Habilidad	Course Name	Difficulty Level	Avg Total Learning Hours	Course Description	Course Language
Google Data Analytics	Google Data Analytics Capstone: Complete a Case Study	BEGINNER	2.1	This course is the eighth and final course in the Google Data Analytics Certificate. You'll have the opportunity to complete a case study, which will help prepare you for your data analytics job hunt. Case studies are commonly used by employers to assess analytical skills. For your case study, you'll choose an analytics-based scenario. You'll then ask questions, prepare, process, analyze, visualize and act on the data from the scenario. You'll also learn about useful job hunting skills, common interview questions and responses, and materials to build a portfolio online. Current Google data analysts will continue to instruct and provide you with hands-on ways to accomplish common data analyst tasks with the best tools and resources.\n\nLearners who complete this certificate program will be equipped to apply for introductory-level jobs as data analysts. No previous experience is necessary.\n\nBy the end of this course, learners will:\n- Learn the benefits and uses of case studies and portfolios in the job search.\n- Explore real world job interview scenarios and common interview questions.\n- Discover how case studies can be a part of the job interview process. \n- Examine and consider different case study scenarios. \n- Have the chance to complete your own case study for your portfolio.	English
Google Data Analytics	Foundations: Data, Data, Everywhere	BEGINNER	10.7	This is the first course in the Google Data Analytics Certificate. Organizations of all kinds need data analysts to help them improve their processes, identify opportunities and trends, launch new products, and make thoughtful decisions. In this course, you'll be introduced to the world of data analytics through hands-on curriculum developed by Google. The material shared covers plenty of key data analytics topics, and it's designed to give you an overview of what's to come in the Google Data Analytics Certificate. Current Google data analysts will instruct and provide you with hands-on ways to accomplish common data analyst tasks using the best tools and resources.\n\nLearners who complete this certificate program will be equipped to apply for introductory-level jobs as data analysts. No previous experience is necessary.\n\nBy the end of this course, learners will:\n- Gain an understanding of the practices and processes employed by a junior or associate data analyst in their day-to-day job. \n- Learn about key analytical skills (data cleaning, data analysis, data visualization) and tools (spreadsheets, SQL, R programming, Tableau) that you can add to your professional toolbox. \n- Discover a wide variety of terms and concepts relevant to the role of a junior data analyst, such as the data life cycle and the data analysis process. \n- Evaluate the role of analytics in the data ecosystem. \n- Conduct an analytical thinking self-assessment. \n- Explore job opportunities available to you upon program completion, and learn about best practices you can leverage during your job search.	English
Google Data Analytics	Data Analysis with R Programming	BEGINNER	10.5	This course is the seventh course in the Google Data Analytics Certificate. In this course, you'll learn about the programming language known as R. You'll find out how to use RStudio, the environment that allows you to work with R, and the software applications and tools that are unique to R, such as R packages. You'll discover how R lets you clean, organize, analyze, visualize, and report data in new and more powerful ways. Current Google data analysts will continue to instruct and provide you with hands-on ways to accomplish common data analyst tasks with the best tools and resources.\n\nLearners who complete this certificate program will be equipped to apply for introductory-level jobs as data analysts. No previous experience is necessary.\n\nBy the end of this course, learners will:\n- Examine the benefits of using the R programming language.\n- Discover how to use RStudio to apply R to your analysis. \n- Explore the fundamental concepts associated with programming in R. \n- Understand the contents and components of R packages including the Tidyverse package.\n- Gain an understanding of dataframes and their use in R.\n- Discover the options for generating visualizations in R.\n- Learn about R Markdown for documenting R programming.	English

Google Data Analytics	Share Data Through the Art of Visualization	BEGINNER	8.5	This is the sixth course in the Google Data Analytics Certificate. You'll learn how to visualize and present your data findings as you complete the data analysis process. This course will show you how data visualizations, such as visual dashboards, can help bring your data to life. You'll also explore Tableau, a data visualization platform that will help you create effective visualizations for your presentations. Current Google data analysts will continue to instruct and provide you with hands-on ways to accomplish common data analyst tasks with the best tools and resources.\n\nLearners who complete this certificate program will be equipped to apply for introductory-level jobs as data analysts. No previous experience is necessary.\n\nBy the end of this course, learners will:\n- Understand the importance of data visualization.\n- Learn how to form a compelling narrative through data stories.\n- Gain an understanding of how to use Tableau to create dashboards and dashboard filters.\n- Discover how to use Tableau to create effective visualizations. \n- Explore the principles and practices involved with effective presentations.\n- Learn how to consider potential limitations associated with the data in your presentations.\n- Understand how to apply best practices to a Q&A with your audience.	English
Google Data Analytics	Analyze Data to Answer Questions	BEGINNER	10.0	This is the fifth course in the Google Data Analytics Certificate. In this course, you'll explore what it means to actually analyze your data. You'll take what you've learned up to this point and apply it to make sense of the data you've collected. You'll learn how to organize and format your data using spreadsheets and SQL to help you look at and think about your data in different ways. You'll also find out how to perform complex calculations with your data to address business objectives. You'll learn how to use formulas, functions, and SQL queries as you conduct your analysis. Current Google data analysts will continue to instruct and provide you with hands-on ways to accomplish common data analyst tasks with the best tools and resources.\n\nLearners who complete this certificate program will be equipped to apply for introductory-level jobs as data analysts. No previous experience is necessary.\n\nBy the end of this course, learners will:\n- Learn how to organize data for analysis.\n- Understand the processes for formatting and adjusting data. \n- Explore how to aggregate data in spreadsheets and by using SQL.\n- Use formulas and functions in spreadsheets to make data calculations.\n- Learn how to complete calculations using SQL queries.	English
Google Data Analytics	Process Data from Dirty to Clean	BEGINNER	9.6	This is the fourth course in the Google Data Analytics Certificate. In this course, you'll continue to build your understanding of data analytics and the concepts and tools that data analysts use in their work. You'll learn how to check and clean your data using spreadsheets and SQL, as well as how to verify and report your data cleaning results. Current Google data analysts will continue to instruct and provide you with hands-on ways to accomplish common data analyst tasks with the best tools and resources.\n\nLearners who complete this certificate program will be equipped to apply for introductory-level jobs as data analysts. No previous experience is necessary.\n\nBy the end of this course, learners will:\n- Check for data integrity.\n- Apply data cleaning techniques using spreadsheets. \n- Develop basic SQL queries for use on databases.\n- Use basic SQL functions to clean and transform data.\n- Verify the results of cleaning data.\n- Write an effective data cleaning report	English
Google Data Analytics	Prepare Data for Exploration	BEGINNER	9.4	This is the third course in the Google Data Analytics Certificate. As you continue to build on your understanding of the topics from the first two courses, you'll be introduced to new topics that will help you gain practical data analytics skills. You'll learn how to use tools like spreadsheets and SQL to extract and make use of the right data for your objectives, and how to organize and protect your data. Current Google data analysts will continue to instruct and provide you with hands-on ways to accomplish common data analyst tasks with the best tools and resources.\n\nLearners who complete this certificate program will be equipped to apply for introductory-level jobs as data analysts. No previous experience is necessary.\n\nBy the end of this course, learners will:\n- Find out how analysts decide what data to collect for analysis.\n- Learn about structured and unstructured data, data types, and data formats.\n- Discover how to identify different types of bias in data to help ensure data credibility. \n- Explore how analysts use spreadsheets and SQL within databases and data sets.\n- Examine open data and the relationship between, and importance of, data ethics and data privacy.\n- Gain an understanding of how to access databases and extract, filter, and sort the data they contain.\n- Learn best practices for organizing data and keeping it secure.	English

Google Data Analytics	Ask Questions to Make Data-Driven Decisions	BEGINNER	8.8	This is the second course in the Google Data Analytics Certificate. You'll build on your understanding of the topics that were introduced in the first course of this certificate program. The material will help you learn how to ask effective questions, make data-driven decisions, and meet stakeholders' needs. Current Google data analysts will instruct and provide you with hands-on ways to accomplish common data analytics tasks.\n\nLearners who complete this certificate program will be equipped to apply for introductory-level jobs as data analysts. No previous experience is necessary.\n\nBy the end of this course, you will:\n- Learn about effective questioning techniques that can help guide analysis. \n- Gain an understanding of data-driven decision-making and how data analysts present findings.\n- Explore a variety of real-world business scenarios as an example of questioning and decision-making.\n- Discover how and why spreadsheets are an important tool for data analysts.\n- Examine the key ideas associated with structured thinking and how they can help analysts better understand problems and develop solutions.\n- Learn strategies for managing the expectations of stakeholders while establishing clear communication with a data analytics team to achieve business objectives.	English
Google Cybersecurity	Assets, Threats, and Vulnerabilities	BEGINNER	7.4	This is the fifth course in the Google Cybersecurity Certificate. These courses will equip you with the skills you need to apply for an entry-level cybersecurity job. You'll build on your understanding of the topics that were introduced in the fourth Google Cybersecurity Certificate course.\n\nIn this course, you will explore the concepts of assets, threats, and vulnerabilities. First, you'll build an understanding of how assets are classified. Next, you will become familiar with common threats and vulnerabilities, and the security controls used by organizations to protect valuable information and mitigate risk. You will develop an attacker mindset by practicing the threat modeling process, and you'll learn tactics for staying ahead of security breaches.\n\nGoogle employees who currently work in cybersecurity will guide you through videos, provide hands-on activities and examples that simulate common cybersecurity tasks, and help you build your skills to prepare for jobs. \n\nLearners who complete this certificate will be equipped to apply for entry-level cybersecurity roles. No previous experience is necessary.\n\nBy the end of this course, you will: \n- Learn effective data handling processes.\n- Discuss the role of encryption and hashing in securing assets.\n- Describe how to effectively use authentication and authorization. \n- Explain how common vulnerability exposures are identified by MITRE.\n- Analyze an attack surface to find risks and vulnerabilities.\n- Identify threats, such as social engineering, malware, and web-based exploits.\n- Summarize the threat modeling process.	English
Google Cybersecurity	Play It Safe: Manage Security Risks	BEGINNER	6.0	This is the second course in the Google Cybersecurity Certificate. These courses will equip you with the skills you need to apply for an entry-level cybersecurity job. You'll build on your understanding of the topics that were introduced in the first Google Cybersecurity Certificate course.\n\nIn this course, you will take a deeper dive into concepts introduced in the first course, with an emphasis on how cybersecurity professionals use frameworks and controls to protect business operations. In particular, you'll identify the steps of risk management and explore common threats, risks, and vulnerabilities. Additionally, you'll explore Security Information and Event Management (SIEM) data and use a playbook to respond to identified threats, risks, and vulnerabilities. Finally, you will take an important step towards becoming a cybersecurity professional and practice performing a security audit.\n\nGoogle employees who currently work in cybersecurity will guide you through videos, provide hands-on activities and examples that simulate common cybersecurity tasks, and help you build your skills to prepare for jobs. \n\nLearners who complete this certificate will be equipped to apply for entry-level cybersecurity roles. No previous experience is necessary.\n\nBy the end of this course, you will: \n- Identify the common threats, risks, and vulnerabilities to business operations.\n- Understand the threats, risks, and vulnerabilities that entry-level cybersecurity analysts are most focused on.\n- Comprehend the purpose of security frameworks and controls.\n- Describe the confidentiality, integrity, and availability (CIA) triad.\n- Explain the National Institute of Standards and Technology (NIST) framework.\n- Explore and practice conducting a security audit.\n- Use a playbook to respond to threats, risks, and vulnerabilities.	English

Google Cybersecurity	Tools of the Trade: Linux and SQL	BEGINNER	8.2	This is the fourth course in the Google Cybersecurity Certificate. These courses will equip you with the skills you need to apply for an entry-level cybersecurity job. You'll build on your understanding of the topics that were introduced in the third Google Cybersecurity Certificate course.\n\nIn this course, you will explore computing skills that you'll use on-the-job as a cybersecurity analyst. First, you'll practice using Linux, an operating system commonly used by cybersecurity professionals. For example, you'll use the Linux command line through the Bash shell to navigate and manage the file system and authenticate users. Then, you'll use SQL to communicate with a database. \n\nGoogle employees who currently work in cybersecurity will guide you through videos, provide hands-on activities and examples that simulate common cybersecurity tasks, and help you build your skills to prepare for jobs. \n\nLearners who complete this certificate will be equipped to apply for entry-level cybersecurity roles. No previous experience is necessary.\n\nBy the end of this course, you will: \n- Explain the relationship between operating systems, applications, and hardware.\n- Compare a graphical user interface to a command line interface.\n- Identify the unique features of common Linux distributions.\n- Navigate and manage the file system using Linux commands via the Bash shell.\n- Use Linux commands via the Bash shell to authenticate and authorize users.\n- Describe how a relational database is organized.\n- Use SQL to retrieve information from a database.\n- Apply filters to SQL queries and use joins to combine multiple tables.	English
Google Cybersecurity	Foundations of Cybersecurity	BEGINNER	6.2	This is the first course in the Google Cybersecurity Certificate. These courses will equip you with the skills you need to prepare for an entry-level cybersecurity job. \n\nIn this course, you will be introduced to the world of cybersecurity through an interactive curriculum developed by Google. You will identify significant events that led to the development of the cybersecurity field, explain the importance of cybersecurity in today's business operations, and explore the job responsibilities and skills of an entry-level cybersecurity analyst. \n\nGoogle employees who currently work in cybersecurity will guide you through videos, provide hands-on activities and examples that simulate common cybersecurity tasks, and help you build your skills to prepare for jobs. \n\nLearners who complete the eight courses in the Google Cybersecurity Certificate will be equipped to apply for entry-level cybersecurity roles. No previous experience is necessary.\n\nBy the end of this course, you will: \n- Identify how security attacks impact business operations.\n- Explore the job responsibilities and core skills of an entry-level cybersecurity analyst.\n- Recognize how past and present attacks on organizations led to the development of the cybersecurity field.\n- Learn the CISSP eight security domains.\n- Identify security domains, frameworks, and controls.\n- Explain security ethics.\n- Recognize common tools used by cybersecurity analysts.	English
Google Cybersecurity	Connect and Protect: Networks and Network Security	BEGINNER	6.9	This is the third course in the Google Cybersecurity Certificate. These courses will equip you with the skills you need to apply for an entry-level cybersecurity job. You'll build on your understanding of the topics that were introduced in the second Google Cybersecurity Certificate course.\n\nIn this course, you will explore how networks connect multiple devices and allow them to communicate. You'll start with the fundamentals of modern networking operations and protocols. For example, you'll learn about the Transmission Control Protocol / Internet Protocol (TCP/IP) model and how network hardware, like routers and modems, allow your computer to send and receive information on the internet. Then, you'll learn about network security. Organizations often store and send valuable information on their networks, so networks are common targets of cyber attacks. By the end of this course, you'll be able to recognize network-level vulnerabilities, and explain how to secure a network using firewalls, system hardening, and virtual private networks. \n\nGoogle employees who currently work in cybersecurity will guide you through videos, provide hands-on activities and examples that simulate common cybersecurity tasks, and help you build your skills to prepare for jobs. \n\nLearners who complete this certificate will be equipped to apply for entry-level cybersecurity roles. No previous experience is necessary.\n\nBy the end of this course, you will: \n- Describe the structure of different computer networks.\n- Illustrate how data is sent and received over a network.\n- Recognize common network protocols.\n- Identify common network security measures and protocols.\n- Explain how to secure a network against intrusion tactics.\n- Compare and contrast local networks to cloud computing.\n- Explain the different types of system hardening techniques.	English

Google Cybersecurity	Automate Cybersecurity Tasks with Python	BEGINNER	7.2	This is the seventh course in the Google Cybersecurity Certificate. These courses will equip you with the skills you need to apply for an entry-level cybersecurity job. You'll build on your understanding of the topics that were introduced in the sixth Google Cybersecurity Certificate course.\n\nIn this course, you will be introduced to the Python programming language and apply it in a cybersecurity setting to automate tasks. You'll start by focusing on foundational Python programming concepts, including data types, variables, conditional statements, and iterative statements. You'll also learn to work with Python effectively by developing functions, using libraries and modules, and making your code readable. In addition, you'll work with string and list data, and learn how to import, parse and debug files. \n\nGoogle employees who currently work in cybersecurity will guide you through videos, provide hands-on activities and examples that simulate common cybersecurity tasks, and help you build your skills to prepare for jobs. \n\nLearners who complete this certificate will be equipped to apply for entry-level cybersecurity roles. No previous experience is necessary.\n\nBy the end of this course, you will: \n- Explain how the Python programming language is used in cybersecurity.\n- Write conditional and iterative statements in Python.\n- Create new, user-defined Python functions.\n- Use Python to work with strings and lists.\n- Use regular expressions to extract information from text.\n- Use Python to open and read the contents of a file.\n- Identify best practices to improve code readability.\n- Practice debugging code.	English
Google Cybersecurity	Sound the Alarm: Detection and Response	BEGINNER	6.8	This is the sixth course in the Google Cybersecurity Certificate. These courses will equip you with the skills you need to apply for an entry-level cybersecurity job. You'll build on your understanding of the topics that were introduced in the fifth Google Cybersecurity Certificate course.\n\nIn this course, you will focus on incident detection and response. You'll define a security incident and explain the incident response lifecycle, including the roles and responsibilities of incident response teams. You'll analyze and interpret network communications to detect security incidents using packet sniffing tools to capture network traffic. By assessing and analyzing artifacts, you'll explore the incident investigation and response processes and procedures. Additionally, you'll practice using Intrusion Detection Systems (IDS) and Security Information Event Management (SIEM) tools.\n\nGoogle employees who currently work in cybersecurity will guide you through videos, provide hands-on activities and examples that simulate common cybersecurity tasks, and help you build your skills to prepare for jobs. \n\nLearners who complete this certificate will be equipped to apply for entry-level cybersecurity roles. No previous experience is necessary.\n\nBy the end of this course, you will: \n- Explain the lifecycle of an incident.\n- Describe the tools used in documentation, detection, and management of incidents.\n- Analyze packets to interpret network communications.\n- Perform artifact investigations to analyze and verify security incidents.\n- Identify the steps to contain, eradicate, and recover from an incident.\n- Determine how to read and analyze logs during incident investigation.\n- Interpret the basic syntax and components of signatures and logs in Intrusion Detection Systems (IDS) and Network Intrusion Detection Systems (NIDS) tools.\n- Perform queries in Security Information and Event Management (SIEM) tools to investigate an event.	English

Google Cybersecurity	Put It to Work: Prepare for Cybersecurity Jobs	BEGINNER	3.5	This is the eighth and final course in the Google Cybersecurity Certificate. Together, these eight courses will equip you with the skills you need to apply for an entry-level cybersecurity job.\n\nIn this course, you will focus on making decisions and escalating incidents to stakeholders. You'll develop the communication and collaboration skills needed to inform and influence stakeholders within an organization. In addition, you'll explore how to ethically operate as a cybersecurity professional. You'll discover how to engage with the cybersecurity community, explore jobs in the cybersecurity field, and complete practice interviews. You'll also write a resume and cover letter to prepare for applying and interviewing for jobs in cybersecurity.\n\nGoogle employees who currently work in cybersecurity will guide you through videos, provide hands-on activities and examples that simulate common cybersecurity tasks, and help you build your skills to prepare for jobs. \n\nLearners who complete this certificate will be equipped to apply for entry-level cybersecurity roles. No previous experience is necessary.\n\nBy the end of this course, you will: \n- Determine when and how to escalate a security incident.\n- Explain how having an ethical mindset supports a cybersecurity professional's ability to protect assets and data.\n- Communicate sensitive information with care and confidentiality.\n- Use reliable sources to remain current on the latest cybersecurity threats, risks, vulnerabilities, and tools.\n- Engage with the cybersecurity community.\n- Find and apply for cybersecurity jobs.\n- Prepare for job interviews.	English
Google UX Design	Foundations of User Experience (UX) Design	BEGINNER	12.3	Foundations of User Experience (UX) Design is the first of a series of seven courses that will equip you with the skills needed to apply to entry-level jobs in user experience design. UX designers focus on the interactions that people have with products like websites, mobile apps, and physical objects. UX designers make those everyday interactions usable, enjoyable, and accessible. The role of an entry-level UX designer might include empathizing with users, defining their pain points, coming up with ideas for design solutions, creating wireframes, prototypes, and mockups, and testing designs to get feedback. \n\nCurrent UX designers and researchers at Google will serve as your instructors, and you will complete hands-on activities that simulate real-world UX design scenarios.\n\nLearners who complete the seven courses in this certificate program should be equipped to apply for entry-level jobs as UX designers. No previous experience is necessary.\n\nBy the end of this course, you will be able to: \n - Define the field of UX and explain why it's important for consumers and businesses.\n - Understand foundational concepts in UX design, such as user-centered design, the design thinking framework, accessibility, and equity-focused design. \n - Identify the factors that contribute to great user experience design.\n - Review common job responsibilities of entry-level UX designers and teams that they work with.\n - Explore job opportunities and career paths within the field of user experience. \n - Explain why design sprints are an important and useful part of a UX designer's work.\n - Describe common UX research methods. \n - Identify and account for biases in UX research.	English

Google UX Design	Build Dynamic User Interfaces (UI) for Websites	BEGINNER	12.6	Build Dynamic User Interfaces (UI) for Websites is the sixth course in a program that will equip you with the skills you need to apply to entry-level jobs in user experience (UX) design. In this course, you will plan a design for a website, create wireframes and prototypes, and test your designs to get feedback. Additionally, you will learn about engaging in design critique sessions and how to give and receive feedback. By the end of this course, you will have a new design project to include in your professional UX portfolio. In addition, you'll learn how to search for entry-level UX design jobs, create a resume that highlights your skills and accomplishments, and build your professional portfolio website. \n\nCurrent UX designers and researchers at Google will serve as your instructors, and you will complete hands-on activities that simulate real-world UX design scenarios. Learners who complete the seven courses in this certificate program should be equipped to apply for entry-level jobs as UX designers.\n\nBy the end of this course, you will be able to:\n - Apply each step of the UX design thinking framework (empathize, define, ideate, prototype, test) to create a responsive website.\n - Plan information architecture and create sitemaps for website designs. \n - Apply common layouts for web pages. \n - Plan and conduct a usability study to gather feedback about designs. \n - Iterate on designs based on research insights. \n - Work with design systems.\n - Add a new design project to your professional UX portfolio. \n - [Optional] Create or update a UX-focused resume. \n - [Optional] Learn how to search for and apply to introductory-level jobs in the field of UX.\n\nThis course is suitable for beginner-level UX designers who have completed the previous five courses of the Google UX Design Certificate. Alternatively, learners need to have a strong foundational understanding of the design process; experience creating wireframes, mockups, and prototypes; and the ability to conduct usability studies. No previous experience with Figma is required.	English
Google UX Design	Create High-Fidelity Designs and Prototypes in Figma	BEGINNER	14.2	Create High-Fidelity Designs and Prototypes in Figma is the fifth course in a certificate program that will equip you with the skills you need to apply to entry-level jobs in user experience (UX) design. In this course, you will follow step-by-step tutorials to learn how to create high-fidelity designs, called mockups, in Figma, a popular design tool. Then, you'll turn those designs into an interactive prototype that works like a finished product. You'll conduct research to collect feedback about your designs and make improvements. Finally, you'll learn how to share your designs with development teams and highlight your work in your professional UX portfolio.\n\nCurrent UX designers and researchers at Google will serve as your instructors, and you will complete hands-on activities that simulate real-world UX design scenarios. Learners who complete the seven courses in this certificate program should be equipped to apply for entry-level jobs as UX designers. \n\nBy the end of this course, you will be able to:\n - Build mockups and high-fidelity prototypes in Figma.\n - Define and apply common visual design elements and principles.\n - Demonstrate how design systems can be used to organize, standardize, and enhance designs.\n - Understand the role of design critique sessions and feedback while iterating on designs. \n - Learn how to hand off finished design projects to engineering teams. \n - Complete mobile app designs to include in a professional UX portfolio. \n\nThis course is suitable for beginner-level UX designers who have completed the previous four courses of the Google UX Design Certificate. Alternatively, learners who have not completed the previous courses should have a strong understanding of the design process, how to create low-fidelity designs on paper and in Figma, and how to conduct usability studies.	English
Google UX Design	Conduct UX Research and Test Early Concepts	BEGINNER	12.2	Conduct UX Research and Test Early Concepts is the fourth course in a certificate program that will equip you with the skills you need to apply to entry-level jobs in user experience (UX) design. In this course, you will learn how to plan and conduct a usability study to gather feedback about designs. Then, you will modify your low-fidelity designs based on insights from your research. \n\nCurrent UX designers and researchers at Google will serve as your instructors, and you will complete hands-on activities that simulate real-world UX design scenarios. Learners who complete the seven courses in this certificate program should be equipped to apply for entry-level jobs as UX designers. \n\nBy the end of this course, you will be able to:\n - Plan a UX research study, including the project background, research goals, research questions, Key Performance Indicators, methodology, participants, and script.\n - Explain the importance of respecting privacy and user data.\n - Conduct a moderated and unmoderated usability study. \n - Take notes during a usability study. \n - Create affinity diagrams to group and analyze data. \n - Synthesize observations from research and come up with insights. \n - Develop persuasive presentation skills to share research insights.\n - Modify low-fidelity designs based on research insights.\n - Continue to design a mobile app to include in your professional portfolio. \n\nTo be successful in this course, you should complete the previous three courses in the certificate program. Or, you need to have an ability to conduct user research to inform the creation of empathy maps, personas, user stories, user journey maps, problem statements, and value propositions; as well as an ability to create wireframes and low-fidelity prototypes on paper and in Figma.	English

Google UX Design	Build Wireframes and Low-Fidelity Prototypes	BEGINNER	11.1	Build Wireframes and Low-Fidelity Prototypes is the third course in a certificate program that will equip you with the skills you need to apply to entry-level jobs in user experience (UX) design. In this course, you'll continue to design a mobile app for your professional UX portfolio. You'll start by creating storyboards and getting familiar with the basics of drawing. Then, you'll create paper wireframes and digital wireframes using the design tool Figma. You'll also create a paper prototype and a digital low-fidelity prototype in Figma. \n\nCurrent UX designers and researchers at Google will serve as your instructors, and you will complete hands-on activities that simulate real-world UX design scenarios. Learners who complete the seven courses in this certificate program should be equipped to apply for entry-level jobs as UX designers.\n\nBy the end of this course, you will be able to:\n - Develop a goal statement. \n - Create two types of storyboards: big picture and close-up. \n - Understand the difference between low-fidelity and high-fidelity design. \n - Apply the basics of drawing. \n - Apply the principles of information architecture to organize a mobile app. \n - Create paper wireframes for a mobile app design. \n - Develop digital wireframes in the design tool Figma. \n - Build a paper prototype to add interactivity to designs. \n - Design a low-fidelity prototype in Figma. \n - Recognize implicit bias and deceptive patterns in design. \n - Continue to design a mobile app to include in your professional portfolio. \n\nTo be successful in this course, you should complete the previous two courses in this certificate program, or have an ability to conduct user research to inform the creation of empathy maps, personas, user stories, user journey maps, problem statements, and value propositions. You will also need paper and a pen or pencil.	English
Google UX Design	Start the UX Design Process: Empathize, Define, and Ideate	BEGINNER	16.2	Start the UX Design Process: Empathize, Define, Ideate is the second course in a certificate program that will equip you with the skills needed to apply to entry-level jobs in user experience (UX) design. In this course, you'll complete the first phases of the design process for a project that you'll be able to include in your portfolio. You will learn how to empathize with users and understand their pain points, define user needs using problem statements, and come up with lots of ideas for solutions to those user problems. \n\nCurrent UX designers and researchers at Google will serve as your instructors, and you will complete hands-on activities that simulate real-world UX design scenarios.\n\nLearners who complete the seven courses in this certificate program should be equipped to apply for entry-level jobs as UX designers. No previous experience is necessary.\n\nBy the end of this course, you will be able to:\n - Empathize with users to understand their needs and pain points.\n - Create empathy maps, personas, user stories, and user journey maps to understand user needs.\n - Develop problem statements to define user needs. \n - Generate ideas for possible solutions to user problems. \n - Conduct competitive audits.\n - Start designing a mobile app, a new project to include in your professional UX portfolio.	English
Google Project Management	Agile Project Management	BEGINNER	10.0	This is the fifth course in the Google Project Management Certificate program. This course will explore the history, approach, and philosophy of Agile project management, including the Scrum framework. You will learn how to differentiate and blend Agile and other project management approaches. As you progress through the course, you will learn more about Scrum, exploring its pillars and values and comparing essential Scrum team roles. You will discover how to build, manage, and refine a product backlog, implement Agile's value-driven delivery strategies, and define a value roadmap. You will also learn strategies to effectively organize the five important Scrum events for a Scrum team, introduce an Agile or Scrum approach to an organization, and coach an Agile team. Finally, you will learn how to search for and land opportunities in Agile roles. Current Google project managers will continue to instruct and provide you with the hands-on approaches, tools, and resources to meet your goals.\n\nLearners who complete this program should be equipped to apply for introductory-level jobs as project managers. No previous experience is necessary.\n\nBy the end of this course, you will be able to: \n - Explain the Agile project management approach and philosophy, including values and principles.\n - Explain the pillars of Scrum and how they support Scrum values.\n - Identify and compare the essential roles in a Scrum team and what makes them effective.\n - Build and manage a Product Backlog and perform Backlog Refinement.\n - Describe the five important Scrum events and how to set up each event for a Scrum team.\n - Implement Agile's value-driven delivery strategies and define a value roadmap.\n - Explain how to coach an Agile team and help them overcome challenges.\n - Conduct a job search for an Agile role and learn how to succeed in your interview.	English

Google Project Management	Project Execution: Running the Project	BEGINNER	11.6	This is the fourth course in the Google Project Management Certificate program. This course will delve into the execution and closing phases of the project life cycle. You will learn what aspects of a project to track and how to track them. You will also learn how to effectively manage and communicate changes, dependencies, and risks. As you explore quality management, you will learn how to measure customer satisfaction and implement continuous improvement and process improvement techniques. Next, you will examine how to prioritize data, how to use data to inform your decision-making, and how to effectively present that data. Then, you will strengthen your leadership skills as you study the stages of team development and how to manage team dynamics. After that, you will discover tools that provide effective project team communication, how to organize and facilitate meetings, and how to effectively communicate project status updates. Finally, you will examine the steps of the project closing process and how to create and share project closing documentation. Current Google project managers will continue to instruct and provide you with hands-on approaches for accomplishing these tasks while showing you the best project management tools and resources for the job at hand.\n\nLearners who complete this program should be equipped to apply for introductory-level jobs as project managers. No previous experience is necessary.\n\nBy the end of this course, you will be able to: \n - Identify what aspects of a project to track and compare different tracking methods.\n - Discuss how to effectively manage and communicate changes, dependencies, and risks.\n - Explain the key quality management concepts of quality standards, quality planning, quality assurance, and quality control.\n - Describe how to create continuous improvement and process improvement and how to measure customer satisfaction.\n - Explain the purpose of a retrospective and describe how to conduct one. \n - Demonstrate how to prioritize and analyze data and how to communicate a project's data-informed story. \n - Identify tools that provide effective project team communication and explore best practices for communicating project status updates.\n - Describe the steps of the closing process for stakeholders, the project team, and project managers.	English
Google Project Management	Capstone: Applying Project Management in the Real World	BEGINNER	13.7	In this final, capstone course of the Google Project Management Certificate, you will practice applying the project management knowledge and skills you have learned so far. We encourage learners to complete Courses 1-5 before beginning the final course, as they provide the foundation necessary to complete the activities in this course. \n\nAs you progress through this course, you will "observe" a project manager in a real-world scenario and complete dozens of hands-on activities. You will:\n- analyze project documents to identify project requirements and evaluate stakeholders \n- complete a project charter and use it as a tool to align project scope and goals among stakeholders\n- identify tasks and milestones and document and prioritize them in a project plan\n- define quality management standards and explore how to effectively share qualitative data\n- demonstrate your project's impact through effective reporting \n\nBy the end of this course, you will have developed a portfolio of project management artifacts that will demonstrate the skills you have learned throughout the entire program, such as your ability to manage stakeholders and teams, organize plans, and communicate project details. These artifacts can exhibit your career readiness when applying for jobs in the field. To further prepare you to interview for project management jobs, you will reflect on past projects, develop an "elevator pitch," and anticipate common interview questions. Current Google project managers will continue to instruct and provide you with the strategies, tools, and resources to meet your goals.\n\nAfter completing this program, you should be equipped to apply for introductory-level jobs as a project manager. You will also have the opportunity to claim a certification of completion badge that will be recognizable to employers.	English

Google Project Management	Project Planning: Putting It All Together	BEGINNER	12.5	This is the third course in the Google Project Management Certificate program. This course will explore how to map out a project in the second phase of the project life cycle: the project planning phase. You will examine the key components of a project plan, how to make accurate time estimates, and how to set milestones. Next, you will learn how to build and manage a budget and how the procurement processes work. Then, you will discover tools that can help you identify and manage different types of risk and how to use a risk management plan to communicate and resolve risks. Finally, you will explore how to draft and manage a communication plan and how to organize project documentation. Current Google project managers will continue to instruct and provide you with hands-on approaches for accomplishing these tasks while showing you the best project management tools and resources for the job at hand.\n\nLearners who complete this program should be equipped to apply for introductory-level jobs as project managers. No previous experience is necessary.\n\nBy the end of this course, you will be able to: \n - Describe the components of the project planning phase and their significance.\n - Explain why milestones are important and how to set them. \n - Make accurate time estimates and describe techniques for acquiring them from team members. \n - Identify tools and best practices to build a project plan and risk management plan. \n - Describe how to estimate, track, and maintain a budget.\n - Explain the procurement process and identify key procurement documentation. \n - Draft a communication plan and explain how to manage it.\n - Explain why milestones are important and how to set them. \n - Explain why a project plan is necessary and what components it contains. \n - Make accurate time estimates and describe techniques for acquiring them from team members.	English
Google Project Management	Project Initiation: Starting a Successful Project	BEGINNER	10.6	This is the second course in the Google Project Management Certificate program. This course will show you how to set a project up for success in the first phase of the project life cycle: the project initiation phase. In exploring the key components of this phase, you'll learn how to define and manage project goals, deliverables, scope, and success criteria. You'll discover how to use tools and templates like stakeholder analysis grids and project charters to help you set project expectations and communicate roles and responsibilities. Current Google project managers will continue to instruct and provide you with hands-on approaches for accomplishing these tasks while showing you the best project management tools and resources for the job at hand.\n\nLearners who complete this program should be equipped to apply for introductory-level jobs as project managers. No previous experience is necessary.\n\nBy the end of this course, you will be able to: \n- Understand the significance of the project initiation phase of the project life cycle. \n- Describe the key components of the project initiation phase. \n- Determine a project's benefits and costs.\n- Define and create measurable project goals and deliverables. \n- Define project scope and differentiate among tasks that are in-scope and out-of-scope. \n- Understand how to manage scope creep to avoid impacting project goals.\n- Define and measure a project's success criteria. \n- Complete a stakeholder analysis and explain its significance.\n- Utilize RACI charts to define and communicate project team member responsibilities.\n- Understand the key components of project charters and develop a project charter for project initiation.\n- Evaluate various project management tools to meet project needs.	English
Google Project Management	Foundations of Project Management	BEGINNER	9.7	This course is the first in a series of six to equip you with the skills you need to apply to introductory-level roles in project management. Project managers play a key role in leading, planning and implementing critical projects to help their organizations succeed. In this course, you'll discover foundational project management terminology and gain a deeper understanding of the role and responsibilities of a project manager. We'll also introduce you to the kinds of jobs you might pursue after completing this program. Throughout the program, you'll learn from current Google project managers, who can provide you with a multi-dimensional educational experience that will help you build your skills for on-the-job application. \n\nLearners who complete this program should be equipped to apply for introductory-level jobs as project managers. No previous experience is necessary.\n\nBy the end of this course, you will be able to:\n- Define project management and describe what constitutes a project.\n- Explore project management roles and responsibilities across a variety of industries.\n- Detail the core skills that help a project manager be successful.\n- Describe the life cycle of a project and explain the significance of each phase.\n- Compare different program management methodologies and approaches and determine which is most effective for a given project.\n- Define organizational structure and culture and explain how it impacts project management. \n- Define change management and describe the role of the project manager in the process.	English

Google Digital Marketing & E-commerce	Foundations of Digital Marketing and E-commerce	BEGINNER	9.4	This is the first of seven courses in the Google Digital Marketing & E-commerce Certificate, which will equip you with the skills you need to apply to entry-level roles in these fields. People who work in digital marketing and e-commerce help their organizations attract new customers, engage customers through various digital channels, and drive transactions like purchases and customer loyalty. In this course, you'll explore entry-level jobs in digital marketing and e-commerce and identify the roles and functions that those jobs play within an organization. You'll also learn about the marketing funnel and how it shapes the customer journey. \n\nGoogle employees who currently work in the field will guide you, providing hands-on activities and examples that simulate common digital marketing and e-commerce tasks, and helping you build your skills and prepare for the job. \n\nLearners who complete the seven courses in this program will be equipped to apply for entry-level jobs in digital marketing and e-commerce. No previous experience is necessary.\n\nBy the end of this course, you will be able to do the following: \n- Define the fields of digital marketing and e-commerce\n- Describe the job responsibilities of an entry-level digital marketing coordinator and e-commerce analyst (and similar job titles) \n- Summarize how this program will help prepare you for a career in digital marketing and e-commerce\n- Identify the roles and functions that digital marketing and e-commerce play within an organization\n- Understand the customer journey and the function of journey maps\n- Explain the concept of a marketing funnel\n- Understand the elements and goals of a digital marketing and e-commerce strategy	English
Google Digital Marketing & E-commerce	Attract and Engage Customers with Digital Marketing	BEGINNER	9.0	Attract and Engage Customers with Digital Marketing is the second of seven courses in the Google Digital Marketing & E-commerce Certificate. In this course you will practice using search engine optimization (SEO), search engine marketing (SEM), and display advertising to attract and engage customers online. You will explore the stages of the marketing funnel and learn how to use digital marketing tactics to move customers through the stages. You'll learn how to increase the quality and quantity of website traffic by understanding SEO fundamentals like keyword research, search engine algorithms, and link building. You will also learn about paid search and advertising, and explore tactics used to gain visibility and reach potential customers on search engine results pages, or SERPs. By the end of this course you'll be able to apply digital marketing strategies, best practices, and tools to increase awareness of a business, understand customer needs, and engage people's interests with products and services. \n\nGoogle employees who currently work in the field will guide you, providing hands-on activities and examples that simulate common digital marketing and e-commerce tasks while showing you some of the best tools and resources used on the job. \n\nLearners who complete the seven courses in this program will be equipped to apply for entry-level jobs in digital marketing and e-commerce. No previous experience is necessary.\n\nBy the end of this course, you will be able to do the following: \n- Identify customer personas and build your target audience\n- Describe the marketing funnel's purpose and benefits\n- Know how to increase your conversion rate\n- Explain the purpose of SEO and the essential SEO terms to know\n- Use Google Search Console and its reports to monitor a site's presence in Google Search results\n- Recognize the benefits of SEM and why to do it\n- Understand the fundamentals of Google Ads and targeting audiences	English
Google Digital Marketing & E-commerce	Satisfaction Guaranteed: Develop Customer Loyalty Online	BEGINNER	4.8	You made it! Satisfaction Guaranteed: Develop Customer Loyalty Online is the seventh and final course in the Google Digital Marketing & E-commerce Certificate. In this course, you'll explore strategies for building customer loyalty in e-commerce. You'll also explore specific tools to develop and maintain client relationships. At the end of the course you'll work through a scenario that demonstrates your ability to deliver a successful e-commerce strategy. Finally, you'll wrap up the course by building professional development skills. We encourage you to complete courses 1–6 before beginning this course because they provide the foundation necessary to complete the activities at the end of this course. \n\nGoogle employees who currently work in the field will guide you, providing hands-on activities and examples that simulate common digital marketing and e-commerce tasks while showing you some of the best tools and resources used on the job.\n\nLearners who complete the seven courses in this program will be prepared to apply for entry-level jobs in digital marketing and e-commerce. No previous experience is necessary.\n\nBy the end of this course, you will be able to do the following: \n- Identify common strategies for building customer loyalty in e-commerce\n- Understand how to successfully manage client relationships and measure satisfaction\n- Monitor an e-commerce store's performance\n- Update an e-commerce store based on data \n- Complete a portfolio scenario to prepare for job interviews\n- Find, apply for, and prepare for interviews and jobs\n- Put together a portfolio and/or resume to present to employers	English

Google Digital Marketing & E-commerce	Make the Sale: Build, Launch, and Manage E-commerce Stores	BEGINNER	4.9	Make the Sale: Build, Launch, and Manage E-commerce Stores is the sixth of seven courses in the Google Digital Marketing & E-commerce Certificate. This course explores how businesses and individuals sell products online, including using popular platforms like Shopify. You'll go through the process of creating a mock e-commerce store. To do this, you'll build a Shopify store, add the necessary information, and create product listings. You'll explore how to reach customers online through e-commerce customer outreach methods like advertisements and campaigns.\n\nGoogle employees who currently work in the field will guide you, providing hands-on activities and examples that simulate common digital marketing and e-commerce tasks while showing you some of the best tools and resources used on the job.\n\nLearners who complete the seven courses in this program will be ready to apply for entry-level jobs in digital marketing and e-commerce. No previous experience is necessary.\n\nBy the end of this course, you will be able to do the following: \n- Understand essential e-commerce strategies and practices\n- Explain how to conduct market research and product research\n- Set up a mock e-commerce store using Shopify\n- Use Google Ads to engage e-commerce customers\n- Explain how trends and seasonality affect e-commerce businesses\n- Use best practices to create an engaging customer experience online\n- Describe the order fulfillment process through checkout, point of sale (POS), shipping, and delivery. \n- Optimize a checkout flow for customers	English
Google Digital Marketing & E-commerce	Think Outside the Inbox: Email Marketing	BEGINNER	6.2	Think Outside the Inbox: Email Marketing is the fourth of seven courses in the Google Digital Marketing & E-commerce Certificate. This course will explore how to execute a successful email marketing campaign. Email marketing is one of the oldest and most proven digital marketing channels, and it is an essential component of an overall digital marketing strategy. Email is a primary channel for many businesses in reaching existing customers, encouraging interaction with the business, driving purchases, and building loyalty. In this course, you'll explore email marketing and cover topics like: creating an email marketing strategy, executing email campaigns, and measuring the results of those campaigns. You'll also learn how to use mailing lists and utilize automation and workflows.\n \nGoogle employees who currently work in the field will guide you, providing hands-on activities and examples that simulate common digital marketing and e-commerce tasks while showing you some of the best tools and resources used on the job.\n\nLearners who complete the seven courses in this program will be equipped to apply for entry-level jobs in digital marketing and e-commerce. No previous experience is necessary.\n\nBy the end of this course, you will be able to do the following: \n- Write effective preview text and subject lines using best practices\n- Create email marketing automation and workflows\n- Build and maintain email lists\n- Write effective email copy\n- Conduct contact management and list segmentation\n- Employ best practices to handle personally identifiable information, or PII, and user data safely\n- Measure and analyze email campaign results	English
Google Digital Marketing & E-commerce	From Likes to Leads: Interact with Customers Online	BEGINNER	8.8	From Likes to Leads: Interact with Customers Online is the third of seven courses in the Google Digital Marketing & E-commerce Certificate. This course will help you develop social media marketing strategies. Social media is a key digital marketing channel for many businesses because of the large number of people who use social platforms to socialize, interact with businesses, and share content. No digital marketing strategy is complete without an online brand presence where customers can engage with a brand. In this course you'll explore social media platforms and identify which platform is the most appropriate for specific business needs. You'll learn how to create content for social media using graphic design principles for marketers and learn how to manage a social media presence. In addition you'll set goals and success metrics for social media ads. \n\nGoogle employees who currently work in the field will guide you, providing hands-on activities and examples that simulate common digital marketing and e-commerce tasks while showing you some of the best tools and resources used on the job. \n\nLearners who complete the seven courses in this program will be equipped to apply for entry-level jobs in digital marketing and e-commerce. No previous experience is necessary.\n\nBy the end of this course, you will be able to do the following: \n- Identify the five core pillars of social media marketing: strategy, planning and publishing, listening and engagement, analytics and reporting, and advertising\n- Determine how to choose social media platforms for a campaign\n- Understand how to boost engagement on social media\n- Learn how to write, design, and repurpose engaging content for social media\n- Recognize how to use the data gathered from social media analytics as a decision-making tool\n- Learn best practices for presenting a social media report\n- Achieve specific marketing goals through the use of paid social media	English

Google Digital Marketing & E-commerce	Assess for Success: Marketing Analytics and Measurement	BEGINNER	6.9	Assess for Success: Marketing Analytics and Measurement is the fifth of seven courses in the Google Digital Marketing & E-commerce Certificate. This course explores marketing analytics practices and tools. Digital marketing and e-commerce professionals are expected to analyze data from various sources (such as web pages, digital marketing channels, and e-commerce sites) and use them to gain customer insights. You'll create media plans and set performance goals. You'll learn how to measure, manage, and analyze data from marketing campaigns using Google Analytics, Google Ads, and similar tools. Then, learn how to adjust a marketing budget according to insights extracted from key metrics. You'll use A/B test results to optimize a campaign and identify metrics that define a campaign's success. You will be able to analyze and visualize data and insights in spreadsheets and prepare presentations to share campaign progress or results with stakeholders. \n\nGoogle employees who currently work in the field will guide you, providing hands-on activities and examples that simulate common digital marketing and e-commerce tasks, while showing you some of the best tools and resources used on the job.\n\nLearners who complete the seven courses in this program will be equipped to apply for entry-level jobs in digital marketing and e-commerce. No previous experience is necessary.\n\nBy the end of this course, you will be able to do the following: \n- Plan and allocate the spending of marketing budgets\n- Describe the unique role of performance goals and key performance indicators (KPIs) in marketing campaigns\n- Describe how tools like Google Analytics and Google Ads are used to measure website and ad campaign performance\n- Describe how to determine the return on investment (ROI) or return on ad spend (ROAS) of a marketing project\n- Prepare, conduct, and analyze the results from an A/B test to optimize a marketing campaign\n- Apply spreadsheet features like sorting, filtering, and pivot tables to prepare data to be shared\n- Create charts in spreadsheets for visualization of metrics	English
Salesforce Sales Development Representative	Foundations for Interviewing with Confidence	BEGINNER	8.8	This is Course 2 in the Salesforce Sales Development Representative Professional Certificate. In order to successfully complete the course, please ensure you have taken Course 1: Groundwork for Success in Sales Development.\n\nThe goal of this course is to prepare you to build your professional tech sales portfolio, and develop and leverage your personal and professional brand. You will be primed to ace your interview and leave a lasting impression on your future employer. These skills will get you in the door of a fast-growing tech company and launch your tech sales career.\n\nCourse 2 in the Sales Development Representative (SDR) Professional Certificate will give you the necessary skills to launch a career in the non-technical side of the tech industry.\n\n\nBy the end of the course, you will be able to: \n\n- Develop an understanding of the tech industry landscape in order to cultivate a long term career plan\n- Construct an intimate understanding of your audience and express a personal story that is unforgettable\n- Formulate a results-driven professional portfolio that showcases your track record and sets you apart from other candidates\n- Create a lasting impression through the interview process\n\n\nTo be successful in this course, you should have: \n\n- An ability to communicate in verbal and written form in a way that is accessible and understandable by a general audience (you don't need to be formal or refined)\n- Baseline computer literacy (you must be able to use a word processor, web search, and email)\n- Familiarity with social media, including LinkedIn \n- Ability and willingness to learn new technology tools\n- Motivation to grow personally and professionally\n- Hunger for feedback and coaching\n- Successfully completed Course 1 in this training	English

| Salesforce Sales Development Representative | Boosting Productivity through the Tech Stack | BEGINNER | 7.1 | This is Course 4 in the Salesforce Sales Development Representative Professional Certificate. In order to successfully complete the course, please ensure you have taken Course 1: Groundwork for Success in Sales Development, Course 2: Foundations for Interviewing with Confidence, and 3: Conversational Selling Playbook for SDRs.\n\nThis course demonstrates how to enhance productivity by implementing tech tools that streamline your SDR workflow. You'll be introduced to a variety of best-in-class sales software that will help you achieve the most optimal results — every time. By the end of the course, you'll feel confident in formulating bulletproof outreach strategies in order to engage with prospective customers.\n\nCourse 4 in the Sales Development Representative (SDR) Professional Certificate will give you the necessary skills to launch a career in the non-technical side of the tech industry. \n\nBy the end of the course, you will be able to: \n\n- Examine and navigate the tech stack and stay up-to-date on the latest tech tools used in the tech sales workforce\n- Understand the basic principles of customer relation management (CRM) tools and how to use them effectively as part of your workflow\n- Use sales intelligence tools to find prospects and optimize your workflow\n- Formulate bulletproof outreach strategies to engage with prospective customers\n- Apply the power of social media and video to find and connect with prospects\n\n\nTo be successful in this course, you should have: \n\n- An ability to communicate in verbal and written form in a way that is accessible and understandable by a general audience (you don't need to be formal or refined)\n- Baseline computer literacy (you must be able to use a word processor, web search, and email)\n- Familiarity with social media, including LinkedIn \n- Ability and willingness to learn new technology tools\n- Motivation to grow personally and professionally\n- Hunger for feedback and coaching\n- Successfully completed the previous courses in this training | English |
| Salesforce Sales Development Representative | Practical Guide to Navigating Professional Relationships | BEGINNER | 6.0 | This is Course 5 in the Salesforce Sales Development Representative Professional Certificate. In order to successfully complete the course, please ensure you have taken Course 1: Groundwork for Success in Sales Development, Course 2: Foundations for Interviewing with Confidence, 3: Conversational Selling Playbook for SDRs, and 4: Boosting Productivity through the Tech Stack.\n\nIn this course, you'll develop 'power' skills that are often overlooked but can actually determine success in your role. As tech industry professionals, we often get trained on how to do the technical work but not on how to give and receive feedback, communicate effectively, present ourselves professionally, and manage relationships. These human-centered skills make all the difference when you are being considered for a promotion within your company or applying for an exciting role at another company. By taking this course, you'll gain foundational knowledge and skills to crush it as a top-performing SDR and beyond.\n\nBy the end of the course, you will be able to: \n\n- Build an empathetic approach to communication that highlights your professional demeanor\n- Produce a message with confidence and clarity in order to achieve results\n- Develop a clear understanding for implementing specific written communication styles in varying scenarios\n- Cultivate an understanding of diverse opinions and multiple perspectives in the workplace\n- Compose a three-month plan to implement feedback, optimize learning, and successfully ramp up your career\n\n\nTo be successful in this course, you should have: \n\n- An ability to communicate in verbal and written form in a way that is accessible and understandable by a general audience (you don't need to be formal or refined)\n- Baseline computer literacy (you must be able to use a word processor, web search, and email)\n- Familiarity with social media, including LinkedIn \n- Ability and willingness to learn new technology tools\n- Motivation to grow personally and professionally\n- Hunger for feedback and coaching\n- Successfully completed the previous courses in this training | English |

Salesforce Sales Development Representative	Conversational Selling Playbook for SDRs	BEGINNER	10.5	This is Course 3 in the Salesforce Sales Development Representative Professional Certificate. In order to successfully complete the course, please ensure you have taken Course 1: Groundwork for Success in Sales Development and Course 2: Foundations for Interviewing with Confidence.\n\nThis course will dive into the 8 principles of SV Academy's Conversational Selling Methodology, which will optimize you for success. You'll be able to integrate these principles not only in the real world, but in your career. Additionally, you'll be taught SV Academy's unique approach to objection handling and framework for high-quality prospecting. \n\nCourse 3 in the Sales Development Representative (SDR) Professional Certificate will give you the necessary skills to launch a career in the non-technical side of the tech industry. \n\n\nBy the end of the course, you will be able to: \n\n- Understand the process of asking strategic questions, establishing trust, identifying pain points and proposing value in efforts to closing a sale\n- Identify and empathize with your Ideal Customer Profile (ICP) and target persona to build a high-quality lead list, efficiently qualify prospects, and leverage data to drive activity\n- Investigate various outreach channels and generate a call script incorporating Conversational Selling strategies\n- Develop a foundation for emotional intelligence in a sales context and generate an empathetic email\n- Generate a multi-channel sales strategy to outreach prospects via phone, email, video, and social media\n\n\nTo be successful in this course, you should have: \n\n- An ability to communicate in verbal and written form in a way that is accessible and understandable by a general audience (you don't need to be formal or refined)\n- Baseline computer literacy (you must be able to use a word processor, web search, and email)\n- Familiarity with social media, including LinkedIn \n- Ability and willingness to learn new technology tools\n- Motivation to grow personally and professionally\n- Hunger for feedback and coaching\n- Successfully completed the previous courses in this training	English
Salesforce Sales Development Representative	Groundwork for Success in Sales Development	BEGINNER	11.7	This is Course 1 in the Salesforce Sales Development Representative Professional Certificate. In order to successfully complete later courses, please ensure you have completed this course before moving on. \n\nThis course is here to introduce you to the key role of a Sales Development Representative at a tech company. We want you to develop a winning professional mindset powered by emotional literacy, strategic thinking, time management, and task prioritization. We'll also focus on how you'll be managing your physical, mental, emotional, and spiritual well-being in both your personal and professional life.\n\nCourse 1 in the Sales Development Representative (SDR) Professional Certificate will give you the necessary skills to launch a career in the non-technical side of the tech industry. \n\n\nIn this course you will learn to:\n\n- Confidently articulate the purpose and power of the SDR role in the tech industry\n- Effectively select strategies and tools for developing a winning professional mindset\n- Justify strategies for time management and prioritization that yield results in your personal and professional life\n- Compose plans for taking responsibility for your physical, mental, emotional, and spiritual well-being within personal and professional relationships\n\n\nTo be successful in this course, you should have: \n\n- An ability to communicate in verbal and written form in a way that is accessible and understandable by a general audience (you don't need to be formal or refined)\n- Baseline computer literacy (you must be able to use a word processor, web search, and email)\n- Familiarity with social media, including LinkedIn \n- Ability and willingness to learn new technology tools\n- Motivation to grow personally and professionally\n- Hunger for feedback and coaching	English

| Google IT Support | IT Security: Defense against the digital dark arts | BEGINNER | 12.2 | This course covers a wide variety of IT security concepts, tools, and best practices. It introduces threats and attacks and the many ways they can show up. We'll give you some background of encryption algorithms and how they're used to safeguard data. Then, we'll dive into the three As of information security: authentication, authorization, and accounting. We'll also cover network security solutions, ranging from firewalls to Wifi encryption options. The course is rounded out by putting all these elements together into a multi-layered, in-depth security architecture, followed by recommendations on how to integrate a culture of security into your organization or team.\n\nAt the end of this course, you'll understand:\n● how various encryption algorithms and techniques work as well as their benefits and limitations.\n● various authentication systems and types.\n● the difference between authentication and authorization.\n● how to evaluate potential risks and recommend ways to reduce risk.\n● best practices for securing a network.\n● how to help others to grasp security concepts and protect themselves. | English |
| Google IT Support | System Administration and IT Infrastructure Services | BEGINNER | 12.8 | This course will transition you from working on a single computer to an entire fleet. Systems administration is the field of IT that's responsible for maintaining reliable computers systems in a multi-user environment. In this course, you'll learn about the infrastructure services that keep all organizations, big and small, up and running. We'll deep dive on cloud so that you'll understand everything from typical cloud infrastructure setups to how to manage cloud resources. You'll also learn how to manage and configure servers and how to use industry tools to manage computers, user information, and user productivity. Finally, you'll learn how to recover your organization's IT infrastructure in the event of a disaster.\n\nBy the end of this course you'll be able to:\n● utilize best practices for choosing hardware, vendors, and services for your organization\n● understand how the most common infrastructure services that keep an organization\nrunning work, and how to manage infrastructure servers\n● understand how to make the most of the cloud for your organization\n● manage an organization's computers and users using the directory services, Active\nDirectory, and OpenLDAP\n● choose and manage the tools that your organization will use\n● backup your organization's data and know how to recover your IT infrastructure in the case of\na disaster\n● utilize systems administration knowledge to plan and improve processes for IT environments | English |

Google IT Support	Operating Systems and You: Becoming a Power User	BEGINNER	18.4	In this course -- through a combination of video lectures, demonstrations, and hands-on practice -- you'll learn about the main components of an operating system and how to perform critical tasks like managing software and users, and configuring hardware. \n\nBy the end of this course you'll be able to:\n● navigate the Windows and Linux filesystems using a graphical user interface and command line interpreter\n● set up users, groups, and permissions for account access\n● install, configure, and remove software on the Windows and Linux operating systems\n● configure disk partitions and filesystems\n● understand how system processes work and how to manage them\n● work with system logs and remote connection tools\n● utilize operating system knowledge to troubleshoot common issues in an IT Support Specialist role	English
Google IT Support	The Bits and Bytes of Computer Networking	BEGINNER	17.0	This course is designed to provide a full overview of computer networking. We'll cover everything from the fundamentals of modern networking technologies and protocols to an overview of the cloud to practical applications and network troubleshooting. \n\nBy the end of this course, you'll be able to:\n● describe computer networks in terms of a five-layer model\n● understand all of the standard protocols involved with TCP/IP communications\n● grasp powerful network troubleshooting tools and techniques\n● learn network services like DNS and DHCP that help make computer networks run\n● understand cloud computing, everything as a service, and cloud storage	English

Google IT Support	Technical Support Fundamentals	BEGINNER	15.5	This course is the first of a series that aims to prepare you for a role as an entry-level IT Support Specialist. In this course, you'll be introduced to the world of Information Technology, or IT. You'll learn about the different facets of Information Technology, like computer hardware, the Internet, computer software, troubleshooting, and customer service. This course covers a wide variety of topics in IT that are designed to give you an overview of what's to come in this certificate program.\n\nBy the end of this course, you'll be able to:\n● understand how the binary system works\n● assemble a computer from scratch\n● choose and install an operating system on a computer\n● understand what the Internet is, how it works, and the impact it has in the modern world\n● learn how applications are created and how they work under the hood of a computer\n● utilize common problem-solving methodologies and soft skills in an Information Technology setting	English
IBM Cybersecurity Analyst	Cybersecurity Capstone: Breach Response Case Studies	BEGINNER	4.8	This course gives you the background needed to gain Cybersecurity skills as part of the IBM Cybersecurity Professional Certificate programs. \n\nYou will explore incident response methodologies and security models. You will learn to recognize and categorize key types of vulnerabilities and associated attacks against today's organizations. You will explore in depth several past and recent breaches to learn how they were detected and what was done or could have been done to reduce the threat risk to the organization.\nFinally, you will explore the costs of data breaches through research studies and well known breaches.\n\nThis course requires you to select and research a cybersecurity breach in the news today and apply your knowledge and skills from this course and previous cybersecurity courses to analyze the type of attack, attack timeline, vulnerable systems, and any missed opportunities. This project will be graded by your peers in the course.\n\nThis course is intended for anyone who wants to explore examples of Cybersecurity breaches to work in the Cybersecurity field as a Cybersecurity Analyst or a Cybersecurity Specialist.\n\nThe completion of this course also makes you eligible to earn the Cybersecurity Capstone: Breach Response Case Studies IBM digital badge. \n\nIn this course, you will learn to:\n\n\tApply incident response methodologies.\n●\tResearch and describe a watering hole attack.\n●\tResearch and describe ransomware threats and the consequences to organization.\n●\tResearch and describe 3rd party breaches and how they affect an organization.\n●\tResearch and describe the effects of a phishing attack.\n●\tResearch and describe a point of sale attack and approximate cost of data breaches.\n●\tPerform a case study on a current cyber attack and breach.	English
IBM Cybersecurity Analyst	Cybersecurity Compliance Framework & System Administration	BEGINNER	6.2	This course gives you the background needed to understand the key cybersecurity compliance and industry standards. This knowledge will be important for you to learn no matter what cybersecurity role you would like to acquire or have within an organization.\n\n You will learn the basic commands for user and server administration as it relates to security. You will need this skill to be able to understand vulnerabilities within your organizations operating systems.\n\nYou will learn the concepts of endpoint security and patch management. Both of these topics are important to keep systems current to avoid cybersecurity incidents against an organization.\n\nFinally you will learn in depth skills around cryptography and encryption to understand how these concepts affect software within a company.\n\nThis course is intended for anyone who wants to gain a basic understanding of Security Frameworks, Compliance, endpoint management, encryption or cryptography or as the third course in a series of courses to gain the skill as a Jr Cybersecurity analyst.	English

IBM Cybersecurity Analyst	Network Security & Database Vulnerabilities	BEGINNER	6.6	This course gives you the background needed to understand basic network security. You will learn the about Local Area Networks, TCP/IP, the OSI Framework and routing basics. You will learn how networking affects security systems within an organization. You will learn the network components that guard an organization from cybersecurity attacks.\n\nIn addition to networking, you will learn about database vulnerabilities and the tools/knowledge needed to research a database vulnerability for a variety of databases including SQL Injection, Oracle, Mongo and Couch. \n\nYou will learn about various security breach types associated with databases and organizations that define standards and provide tools for cybersecurity professionals.\n\nThis course is intended for anyone who wants to gain a basic understanding of Network Security/Database Vulnerabilities or as the fourth course in a series of courses to acquire the skills to work in the Cybersecurity field as a Jr Cybersecurity Analyst.	English
IBM Cybersecurity Analyst	Penetration Testing, Incident Response and Forensics	BEGINNER	5.2	This course gives you the background needed to gain Cybersecurity skills as part of the Cybersecurity Security Analyst Professional Certificate program. \n\nYou will learn about the different phases of penetration testing, how to gather data for your penetration test and popular penetration testing tools. Furthermore, you will learn the phases of an incident response, important documentation to collect, and the components of an incident response policy and team. Finally, you will learn key steps in the forensic process and important data to collect. \n\nThis course also gives you a first look at scripting and the importance to a system analyst.\n\nThis course is intended for anyone who wants to gain a basic understanding of Cybersecurity or as the fifth course in a series of courses to acquire the skills to work in the Cybersecurity field as a Cybersecurity Analyst.\n\nThe completion of this course also makes you eligible to earn the Penetration Testing, Incident Response and Forensics IBM digital badge. More information about the badge can be found https://www.youracclaim.com/org/ibm/badge/penetration-testing-incident-response-and-forensics.\n\n\n\nIn this course you will learn to:\n•\tDescribe penetration testing tools and the benefits to an organization\n•\tDescribe a deep dive into incident response techniques and tools\n•\tDescribe digital forensics and digital evidence.\n•\tDiscuss the power of scripting.	English
IBM Cybersecurity Analyst	Cyber Threat Intelligence	BEGINNER	6.0	This course gives you the background needed to gain Cybersecurity skills as part of the Cybersecurity Security Analyst Professional Certificate program. \n\nYou will understand network defensive tactics, define network access control and use network monitoring tools. You will understand data protection risks and explore mobile endpoint protection. Finally you will recognize various scanning technologies, application security vulnerabilities and threat intelligence platforms.\n\nThis course also gives you hands on access to cybersecurity tools important to a system analyst.\n\nThis course is intended for anyone who wants to gain a basic understanding of Cybersecurity or as the sixth course in a series of courses to acquire the skills to work in the Cybersecurity field as a Cybersecurity Analyst.\n\nThe completion of this course also makes you eligible to earn the Cyber Threat Intelligence IBM digital badge. More information about the badge can be found https://www.youracclaim.com/org/ibm/badge/cyber-threat-intelligence.\n\nIn this course, you will learn to:\n\n•\tDescribe examples of network defensive tactics.\n•\tDiscuss data loss prevention and endpoint protection concepts and tools. \n•\tExplore a data loss prevention tool and learn how to classify data in your database environment. \n•\tDescribe security vulnerability scanning technologies and tools.\n•\tRecognize application security threats and common vulnerabilities.\n•\tIdentify the key concepts around threat intelligence.\n•\tExplore a SIEM product and review suspicious alerts and how to take action.	English
IBM Cybersecurity Analyst	IBM Cybersecurity Analyst Assessment	INTERMEDIATE	2.6	A growing number of exciting, well-paying jobs in today's security industry do not require a college degree. This is the final course required to assess your acquired knowledge and skills from from the previous two specializations, IT Fundamentals of Cybersecurity and Security Analyst Fundamentals, to become job-ready for a cybersecurity analyst role. \n\nYou will be expected to pass a final assessment quiz for each of the seven (7) prior courses within the IBM Cybersecurity Analyst Professional Certificate.\n\nUpon successful completion of the quizzes, you will acquire the IBM Cybersecurity Analyst Professional Certificate.	English

IBM Cybersecurity Analyst	Introduction to Cybersecurity Tools & Cyber Attacks	BEGINNER	9.7	This course gives you the background needed to understand basic Cybersecurity. You will learn the history of Cybersecurity, types and motives of cyber attacks to further your knowledge of current threats to organizations and individuals. Key terminology, basic system concepts and tools will be examined as an introduction to the Cybersecurity field.\n\nYou will learn about critical thinking and its importance to anyone looking to pursue a career in Cybersecurity.\n\nFinally, you will begin to learn about organizations and resources to further research cybersecurity issues in the Modern era.\n\nThis course is intended for anyone who wants to gain a basic understanding of Cybersecurity or as the first course in a series of courses to acquire the skills to work in the Cybersecurity field as a Jr Cybersecurity Analyst.\n\nThe completion of this course also makes you eligible to earn the Introduction to Cybersecurity Tools & Cyber Attacks IBM digital badge. More information about the badge can be found https://www.youracclaim.com/org/ibm/badge/introduction-to-cybersecurity-tools-cyber-attacks	English
IBM Data Analyst	IBM Data Analyst Capstone Project	INTERMEDIATE	6.9	By completing this final capstone project you will apply various Data Analytics skills and techniques that you have learned as part of the previous courses in the IBM Data Analyst Professional Certificate. You will assume the role of an Associate Data Analyst who has recently joined the organization and be presented with a business challenge that requires data analysis to be performed on real-world datasets. \n\nYou will perform the various tasks that professional data analysts do as part of their jobs, including: \n- Data collection from multiple sources \n- Data wrangling and data preparation \n- Exploratory data analysis \n- Statistical analysis and data mining \n- Data visualization with different charts and plots, and \n- Interactive dashboard creation. \n\nThe project will culminate with a presentation of your data analysis report for various stakeholders in the organization. The report will include an executive summary, your analysis, and a conclusion. You will be assessed on both your work for the various stages in the Data Analysis process, as well as the final deliverable. \n\nAs part of this project you will demonstrate your proficiency with using Jupyter Notebooks, SQL, Relational Databases (RDBMS), Business Intelligence (BI) tools like Cognos, and Python Libraries such as Pandas, Numpy, Scikit-learn, Scipy, Matplotlib, Seaborn and others. \n\nThis project is a great addition to your portfolio and an opportunity to showcase your Data Analytics skills to prospective employers.	English
IBM Data Analyst	Python for Data Science, AI & Development	BEGINNER	9.0	Kickstart your learning of Python with this beginner-friendly self-paced course taught by an expert. Python is one of the most popular languages in the programming and data science world and demand for individuals who have the ability to apply Python has never been higher. \n\nThis introduction to Python course will take you from zero to programming in Python in a matter of hours—no prior programming experience necessary! You will learn about Python basics and the different data types. You will familiarize yourself with Python Data structures like List and Tuples, as well as logic concepts like conditions and branching. You will use Python libraries such as Pandas, Numpy & Beautiful Soup. You'll also use Python to perform tasks such as data collection and web scraping with APIs. \n\nYou will practice and apply what you learn through hands-on labs using Jupyter Notebooks. By the end of this course, you'll feel comfortable creating basic programs, working with data, and automating real-world tasks using Python. \n\nThis course is suitable for anyone who wants to learn Data Science, Data Analytics, Software Development, Data Engineering, AI, and DevOps as well as a number of other job roles.	English

IBM Data Analyst	Data Visualization and Dashboards with Excel and Cognos	BEGINNER	5.5	Learn how to create data visualizations and dashboards using spreadsheets and analytics tools. This course covers some of the first steps for telling a compelling story with your data using various types of charts and graphs. You'll learn the basics of visualizing data with Excel and IBM Cognos Analytics without having to write any code. \n\nYou'll start by creating simple charts in Excel such as line, pie and bar charts. You will then create more advanced visualizations with Treemaps, Scatter Charts, Histograms, Filled Map Charts, and Sparklines. Next you'll also work with the Excel PivotChart feature as well as assemble several visualizations in an Excel dashboard. \n\nThis course also teaches you how to use business intelligence (BI) tools like Cognos Analytics to create interactive dashboards. By the end of the course you will have an appreciation for the key role that data visualizations play in communicating your data analysis findings, and the ability to effectively create them. \n\nThroughout this course there will be numerous hands-on labs to help you develop practical experience for working with Excel and Cognos. There is also a final project in which you'll create a set of data visualizations and an interactive dashboard to add to your portfolio, which you can share with peers, professional communities or prospective employers.	English
IBM Data Analyst	Data Analysis with Python	BEGINNER	8.9	Analyzing data with Python is an essential skill for Data Scientists and Data Analysts. This course will take you from the basics of data analysis with Python to building and evaluating data models. \n\n Topics covered include: \n- collecting and importing data \n- cleaning, preparing & formatting data \n- data frame manipulation \n- summarizing data \n- building machine learning regression models \n- model refinement \n- creating data pipelines \n\nYou will learn how to import data from multiple sources, clean and wrangle data, perform exploratory data analysis (EDA), and create meaningful data visualizations. You will then predict future trends from data by developing linear, multiple, polynomial regression models & pipelines and learn how to evaluate them. \n\nIn addition to video lectures you will learn and practice using hands-on labs and projects. You will work with several open source Python libraries, including Pandas and Numpy to load, manipulate, analyze, and visualize cool datasets. You will also work with scipy and scikit-learn, to build machine learning models and make predictions. \n\nIf you choose to take this course and earn the Coursera course certificate, you will also earn an IBM digital badge.	English
IBM Data Analyst	Python Project for Data Science	INTERMEDIATE	3.0	This mini-course is intended to for you to demonstrate foundational Python skills for working with data. This course primarily involves completing a project in which you will assume the role of a Data Scientist or a Data Analyst and be provided with a real-world data set and a real-world inspired scenario to identify patterns and trends. \n\nYou will perform specific data science and data analytics tasks such as extracting data, web scraping, visualizing data and creating a dashboard. This project will showcase your proficiency with Python and using libraries such as Pandas and Beautiful Soup within a Jupyter Notebook. Upon completion you will have an impressive project to add to your job portfolio. \n\nPRE-REQUISITE: **Python for Data Science, AI and Development** course from IBM is a pre-requisite for this project course. Please ensure that before taking this course you have either completed the Python for Data Science, AI and Development course from IBM or have equivalent proficiency in working with Python and data. \n\nNOTE: This course is not intended to teach you Python and does not have too much instructional content. It is intended for you to apply prior Python knowledge.	English

IBM Data Analyst	Introduction to Data Analytics	BEGINNER	8.4	Ready to start a career in Data Analysis but don't know where to begin? This course presents you with a gentle introduction to Data Analysis, the role of a Data Analyst, and the tools used in this job. You will learn about the skills and responsibilities of a data analyst and hear from several data experts sharing their tips & advice to start a career. This course will help you to differentiate between the roles of Data Analysts, Data Scientists, and Data Engineers. \n\nYou will familiarize yourself with the data ecosystem, alongside Databases, Data Warehouses, Data Marts, Data Lakes and Data Pipelines. Continue this exciting journey and discover Big Data platforms such as Hadoop, Hive, and Spark. \n\nBy the end of this course you'll be able to understand the fundamentals of the data analysis process including gathering, cleaning, analyzing and sharing data and communicating your insights with the use of visualizations and dashboard tools. \n\nThis all comes together in the final project where it will test your knowledge of the course material, and provide a real-world scenario of data analysis tasks. \n\nThis course does not require any prior data analysis, spreadsheet, or computer science experience.	English
IBM Data Analyst	Excel Basics for Data Analysis	BEGINNER	7.6	Spreadsheet tools like Excel are an essential tool for working with data - whether for data analytics, business, marketing, or research. This course is designed to give you a basic working knowledge of Excel and how to use it for analyzing data. \n \nThis course is suitable for those who are interested in pursuing a career in data analysis or data science, as well as anyone looking to use Excel for data analysis in their own domain. No prior experience with spreadsheets or coding is required - all you need is a device with a modern web browser and the ability to create a Microsoft account to access Excel online at no cost. If you have a desktop version of Excel, you can also easily follow along with the course. \n \nThroughout this course, you'll gain valuable experience working with data sets and spreadsheets. We'll start by introducing you to spreadsheets like Microsoft Excel and Google Sheets, and show you how to load data from multiple formats. From there, you'll learn how to perform basic data wrangling and cleansing tasks using functions, and expand your knowledge of data analysis through the use of filtering, sorting, and pivot tables. \n \nThere is a strong focus on practice and applied learning in this course. With each lab, you'll have the opportunity to manipulate data and gain hands-on experience using Excel. You'll learn how to clean and format your data efficiently, and convert it into a pivot table to make it more organized and readable. The final project will allow you to showcase your newly acquired data analysis skills by working with real data sets and spreadsheets. \n \nBy the end of this course, you'll have a solid foundation in using Excel for data analysis. You'll have worked with multiple data sets and spreadsheets, and will have the skills and knowledge needed to effectively clean and analyze data without having to learn any code. So let's get started!	English

IBM Data Analyst	Databases and SQL for Data Science with Python	BEGINNER	10.1	Working knowledge of SQL (or Structured Query Language) is a must for data professionals like Data Scientists, Data Analysts and Data Engineers. Much of the world's data resides in databases. SQL is a powerful language used for communicating with and extracting data from databases.\n\nIn this course you will learn SQL inside out- from the very basics of Select statements to\nadvanced concepts like JOINs. \nYou will: \n-write foundational SQL statements like: SELECT, INSERT, UPDATE, and DELETE \n-filter result sets, use WHERE, COUNT, DISTINCT, and LIMIT clauses \n-differentiate between DML & DDL \n-CREATE, ALTER, DROP and load tables \n-use string patterns and ranges; ORDER and GROUP result sets, and built-in database functions\n-build sub-queries and query data from multiple tables \n-access databases as a data scientist using Jupyter notebooks with SQL and Python\n-work with advanced concepts like Stored Procedures, Views, ACID Transactions, Inner & Outer JOINs through hands-on labs and projects\n\nYou will practice building SQL queries, work with real databases on the Cloud, and use real data science tools. \n\nIn the final project you'll analyze multiple real-world datasets to demonstrate your skills.	English
IBM Data Analyst	Data Visualization with Python	INTERMEDIATE	7.4	One of the most important skills of successful data scientists and data analysts is the ability to tell a compelling story by visualizing data and findings in an approachable and stimulating way. In this course you will learn many ways to effectively visualize both small and large-scale data. You will be able to take data that at first glance has little meaning and present that data in a form that conveys insights. \n\nThis course will teach you to work with many Data Visualization tools and techniques. You will learn to create various types of basic and advanced graphs and charts like: Waffle Charts, Area Plots, Histograms, Bar Charts, Pie Charts, Scatter Plots, Word Clouds, Choropleth Maps, and many more! You will also create interactive dashboards that allow even those without any Data Science experience to better understand data, and make more effective and informed decisions. \n\nYou will learn hands-on by completing numerous labs and a final project to practice and apply the many aspects and techniques of Data Visualization using Jupyter Notebooks and a Cloud-based IDE. You will use several data visualization libraries in Python, including Matplotlib, Seaborn, Folium, Plotly & Dash.	English

IBM Data Analytics with Excel and R	Introduction to Data Analytics	BEGINNER	8.4	Ready to start a career in Data Analysis but don't know where to begin? This course presents you with a gentle introduction to Data Analysis, the role of a Data Analyst, and the tools used in this job. You will learn about the skills and responsibilities of a data analyst and hear from several data experts sharing their tips & advice to start a career. This course will help you to differentiate between the roles of Data Analysts, Data Scientists, and Data Engineers. \n\nYou will familiarize yourself with the data ecosystem, alongside Databases, Data Warehouses, Data Marts, Data Lakes and Data Pipelines. Continue this exciting journey and discover Big Data platforms such as Hadoop, Hive, and Spark. \n\nBy the end of this course you'll be able to understand the fundamentals of the data analysis process including gathering, cleaning, analyzing and sharing data and communicating your insights with the use of visualizations and dashboard tools. \n\nThis all comes together in the final project where it will test your knowledge of the course material, and provide a real-world scenario of data analysis tasks. \n\nThis course does not require any prior data analysis, spreadsheet, or computer science experience.	English
IBM Data Analytics with Excel and R	Data Visualization and Dashboards with Excel and Cognos	BEGINNER	5.5	Learn how to create data visualizations and dashboards using spreadsheets and analytics tools. This course covers some of the first steps for telling a compelling story with your data using various types of charts and graphs. You'll learn the basics of visualizing data with Excel and IBM Cognos Analytics without having to write any code. \n\nYou'll start by creating simple charts in Excel such as line, pie and bar charts. You will then create more advanced visualizations with Treemaps, Scatter Charts, Histograms, Filled Map Charts, and Sparklines. Next you'll also work with the Excel PivotChart feature as well as assemble several visualizations in an Excel dashboard. \n\nThis course also teaches you how to use business intelligence (BI) tools like Cognos Analytics to create interactive dashboards. By the end of the course you will have an appreciation for the key role that data visualizations play in communicating your data analysis findings, and the ability to effectively create them. \n\nThroughout this course there will be numerous hands-on labs to help you develop practical experience for working with Excel and Cognos. There is also a final project in which you'll create a set of data visualizations and an interactive dashboard to add to your portfolio, which you can share with peers, professional communities or prospective employers.	English

IBM Data Analytics with Excel and R	Data Visualization with R	BEGINNER	3.2	In this course, you will learn the Grammar of Graphics, a system for describing and building graphs, and how the ggplot2 data visualization package for R applies this concept to basic bar charts, histograms, pie charts, scatter plots, line plots, and box plots. You will also learn how to further customize your charts and plots using themes and other techniques. You will then learn how to use another data visualization package for R called Leaflet to create map plots, a unique way to plot data based on geolocation data. Finally, you will be introduced to creating interactive dashboards using the R Shiny package. You will learn how to create and customize Shiny apps, alter the appearance of the apps by adding HTML and image components, and deploy your interactive data apps on the web.\n\nYou will practice what you learn and build hands-on experience by completing labs in each module and a final project at the end of the course.\n\nWatch the videos, work through the labs, and watch your data science skill grow. Good luck!\n\nNOTE: This course requires knowledge of working with R and data. If you do not have these skills, it is highly recommended that you first take the Introduction to R Programming for Data Science as well as the Data Analysis with R courses from IBM prior to starting this course. Note: The pre-requisite for this course is basic R programming skills.	English
IBM Data Analytics with Excel and R	Data Analysis with R	INTERMEDIATE	5.0	The R programming language is purpose-built for data analysis. R is the key that opens the door between the problems that you want to solve with data and the answers you need to meet your objectives. This course starts with a question and then walks you through the process of answering it through data. You will first learn important techniques for preparing (or wrangling) your data for analysis. You will then learn how to gain a better understanding of your data through exploratory data analysis, helping you to summarize your data and identify relevant relationships between variables that can lead to insights. Once your data is ready to analyze, you will learn how to develop your model and evaluate and tune its performance. By following this process, you can be sure that your data analysis performs to the standards that you have set, and you can have confidence in the results. \n\nYou will build hands-on experience by playing the role of a data analyst who is analyzing airline departure and arrival data to predict flight delays. Using an Airline Reporting Carrier On-Time Performance Dataset, you will practice reading data files, preprocessing data, creating models, improving models, and evaluating them to ultimately choose the best model. \n\nWatch the videos, work through the labs, and add to your portfolio. Good luck!\n\nNote: The pre-requisite for this course is basic R programming skills. For example, ensure that you have completed a course like Introduction to R Programming for Data Science from IBM.	English

IBM Data Analytics with Excel and R	Excel Basics for Data Analysis	BEGINNER	7.6	Spreadsheet tools like Excel are an essential tool for working with data - whether for data analytics, business, marketing, or research. This course is designed to give you a basic working knowledge of Excel and how to use it for analyzing data. \n \nThis course is suitable for those who are interested in pursuing a career in data analysis or data science, as well as anyone looking to use Excel for data analysis in their own domain. No prior experience with spreadsheets or coding is required - all you need is a device with a modern web browser and the ability to create a Microsoft account to access Excel online at no cost. If you have a desktop version of Excel, you can also easily follow along with the course. \n \nThroughout this course, you'll gain valuable experience working with data sets and spreadsheets. We'll start by introducing you to spreadsheets like Microsoft Excel and Google Sheets, and show you how to load data from multiple formats. From there, you'll learn how to perform basic data wrangling and cleansing tasks using functions, and expand your knowledge of data analysis through the use of filtering, sorting, and pivot tables. \n \nThere is a strong focus on practice and applied learning in this course. With each lab, you'll have the opportunity to manipulate data and gain hands-on experience using Excel. You'll learn how to clean and format your data efficiently, and convert it into a pivot table to make it more organized and readable. The final project will allow you to showcase your newly acquired data analysis skills by working with real data sets and spreadsheets. \n \nBy the end of this course, you'll have a solid foundation in using Excel for data analysis. You'll have worked with multiple data sets and spreadsheets, and will have the skills and knowledge needed to effectively clean and analyze data without having to learn any code. So let's get started!	English
IBM Data Analytics with Excel and R	Data Science with R - Capstone Project	INTERMEDIATE	2.4	In this capstone course, you will apply various data science skills and techniques that you have learned as part of the previous courses in the IBM Data Science with R Specialization or IBM Data Analytics with Excel and R Professional Certificate.\n\nFor this project, you will assume the role of a Data Scientist who has recently joined an organization and be presented with a challenge that requires data collection, analysis, basic hypothesis testing, visualization, and modeling to be performed on real-world datasets. You will collect and understand data from multiple sources, conduct data wrangling and preparation with Tidyverse, perform exploratory data analysis with SQL, Tidyverse and ggplot2, model data with linear regression, create charts and plots to visualize the data, and build an interactive dashboard.\n\nThe project will culminate with a presentation of your data analysis report, with an executive summary for the various stakeholders in the organization.	English

IBM Data Analytics with Excel and R	Assessment for Data Analysis and Visualization Foundations	BEGINNER	0.9	This course is the final step in the Data Analysis and Visualization Foundations Specialization. It contains a graded final examination that covers content from three courses: Introduction to Data Analytics, Excel Basics for Data Analysis, and Data Visualization and Dashboards with Excel and Cognos. \n\nFrom the Introduction to Data Analytics course, your understanding will be assessed on topics like the data ecosystem and the fundamentals of data analysis, covering tools for data gathering and data mining. Moving on to the Excel Basics for Data Analysis course, expect questions focusing on the use of Excel spreadsheets in data analytics, proficiency in data cleansing and wrangling, and skills in working with pivot tables. Finally, from the Data Visualization and Dashboards with Excel and Cognos course, you will demonstrate your knowledge of IBM Cognos basics and your ability to use Excel for effective data visualization.	English
IBM Data Analytics with Excel and R	Introduction to R Programming for Data Science	BEGINNER	5.0	When working in the data science field you will definitely become acquainted with the R language and the role it plays in data analysis. This course introduces you to the basics of the R language such as data types, techniques for manipulation, and how to implement fundamental programming tasks. \n\nYou will begin the process of understanding common data structures, programming fundamentals and how to manipulate data all with the help of the R programming language. \n\nThe emphasis in this course is hands-on and practical learning . You will write a simple program using RStudio, manipulate data in a data frame or matrix, and complete a final project as a data analyst using Watson Studio and Jupyter notebooks to acquire and analyze data-driven insights. \n \n\nNo prior knowledge of R, or programming is required.	English

IBM Data Analytics with Excel and R	SQL for Data Science with R	BEGINNER	6.8	Much of the world's data resides in databases. SQL (or Structured Query Language) is a powerful language which is used for communicating with and extracting data from databases. A working knowledge of databases and SQL is a must if you want to become a data scientist.\n\nThe purpose of this course is to introduce relational database concepts and help you learn and apply foundational knowledge of the SQL and R languages. It is also intended to get you started with performing SQL access in a data science environment. \n\nThe emphasis in this course is on hands-on and practical learning. As such, you will work with real databases, real data science tools, and real-world datasets. You will create a database instance in the cloud. Through a series of hands-on labs, you will practice building and running SQL queries. You will also learn how to access databases from Jupyter notebooks using SQL and R.\n\nNo prior knowledge of databases, SQL, R, or programming is required.\n\nAnyone can audit this course at no charge. If you choose to take this course and earn the Coursera course certificate, you can also earn an IBM digital badge upon successful completion of the course.	English
IBM Data Analytics with Excel and R	Assessment for Data Analysis and Visualization Foundations	BEGINNER	0.9	This course is the final step in the Data Analysis and Visualization Foundations Specialization. It contains a graded final examination that covers content from three courses: Introduction to Data Analytics, Excel Basics for Data Analysis, and Data Visualization and Dashboards with Excel and Cognos. \n\nFrom the Introduction to Data Analytics course, your understanding will be assessed on topics like the data ecosystem and the fundamentals of data analysis, covering tools for data gathering and data mining. Moving on to the Excel Basics for Data Analysis course, expect questions focusing on the use of Excel spreadsheets in data analytics, proficiency in data cleansing and wrangling, and skills in working with pivot tables. Finally, from the Data Visualization and Dashboards with Excel and Cognos course, you will demonstrate your knowledge of IBM Cognos basics and your ability to use Excel for effective data visualization.	English

| IBM Data Engineering | Introduction to Data Engineering | BEGINNER | 9.5 | Start your journey in one of the fastest growing professions today with this beginner-friendly Data Engineering course! You will be introduced to the core concepts, processes, and tools you need to know in order to get a foundational knowledge of data engineering. as well as the roles that Data Engineers, Data Scientists, and Data Analysts play in the ecosystem. \n\nYou will begin this course by understanding what is data engineering as well as the roles that Data Engineers, Data Scientists, and Data Analysts play in this exciting field. Next you will learn about the data engineering ecosystem, the different types of data structures, file formats, sources of data, and the languages data professionals use in their day-to-day tasks. \n\nYou will become familiar with the components of a data platform and gain an understanding of several different types of data repositories such as Relational (RDBMS) and NoSQL databases, Data Warehouses, Data Marts, Data Lakes and Data Lakehouses. You'll then learn about Big Data processing tools like Apache Hadoop and Spark. You will also become familiar with ETL, ELT, Data Pipelines and Data Integration. \n\nThis course provides you with an understanding of a typical Data Engineering lifecycle which includes architecting data platforms, designing data stores, and gathering, importing, wrangling, querying, and analyzing data. You will also learn about security, governance, and compliance. \n\nYou will learn about career opportunities in the field of Data Engineering and the different paths that you can take for getting skilled as a Data Engineer. You will hear from several experienced Data Engineers, sharing their insights and advice. \n\nBy the end of this course, you will also have completed several hands-on labs and worked with a relational database, loaded data into the database, and performed some basic querying operations. | English |
| IBM Data Engineering | Getting Started with Data Warehousing and BI Analytics | INTERMEDIATE | 7.0 | Kickstart your Data Warehousing and Business Intelligence (BI) Analytics journey with this self-paced course. You will learn how to design, deploy, load, manage, and query data warehouses and data marts. You will also work with BI tools to analyze data in these repositories. \n\nYou will begin this course by understanding different kinds of analytics repositories including data marts, data warehouses, data lakes, data lakehouses, and data reservoirs, and their functions and uses. They are designed to enable rapid business decision making through accurate and flexible reporting and data analysis. \n\nA data warehouse is one of the most fundamental business intelligence tools in use today, and one that successful Data Engineers must understand. In this course, you will learn to design, model and implement data warehouses and explore data-warehousing architectures such as Star and Snowflake schemas. You will also learn how to populate data warehouses using ETL and ELT processes, verify data, query data and how to use Cubes, Rollups, and materialized views/tables. \n\nYou will become familiar with different BI tools used by experts in the industry such as IBM Cognos Analytics, Tableau, and Microsoft PowerBI. You will also use a BI tool to create data visualizations and build interactive dashboards to gain insights from data. \n\nThe hands-on labs in this course will enable you to apply what you learn and gain a practical knowledge of Data Warehousing and BI Analytics. You will work with repositories like MySQL, PostgreSQL, and IBM Db2. You will also use BI tools like Cognos Analytics. At the end of this course, you will complete a project to demonstrate the skills you acquired in each module. | English |

| IBM Data Engineering | Introduction to Big Data with Spark and Hadoop | INTERMEDIATE | 6.7 | This self-paced IBM course will teach you all about big data! You will become familiar with the characteristics of big data and its application in big data analytics. You will also gain hands-on experience with big data processing tools like Apache Hadoop and Apache Spark. \n\nBernard Marr defines big data as the digital trace that we are generating in this digital era. You will start the course by understanding what big data is and exploring how insights from big data can be harnessed for a variety of use cases. You'll also explore how big data uses technologies like parallel processing, scaling, and data parallelism. \n\nNext, you will learn about Hadoop, an open-source framework that allows for the distributed processing of large data and its ecosystem. You will discover important applications that go hand in hand with Hadoop, like Distributed File System (HDFS), MapReduce, and HBase. You will become familiar with Hive, a data warehouse software that provides an SQL-like interface to efficiently query and manipulate large data sets. \n\nYou'll then gain insights into Apache Spark, an open-source processing engine that provides users with new ways to store and use big data. In this course, you will discover how to leverage Spark to deliver reliable insights. The course provides an overview of the platform, going into the components that make up Apache Spark. \n\nYou'll learn about DataFrames and perform basic DataFrame operations and work with SparkSQL. Explore how Spark processes and monitors the requests your application submits and how you can track work using the Spark Application UI. \n\nThis course has several hands-on labs to help you apply and practice the concepts you learn. You will complete Hadoop and Spark labs using various tools and technologies, including Docker, Kubernetes, Python, and Jupyter Notebooks. | English |
| IBM Data Engineering | Data Engineering Capstone Project | ADVANCED | 4.6 | Showcase your skills in this Data Engineering project! In this course you will apply a variety of data engineering skills and techniques you have learned as part of the previous courses in the IBM Data Engineering Professional Certificate. \n\nYou will demonstrate your knowledge of Data Engineering by assuming the role of a Junior Data Engineer who has recently joined an organization and be presented with a real-world use case that requires architecting and implementing a data analytics platform. \n\nIn this Capstone project you will complete numerous hands-on labs. You will create and query data repositories using relational and NoSQL databases such as MySQL and MongoDB. You'll also design and populate a data warehouse using PostgreSQL and IBM Db2 and write queries to perform Cube and Rollup operations. \n\nYou will generate reports from the data in the data warehouse and build a dashboard using Cognos Analytics. You will also show your proficiency in Extract, Transform, and Load (ETL) processes by creating data pipelines for moving data from different repositories. You will perform big data analytics using Apache Spark to make predictions with the help of a machine learning model. \n\nThis course is the final course in the IBM Data Engineering Professional Certificate. It is recommended that you complete all the previous courses in this Professional Certificate before starting this course. | English |

IBM Data Engineering	Introduction to Relational Databases (RDBMS)	BEGINNER	6.4	Are you ready to dive into the world of data engineering? In this beginner level course, you will gain a solid understanding of how data is stored, processed, and accessed in relational databases (RDBMSes). You will work with different types of databases that are appropriate for various data processing requirements. \n\nYou will begin this course by being introduced to relational database concepts, as well as several industry standard relational databases, including IBM DB2, MySQL, and PostgreSQL. Next, you'll utilize RDBMS tools used by professionals such as phpMyAdmin and pgAdmin for creating and maintaining relational databases. You will also use the command line and SQL statements to create and manage tables. \n\nThis course incorporates hands-on, practical exercises to help you demonstrate your learning. You will work with real databases and explore real-world datasets. You will create database instances and populate them with tables and data. \n\nAt the end of this course, you will complete a final assignment where you will apply your accumulated knowledge from this course and demonstrate that you have the skills to: design a database for a specific analytics requirement, normalize tables, create tables and views in the database, load and access data. \n\nNo prior knowledge of databases or programming is required. \n\nAnyone can audit this course at no-charge. If you choose to take this course and earn the Coursera course certificate, you can also earn an IBM digital badge upon successful completion of the course.	English
IBM Data Engineering	Python Project for Data Engineering	INTERMEDIATE	3.2	Showcase your Python skills in this Data Engineering Project! This short course is designed to apply your basic Python skills through the implementation of various techniques for gathering and manipulating data. \n\nYou will take on the role of a Data Engineer by extracting data from multiple sources, and converting the data into specific formats and making it ready for loading into a database for analysis. You will also demonstrate your knowledge of web scraping and utilizing APIs to extract data. \n\nBy the end of this hands-on project, you will have shown your proficiency with important skills to Extract Transform and Load (ETL) data using an IDE, and of course, Python Programming. \n\nUpon completion of this course, you will also have a great new addition to your portfolio! \n\nPRE-REQUISITE: \n\n**Python for Data Science, AI and Development** course from IBM is a pre-requisite for this project course. Please ensure that before taking this course you have either completed the Python for Data Science, AI and Development course from IBM or have equivalent proficiency in working with Python and data. NOTE: This course is not intended to teach you Python and does not have too much new instructional content. It is intended for you to mostly apply prior Python knowledge.	English

IBM Data Engineering	Hands-on Introduction to Linux Commands and Shell Scripting	BEGINNER	5.3	This course provides a practical understanding of common Linux / UNIX shell commands. In this beginner friendly course, you will learn about the Linux basics, Shell commands, and Bash shell scripting. \n\nYou will begin this course with an introduction to Linux and explore the Linux architecture. You will interact with the Linux Terminal, execute commands, navigate directories, edit files, as well as install and update software. \n\nNext, you'll become familiar with commonly used Linux commands. You will work with general purpose commands like id, date, uname, ps, top, echo, man; directory management commands such as pwd, cd, mkdir, rmdir, find, df; file management commands like cat, wget, more, head, tail, cp, mv, touch, tar, zip, unzip; access control command chmod; text processing commands - wc, grep, tr; as well as networking commands - hostname, ping, ifconfig and curl. \n\nYou will then move on to learning the basics of shell scripting to automate a variety of tasks. You'll create simple to more advanced shell scripts that involve Metacharacters, Quoting, Variables, Command substitution, I/O Redirection, Pipes & Filters, and Command line arguments. You will also schedule cron jobs using crontab. \n\nThe course includes both video-based lectures as well as hands-on labs to practice and apply what you learn. You will have no-charge access to a virtual Linux server that you can access through your web browser, so you don't need to download and install anything to complete the labs. \n\nYou'll end this course with a final project as well as a final exam. In the final project you will demonstrate your knowledge of course concepts by performing your own Extract, Transform, and Load (ETL) process and create a scheduled backup script. \n\nThis course is ideal for data engineers, data scientists, software developers, and cloud practitioners who want to get familiar with frequently used commands on Linux, MacOS and other Unix-like operating systems as well as get started with creating shell scripts.	English
IBM Data Engineering	Databases and SQL for Data Science with Python	BEGINNER	10.1	Working knowledge of SQL (or Structured Query Language) is a must for data professionals like Data Scientists, Data Analysts and Data Engineers. Much of the world's data resides in databases. SQL is a powerful language used for communicating with and extracting data from databases.\n\nIn this course you will learn SQL inside out- from the very basics of Select statements to\nadvanced concepts like JOINs. \nYou will: \n-write foundational SQL statements like: SELECT, INSERT, UPDATE, and DELETE \n-filter result sets, use WHERE, COUNT, DISTINCT, and LIMIT clauses \n-differentiate between DML & DDL \n-CREATE, ALTER, DROP and load tables \n-use string patterns and ranges; ORDER and GROUP result sets, and built-in database functions\n-build sub-queries and query data from multiple tables \n-access databases as a data scientist using Jupyter notebooks with SQL and Python\n-work with advanced concepts like Stored Procedures, Views, ACID Transactions, Inner & Outer JOINs through hands-on labs and projects\n\nYou will practice building SQL queries, work with real databases on the Cloud, and use real data science tools. \n\nIn the final project you'll analyze multiple real-world datasets to demonstrate your skills.	English

IBM Data Engineering	ETL and Data Pipelines with Shell, Airflow and Kafka	INTERMEDIATE	9.7	Delve into the two different approaches to converting raw data into analytics-ready data. One approach is the Extract, Transform, Load (ETL) process. The other contrasting approach is the Extract, Load, and Transform (ELT) process. ETL processes apply to data warehouses and data marts. ELT processes apply to data lakes, where the data is transformed on demand by the requesting/calling application. \n\nIn this course, you will learn about the different tools and techniques that are used with ETL and Data pipelines. Both ETL and ELT extract data from source systems, move the data through the data pipeline, and store the data in destination systems. During this course, you will experience how ELT and ETL processing differ and identify use cases for both. You will identify methods and tools used for extracting the data, merging extracted data either logically or physically, and for loading data into data repositories. \n\nYou will also define transformations to apply to source data to make the data credible, contextual, and accessible to data users. You will be able to outline some of the multiple methods for loading data into the destination system, verifying data quality, monitoring load failures, and the use of recovery mechanisms in case of failure. \n\nBy the end of this course, you will also know how to use Apache Airflow to build data pipelines as well be knowledgeable about the advantages of using this approach. You will also learn how to use Apache Kafka to build streaming pipelines as well as the core components of Kafka which include: brokers, topics, partitions, replications, producers, and consumers. \n\nFinally, you will complete a shareable final project that enables you to demonstrate the skills you acquired in each module.	English
IBM Data Engineering	Relational Database Administration (DBA)	INTERMEDIATE	9.3	Get started with Relational Database Administration and Database Management in this self-paced course! \n\nThis course begins with an introduction to database management; you will learn about things like the Database Management Lifecycle, the roles of a Database Administrator (DBA) as well as database storage. You will then discover some of the activities, techniques, and best practices for managing a database. \n\nYou will also learn about database optimization, including updating statistics, slow queries, types of indexes, and index creation and usage. You will learn about configuring and upgrading database server software and related products. You'll also learn about database security; how to implement user authentication, assign roles, and assign object-level permissions. And gain an understanding of how to perform backup and restore procedures in case of system failures. \n\nYou will learn how to optimize databases for performance, monitor databases, collect diagnostic data, and access error information to help you resolve issues that may occur. Many of these tasks are repetitive, so you will learn how to schedule maintenance activities and regular diagnostic tests and send automated messages of the success or failure of a task. The course includes both video-based lectures as well as hands-on labs to practice and apply what you learn. \n\nThis course ends with a final project where you will assume the role of a database administrator and complete a number of database administration tasks across many different databases.	English

IBM Data Engineering	Introduction to NoSQL Databases	BEGINNER	7.9	Get started with NoSQL Databases with this beginner-friendly introductory course! This course will provide technical, hands-on knowledge of NoSQL databases and Database-as-a-Service (DaaS) offerings. With the advent of Big Data and agile development methodologies, NoSQL databases have gained a lot of relevance in the database landscape. Their main advantage is the ability to handle scalability and flexibility issues modern applications raise. \n\nYou will start this course by learning the history and the basics of NoSQL databases (document, key-value, column, and graph) and discover their key characteristics and benefits. You will learn about the four categories of NoSQL databases and how they differ. You'll also explore the differences between the ACID and BASE consistency models, the pros and cons of distributed systems, and when to use RDBMS and NoSQL. You will also learn about vector databases, an emerging class of databases popular in AI. \n\nNext, you will explore the architecture and features of several implementations of NoSQL databases, namely MongoDB, Cassandra, and IBM Cloudant. You will learn about the common tasks that they each perform and their key and defining characteristics. \n\nYou will then get hands-on experience using those NoSQL databases to perform standard database management tasks, such as creating and replicating databases, loading and querying data, modifying database permissions, indexing and aggregating data, and sharding (or partitioning) data. \n\nAt the end of this course, you will complete a final project where you will apply all your knowledge of the course content to a specific scenario and work with several NoSQL databases. This course suits anyone wanting to expand their Data Management and Information Technology skill set.	English
IBM Data Engineering	Python for Data Science, AI & Development	BEGINNER	9.0	Kickstart your learning of Python with this beginner-friendly self-paced course taught by an expert. Python is one of the most popular languages in the programming and data science world and demand for individuals who have the ability to apply Python has never been higher. \n\nThis introduction to Python course will take you from zero to programming in Python in a matter of hours—no prior programming experience necessary! You will learn about Python basics and the different data types. You will familiarize yourself with Python Data structures like List and Tuples, as well as logic concepts like conditions and branching. You will use Python libraries such as Pandas, Numpy & Beautiful Soup. You'll also use Python to perform tasks such as data collection and web scraping with APIs. \n\nYou will practice and apply what you learn through hands-on labs using Jupyter Notebooks. By the end of this course, you'll feel comfortable creating basic programs, working with data, and automating real-world tasks using Python. \n\nThis course is suitable for anyone who wants to learn Data Science, Data Analytics, Software Development, Data Engineering, AI, and DevOps as well as a number of other job roles.	English

| IBM Data Science | Databases and SQL for Data Science with Python | BEGINNER | 10.1 | Working knowledge of SQL (or Structured Query Language) is a must for data professionals like Data Scientists, Data Analysts and Data Engineers. Much of the world's data resides in databases. SQL is a powerful language used for communicating with and extracting data from databases.\n\nIn this course you will learn SQL inside out- from the very basics of Select statements to\nadvanced concepts like JOINs. \nYou will: \n-write foundational SQL statements like: SELECT, INSERT, UPDATE, and DELETE \n-filter result sets, use WHERE, COUNT, DISTINCT, and LIMIT clauses \n-differentiate between DML & DDL \n-CREATE, ALTER, DROP and load tables \n-use string patterns and ranges; ORDER and GROUP result sets, and built-in database functions\n-build sub-queries and query data from multiple tables \n-access databases as a data scientist using Jupyter notebooks with SQL and Python\n-work with advanced concepts like Stored Procedures, Views, ACID Transactions, Inner & Outer JOINs through hands-on labs and projects\n\nYou will practice building SQL queries, work with real databases on the Cloud, and use real data science tools. \n\nIn the final project you'll analyze multiple real-world datasets to demonstrate your skills. | English |
| IBM Data Science | Data Analysis with Python | BEGINNER | 8.9 | Analyzing data with Python is an essential skill for Data Scientists and Data Analysts. This course will take you from the basics of data analysis with Python to building and evaluating data models. \n\n Topics covered include: \n- collecting and importing data \n- cleaning, preparing & formatting data \n- data frame manipulation \n- summarizing data \n- building machine learning regression models \n- model refinement \n- creating data pipelines \n\nYou will learn how to import data from multiple sources, clean and wrangle data, perform exploratory data analysis (EDA), and create meaningful data visualizations. You will then predict future trends from data by developing linear, multiple, polynomial regression models & pipelines and learn how to evaluate them. \n\nIn addition to video lectures you will learn and practice using hands-on labs and projects. You will work with several open source Python libraries, including Pandas and Numpy to load, manipulate, analyze, and visualize cool datasets. You will also work with scipy and scikit-learn, to build machine learning models and make predictions. \n\nIf you choose to take this course and earn the Coursera course certificate, you will also earn an IBM digital badge. | English |

| IBM Data Science | Applied Data Science Capstone | INTERMEDIATE | 7.8 | This is the final course in the IBM Data Science Professional Certificate as well as the Applied Data Science with Python Specialization. This capstone project course will give you the chance to practice the work that data scientists do in real life when working with datasets. \n\nIn this course you will assume the role of a Data Scientist working for a startup intending to compete with SpaceX, and in the process follow the Data Science methodology involving data collection, data wrangling, exploratory data analysis, data visualization, model development, model evaluation, and reporting your results to stakeholders. \n\nYou will be tasked with predicting if the first stage of the SpaceX Falcon 9 rocket will land successfully. With the help of your Data Science findings and models, the competing startup you have been hired by can make more informed bids against SpaceX for a rocket launch. \n\nIn this course, there will not be much new learning, instead you'll focus on hands-on work to demonstrate and apply what you have learnt in previous courses. By successfully completing this Capstone you will have added a project to your data science and machine learning portfolio to showcase to employers. | English |
| IBM Data Science | Python Project for Data Science | INTERMEDIATE | 3.0 | This mini-course is intended to for you to demonstrate foundational Python skills for working with data. This course primarily involves completing a project in which you will assume the role of a Data Scientist or a Data Analyst and be provided with a real-world data set and a real-world inspired scenario to identify patterns and trends. \n\nYou will perform specific data science and data analytics tasks such as extracting data, web scraping, visualizing data and creating a dashboard. This project will showcase your proficiency with Python and using libraries such as Pandas and Beautiful Soup within a Jupyter Notebook. Upon completion you will have an impressive project to add to your job portfolio. \n\nPRE-REQUISITE: **Python for Data Science, AI and Development** course from IBM is a pre-requisite for this project course. Please ensure that before taking this course you have either completed the Python for Data Science, AI and Development course from IBM or have equivalent proficiency in working with Python and data. \n\nNOTE: This course is not intended to teach you Python and does not have too much instructional content. It is intended for you to apply prior Python knowledge. | English |

| IBM Data Science | Python for Data Science, AI & Development | BEGINNER | 9.0 | Kickstart your learning of Python with this beginner-friendly self-paced course taught by an expert. Python is one of the most popular languages in the programming and data science world and demand for individuals who have the ability to apply Python has never been higher. \n\nThis introduction to Python course will take you from zero to programming in Python in a matter of hours—no prior programming experience necessary! You will learn about Python basics and the different data types. You will familiarize yourself with Python Data structures like List and Tuples, as well as logic concepts like conditions and branching. You will use Python libraries such as Pandas, Numpy & Beautiful Soup. You'll also use Python to perform tasks such as data collection and web scraping with APIs. \n\nYou will practice and apply what you learn through hands-on labs using Jupyter Notebooks. By the end of this course, you'll feel comfortable creating basic programs, working with data, and automating real-world tasks using Python. \n\nThis course is suitable for anyone who wants to learn Data Science, Data Analytics, Software Development, Data Engineering, AI, and DevOps as well as a number of other job roles. | English |
| IBM Data Science | Data Science Methodology | BEGINNER | 5.2 | If there is a shortcut to becoming a Data Scientist, then learning to think and work like a successful Data Scientist is it. In this course, you will learn and then apply this methodology that you can use to tackle any Data Science scenario. You'll explore two notable data science methodologies, Foundational Data Science Methodology, and the six-stage CRISP-DM data science methodology, and learn how to apply these data science methodologies. Most established data scientists follow these or similar methodologies for solving data science problems.\n\nBegin by learning about forming the business/research problem Learn how data scientists obtain, prepare, and analyze data. Discover how applying data science methodology practices helps ensure that the data used for problem-solving is relevant and properly manipulated to address the question. Next, learn about building the data model, deploying that model, data storytelling, and obtaining feedback You'll think like a data scientist and develop your data science methodology skills using a real-world inspired scenario through progressive labs hosted within Jupyter Notebooks and using Python. | English |

IBM Data Science	Machine Learning with Python	INTERMEDIATE	10.7	Get ready to dive into the world of Machine Learning (ML) by using Python! This course is for you whether you want to advance your Data Science career or get started in Machine Learning and Deep Learning. \n\nThis course will begin with a gentle introduction to Machine Learning and what it is, with topics like supervised vs unsupervised learning, linear & non-linear regression, simple regression and more. \n\nYou will then dive into classification techniques using different classification algorithms, namely K-Nearest Neighbors (KNN), decision trees, and Logistic Regression. You'll also learn about the importance and different types of clustering such as k-means, hierarchical clustering, and DBSCAN. \n\nWith all the many concepts you will learn, a big emphasis will be placed on hands-on learning. You will work with Python libraries like SciPy and scikit-learn and apply your knowledge through labs. In the final project you will demonstrate your skills by building, evaluating and comparing several Machine Learning models using different algorithms. \n\nBy the end of this course, you will have job ready skills to add to your resume and a certificate in machine learning to prove your competency.	English
IBM Data Science	What is Data Science?	BEGINNER	6.5	Do you want to know why data science has been labeled the sexiest profession of the 21st century? After taking this course, you will be able to answer this question, understand what data science is and what data scientists do, and learn about career paths in the field. \n \nThe art of uncovering insights and trends in data has been around since ancient times. The ancient Egyptians used census data to increase efficiency in tax collection and accurately predicted the Nile River's flooding every year. Since then, people have continued to use data to derive insights and predict outcomes. Recently, they have carved out a unique and distinct field for the work they do. This field is data science. \n \nIn today's world, we use Data Science to find patterns in data and make meaningful, data-driven conclusions and predictions. \nThis course is for everyone and teaches concepts like how data scientists use machine learning and deep learning and how companies apply data science in business. \n \nYou will meet several data scientists, who will share their insights and experiences in data science. By taking this introductory course, you will begin your journey into this thriving field.	English
IBM Data Science	Data Visualization with Python	INTERMEDIATE	7.4	One of the most important skills of successful data scientists and data analysts is the ability to tell a compelling story by visualizing data and findings in an approachable and stimulating way. In this course you will learn many ways to effectively visualize both small and large-scale data. You will be able to take data that at first glance has little meaning and present that data in a form that conveys insights. \n\nThis course will teach you to work with many Data Visualization tools and techniques. You will learn to create various types of basic and advanced graphs and charts like: Waffle Charts, Area Plots, Histograms, Bar Charts, Pie Charts, Scatter Plots, Word Clouds, Choropleth Maps, and many more! You will also create interactive dashboards that allow even those without any Data Science experience to better understand data, and make more effective and informed decisions. \n\nYou will learn hands-on by completing numerous labs and a final project to practice and apply the many aspects and techniques of Data Visualization using Jupyter Notebooks and a Cloud-based IDE. You will use several data visualization libraries in Python, including Matplotlib, Seaborn, Folium, Plotly & Dash.	English

IBM Data Science	Tools for Data Science	BEGINNER	9.2	In order to be successful in Data Science, you need to be skilled with using tools that Data Science professionals employ as part of their jobs. This course teaches you about the popular tools in Data Science and how to use them. \n\nYou will become familiar with the Data Scientist's tool kit which includes: Libraries & Packages, Data Sets, Machine Learning Models, Kernels, as well as the various Open source, commercial, Big Data and Cloud-based tools. \n\nWork with Jupyter Notebooks, JupyterLab, RStudio IDE, Git, GitHub, and Watson Studio. You will understand what each tool is used for, what programming languages they can execute, their features and limitations. \n\nThis course gives plenty of hands-on experience in order to develop skills for working with these Data Science Tools. With the tools hosted in the cloud on Skills Network Labs, you will be able to test each tool and follow instructions to run simple code in Python, R, or Scala. \n\nTowards the end the course, you will create a final project with a Jupyter Notebook. You will demonstrate your proficiency preparing a notebook, writing Markdown, and sharing your work with your peers.	English
IBM Data Warehouse Engineer	Getting Started with Data Warehousing and BI Analytics	INTERMEDIATE	7.0	Kickstart your Data Warehousing and Business Intelligence (BI) Analytics journey with this self-paced course. You will learn how to design, deploy, load, manage, and query data warehouses and data marts. You will also work with BI tools to analyze data in these repositories. \n\nYou will begin this course by understanding different kinds of analytics repositories including data marts, data warehouses, data lakes, data lakehouses, and data reservoirs, and their functions and uses. They are designed to enable rapid business decision making through accurate and flexible reporting and data analysis. \n\nA data warehouse is one of the most fundamental business intelligence tools in use today, and one that successful Data Engineers must understand. In this course, you will learn to design, model and implement data warehouses and explore data-warehousing architectures such as Star and Snowflake schemas. You will also learn how to populate data warehouses using ETL and ELT processes, verify data, query data and how to use Cubes, Rollups, and materialized views/tables. \n\nYou will become familiar with different BI tools used by experts in the industry such as IBM Cognos Analytics, Tableau, and Microsoft PowerBI. You will also use a BI tool to create data visualizations and build interactive dashboards to gain insights from data. \n\nThe hands-on labs in this course will enable you to apply what you learn and gain a practical knowledge of Data Warehousing and BI Analytics. You will work with repositories like MySQL, PostgreSQL, and IBM Db2. You will also use BI tools like Cognos Analytics. At the end of this course, you will complete a project to demonstrate the skills you acquired in each module.	English

IBM Data Warehouse Engineer	Databases and SQL for Data Science with Python	BEGINNER	10.1	Working knowledge of SQL (or Structured Query Language) is a must for data professionals like Data Scientists, Data Analysts and Data Engineers. Much of the world's data resides in databases. SQL is a powerful language used for communicating with and extracting data from databases.\n\nIn this course you will learn SQL inside out- from the very basics of Select statements to\nadvanced concepts like JOINs. \nYou will: \n-write foundational SQL statements like: SELECT, INSERT, UPDATE, and DELETE \n-filter result sets, use WHERE, COUNT, DISTINCT, and LIMIT clauses \n-differentiate between DML & DDL \n-CREATE, ALTER, DROP and load tables \n-use string patterns and ranges; ORDER and GROUP result sets, and built-in database functions\n-build sub-queries and query data from multiple tables \n-access databases as a data scientist using Jupyter notebooks with SQL and Python\n-work with advanced concepts like Stored Procedures, Views, ACID Transactions, Inner & Outer JOINs through hands-on labs and projects\n\nYou will practice building SQL queries, work with real databases on the Cloud, and use real data science tools. \n\nIn the final project you'll analyze multiple real-world datasets to demonstrate your skills.	English
IBM Data Warehouse Engineer	ETL and Data Pipelines with Shell, Airflow and Kafka	INTERMEDIATE	9.7	Delve into the two different approaches to converting raw data into analytics-ready data. One approach is the Extract, Transform, Load (ETL) process. The other contrasting approach is the Extract, Load, and Transform (ELT) process. ETL processes apply to data warehouses and data marts. ELT processes apply to data lakes, where the data is transformed on demand by the requesting/calling application. \n\nIn this course, you will learn about the different tools and techniques that are used with ETL and Data pipelines. Both ETL and ELT extract data from source systems, move the data through the data pipeline, and store the data in destination systems. During this course, you will experience how ELT and ETL processing differ and identify use cases for both. You will identify methods and tools used for extracting the data, merging extracted data either logically or physically, and for loading data into data repositories. \n\nYou will also define transformations to apply to source data to make the data credible, contextual, and accessible to data users. You will be able to outline some of the multiple methods for loading data into the destination system, verifying data quality, monitoring load failures, and the use of recovery mechanisms in case of failure. \n\nBy the end of this course, you will also know how to use Apache Airflow to build data pipelines as well be knowledgeable about the advantages of using this approach. You will also learn how to use Apache Kafka to build streaming pipelines as well as the core components of Kafka which include: brokers, topics, partitions, replications, producers, and consumers. \n\nFinally, you will complete a shareable final project that enables you to demonstrate the skills you acquired in each module.	English

IBM Data Warehouse Engineer	Introduction to Relational Databases (RDBMS)	BEGINNER	6.4	Are you ready to dive into the world of data engineering? In this beginner level course, you will gain a solid understanding of how data is stored, processed, and accessed in relational databases (RDBMSes). You will work with different types of databases that are appropriate for various data processing requirements. \n\nYou will begin this course by being introduced to relational database concepts, as well as several industry standard relational databases, including IBM DB2, MySQL, and PostgreSQL. Next, you'll utilize RDBMS tools used by professionals such as phpMyAdmin and pgAdmin for creating and maintaining relational databases. You will also use the command line and SQL statements to create and manage tables. \n\nThis course incorporates hands-on, practical exercises to help you demonstrate your learning. You will work with real databases and explore real-world datasets. You will create database instances and populate them with tables and data. \n\nAt the end of this course, you will complete a final assignment where you will apply your accumulated knowledge from this course and demonstrate that you have the skills to: design a database for a specific analytics requirement, normalize tables, create tables and views in the database, load and access data. \n\nNo prior knowledge of databases or programming is required. \n\nAnyone can audit this course at no-charge. If you choose to take this course and earn the Coursera course certificate, you can also earn an IBM digital badge upon successful completion of the course.	English
IBM Data Warehouse Engineer	Introduction to Data Engineering	BEGINNER	9.5	Start your journey in one of the fastest growing professions today with this beginner-friendly Data Engineering course! You will be introduced to the core concepts, processes, and tools you need to know in order to get a foundational knowledge of data engineering. as well as the roles that Data Engineers, Data Scientists, and Data Analysts play in the ecosystem. \n\nYou will begin this course by understanding what is data engineering as well as the roles that Data Engineers, Data Scientists, and Data Analysts play in this exciting field. Next you will learn about the data engineering ecosystem, the different types of data structures, file formats, sources of data, and the languages data professionals use in their day-to-day tasks. \n\nYou will become familiar with the components of a data platform and gain an understanding of several different types of data repositories such as Relational (RDBMS) and NoSQL databases, Data Warehouses, Data Marts, Data Lakes and Data Lakehouses. You'll then learn about Big Data processing tools like Apache Hadoop and Spark. You will also become familiar with ETL, ELT, Data Pipelines and Data Integration. \n\nThis course provides you with an understanding of a typical Data Engineering lifecycle which includes architecting data platforms, designing data stores, and gathering, importing, wrangling, querying, and analyzing data. You will also learn about security, governance, and compliance. \n\nYou will learn about career opportunities in the field of Data Engineering and the different paths that you can take for getting skilled as a Data Engineer. You will hear from several experienced Data Engineers, sharing their insights and advice. \n\nBy the end of this course, you will also have completed several hands-on labs and worked with a relational database, loaded data into the database, and performed some basic querying operations.	English

IBM Data Warehouse Engineer	Relational Database Administration (DBA)	INTERMEDIATE	9.3	Get started with Relational Database Administration and Database Management in this self-paced course! \n\nThis course begins with an introduction to database management; you will learn about things like the Database Management Lifecycle, the roles of a Database Administrator (DBA) as well as database storage. You will then discover some of the activities, techniques, and best practices for managing a database. \n\nYou will also learn about database optimization, including updating statistics, slow queries, types of indexes, and index creation and usage. You will learn about configuring and upgrading database server software and related products. You'll also learn about database security; how to implement user authentication, assign roles, and assign object-level permissions. And gain an understanding of how to perform backup and restore procedures in case of system failures. \n\nYou will learn how to optimize databases for performance, monitor databases, collect diagnostic data, and access error information to help you resolve issues that may occur. Many of these tasks are repetitive, so you will learn how to schedule maintenance activities and regular diagnostic tests and send automated messages of the success or failure of a task. The course includes both video-based lectures as well as hands-on labs to practice and apply what you learn. \n\nThis course ends with a final project where you will assume the role of a database administrator and complete a number of database administration tasks across many different databases.	English
IBM Data Warehouse Engineer	Hands-on Introduction to Linux Commands and Shell Scripting	BEGINNER	5.3	This course provides a practical understanding of common Linux / UNIX shell commands. In this beginner friendly course, you will learn about the Linux basics, Shell commands, and Bash shell scripting. \n\nYou will begin this course with an introduction to Linux and explore the Linux architecture. You will interact with the Linux Terminal, execute commands, navigate directories, edit files, as well as install and update software. \n\nNext, you'll become familiar with commonly used Linux commands. You will work with general purpose commands like id, date, uname, ps, top, echo, man; directory management commands such as pwd, cd, mkdir, rmdir, find, df; file management commands like cat, wget, more, head, tail, cp, mv, touch, tar, zip, unzip; access control command chmod; text processing commands - wc, grep, tr; as well as networking commands - hostname, ping, ifconfig and curl. \n\nYou will then move on to learning the basics of shell scripting to automate a variety of tasks. You'll create simple to more advanced shell scripts that involve Metacharacters, Quoting, Variables, Command substitution, I/O Redirection, Pipes & Filters, and Command line arguments. You will also schedule cron jobs using crontab. \n\nThe course includes both video-based lectures as well as hands-on labs to practice and apply what you learn. You will have no-charge access to a virtual Linux server that you can access through your web browser, so you don't need to download and install anything to complete the labs. \n\nYou'll end this course with a final project as well as a final exam. In the final project you will demonstrate your knowledge of course concepts by performing your own Extract, Transform, and Load (ETL) process and create a scheduled backup script. \n\nThis course is ideal for data engineers, data scientists, software developers, and cloud practitioners who want to get familiar with frequently used commands on Linux, MacOS and other Unix-like operating systems as well as get started with creating shell scripts.	English

IBM DevOps and Software Engineering	Python for Data Science, AI & Development	BEGINNER	9.0	Kickstart your learning of Python with this beginner-friendly self-paced course taught by an expert. Python is one of the most popular languages in the programming and data science world and demand for individuals who have the ability to apply Python has never been higher. \n\nThis introduction to Python course will take you from zero to programming in Python in a matter of hours—no prior programming experience necessary! You will learn about Python basics and the different data types. You will familiarize yourself with Python Data structures like List and Tuples, as well as logic concepts like conditions and branching. You will use Python libraries such as Pandas, Numpy & Beautiful Soup. You'll also use Python to perform tasks such as data collection and web scraping with APIs. \n\nYou will practice and apply what you learn through hands-on labs using Jupyter Notebooks. By the end of this course, you'll feel comfortable creating basic programs, working with data, and automating real-world tasks using Python. \n\nThis course is suitable for anyone who wants to learn Data Science, Data Analytics, Software Development, Data Engineering, AI, and DevOps as well as a number of other job roles.	English
IBM DevOps and Software Engineering	Hands-on Introduction to Linux Commands and Shell Scripting	BEGINNER	5.3	This course provides a practical understanding of common Linux / UNIX shell commands. In this beginner friendly course, you will learn about the Linux basics, Shell commands, and Bash shell scripting. \n\nYou will begin this course with an introduction to Linux and explore the Linux architecture. You will interact with the Linux Terminal, execute commands, navigate directories, edit files, as well as install and update software. \n\nNext, you'll become familiar with commonly used Linux commands. You will work with general purpose commands like id, date, uname, ps, top, echo, man; directory management commands such as pwd, cd, mkdir, rmdir, find, df; file management commands like cat, wget, more, head, tail, cp, mv, touch, tar, zip, unzip; access control command chmod; text processing commands - wc, grep, tr; as well as networking commands - hostname, ping, ifconfig and curl. \n\nYou will then move on to learning the basics of shell scripting to automate a variety of tasks. You'll create simple to more advanced shell scripts that involve Metacharacters, Quoting, Variables, Command substitution, I/O Redirection, Pipes & Filters, and Command line arguments. You will also schedule cron jobs using crontab. \n\nThe course includes both video-based lectures as well as hands-on labs to practice and apply what you learn. You will have no-charge access to a virtual Linux server that you can access through your web browser, so you don't need to download and install anything to complete the labs. \n\nYou'll end this course with a final project as well as a final exam. In the final project you will demonstrate your knowledge of course concepts by performing your own Extract, Transform, and Load (ETL) process and create a scheduled backup script. \n\nThis course is ideal for data engineers, data scientists, software developers, and cloud practitioners who want to get familiar with frequently used commands on Linux, MacOS and other Unix-like operating systems as well as get started with creating shell scripts.	English

IBM DevOps and Software Engineering	DevOps Capstone Project	INTERMEDIATE	3.9	Showcase your DevOps and Software Engineering skills with this hands-on Capstone project! In this course you will apply the skills and techniques you have learned as part of the previous courses in the Professional Certificate. During the project you will develop, test, deploy, monitor, and enhance a secure microservices-based application on Cloud, over the course of several sprints. \n\nYou'll develop an Agile plan by developing user stories and a Kanban board using ZenHub and GitHub. This plan will be implemented to create a RESTful microservice-based Flask application. You will employ Test Driven Development (TDD) to create and execute tests for the app. \n\nYou will complete many other tasks like adding functionality using Continuous Integration, ensuring the app is secure, and deploy the app on Cloud using Kubernetes. You will also build an automated CI/CD pipeline. \n\nThis course is the final course in the IBM DevOps Engineering Professional Certificates. It is recommended that you complete all the previous courses in this Professional Certificate before starting this course.	English
IBM DevOps and Software Engineering	Introduction to Cloud Computing	BEGINNER	7.4	Start your cloud computing journey with this self-paced introductory course! Whether you need general cloud computing knowledge for school or business, or you are considering a career change, this beginner-friendly course is right for you. \n\nIn this course you'll learn about essential characteristics of cloud computing and emerging technologies supported by cloud. You'll explore cloud service models, including Infrastructure as a Service (IaaS), Platform as a Service (PaaS), Software as a Service (SaaS), and Public, Private, and Hybrid deployment models. \n\nDiscover the offerings of prominent cloud service providers AWS, Google, IBM, Microsoft, and others, and review cloud computing case studies. Learn about cloud adoption, blockchain, analytics, and AI. \n\nYou will learn about the many components of cloud computing architecture including datacenters, availability zones, virtual machines, containers, and bare metal servers. You will also familiarize yourself with different types of cloud storage options, such as Object Storage. \n\nYou'll gain foundational knowledge of emergent cloud trends and practices including Hybrid, Multicloud, Microservices, Serverless, DevOps, Cloud Native, Application Modernization, as well as learn about cloud security and monitoring. You'll also explore cloud computing job roles and possible career paths and opportunities. \n\nYou will complete a number of labs and quizzes throughout this course to increase your understanding of course content. At the end of the course, you will complete a final project where you will deploy an application to Cloud using a serverless architecture, a valuable addition to your portfolio. \n\nAfter this course, check out the related courses to help you towards your new career as a cloud engineer, full stack developer, DevOps engineer, cybersecurity analyst, and others.	English

IBM DevOps and Software Engineering	Developing AI Applications with Python and Flask	INTERMEDIATE	2.8	This mini course is intended to apply basic Python skills for developing Artificial Intelligence (AI) enabled applications. In this hands-on project you will assume the role of a developer and perform tasks including: \n- Develop functions and application logic \n- Exchange data using Watson AI libraries\n- Write unit tests, and \n- Package the application for distribution. \n\nYou will demonstrate your foundational Python skills by employing different techniques to develop web applications and AI powered solutions. After completing this course, you will have added another project to your portfolio and gained the confidence to begin developing AI enabled applications using Python and Flask, Watson AI libraries, build and run unit tests, and package the application for distribution out in the real world.	English
IBM DevOps and Software Engineering	Application Security for Developers and DevOps Professionals	INTERMEDIATE	6.9	How vulnerable are your applications to security risks and threats? This course will help you identify vulnerabilities and monitor the health of your applications and systems. You'll examine and implement secure code practices to prevent events like data breaches and leaks, and discover how practices like monitoring and observability can keep systems safe and secure. \n\nYou will gain extensive knowledge on various practices, concepts, and processes for maintaining a secure environment, including DevSecOps practices that automate security integration across the software development lifecycle (SDLC), Static Application Security Testing (SAST) for identifying security flaws, Dynamic Analysis, and Dynamic Testing. You'll also learn about creating a Secure Development Environment, both on-premise and in the cloud. You'll explore the Open Web Application Security Project (OWASP) top application security risks, including broken access controls and SQL injections. \n\nAdditionally, you will learn how monitoring, observability, and evaluation ensure secure applications and systems. You'll discover the essential components of a monitoring system and how application performance monitoring (APM) tools aid in measuring app performance and efficiency. You'll analyze the Golden Signals of monitoring, explore visualization and logging tools, and learn about the different metrics and alerting systems that help you understand your applications and systems. \n\nThrough videos, hands-on labs, peer discussion, and the practice and graded assessments in this course, you will develop and demonstrate your skills and knowledge for creating and maintaining a secure development environment.	English

IBM DevOps and Software Engineering	Getting Started with Git and GitHub	BEGINNER	2.9	Get started with Git and GitHub in this self-paced, introductory course! You'll become familiar with collaborative version control and popular Git platforms. Collaboration and social coding are crucial parts of contemporary Software Engineering practices and the DevOps culture. \n\nYou will begin this course with an overview of Git and Github fundamentals and explore key Git concepts such as branching and repositories, as well as the use of Git commands. You will also learn and practice various Git concepts such as forking, cloning and merging workflows using hands-on labs. And you'll learn to use GitHub to work effectively as a team, and perform common Git operations, from both the Web UI and command line. \n\nThe course wraps up with a final project where you will start building your portfolio by creating and sharing a public/open-source GitHub project. By completing this course you will demonstrate your Git and Github skills as well as add a project to your resume! \n\nAll hands-on activities in this course can be performed using web-browser based tools and interfaces. Installation of any specialized software is NOT required on your own computer in order to complete the course.	English
IBM DevOps and Software Engineering	Application Development using Microservices and Serverless	INTERMEDIATE	3.8	Welcome to this introductory course on microservices and serverless, essential technologies for cloud native and application modernization workloads. \n\nRather than building large applications, known as monoliths, that perform all the functionality, microservices break down larger applications into smaller pieces that are independently maintainable and scalable, providing a host of benefits. This architecture is now used in the largest software organizations in the world, because it provides cost benefits, team autonomy, and other advantages. \n\nLikewise, serverless has emerged as an increasingly popular compute option in the cloud era. Giving developers and operators the ability to run applications without managing underlying infrastructure. \n\nIn this course, you will create microservices using various methodologies. You will create REST APIs using Python and Flask. Next, you will learn the basics of Serverless applications, and how to run your applications on the IBM Cloud Code Engine. \n\nThe course contains several hands-on labs which allow you to practice and apply the content you learn in the course. \n\nIn the final project, you will create a front-end application composed of several microservices and deploy them on the Cloud using serverless.	English

| IBM DevOps and Software Engineering | Introduction to DevOps | BEGINNER | 5.3 | Get started with your DevOps journey with this beginner-friendly course! DevOps skills are high in demand and expected to be one of the fastest-growing skills in the software industry. This course is designed to be a first step in obtaining those valuable skills. \n\nThis self-paced introductory course explores DevOps as a cultural movement. It describes the business case for DevOps, and covers its essentials. This course teaches new ways of thinking, working, organizing, and measuring to fully realize the benefits of DevOps. By applying DevOps practices, you will be able to build better products for your users. \n\nYou will learn how breaking down silos and organizing developers and operators into single cross-functional teams is necessary for truly adopting DevOps. Having everyone contributing and everyone being responsible for success is at the heart of DevOps. You will see how building a culture of shared responsibility and transparency is the foundation of every high-performing DevOps teams. \n\nYou'll learn how you can use cloud native architecture to build resilience in your products and learn about helpful DevOps tools like horizontal scaling and independently deployable microservices. You will explore how Agile Methodologies like Scrum are crucial to DevOps as well as learn about Continuous Integration and Continuous Delivery (CI/CD), which enables frequent deployments and working as a team to create high-quality code. \n\nThis course concludes with case studies about DevOps-based scenarios, which you will analyze and relate to DevOps concepts learnt throughout this course. \n\nThis course is designed for those new to DevOps as well as those looking to increase their current knowledge of DevOps. | English |
| IBM DevOps and Software Engineering | Continuous Integration and Continuous Delivery (CI/CD) | INTERMEDIATE | 5.2 | A principle of DevOps is to replace manual processes with automation to improve efficiency, reduce human error, and accelerate software delivery. This requires automation that continuously integrates code changes and continuously delivers those changes to a production environment. \n\nThis course introduces you to Continuous Integration and Continuous Delivery (CI/CD), an automated approach to software development. You'll discover the benefits of CI/CD for creating a DevOps pipeline and explore popular CI/CD tools. \n\nYou'll examine the key features of CI, explore social coding, and the Git Feature Branch Workflow. You will also learn about standard CI tools and gain a deep understanding of GitHub Actions workflows and their components. \n\nThis course provides an overview of CD and its goals, benefits, and best practices. You will learn the requirements of a CI/CD pipeline and discover standard CD tools. \n\nYou will explore Tekton and discover how its components work together to create a CD pipeline. You will learn how to build a pipeline, pass parameters to a pipeline, build triggers to start pipeline runs, implement reusable tasks, and create custom tasks. You will discover how to complete your CD pipeline by building a container image and deploying your application to an OpenShift Kubernetes cluster. \n\nThroughout the course, you can hone your skills and challenge yourself through several hands-on labs. | English |

IBM DevOps and Software Engineering	Introduction to Test and Behavior Driven Development	INTERMEDIATE	3.5	Successful developers need to not only build the right software but build it right. To know your software works correctly, you need to test each unit of code. One of the best methods for this unit-level testing is test driven development. \n\nThis course provides a detailed overview of test driven development (TDD). First, you'll learn what automated testing is and why it is essential for building robust applications resilient to failure. You'll explore the basics of testing, including test cases, testing levels, and the traditional release cycle. \n\nYou'll learn about TDD and its complement, behavior driven development (BDD): TDD tests individual units of code while BDD tests how these units work together. \n\nThen you'll examine TDD in detail. You'll explore TDD's benefits, concepts, and popular tools, and you'll hone your new testing skills through hands-on labs. You'll create TDD test cases by writing test assertions and building test fixtures, and you'll run these test cases by using the Nose testing package. You'll then practice more advanced TDD methods such as increasing code coverage, generating and using fake data, and testing mock objects.	English
IBM DevOps and Software Engineering	Introduction to Containers w/ Docker, Kubernetes & OpenShift	INTERMEDIATE	5.5	Take the next step in your software engineering career by getting skilled in container tools and technologies! The average salary for jobs that require container skills is $137,000 in the US according to salary.com, making Devops professionals and developers with these skills highly in demand. More than 70 percent of Fortune 100 companies are running containerized applications. But why? \n\nUsing containerization, organizations can move applications quickly and seamlessly among desktop, on-premises, and cloud platforms. \n\nIn this beginner course on containers, learn how to build cloud native applications using current containerization tools and technologies such as Docker, container registries, Kubernetes, Red Hat, OpenShift, and Istio. Also learn how to deploy and scale your applications in any public, private, or hybrid cloud. \n\nBy taking this course you will familiarize yourself with: \n- Docker objects, Dockerfile commands, container image naming, Docker networking, storage, and plugins \n- Kubernetes command line interface (CLI), or "kubectl" to manipulate objects, manage workloads in a Kubernetes cluster, and apply basic kubectl commands \n- ReplicaSets, autoscaling, rolling updates, ConfigMaps, Secrets, and service bindings \n- The similarities and differences between OpenShift and Kubernetes \n\nEach week, you will apply what you learn in hands-on, browser-based labs. By the end of the course, you'll be able to build a container image, then deploy and scale your container on the cloud using OpenShift. \n\nThe skills taught in this course are essential to anyone in the fields of software development, back-end & full-stack development, cloud architects, cloud system engineers, devops practitioners, site reliability engineers (SRE), cloud networking specialists and many other roles.	English

IBM DevOps and Software Engineering	Introduction to Agile Development and Scrum	BEGINNER	5.0	Get started with using Agile Development and Scrum with this self-paced introductory course! After successfully completing this course, you will be able to embrace the Agile concepts of adaptive planning, iterative development, and continuous improvement - resulting in early deliveries and value to customers. \n\nYou will look at Scrum as a framework and learn how to apply it alongside Agile. You will also become familiar with related methodologies like Waterfall, Extreme Programming (XP), and Kanban. \n\nApply Agile practices derived from lean manufacturing concepts, like test-driven development. Learn how a scrum team functions. Also learn about the importance of Agile iterative planning and enable yourself to write good user stories and track your team's progress using a kanban board. \n\nCreate and refine a product backlog collaboratively with the team and the customer, in a flexible and blameless culture. You'll also learn how to use burndown charts, achieve sprint goals, and conduct the sprint review and retrospective. This approach will lead you to higher levels of efficiency, with the ability to plan and execute sprints with your development team, measuring success with actionable metrics. \n\nThis course is about more than facts and processes. It is about working collaboratively on a self-organizing team, coached by a scrum master, and building what is needed, rather than simply following a plan. Developed and taught by an experienced Agile practitioner, the course includes hands-on practice through realistic scenario-based labs using GitHub and ZenHub. \n\nThe course will benefit anyone who wants to get started with working the Agile way or transform the organizational culture to adopt and realize the benefits of Scrum. This includes Project Managers, Product Managers, and Executives. It is particularly suitable for IT practitioners such as software developers, development managers, and IT Scrum Masters.	English
IBM Full Stack Software Developer	Developing Cloud Native Applications	INTERMEDIATE	8.6	Do you want to learn about developing applications that are cloud native right from conception to implementation? In this course, you'll begin with some crucial cloud concepts such as Cloud Native Applications, CNCF and Hybrid Cloud. You will dive into specific tools and techniques for developing cloud native apps. \n\nYou'll then learn how to use CLI to develop, test and deploy applications for IBM Cloud with the use of Node.js . You will further use DevOps to maintain application development using Web IDE features, Git repository and Delivery Pipeline. You will familiarize yourself with concepts like REST Architecture, JSON and Watson API.\n\nYou will also look at two key areas of cloud thinking: modernization and continuous integration/continuous delivery. Throughout this course you will practice with hands-on labs and gain skills with tools used by professionals!\n\nLastly you will complete a final project where you will build your own CI/CD enabled application with a NoSQL database and have a great addition to your portfolio.	English

IBM Full Stack Software Developer	Developing AI Applications with Python and Flask	INTERMEDIATE	2.8	This mini course is intended to apply basic Python skills for developing Artificial Intelligence (AI) enabled applications. In this hands-on project you will assume the role of a developer and perform tasks including: \n- Develop functions and application logic \n- Exchange data using Watson AI libraries\n- Write unit tests, and \n- Package the application for distribution. \n\nYou will demonstrate your foundational Python skills by employing different techniques to develop web applications and AI powered solutions. After completing this course, you will have added another project to your portfolio and gained the confidence to begin developing AI enabled applications using Python and Flask, Watson AI libraries, build and run unit tests, and package the application for distribution out in the real world.	English
IBM Full Stack Software Developer	Full Stack Application Development Capstone Project	INTERMEDIATE	2.2	Show your mastery of full stack application development by completing this capstone project! In this course, you will apply your knowledge and skills to a real-life inspired challenge and use your expertise to develop a successful solution. \n\nThe project provides you with an opportunity to solidify your full stack proficiency. As you design a dynamic user experience, you will develop frontend pages, add user administration, build actions for database operations, create backend services, and configure CI/CD pipelines. You will boost your capabilities with HTML, CSS, JavaScript, Django, React, Node js and NoSQL (Mongo), Containerization, IBM Code Engine, Python, and Kubernetes. Then you will devise a solution for managing the containerized deployment of your application. \n\nThis project is created for you to apply knowledge of relevant and in-demand skills such as: \n- Designing applications and their architecture \n- Creating web frontends with static and dynamic pages using HTML, CSS, JavaScript and REACT\n- Implementing user management and authentication \n- Developing backend services and communicating with databases \n- Continuously Integrating and Deploying changes using CI/CD pipelines \n- Deploying serverless applications on Code Engine \n- Creating and invoking RESTful microservices \n- Deploying the entire solution on Cloud using Kubernetes \n\nWhen you complete this project, you will have a working Full Stack application showpiece that will impress potential employers. \n\nBefore completing this project, it is highly recommended that you complete all the prior courses offered in the IBM Full Stack Software Developer Professional Certificate.	English

IBM Full Stack Software Developer	Application Development using Microservices and Serverless	INTERMEDIATE	3.8	Welcome to this introductory course on microservices and serverless, essential technologies for cloud native and application modernization workloads. \n\nRather than building large applications, known as monoliths, that perform all the functionality, microservices break down larger applications into smaller pieces that are independently maintainable and scalable, providing a host of benefits. This architecture is now used in the largest software organizations in the world, because it provides cost benefits, team autonomy, and other advantages. \n\nLikewise, serverless has emerged as an increasingly popular compute option in the cloud era. Giving developers and operators the ability to run applications without managing underlying infrastructure. \n\nIn this course, you will create microservices using various methodologies. You will create REST APIs using Python and Flask. Next, you will learn the basics of Serverless applications, and how to run your applications on the IBM Cloud Code Engine. \n\nThe course contains several hands-on labs which allow you to practice and apply the content you learn in the course. \n\nIn the final project, you will create a front-end application composed of several microservices and deploy them on the Cloud using serverless.	English
IBM Full Stack Software Developer	Introduction to Web Development with HTML, CSS, JavaScript	BEGINNER	6.2	Want to take the first steps to become a Web Developer? This course will help you discover the languages, frameworks, and tools that you will need to create interactive and engaging websites right from the beginning. \n\nYou will begin by learning about the roles of front-end, back-end, and full-stack developers and how they work together on development projects. Through this, you will also become familiar with the terminology and skills needed in your career as a web developer. \n\nNext, you will explore the languages needed for developing websites or applications. You will gain a thorough understanding of HTML and CSS and learn how a combination of both technologies can help developers create the structure and style of their websites. \n\nFinally, you will learn how JavaScript can make your webpages dynamic with features that include interactive forms, dynamic content modification, and sophisticated menu systems. \n\nBy learning the fundamentals of HTML5, CSS, and JavaScript you will be able to combine them to: \n- create the basic structure of a website \n- create format and layout for web applications \n- enhance your website and create rich, interactive applications \n- increase user interactivity and enhance user experience \n- give your website a real wow factor! \n\nIn this course you will practice what you learn with numerous hands-on labs. Lastly, you will complete a final project where you will create a webpage to showcase your skills and have a great addition to your portfolio!	English

IBM Full Stack Software Developer	Introduction to Containers w/ Docker, Kubernetes & OpenShift	INTERMEDIATE	5.5	Take the next step in your software engineering career by getting skilled in container tools and technologies! The average salary for jobs that require container skills is $137,000 in the US according to salary.com, making Devops professionals and developers with these skills highly in demand. More than 70 percent of Fortune 100 companies are running containerized applications. But why? \n\nUsing containerization, organizations can move applications quickly and seamlessly among desktop, on-premises, and cloud platforms. \n\nIn this beginner course on containers, learn how to build cloud native applications using current containerization tools and technologies such as Docker, container registries, Kubernetes, Red Hat, OpenShift, and Istio. Also learn how to deploy and scale your applications in any public, private, or hybrid cloud. \n\nBy taking this course you will familiarize yourself with: \n- Docker objects, Dockerfile commands, container image naming, Docker networking, storage, and plugins \n- Kubernetes command line interface (CLI), or "kubectl" to manipulate objects, manage workloads in a Kubernetes cluster, and apply basic kubectl commands \n- ReplicaSets, autoscaling, rolling updates, ConfigMaps, Secrets, and service bindings \n- The similarities and differences between OpenShift and Kubernetes \n\nEach week, you will apply what you learn in hands-on, browser-based labs. By the end of the course, you'll be able to build a container image, then deploy and scale your container on the cloud using OpenShift. \n\nThe skills taught in this course are essential to anyone in the fields of software development, back-end & full-stack development, cloud architects, cloud system engineers, devops practitioners, site reliability engineers (SRE), cloud networking specialists and many other roles.	English
IBM Full Stack Software Developer	Getting Started with Git and GitHub	BEGINNER	2.9	Get started with Git and GitHub in this self-paced, introductory course! You'll become familiar with collaborative version control and popular Git platforms. Collaboration and social coding are crucial parts of contemporary Software Engineering practices and the DevOps culture. \n\nYou will begin this course with an overview of Git and Github fundamentals and explore key Git concepts such as branching and repositories, as well as the use of Git commands. You will also learn and practice various Git concepts such as forking, cloning and merging workflows using hands-on labs. And you'll learn to use GitHub to work effectively as a team, and perform common Git operations, from both the Web UI and command line. \n\nThe course wraps up with a final project where you will start building your portfolio by creating and sharing a public/open-source GitHub project. By completing this course you will demonstrate your Git and Github skills as well as add a project to your resume! \n\nAll hands-on activities in this course can be performed using web-browser based tools and interfaces. Installation of any specialized software is NOT required on your own computer in order to complete the course.	English

| IBM Full Stack Software Developer | Python for Data Science, AI & Development | BEGINNER | 9.0 | Kickstart your learning of Python with this beginner-friendly self-paced course taught by an expert. Python is one of the most popular languages in the programming and data science world and demand for individuals who have the ability to apply Python has never been higher. \n\nThis introduction to Python course will take you from zero to programming in Python in a matter of hours—no prior programming experience necessary! You will learn about Python basics and the different data types. You will familiarize yourself with Python Data structures like List and Tuples, as well as logic concepts like conditions and branching. You will use Python libraries such as Pandas, Numpy & Beautiful Soup. You'll also use Python to perform tasks such as data collection and web scraping with APIs. \n\nYou will practice and apply what you learn through hands-on labs using Jupyter Notebooks. By the end of this course, you'll feel comfortable creating basic programs, working with data, and automating real-world tasks using Python. \n\nThis course is suitable for anyone who wants to learn Data Science, Data Analytics, Software Development, Data Engineering, AI, and DevOps as well as a number of other job roles. | English |
| IBM Full Stack Software Developer | Introduction to Cloud Computing | BEGINNER | 7.4 | Start your cloud computing journey with this self-paced introductory course! Whether you need general cloud computing knowledge for school or business, or you are considering a career change, this beginner-friendly course is right for you. \n\nIn this course you'll learn about essential characteristics of cloud computing and emerging technologies supported by cloud. You'll explore cloud service models, including Infrastructure as a Service (IaaS), Platform as a Service (PaaS), Software as a Service (SaaS), and Public, Private, and Hybrid deployment models. \n\nDiscover the offerings of prominent cloud service providers AWS, Google, IBM, Microsoft, and others, and review cloud computing case studies. Learn about cloud adoption, blockchain, analytics, and AI. \n\nYou will learn about the many components of cloud computing architecture including datacenters, availability zones, virtual machines, containers, and bare metal servers. You will also familiarize yourself with different types of cloud storage options, such as Object Storage. \n\nYou'll gain foundational knowledge of emergent cloud trends and practices including Hybrid, Multicloud, Microservices, Serverless, DevOps, Cloud Native, Application Modernization, as well as learn about cloud security and monitoring. You'll also explore cloud computing job roles and possible career paths and opportunities. \n\nYou will complete a number of labs and quizzes throughout this course to increase your understanding of course content. At the end of the course, you will complete a final project where you will deploy an application to Cloud using a serverless architecture, a valuable addition to your portfolio. \n\nAfter this course, check out the related courses to help you towards your new career as a cloud engineer, full stack developer, DevOps engineer, cybersecurity analyst, and others. | English |

IBM Full Stack Software Developer	Django Application Development with SQL and Databases	INTERMEDIATE	4.4	Working with databases is a key skill for developers, especially those in Back-End, Full Stack, and DevOps roles. This course will teach you the fundamentals of relational databases and how to access them from your applications. \n\nSome of the essential application development tasks include accessing, processing, and presenting data. Data is stored in various databases, either on-premise or on the cloud, and developers will need to learn how to talk to them via programming languages. \n\nIn this course, you'll learn about foundational database concepts, and basics of SQL, a simple and powerful programming language used for managing data. \n\nIn addition to SQL, you will discover how Object-Relational Mapping (ORM) allows you to use Object-Oriented Programming (OOP) languages like Python to work with databases. You will gain full-stack Django skills by creating a Django web app to persist, process, and present data. And you will get hands-on experience deploying your Django web app on the cloud. \n\nThroughout this course you will practice with hands-on labs. You will also complete a final project at the end of the course to demonstrate what you have learnt and have a great addition to your portfolio!	English
IBM Mainframe Developer	IBM COBOL Data and File Management	BEGINNER	2.9	Welcome to IBM COBOL – Data and File Management! By enrolling in this course, you are taking a big step in increasing your knowledge and hands on experience with IBM COBOL data and file management. In this course, you will learn the fundamental elements of COBOL code. You will learn the process of working with COBOL data. You will learn handling COBOL files. This course also relational databases in a mainframe, COBOL context. So let's get started!	English
IBM Mainframe Developer	Introduction to Enterprise Computing	BEGINNER	4.9	Large Scale Enterprise Computing powers all major transactions, and the Mainframe is responsible for 87% of all credit card transactions and enables 71% of all Fortune 500 companies. Mainframes are fundamental on how we do business, and IBM Z is the only production mainframe sold today. Virtually everyone depends on it. This is your introduction to the hardware, operating systems, security, and features that make this possible.\n\nOn successful completion of this course, learners are eligible to earn their Introduction to Enterprise Computing badge. More information can be found here: https://www.youracclaim.com/org/ibm/badge/introduction-to-enterprise-computing	English

IBM Mainframe Developer	IBM COBOL Basic Testing and Debugging	BEGINNER	2.1	Welcome to IBM COBOL – Basic Testing and Debugging! By enrolling in this course, you are taking a big step in increasing your knowledge and hands on experience with IBM COBOL testing and debugging topics and technologies. In this course, you will describe common errors associated with working with COBOL. You will list file status codes. You will also describe the process of debugging COBOL code. So let's get started!	English
IBM Mainframe Developer	IBM COBOL Core	BEGINNER	3.8	COBOL is a programming language that serves a wide range of businesses. Key aspects of COBOL are that it is scalable, mature, and self-documenting. \n\nIn this COBOL CORE class you'll discover more features of the language, how to handle tables, edit, use switches, numeric usage, and structured COBOL. \n\nEnjoy your ride through the world of COBOL! We're excited to have you here and can't wait to get started.	English
IBM Mainframe Developer	IBM COBOL Basics	BEGINNER	4.2	COBOL is a programming language that serves a wide range of businesses. Key aspects of COBOL are that it is scalable, mature, and self-documenting. \n\nIn the Basics course you will learn about COBOL from its birth and through its evolution. You will have some basic lessons on handling numbers, symbols, editing, procedures, and the overall program structure. You'll even have the opportunity to create code of your own. \n\nBuckle up and join us on a ride through the world of COBOL, we can't wait to see you in class.	English
IBM Mainframe Developer	IBM COBOL Software Development Practices	BEGINNER	2.7	This course is aimed at anybody interested in COBOL or or software development. In this course, you will be introduced to core practices, systems, and methodologies associated with IBM COBOL software development. You will learn about COBOL as a self-documenting language. You will review working with existing coding. This course also covers quality assurance (QA), technical support and project management.	English

IBM Mainframe Developer	IBM COBOL Software Development Process	BEGINNER	2.6	This course is geared towards anyone interested in learning about IBM, COBOL, mainframe computing, and the Software Development Lifecycle (SDLC) and increasing their knowledge and hands on experience with core concepts and technologies including life cycle and systems analysis concepts, design and structured coding, and a wide variety of topics designed to provide relevant, requisite working knowledge and practical experience.	English
Intuit Bookkeeping	Financial Statement Analysis	BEGINNER	9.9	In the final course of this certificate, you will apply your skills towards financial statement analysis. If you have the foundational concepts of accounting under your belt, you are ready to put them into action in this course. Here, you will learn how to reconcile different types of accounts, check for accuracy, and troubleshoot errors. Additionally, you will practice how to apply different analytical methods to key financial statements and understand how these methods inform a variety of business decisions.\n\nBy the end of this course, you will be able to:\n-Describe and illustrate the use of a bank reconciliation in controlling cash\n-Outline the purpose of financial statements in relationship to decision making\n-Describe basic financial statement analytical methods\n-Apply quantitative skills to analyze business health\n\nCourses 1-3 in the Intuit Bookkeeping Professional Certificate, or the equivalent, are recommended prerequisites for this course.	English
Intuit Bookkeeping	Assets in Accounting	BEGINNER	9.9	In this second course, you will dive deeper into the world of bookkeeping and focus on accounting for assets. If you are familiar with bookkeeping basics, such as double entry accounting, you are ready for this course. You will gain an understanding of common asset types, learn how to account for inventory, calculate cost of goods sold, and work with Property, Plant, and Equipment (PP&E). Upon completing this course, you will use your new knowledge of assets to record transactions and produce financial statements for increasingly complex business situations. \n\nBy the end of this course, you will be able to:\n-Summarize the common types of assets a business may have\n-Describe the importance of control over inventory\n-Outline how depreciation expense is reported on an income statement\n-Illustrate how transactions can be recorded in terms of the resulting change in the elements of the accounting equation. \n\nCourse 1 Bookkeeper Basics, or the equivalent, is a recommended prerequisite for this course.	English
Intuit Bookkeeping	Liabilities and Equity in Accounting	BEGINNER	8.7	In this third course, you will learn about liability and equity accounts and its effect on the balance sheet. If you have mastered bookkeeping basics and understand accounting assets, you are ready to jump into Liabilities and Equity in Accounting. You will explore the various types of liability, including: current and long term, payroll, and sales tax. Additionally, you will learn about the equity portion of the accounting equation and how to account for changes in owner's equity. \n\nBy the end of this course, you will be able to:\n-Describe the three main characteristics of liabilities.\n-Demonstrate an understanding of the basic payroll accounting functions and tasks.\n-Compare and contrast the different types of equity \n-Use the accounting equation to describe the financial position of an organization.\n\nCourses 1 and 2 in the Intuit Bookkeeping Professional Certificate, or the equivalent, are recommended prerequisites for this course.	English

Meta Marketing Analytics	Meta Marketing Science Certification Exam	BEGINNER	0.5	This course helps you prepare for the Meta Marketing Science Certification exam. You'll be guided through scheduling and taking the exam through Meta Blueprint. You'll get access to the study guide and other resources to help you prepare for the exam. \n\nThis course is only accessible to learners who have successfully completed Course 1: Marketing Analytics Foundation, Course 2: Introduction to Data Analytics, Course 3: Data Analysis with Spreadsheets and SQL, Course 4: Python Data Analytics, Course 5: Statistics for Marketing, Course 6: Data Analytics for Marketing and Course 7: Marketing Analytics with Meta in this program.	English
Meta Marketing Analytics	Marketing Analytics Foundation	BEGINNER	7.1	This course lays the foundation of marketing analytics. You'll learn the basic principles of marketing, the role data analysis plays in digital marketing and how data is collected and managed.\n\nBy the end of this course you will be able to:\n• Describe how marketers use data to inform campaign decisions\n• Describe the basic principles of marketing\n• Identify why data analysis matters in digital marketing\n• Implement the Meta pixel to capture data used to track visitor activity on a website\n• Explain how an API connects data captured offline to an online platform\n• Describe common platforms for online data management and evaluation\n• Navigate Google Analytics and Meta Ads Manager reports\n• Explain the significance of the privacy regulations that govern the online marketing space\n\nRegardless of your current marketing and analytics experience, this course will help you build a solid foundation for incorporating data into your marketing efforts. \n\nLearners should have basic internet navigation skills and be eager to participate.	English
Meta Marketing Analytics	Introduction to Data Analytics	BEGINNER	10.2	This course provides a practical understanding and framework for basic analytics tasks, including data extraction, cleaning, manipulation, and analysis. It introduces the OSEMN cycle for managing analytics projects and you'll examine real-world examples of how companies use data insights to improve decision-making.\n\nBy the end of this course you will be able to:\n• Formulate business goals, KPIs and associated metrics\n• Apply a data analysis process using the OSEMN framework\n• Identify and define the relevant data to be collected for marketing\n• Compare and contrast various data formats and their applications across different scenarios\n• Identify data gaps and articulate the strengths and weaknesses of collected data\n\nYou don't need marketing or data analysis experience, but should have basic internet navigation skills and be eager to participate. Ideally you have already completed course 1: Marketing Analytics Foundation in this program.	English

| Meta Marketing Analytics | Data Analytics Methods for Marketing | BEGINNER | 6.5 | This course explores common analytics methods used by marketers such as audience segmentation, clustering and marketing mix modeling. . You'll explore how to use linear regression for marketing planning and forecasting, and how to assess advertising effectiveness through experiments. \n\nBy the end of this course you will be able to:\n• Understand your audience using analytics and variable descriptions\n• Define a target audience using segmentation with K-means clustering \n• Use historical data to plan your marketing across different channels\n• Use linear regression to forecast marketing outcomes\n• Describe marketing mix modeling and apply different attribution models\n• Assess advertising effectiveness \n• Explain how A/B testing works and how you can use it to optimize ads\n• Evaluate experiment results and assess the strength of the experiment\n• Optimize your sales funnel\n\nThis course is for people who want to learn how to plan, forecast and optimize marketing efforts using marketing mix modeling, attribution models and A/B tests. | English |
| Meta Marketing Analytics | Marketing Analytics with Meta | BEGINNER | 5.9 | This course explores Meta Marketing Analytics Tools. You'll learn how to create ads using Meta Ads Manager, utilize Meta experiments, optimize ads through A/B testing, integrate data from campaigns and perform an analysis to evaluate the results. \n\nBy the end of this course you will be able to:\n• Create an ad in Meta Ads Manager\n• Evaluate campaign results\n• Conduct an A/B Test to compare ad campaigns and see which performs best\n• Conduct a Brand Lift test to measure how your ads impact brand awareness or recall \n• Conduct a Conversion Lift test to measure the incremental impact your ad has on conversions\n• Identify how and when to use Marketing Mix Modeling to achieve your desired outcomes\n• Implement a full analysis process from hypothesis to recommending measurement solutions, performing an analysis, generating insights and presenting results \n\nThis course is for people who want to use Meta Ads Manager to run tests, learn what works, and optimize advertising strategies to improve ad performance. | English |

| Meta Marketing Analytics | Statistics for Marketing | BEGINNER | 9.5 | This course takes a deep dive into the statistical foundation upon which marketing analytics is built. The first part of this course will help you to thoroughly understand your dataset and what the data actually means. Then, it will go into sampling including how to ask specific questions about your data and how to conduct analysis to answer those questions.\n\nMany of the mistakes made by Marketing Analysts today are due to a lack of understanding the concepts behind the tests they run, leading to incorrect tests or misinterpreting the results. This course is tailored to provide you with the necessary background knowledge to comprehend the "what" and "why" of your actions in a practical sense.\n\nBy the end of this course you will be able to:\n• Understand the concept of dependent and independent variables\n• Identify variables to test\n• Understand the Null Hypothesis, P-Values, and their role in testing hypotheses\n• Formulate a hypothesis and align it to business goals\n• Identify actions based on hypothesis validation/invalidation\n• Explain Descriptive Statistics (mean, median, standard deviation, distribution) and their use cases\n• Understand basic concepts from Inferential Statistics\n• Explain the different levels of analytics (descriptive, predictive, prescriptive) in the context of marketing \n• Create basic statistical models for regression using data\n• Create time-series forecasts using historical data and basic statistical models\n• Understand the basic assumptions, use cases, and limitations of Linear Regression\n• Fit a linear regression model to a dataset and interpret the output using Tableau and statsmodels \n• Explain the difference between linear and multivariate regression\n• Run a segmentation (cluster) analysis\n• Describe the difference between observational methods and experiments\n\nThis course is designed for people who want to learn the basics of descriptive and inferential statistics and analytics in marketing. | English |
| Meta Social Media Marketing | Introduction to Social Media Marketing | BEGINNER | 12.7 | This course lays the foundation of social media marketing. You'll learn what social media marketing entails, including the history and the different social media channels that exist. You'll learn how to select a social media channel that fits your needs, set goals and success metrics, and determine who your target audience is.\n\nBy the end of this course, you will be able to: \n• Understand the landscape of traditional, digital, and social media marketing\n• Understand how to become certified as a Digital Marketing Associate \n• Understand the major social media platforms, how they function, and what role they play in marketing\n• Create SMART goals and identify KPIs\n• Define your target audience and their customer journey\n• Choose the right social media platforms and learn how to create social media policies\n\nWhatever level of knowledge you start with, this course will help you build a solid foundation for social media marketing and gain applicable skills that will allow you to make your social media marketing efforts more successful and noticeable.\n\nLearners don't need marketing experience, but should have basic internet navigation skills and be eager to participate and connect in social media. Learners must have a Facebook account and an Instagram account helps. | English |

| Meta Social Media Marketing | Fundamentals of Social Media Advertising | BEGINNER | 7.4 | This course takes a deep dive into paid advertising on social media. Learn how to start advertising on platforms like Facebook and Instagram by developing effective ads. Learn how to work with design teams by capturing the essence of your ad campaign in a creative brief, and understand how privacy policies may affect your ads. Complete the course with a project where you will produce a creative brief with assets you would deliver to a design team for your ad campaign. You'll also create your first social media ad. \n\nBy the end of this course you will be able to:\n• Determine why and when to invest in paid advertising on social media \n• Understand the anatomy of a social media ad and how they differ from organic posts\n• Evaluate on which platforms to run social media ad campaigns and what makes an ad effective\n• Craft compelling and effective visuals and copy for social media ads\n• Learn how to collaborate effectively with others through creative briefs\n• Build foundational understanding for data, data-based advertising and privacy protection\n• Build an ad directly from your Facebook Business Page and your Instagram Business Account\n• Use Instagram Stories Ads effectively to connect with customers\n• Write a creative brief and create a social media ad\n\nThis course is intended for people who want to learn how to create and manage ads on social media. Learners don't need marketing experience, but they have basic internet navigation skills and are eager to participate and connect in social media. Having a Facebook or Instagram account helps and ideally learners have already completed course 1 (Introduction to Social Media Marketing) and 2 (Social Media Management) in this program. | English |
| Meta Social Media Marketing | Social Media Management | BEGINNER | 12.1 | This course equips you with critical content creation and management skills. You'll learn how to create effective social media posts and how to create a strong brand to help you build a social media presence. You'll also learn how to establish an ongoing process to manage your content. This includes setting up a content calendar, managing and moderating your posts, analyzing data for insights and iteration, and how to increase post effectiveness. You will end the course with real-world application of your skills through a content management project.\n\nBy the end of this course, you will be able to: \n• Establish and manage a social media presence \n• Create a Facebook business page and an Instagram account for business\n• Understand how and why to create content for social media \n• Create a brand, tone, and voice for a social media presence\n• Manage a content calendar for your social media presence\n• Evaluate the performance of your content on social media to iterate and optimize the performance\n• Create a content calendar for your social media presence\n• Manage social media content using real world data\n\nThis course is intended for people who want to learn how to create and manage a business presence on social media, including creating content, interacting and engaging with customers on social media and evaluating the results of different posts. \n\nLearners don't need marketing experience, but they have basic internet navigation skills and are eager to participate and connect in social media. Having a Facebook or Instagram account helps and ideally learners already completed course 1 (Introduction to Social Media Marketing) in this program. | English |

| Meta Social Media Marketing | Measure and Optimize Social Media Marketing Campaigns | BEGINNER | 8.1 | This course provides you with the skills to optimize your social media marketing efforts. Learn to evaluate and interpret the results of your advertising campaigns. Learn how to assess advertising effectiveness through lift studies and optimize your campaigns with split testing. Understand how advertising effectiveness is measured across platforms and devices, learn how to evaluate the ROI of your marketing, and master how to communicate your social media marketing results to others in the company. \n\nBy the end of this course, you will be able to:\n• Analyze dashboards and evaluate ROI from your social media marketing efforts\n• Understand different techniques used to optimize marketing campaigns, such as attribution and marketing mix models\n• Implement an A/B test to optimize your campaign\n• Present and communicate the results of your campaign to a team\n\nThis course is for people who want to learn how to analyze their campaign marketing results, optimize their campaigns, and effectively communicate findings to their teams. Learners don't need marketing experience but should have basic internet navigation skills and be eager to participate and connect on social media. Having a Facebook or Instagram account helps, and ideally, learners have already completed the four previous courses in this program.\n\nThis course will be followed by the Meta Social Media Marketing Capstone course, the final course of this certification, in which learners will take the Digital Marketing Associate Certification Exam and complete a Capstone project to receive their Meta Social Media Marketing Professional Certificate. | English |
| Meta Social Media Marketing | Meta Social Media Marketing Capstone | BEGINNER | 3.9 | In this capstone course, you will practice creating a presentation on the marketing campaign you've been developing throughout the program with a project where you will gain hands-on experience with communicating results and formulating recommendations based on the results of a social marketing campaign. In addition, you will sign up for and take the Meta Digital Marketing Associate Certification Exam and receive your Digital Marketing Associate Certification from Meta. After successfully completing your project and passing the Meta exam, you will receive your Coursera certificate of completion for the Meta Social Media Marketing Professional Certificate Program. \n\nBy the end of this course, you will be able to:\n• Present and communicate the results of a campaign to a team\n• Complete the Digital Marketing Associate Certification Exam\n\nThis course is for people who have completed all 5 previous courses of the Meta Social Media Marketing Professional Certificate and are ready to take their Digital Marketing Associate Certification Exam and complete a Capstone project to receive their Meta Social Media Marketing Professional Certificate. \nIn order to take the exam, learners must have access to a Mac or PC with a webcam. | English |

| Meta Social Media Marketing | Advertising with Meta | BEGINNER | 9.2 | This course will establish you as an expert in Meta Ads Manager. Learn how to structure campaigns in Ads Manager by selecting ad objectives, target audience, budget, and placement that fit your unique goals. Learn to create and manage ads across Facebook and Instagram and evaluate and optimize the results of your Ads Manager campaigns. You will end the course by creating an actual ad campaign in Ads Manager to expand not only your knowledge, but your social media marketing portfolio. \n \nBy the end of this course, you will be able to:\n• Structure campaigns in Meta Ads Manager\n• Identify the major components and elements of an ad in Meta Ads Manager\n• Build an ad that aligns with your marketing objectives and target it to your intended audience\n• Set a budget, placement, and schedule for your ads in Meta Ads Manager\n• Edit and troubleshoot your ads in Meta Ads Manager\n \nThis course is intended for people who want to learn how to use Meta Ads Manager to create, manage and optimize campaigns on Facebook and Instagram. Learners don't need marketing experience, but they have basic internet navigation skills and are eager to participate and connect in social media. \n\nLearners must have a Facebook account and an Instagram account helps. Ideally, learners have already completed the four previous courses in this program. | English |
| Salesforce Sales Operations | Lead Management in Salesforce | BEGINNER | 9.5 | The second course in the Salesforce Sales Operations Professional Certificate, Lead Management in Salesforce, is for anyone who is curious about entry level sales roles that require foundational skills in Salesforce, the sales operations specialist role specifically, and how to use tools in Salesforce to manage leads in a real world business setting.\n\nThis second course will give you a foundational understanding of how to help sales and marketing teams optimize the lead management process. Specifically, this course shows how a sales operations specialist would support a marketing associate and sales development representative to make the lead management more effective and efficient. You will learn the basics of data management, how to upload lead data into Salesforce, and then how to effectively train team members to manage leads using the different tools available in the Salesforce Sales Cloud. These are crucial skills for anyone interested in entry level sales jobs.\n\nFor this course, it is recommended (but not required) that you have some background knowledge of sales and CRM, as well as an understanding of the basics of Salesforce platform navigation. If you're a total beginner with these concepts, you can still be successful in this course — however, it might require some additional work on your part.\n\nBy enrolling in this course, you are taking the next step to kickstarting your career in Salesforce. Congratulations on continuing this exciting journey! | English |

Salesforce Sales Operations	Opportunity Management in Salesforce	BEGINNER	6.1	The third course in the Salesforce Sales Operations Professional Certificate, Opportunity Management in Salesforce, is for anyone who is curious about entry level sales roles that require foundational skills in Salesforce, the sales operations specialist role specifically, and how to use tools in Salesforce to manage opportunities and close sales deals in a real world business setting.\n\nThis third course will give you a foundational understanding of how to help sales teams optimize the opportunity management process. Specifically, this course shows how a sales operations specialist would support account executives and empower them to progress opportunities through a sales pipeline and close sales deals as effectively and efficiently as possible. This will require the use of new tools in Salesforce, including products, price books, quotes, contracts, and orders. Learning how to leverage these aspect of Salesforce are crucial skills for anyone interested in entry level sales jobs.\n\nFor this course, it is recommended (but not required) that you have some background knowledge of sales and CRM, as well as an understanding of the basics of Salesforce platform navigation. If you're a total beginner with these concepts, you can still be successful in this course — however, it might require some additional work on your part.\n\nBy enrolling in this course, you are taking the next step to kickstarting your career in Salesforce. Congratulations on continuing this exciting journey!	English
Salesforce Sales Operations	Reports, Dashboards, and Customer Success in Salesforce	BEGINNER	6.2	The fourth course in the Salesforce Sales Operations Professional Certificate — Reports, Dashboards, and Customer Success in Salesforce — is for anyone who is curious about entry level sales roles that require foundational skills in Salesforce, the sales operations specialist role specifically, how to use tools in Salesforce to improve customer service at a business, how to leverage data in Salesforce to improve the overall performance of a sales team, and the path to becoming a Salesforce administrator.\n\nThis fourth course goes into more depth on how a sales operations specialist would use Salesforce Service Cloud to support a variety of different customer service needs. You will learn the basics of effective customer support, and you will leverage a variety of new tools available in the Salesforce Service Cloud to effectively manage customer relationships.\n\nThis course also goes into more depth on how a sales ops specialist would use Salesforce Reports and Dashboards to support a variety of needs from a sales team manager to track, improve, and forecast the overall performance of a sales team. You will learn how to use filters to produce custom reports in Salesforce, and then discover how to visualize that data effectively through the use of charts and dashboards. \n\nFor this course, it is recommended (but not required) that you have some background knowledge of sales and CRM, as well as an understanding of the basics of Salesforce platform navigation. If you're a total beginner with these concepts, you can still be successful in this course — however, it might require some additional work on your part.\n\nBy enrolling in this course, you are taking the next step to kickstarting your career in Salesforce. Congratulations on continuing this exciting journey!	English

| Salesforce Sales Operations | Sales and CRM Overview | BEGINNER | 6.6 | This course is the first of a series that aims to teach you the foundational skills in Salesforce that will prepare you for a variety of entry-level sales roles, including the sales operations specialist position. \n\nThis course is designed for beginners. No previous experience in Salesforce, sales, or CRM is necessary to be successful. In this course, you will be introduced to essential concepts like the fundamentals of the sales process. You'll also learn about what Customer Relationship Management (CRM) systems are and what they are used for, you'll dive into Salesforce's main products and their use cases, and you will gain a working knowledge of the key functionalities of the Salesforce Sales Cloud that help support a business's growth.\n\nThis course is the first step in your learning journey with Salesforce. It will provide you with the foundation you need to go into depth with more advanced Salesforce tools taught later in the certificate, and ultimately launch your new career. Please note that if you already have background knowledge in sales and CRM, or if you want to dive immediately into content that goes into more depth with Salesforce, it is recommended that you start with Course 2 in this certificate: Lead Management in Salesforce. | English |
| Google Digital Marketing & E-commerce | Foundations of Digital Marketing and E-commerce | BEGINNER | 9.4 | This is the first of seven courses in the Google Digital Marketing & E-commerce Certificate, which will equip you with the skills you need to apply to entry-level roles in these fields. People who work in digital marketing and e-commerce help their organizations attract new customers, engage customers through various digital channels, and drive transactions like purchases and customer loyalty. In this course, you'll explore entry-level jobs in digital marketing and e-commerce and identify the roles and functions that those jobs play within an organization. You'll also learn about the marketing funnel and how it shapes the customer journey. \n\nGoogle employees who currently work in the field will guide you, providing hands-on activities and examples that simulate common digital marketing and e-commerce tasks, and helping you build your skills and prepare for the job. \n\nLearners who complete the seven courses in this program will be equipped to apply for entry-level jobs in digital marketing and e-commerce. No previous experience is necessary.\n\nBy the end of this course, you will be able to do the following: \n- Define the fields of digital marketing and e-commerce\n- Describe the job responsibilities of an entry-level digital marketing coordinator and e-commerce analyst (and similar job titles) \n- Summarize how this program will help prepare you for a career in digital marketing and e-commerce\n- Identify the roles and functions that digital marketing and e-commerce play within an organization\n- Understand the customer journey and the function of journey maps\n- Explain the concept of a marketing funnel\n- Understand the elements and goals of a digital marketing and e-commerce strategy | English |

Google Digital Marketing & E-commerce	Attract and Engage Customers with Digital Marketing	BEGINNER	9.0	Attract and Engage Customers with Digital Marketing is the second of seven courses in the Google Digital Marketing & E-commerce Certificate. In this course you will practice using search engine optimization (SEO), search engine marketing (SEM), and display advertising to attract and engage customers online. You will explore the stages of the marketing funnel and learn how to use digital marketing tactics to move customers through the stages. You'll learn how to increase the quality and quantity of website traffic by understanding SEO fundamentals like keyword research, search engine algorithms, and link building. You will also learn about paid search and advertising, and explore tactics used to gain visibility and reach potential customers on search engine results pages, or SERPs. By the end of this course you'll be able to apply digital marketing strategies, best practices, and tools to increase awareness of a business, understand customer needs, and engage people's interests with products and services. \n\nGoogle employees who currently work in the field will guide you, providing hands-on activities and examples that simulate common digital marketing and e-commerce tasks while showing you some of the best tools and resources used on the job. \n\nLearners who complete the seven courses in this program will be equipped to apply for entry-level jobs in digital marketing and e-commerce. No previous experience is necessary.\n\nBy the end of this course, you will be able to do the following: \n- Identify customer personas and build your target audience\n- Describe the marketing funnel's purpose and benefits\n- Know how to increase your conversion rate\n- Explain the purpose of SEO and the essential SEO terms to know\n- Use Google Search Console and its reports to monitor a site's presence in Google Search results\n- Recognize the benefits of SEM and why to do it\n- Understand the fundamentals of Google Ads and targeting audiences	English
Google Digital Marketing & E-commerce	From Likes to Leads: Interact with Customers Online	BEGINNER	8.8	From Likes to Leads: Interact with Customers Online is the third of seven courses in the Google Digital Marketing & E-commerce Certificate. This course will help you develop social media marketing strategies. Social media is a key digital marketing channel for many businesses because of the large number of people who use social platforms to socialize, interact with businesses, and share content. No digital marketing strategy is complete without an online brand presence where customers can engage with a brand. In this course you'll explore social media platforms and identify which platform is the most appropriate for specific business needs. You'll learn how to create content for social media using graphic design principles for marketers and learn how to manage a social media presence. In addition you'll set goals and success metrics for social media ads. \n\nGoogle employees who currently work in the field will guide you, providing hands-on activities and examples that simulate common digital marketing and e-commerce tasks while showing you some of the best tools and resources used on the job. \n\nLearners who complete the seven courses in this program will be equipped to apply for entry-level jobs in digital marketing and e-commerce. No previous experience is necessary.\n\nBy the end of this course, you will be able to do the following: \n- Identify the five core pillars of social media marketing: strategy, planning and publishing, listening and engagement, analytics and reporting, and advertising\n- Determine how to choose social media platforms for a campaign\n- Understand how to boost engagement on social media\n- Learn how to write, design, and repurpose engaging content for social media\n- Recognize how to use the data gathered from social media analytics as a decision-making tool\n- Learn best practices for presenting a social media report\n- Achieve specific marketing goals through the use of paid social media	English

| Google Digital Marketing & E-commerce | Think Outside the Inbox: Email Marketing | BEGINNER | 6.2 | Think Outside the Inbox: Email Marketing is the fourth of seven courses in the Google Digital Marketing & E-commerce Certificate. This course will explore how to execute a successful email marketing campaign. Email marketing is one of the oldest and most proven digital marketing channels, and it is an essential component of an overall digital marketing strategy. Email is a primary channel for many businesses in reaching existing customers, encouraging interaction with the business, driving purchases, and building loyalty. In this course, you'll explore email marketing and cover topics like: creating an email marketing strategy, executing email campaigns, and measuring the results of those campaigns. You'll also learn how to use mailing lists and utilize automation and workflows.\n \nGoogle employees who currently work in the field will guide you, providing hands-on activities and examples that simulate common digital marketing and e-commerce tasks while showing you some of the best tools and resources used on the job.\n\nLearners who complete the seven courses in this program will be equipped to apply for entry-level jobs in digital marketing and e-commerce. No previous experience is necessary.\n\nBy the end of this course, you will be able to do the following: \n- Write effective preview text and subject lines using best practices\n- Create email marketing automation and workflows\n- Build and maintain email lists\n- Write effective email copy\n- Conduct contact management and list segmentation\n- Employ best practices to handle personally identifiable information, or PII, and user data safely\n- Measure and analyze email campaign results | English |
| Google Digital Marketing & E-commerce | Assess for Success: Marketing Analytics and Measurement | BEGINNER | 6.9 | Assess for Success: Marketing Analytics and Measurement is the fifth of seven courses in the Google Digital Marketing & E-commerce Certificate. This course explores marketing analytics practices and tools. Digital marketing and e-commerce professionals are expected to analyze data from various sources (such as web pages, digital marketing channels, and e-commerce sites) and use them to gain customer insights. You'll create media plans and set performance goals. You'll learn how to measure, manage, and analyze data from marketing campaigns using Google Analytics, Google Ads, and similar tools. Then, learn how to adjust a marketing budget according to insights extracted from key metrics. You'll use A/B test results to optimize a campaign and identify metrics that define a campaign's success. You will be able to analyze and visualize data and insights in spreadsheets and prepare presentations to share campaign progress or results with stakeholders. \n\nGoogle employees who currently work in the field will guide you, providing hands-on activities and examples that simulate common digital marketing and e-commerce tasks, while showing you some of the best tools and resources used on the job.\n\nLearners who complete the seven courses in this program will be equipped to apply for entry-level jobs in digital marketing and e-commerce. No previous experience is necessary.\n\nBy the end of this course, you will be able to do the following: \n- Plan and allocate the spending of marketing budgets\n- Describe the unique role of performance goals and key performance indicators (KPIs) in marketing campaigns\n- Describe how tools like Google Analytics and Google Ads are used to measure website and ad campaign performance\n- Describe how to determine the return on investment (ROI) or return on ad spend (ROAS) of a marketing project\n- Prepare, conduct, and analyze the results from an A/B test to optimize a marketing campaign\n- Apply spreadsheet features like sorting, filtering, and pivot tables to prepare data to be shared\n- Create charts in spreadsheets for visualization of metrics | English |

| Google Digital Marketing & E-commerce | Make the Sale: Build, Launch, and Manage E-commerce Stores | BEGINNER | 4.9 | Make the Sale: Build, Launch, and Manage E-commerce Stores is the sixth of seven courses in the Google Digital Marketing & E-commerce Certificate. This course explores how businesses and individuals sell products online, including using popular platforms like Shopify. You'll go through the process of creating a mock e-commerce store. To do this, you'll build a Shopify store, add the necessary information, and create product listings. You'll explore how to reach customers online through e-commerce customer outreach methods like advertisements and campaigns.\n\nGoogle employees who currently work in the field will guide you, providing hands-on activities and examples that simulate common digital marketing and e-commerce tasks while showing you some of the best tools and resources used on the job.\n\nLearners who complete the seven courses in this program will be ready to apply for entry-level jobs in digital marketing and e-commerce. No previous experience is necessary.\n\nBy the end of this course, you will be able to do the following: \n- Understand essential e-commerce strategies and practices\n- Explain how to conduct market research and product research\n- Set up a mock e-commerce store using Shopify\n- Use Google Ads to engage e-commerce customers\n- Explain how trends and seasonality affect e-commerce businesses\n- Use best practices to create an engaging customer experience online\n- Describe the order fulfillment process through checkout, point of sale (POS), shipping, and delivery. \n- Optimize a checkout flow for customers | English |
| Google Digital Marketing & E-commerce | Satisfaction Guaranteed: Develop Customer Loyalty Online | BEGINNER | 4.8 | You made it! Satisfaction Guaranteed: Develop Customer Loyalty Online is the seventh and final course in the Google Digital Marketing & E-commerce Certificate. In this course, you'll explore strategies for building customer loyalty in e-commerce. You'll also explore specific tools to develop and maintain client relationships. At the end of the course you'll work through a scenario that demonstrates your ability to deliver a successful e-commerce strategy. Finally, you'll wrap up the course by building professional development skills. We encourage you to complete courses 1–6 before beginning this course because they provide the foundation necessary to complete the activities at the end of this course. \n\nGoogle employees who currently work in the field will guide you, providing hands-on activities and examples that simulate common digital marketing and e-commerce tasks while showing you some of the best tools and resources used on the job.\n\nLearners who complete the seven courses in this program will be prepared to apply for entry-level jobs in digital marketing and e-commerce. No previous experience is necessary.\n\nBy the end of this course, you will be able to do the following: \n- Identify common strategies for building customer loyalty in e-commerce\n- Understand how to successfully manage client relationships and measure satisfaction\n- Monitor an e-commerce store's performance\n- Update an e-commerce store based on data \n- Complete a portfolio scenario to prepare for job interviews\n- Find, apply for, and prepare for interviews and jobs\n- Put together a portfolio and/or resume to present to employers | English |

Unilever Digital Marketing Analyst	Advanced Tools for Digital Marketing Analytics	BEGINNER	2.8	The Advanced Tools for Digital Marketing Analytics course explores cutting-edge tools and technologies that are transforming the landscape of digital marketing analytics such as marketing automation and scaling strategies, predictive analytics and algorithms, video and mobile marketing trends, as well as artificial intelligence (AI), natural language processing (NLP), and ethics. You'll also walk through preparing a portfolio and supporting a career change to digital marketing analyst. \n\nAfter completing this course, you will be able to: \n\n- Describe marketing automation and software applications that support it.\n\n- Strategically assess scalability options for marketing campaigns.\n\n- Identify the current applications of predictive analytics for digital marketing.\n\n- Use data summarization, experimentation, and analysis as an application for targeting.\n\n- Describe the future of video and mobile marketing and their impact on the digital marketing channel mix.\n\n- Describe how AI and machine learning benefit digital marketing campaigns.\n\n- Define NLP and identify its impact on digital marketing.\n\n- Examine ethical considerations impacting digital marketing and recognize the potential impact of future advances.	English
Unilever Digital Marketing Analyst	Campaign Performance Reporting, Visualization, & Improvement	BEGINNER	3.2	The Campaign Performance Reporting, Visualization, and Improvement course explores the critical aspects of measuring, reporting, and enhancing campaign performance to achieve marketing excellence. \n\nAfter completing this course, you will be able to:\n\n- Describe the value of data storytelling and list best practices for preparing visualizations.\n\n- Identify popular visualization tools and advantages of each.\n\n- Identify common market channel strategies.\n\n- Describe the ANSOFF Matrix Model and choose a market strategy using ANSOFF Matrix.\n\n- Identify what campaign structures impact ROI and common pitfalls to avoid.\n\n- Assess and readjust ROI. \n\n- Identify the steps to plan and implement market campaign analysis.\n\n- Recognize the different models of multi-touch attribution and identify how to implement multi-touch attribution.	English

Unilever Digital Marketing Analyst	Measurement and Analysis	BEGINNER	3.6	The Measurement and Analysis course delves into the essential aspects of tracking, analyzing, and optimizing marketing efforts to drive success. Throughout the course, you will gain a solid understanding of search engine marketing (SEM) and search engine optimization (SEO), web analytics and tools, social media platforms and analytics, as well as A/B testing and campaign performance reporting. \n\nAfter completing this course, you will be able to:\n\n- Set up an SEO objective and perform keyword research.\n\n- Construct and apply a value proposition and identify how to analyze performance of SEO strategy.\n\n- Define web analytics and associated KPIs.\n\n- Identify key features of the Google Analytics Platform, set up a Google Analytics Dashboard and describe other popular platforms and their key features.\n\n- Define the 4Cs of social media marketing and recognize SMART objectives.\n\n- Describe the RACE Planning Framework.\n\n- Identify top social media platforms and assess the best platform to use for a given strategy and objective.\n\n- Design a campaign strategy end-to-end and identify where to automate monitoring and adjusting.\n\n- Identify the steps to implement testing for a campaign strategy and plan for performance testing.	English
Unilever Digital Marketing Analyst	Customer Understanding and Digital Marketing Channels	BEGINNER	6.8	The Customer Understanding and Digital Marketing Channels course explores the dynamic landscape of digital marketing and its pivotal role in modern business strategies. In a digital world, it is more important than ever for businesses to connect with a global audience, target specific demographics, measure campaign performance with precision, and deliver personalized marketing messages. \n\nAfter completing this course, you will be able to:\n\n- Define fundamental digital marketing concepts such as customer personas, segmentation, funnels and value propositions.\n\n- Describe the Digital Marketing Analyst role and its impact on making smarter, quicker and more efficient decisions.\n\n- Describe the elements of the SOSTAC marketing planning framework and marketing transformation lanes.\n\n- Describe the nature of customer experience insights and identify internal and external tools to support customer segmentation.\n\n- Identify the relationship between customer experience and content marketing and brand storytelling.\n\n- Describe the 6Ps of marketing and how they are used to arrange a successful marketing mix.\n\n- Recognize digital marketing channels and identify inbound and outbound tools and performance metrics for each.	English

Unilever Supply Chain Data Analyst	Supply Chain Software Tools	BEGINNER	4.7	In the Supply Chain Software Tools course, you'll learn about the challenges of handling large amounts of data and how to effectively gather, analyze, and use the data. You'll learn about the latest cutting-edge technological solutions that can streamline operations, and emerging trends (such as artificial intelligence) that allow large amounts of data to be processed and summarized instantly. Additionally, you'll prepare for a job as a supply chain analyst by building your resume, learning how to market yourself and gain insights into the job research and application process.\n\nBy the end of this module, you'll be able to:\nRecognize supply chain emerging trends.\nDescribe the software tools available for supply chain analytics such as cloud-based solutions, AI-powered projections, advanced analytics, data lakes, and database management. \nExplain how to access real-time insights, review inventory availability and movement, replenish schedules, and review historical data.\nIdentify how to build accurate plans and forecasts for planning, data collection, validation, aggregation, and financial consolidation. \nIdentify how to test assumptions with scenarios to assist with forecasting decision making.\nOptimize supply chain operations. \nIdentify patterns and trends in supply chain data and streamline processes.\nPrepare for a job as a Supply Chain Analyst.	English
Unilever Supply Chain Data Analyst	Implementing Supply Chain Analytics	BEGINNER	4.7	In the Implementing Supply Chain Analytics: Descriptive, Diagnostic, Predictive and Prescriptive course, you'll discover how implementing analytical methods, models, and tools helps decision-making become more efficient. You'll use different types of methods, models, and tools, depending on specific business scenarios or needs, to help you analyze the current state of the supply chain and to lead you to insightful solutions. You'll also explore the utilization of supply chain models to evaluate and question the data to optimize the flow of goods, information, and cost in a supply chain to help identify potential improvements, determine the most efficient or practical course of action, and to communicate the impact to the customer.\n\nBy the end of this course, you'll be able to:\nInterpret historical data effectively using descriptive analytics.\nForecast the most probable outcomes, projects, or future. scenarios, along with their business implications, using predictive analytics.\nCollaborate and make recommendations that maximize business value, addressing problems through prescriptive analytics.\nDescribe the appropriate communication channels to display and summarize the data results and Supply Chain recommendations. \nUse supply chain models to evaluate and optimize the flow of goods, information, and sots with a supply chain.	English

Unilever Supply Chain Data Analyst	Using Data Analytics in Supply Chain	BEGINNER	8.9	In the Using Data Analytics in Supply Chain course, you'll explore the importance of data governance, and learn the fundamental concepts surrounding data. You'll also learn the tools and processes employed in supply chain analytics, enabling you to gather, analyze, synthesize, validate, and interpret data-driven insights. This ensures that products are efficiently delivered to their destination in a timely and cost-effective manner.\n\nBy the end of this course, you'll be able to:\nExplain the importance of data governance and adhere to data governance policies.\nDefine data analysis objectives, formulate questions, pinpoint data sources, and implement effective data gathering techniques.\nConduct data analysis by applying calculations, summarizations, averages, and classification of information to answer the identified data analysis objectives and questions.\nIdentify how to use SQL, Python, or spreadsheets to clean, manage, consolidate, analyze, and visualize data. \nDifferentiate between various scenarios and construct simulations to evaluate outcomes.\nUse data visualization to present insights effectively to decision-makers.	English
Unilever Supply Chain Data Analyst	Supply Chain Management and Analytics	BEGINNER	9.6	In the Supply Chain Management and Analytics course, you'll learn the foundations of supply chain management and how the Supply Chain Analyst role has an impact on the entire supply chain including making smarter, quicker, and more efficient decisions. You'll focus on the supply chain process, how to use analytics to identify potential opportunities in all aspects of the supply chain, and how to monitor supply chain security risks to help minimize their impact on the entire supply chain. Additionally, you'll explore the future of supply chain and how it's impacted by security and sustainability. \n\nBy the end of this course, you'll be able to:\nDescribe the supply chain components and their importance.\nDescribe the Supply Chain Analyst role and its impact to the entire supply chain in making smarter, quicker and more efficient decisions.\nRecognize how to use analytics to identify potential opportunities on all aspects of the supply chain ensuring cost and resource efficiencies and continual growth.\nUse data and the current status of expenses and profitability to understand the financial impact of operations, overall spend, procurement, savings realization, and future outlook.\nMonitor supply chain security risks and their impact and adjust overall planning and scheduling accordingly.\nDescribe the role of the Supply Chain Analysts to assist in meeting sustainability goals.	English

| Microsoft Azure Data Engineering Associate (DP-203) | Introduction to Microsoft Azure Synapse Analytics | INTERMEDIATE | 4.0 | In this course, you will learn how Azure Synapse Analytics enables you to perform different types of analytics through its' components that can be used to build Modern Data Warehouses through to advanced analytical solutions. You will learn how Azure Synapse Analytics solves the issue of having a single service to fulfill the broad range of analytics requirements that organizations face today and take a tour of the core application used to interact with the various components of Azure Synapse Analytics. You will learn the various components of Azure Synapse Analytics that enable you to build your analytical solutions in one place.\n\nThis course is part of a Specialization intended for Data engineers and developers who want to demonstrate their expertise in designing and implementing data solutions that use Microsoft Azure data services for anyone interested in preparing for the Exam DP-203: Data Engineering on Microsoft Azure (beta). \n\nThis is the fourth course in a program of 10 courses to help prepare you to take the exam so that you can have expertise in designing and implementing data solutions that use Microsoft Azure data services. The Data Engineering on Microsoft Azure exam is an opportunity to prove knowledge expertise in integrating, transforming, and consolidating data from various structured and unstructured data systems into structures that are suitable for building analytics solutions that use Microsoft Azure data services. Each course teaches you the concepts and skills that are measured by the exam. \n\nBy the end of this Specialization, you will be ready to take and sign-up for the Exam DP-203: Data Engineering on Microsoft Azure (beta). | English |
| Microsoft Azure Data Engineering Associate (DP-203) | Prepare for DP-203: Data Engineering on Microsoft Azure Exam | INTERMEDIATE | 4.1 | Microsoft certifications give you a professional advantage by providing globally recognized and industry-endorsed evidence of mastering skills in digital and cloud businesses. In this course, you will prepare to take the DP-203 Microsoft Azure Data Fundamentals certification exam. \n\nYou will refresh your knowledge of how to use various Azure data services and languages to store and produce cleansed and enhanced datasets for analysis. You will test your knowledge in a practice exam mapped to all the main topics covered in the DP-203 exam, ensuring you're well prepared for certification success. \n\nYou will also get a more detailed overview of the Microsoft certification program and where you can go next in your career. You'll also get tips and tricks, testing strategies, useful resources, and information on how to sign up for the DP-203 proctored exam. By the end of this course, you will be ready to sign-up for and take the DP-203 exam.\n\nThis is the last course in a program of 10 courses to help prepare you to take the exam so that you can have expertise in designing and implementing data solutions that use Microsoft Azure data services. The Data Engineering on Microsoft Azure exam is an opportunity to prove knowledge expertise in integrating, transforming, and consolidating data from various structured and unstructured data systems into structures that are suitable for building analytics solutions that use Microsoft Azure data services. Each course teaches you the concepts and skills that are measured by the exam. \n\nBy the end of this Specialization, you will be ready to take and sign-up for the Exam DP-203: Data Engineering on Microsoft Azure (beta). | English |

| Microsoft Azure Data Engineering Associate (DP-203) | Azure Data Lake Storage Gen2 and Data Streaming Solution | INTERMEDIATE | 3.5 | In this course, you will see how Azure Data Lake Storage can make processing Big Data analytical solutions more efficient and how easy it is to set up. You will also explore how it fits into common architectures, as well as the different methods of uploading the data to the data store. You will examine the myriad of security features that will ensure your data is secure. Learn the concepts of event processing and streaming data and how this applies to Azure Stream Analytics. You will then set up a stream analytics job to stream data, and learn how to manage and monitor a running job.\n\nThis course is part of a Specialization intended for Data engineers and developers who want to demonstrate their expertise in designing and implementing data solutions that use Microsoft Azure data services for anyone interested in preparing for the Exam DP-203: Data Engineering on Microsoft Azure (beta). You will take a practice exam that covers key skills measured by the certification exam.\n\nThis is the ninth course in a program of 10 courses to help prepare you to take the exam so that you can have expertise in designing and implementing data solutions that use Microsoft Azure data services. The Data Engineering on Microsoft Azure exam is an opportunity to prove knowledge expertise in integrating, transforming, and consolidating data from various structured and unstructured data systems into structures that are suitable for building analytics systems that use Microsoft Azure data services. Each course teaches you the concepts and skills that are measured by the exam. \n\nBy the end of this Specialization, you will be ready to take and sign-up for the Exam DP-203: Data Engineering on Microsoft Azure (beta). | English |
| Microsoft Azure Data Engineering Associate (DP-203) | Operational Analytics with Microsoft Azure Synapse Analytics | INTERMEDIATE | 2.5 | In this course, you will learn how to perform operational analytics against Azure Cosmos DB using the Azure Synapse Link feature within Azure Synapse Analytics.\n\nYou will learn how hybrid transactional and analytical processing can help you perform operational analytics with Azure Synapse Analytics. You will also learn how to configure and enable Azure Synapse Link to interact with Azure Cosmos DB and how you can perform analytics against Azure Cosmos DB using Azure Synapse Link.\n\nThis course is part of a Specialization intended for Data engineers and developers who want to demonstrate their expertise in designing and implementing data solutions that use Microsoft Azure data services for anyone interested in preparing for the Exam DP-203: Data Engineering on Microsoft Azure (beta). You will take a practice exam that covers key skills measured by the certification exam.\n\nThis is the seventh course in a program of 10 courses to help prepare you to take the exam so that you can have expertise in designing and implementing data solutions that use Microsoft Azure data services. The Data Engineering on Microsoft Azure exam is an opportunity to prove knowledge expertise in integrating, transforming, and consolidating data from various structured and unstructured data systems into structures that are suitable for building analytics solutions that use Microsoft Azure data services. Each course teaches you the concepts and skills that are measured by the exam. \n\nBy the end of this Specialization, you will be ready to take and sign-up for the Exam DP-203: Data Engineering on Microsoft Azure (beta). | English |

| Microsoft Azure Data Engineering Associate (DP-203) | Microsoft Azure for Data Engineering | INTERMEDIATE | 3.7 | The world of data has evolved and the advent of cloud technologies is providing new opportunities for businesses to explore. In this course, you will learn the various data platform technologies available, and how a Data Engineer can take advantage of this technology to an organization's benefit.\n\nThis course part of a Specialization intended for Data engineers and developers who want to demonstrate their expertise in designing and implementing data solutions that use Microsoft Azure data services anyone interested in preparing for the Exam DP-203: Data Engineering on Microsoft Azure (beta). \n\nThis is the first course in a program of 10 courses to help prepare you to take the exam so that you can have expertise in designing and implementing data solutions that use Microsoft Azure data services. The Data Engineering on Microsoft Azure exam is an opportunity to prove knowledge expertise in integrating, transforming, and consolidating data from various structured and unstructured data systems into structures that are suitable for building analytics solutions that use Microsoft Azure data services. Each course teaches you the concepts and skills that are measured by the exam. \n\nBy the end of this Specialization, you will be ready to take and sign-up for the Exam DP-203: Data Engineering on Microsoft Azure (beta). | English |
| Microsoft Azure Data Engineering Associate (DP-203) | Data Warehousing with Microsoft Azure Synapse Analytics | INTERMEDIATE | 7.9 | In this course, you will explore the tools and techniques that can be used to work with Modern Data Warehouses productively and securely within Azure Synapse Analytics. You will learn how Azure Synapse Analytics enables you to build Data Warehouses using modern architecture patterns and how the common schema is implemented in a data warehouse. You'll learn the best practices you need to adopt to load data into a data warehouse and the techniques that you can use to optimize query performance within Azure Synapse Analytics.\n\nThis course is part of a Specialization intended for Data engineers and developers who want to demonstrate their expertise in designing and implementing data solutions that use Microsoft Azure data services for anyone interested in preparing for the Exam DP-203: Data Engineering on Microsoft Azure (beta). \n\nThis is the fifth course in a program of 10 courses to help prepare you to take the exam so that you can have expertise in designing and implementing data solutions that use Microsoft Azure data services. The Data Engineering on Microsoft Azure exam is an opportunity to prove knowledge expertise in integrating, transforming, and consolidating data from various structured and unstructured data systems into structures that are suitable for building analytics solutions that use Microsoft Azure data services. Each course teaches you the concepts and skills that are measured by the exam. \n\nBy the end of this Specialization, you will be ready to take and sign-up for the Exam DP-203: Data Engineering on Microsoft Azure (beta). | English |

Microsoft Azure Data Engineering Associate (DP-203)	Data Storage in Microsoft Azure	INTERMEDIATE	5.5	Azure provides a variety of ways to store data: unstructured, archival, relational, and more. In this course, you will learn the basics of storage management in Azure, how to create a Storage Account, and how to choose the right model for the data you want to store in the cloud.\n\nThis course part of a Specialization intended for Data engineers and developers who want to demonstrate their expertise in designing and implementing data solutions that use Microsoft Azure data services anyone interested in preparing for the Exam DP-203: Data Engineering on Microsoft Azure (beta). \n\nThis is the second in a program of 10 courses to help prepare you to take the exam so that you can have expertise in designing and implementing data solutions that use Microsoft Azure data services. The Data Engineering on Microsoft Azure exam is an opportunity to prove knowledge expertise in integrating, transforming, and consolidating data from various structured and unstructured data systems into structures that are suitable for building analytics solutions that use Microsoft Azure data services. Each course teaches you the concepts and skills that are measured by the exam. \n\nBy the end of this Specialization, you will be ready to take and sign-up for the Exam DP-203: Data Engineering on Microsoft Azure (beta).	English
Microsoft Azure Data Engineering Associate (DP-203)	Microsoft Azure Databricks for Data Engineering	INTERMEDIATE	9.4	In this course, you will learn how to harness the power of Apache Spark and powerful clusters running on the Azure Databricks platform to run large data engineering workloads in the cloud.\n\nYou will discover the capabilities of Azure Databricks and the Apache Spark notebook for processing huge files. You will come to understand the Azure Databricks platform and identify the types of tasks well-suited for Apache Spark. You will also be introduced to the architecture of an Azure Databricks Spark Cluster and Spark Jobs. You will work with large amounts of data from multiple sources in different raw formats. you will learn how Azure Databricks supports day-to-day data-handling functions, such as reads, writes, and queries.\n\nThis course is part of a Specialization intended for Data engineers and developers who want to demonstrate their expertise in designing and implementing data solutions that use Microsoft Azure data services for anyone interested in preparing for the Exam DP-203: Data Engineering on Microsoft Azure (beta). You will take a practice exam that covers key skills measured by the certification exam.\n\nThis is the eighth course in a program of 10 courses to help prepare you to take the exam so that you can have expertise in designing and implementing data solutions that use Microsoft Azure data services. The Data Engineering on Microsoft Azure exam is an opportunity to prove knowledge expertise in integrating, transforming, and consolidating data from various structured and unstructured data systems into structures that are suitable for building analytics solutions that use Microsoft Azure data services. Each course teaches you the concepts and skills that are measured by the exam. \n\nBy the end of this Specialization, you will be ready to take and sign-up for the Exam DP-203: Data Engineering on Microsoft Azure (beta).	English

| Microsoft Azure Data Engineering Associate (DP-203) | Data Integration with Microsoft Azure Data Factory | INTERMEDIATE | 8.9 | In this course, you will learn how to create and manage data pipelines in the cloud using Azure Data Factory.\n\nThis course is part of a Specialization intended for Data engineers and developers who want to demonstrate their expertise in designing and implementing data solutions that use Microsoft Azure data services. It is ideal for anyone interested in preparing for the DP-203: Data Engineering on Microsoft Azure exam (beta). \n\nThis is the third course in a program of 10 courses to help prepare you to take the exam so that you can have expertise in designing and implementing data solutions that use Microsoft Azure data services. The Data Engineering on Microsoft Azure exam is an opportunity to prove knowledge expertise in integrating, transforming, and consolidating data from various structured and unstructured data systems into structures that are suitable for building analytics solutions that use Microsoft Azure data services. Each course teaches you the concepts and skills that are measured by the exam. \n\nBy the end of this Specialization, you will be ready to take and sign-up for the Exam DP-203: Data Engineering on Microsoft Azure (beta). | English |
| Microsoft Azure Data Engineering Associate (DP-203) | Data Engineering with MS Azure Synapse Apache Spark Pools | INTERMEDIATE | 3.4 | In this course, you will learn how to perform data engineering with Azure Synapse Apache Spark Pools, which enable you to boost the performance of big-data analytic applications by in-memory cluster computing.\n\nYou will learn how to differentiate between Apache Spark, Azure Databricks, HDInsight, and SQL Pools and understand the use-cases of data-engineering with Apache Spark in Azure Synapse Analytics. You will also learn how to ingest data using Apache Spark Notebooks in Azure Synapse Analytics and transform data using DataFrames in Apache Spark Pools in Azure Synapse Analytics. You will integrate SQL and Apache Spark pools in Azure Synapse Analytics. You will also learn how to monitor and manage data engineering workloads with Apache Spark in Azure Synapse Analytics.\n\nThis course is part of a Specialization intended for Data engineers and developers who want to demonstrate their expertise in designing and implementing data solutions that use Microsoft Azure data services for anyone interested in preparing for the Exam DP-203: Data Engineering on Microsoft Azure (beta). You will take a practice exam that covers key skills measured by the certification exam.\n\nThis is the sixth course in a program of 10 courses to help prepare you to take the exam so that you can have expertise in designing and implementing data solutions that use Microsoft Azure data services. The Data Engineering on Microsoft Azure exam is an opportunity to prove knowledge expertise in integrating, transforming, and consolidating data from various structured and unstructured data systems into structures that are suitable for building analytics solutions that use Microsoft Azure data services. Each course teaches you the concepts and skills that are measured by the exam. \n\nBy the end of this Specialization, you will be ready to take and sign-up for the Exam DP-203: Data Engineering on Microsoft Azure (beta). | English |

| Microsoft Azure Data Scientist Associate (DP-100) | Build and Operate Machine Learning Solutions with Azure | INTERMEDIATE | 9.4 | Azure Machine Learning is a cloud platform for training, deploying, managing, and monitoring machine learning models. In this course, you will learn how to use the Azure Machine Learning Python SDK to create and manage enterprise-ready ML solutions.\n\nThis is the third course in a five-course program that prepares you to take the DP-100: Designing and Implementing a Data Science Solution on Azurecertification exam.\n\nThe certification exam is an opportunity to prove knowledge and expertise operate machine learning solutions at a cloud-scale using Azure Machine Learning. This specialization teaches you to leverage your existing knowledge of Python and machine learning to manage data ingestion and preparation, model training and deployment, and machine learning solution monitoring in Microsoft Azure. Each course teaches you the concepts and skills that are measured by the exam. \n\nThis Specialization is intended for data scientists with existing knowledge of Python and machine learning frameworks like Scikit-Learn, PyTorch, and Tensorflow, who want to build and operate machine learning solutions in the cloud. It teaches data scientists how to create end-to-end solutions in Microsoft Azure. Students will learn how to manage Azure resources for machine learning; run experiments and train models; deploy and operationalize machine learning solutions, and implement responsible machine learning. They will also learn to use Azure Databricks to explore, prepare, and model data; and integrate Databricks machine learning processes with Azure Machine Learning. | English |
| Microsoft Azure Data Scientist Associate (DP-100) | Perform data science with Azure Databricks | INTERMEDIATE | 6.2 | In this course, you will learn how to harness the power of Apache Spark and powerful clusters running on the Azure Databricks platform to run data science workloads in the cloud.\n\nThis is the fourth course in a five-course program that prepares you to take the DP-100: Designing and Implementing a Data Science Solution on Azurec ertification exam.\n\nThe certification exam is an opportunity to prove knowledge and expertise operate machine learning solutions at a cloud-scale using Azure Machine Learning. This specialization teaches you to leverage your existing knowledge of Python and machine learning to manage data ingestion and preparation, model training and deployment, and machine learning solution monitoring in Microsoft Azure. Each course teaches you the concepts and skills that are measured by the exam. \n\nThis Specialization is intended for data scientists with existing knowledge of Python and machine learning frameworks like Scikit-Learn, PyTorch, and Tensorflow, who want to build and operate machine learning solutions in the cloud. It teaches data scientists how to create end-to-end solutions in Microsoft Azure. Students will learn how to manage Azure resources for machine learning; run experiments and train models; deploy and operationalize machine learning solutions, and implement responsible machine learning. They will also learn to use Azure Databricks to explore, prepare, and model data; and integrate Databricks machine learning processes with Azure Machine Learning. | English |

Microsoft Azure Data Scientist Associate (DP-100)	Microsoft Azure Machine Learning for Data Scientists	INTERMEDIATE	4.3	Machine learning is at the core of artificial intelligence, and many modern applications and services depend on predictive machine learning models. Training a machine learning model is an iterative process that requires time and compute resources. Automated machine learning can help make it easier. In this course, you will learn how to use Azure Machine Learning to create and publish models without writing code.\n\nThis is the second course in a five-course program that prepares you to take the DP-100: Designing and Implementing a Data Science Solution on Azurecertification exam.\n\nThe certification exam is an opportunity to prove knowledge and expertise operate machine learning solutions at a cloud-scale using Azure Machine Learning. This specialization teaches you to leverage your existing knowledge of Python and machine learning to manage data ingestion and preparation, model training and deployment, and machine learning solution monitoring in Microsoft Azure. Each course teaches you the concepts and skills that are measured by the exam. \n\nThis Specialization is intended for data scientists with existing knowledge of Python and machine learning frameworks like Scikit-Learn, PyTorch, and Tensorflow, who want to build and operate machine learning solutions in the cloud. It teaches data scientists how to create end-to-end solutions in Microsoft Azure. Students will learn how to manage Azure resources for machine learning; run experiments and train models; deploy and operationalize machine learning solutions, and implement responsible machine learning. They will also learn to use Azure Databricks to explore, prepare, and model data; and integrate Databricks machine learning processes with Azure Machine Learning.	English
Microsoft Azure Data Scientist Associate (DP-100)	Prepare for DP-100: Data Science on Microsoft Azure Exam	INTERMEDIATE	4.4	Microsoft certifications give you a professional advantage by providing globally recognized and industry-endorsed evidence of mastering skills in digital and cloud businesses. In this course, you will prepare to take the DP-100 Azure Data Scientist Associate certification exam. \n\nYou will refresh your knowledge of how to plan and create a suitable working environment for data science workloads on Azure, run data experiments, and train predictive models. In addition, you will recap on how to manage, optimize, and deploy machine learning models into production.\n\nYou will test your knowledge in a practice exam mapped to all the main topics covered in the DP-100 exam, ensuring you're well prepared for certification success.\n\nYou will also get a more detailed overview of the Microsoft certification program and where you can go next in your career. You'll also get tips and tricks, testing strategies, useful resources, and information on how to sign up for the DP-100 proctored exam. By the end of this course, you will be ready to sign-up for and take the DP-100 exam.\n\nThis is the fifth course in a five-course program that prepares you to take the DP-100: Designing and Implementing a Data Science Solution on Azure certification exam.\n\nThe certification exam is an opportunity to prove knowledge and expertise operate machine learning solutions at a cloud-scale using Azure Machine Learning. This specialization teaches you to leverage your existing knowledge of Python and machine learning to manage data ingestion and preparation, model training and deployment, and machine learning solution monitoring in Microsoft Azure. Each course teaches you the concepts and skills that are measured by the exam. \n\nThis Specialization is intended for data scientists with existing knowledge of Python and machine learning frameworks like Scikit-Learn, PyTorch, and Tensorflow, who want to build and operate machine learning solutions in the cloud. It teaches data scientists how to create end-to-end solutions in Microsoft Azure. Students will learn how to manage Azure resources for machine learning; run experiments and train models; deploy and operationalize machine learning solutions, and implement responsible machine learning. They will also learn to use Azure Databricks to explore, prepare, and model data; and integrate Databricks machine learning processes with Azure Machine Learning.	English

Microsoft Azure Data Scientist Associate (DP-100)	Create Machine Learning Models in Microsoft Azure	INTERMEDIATE	3.8	Machine learning is the foundation for predictive modeling and artificial intelligence. If you want to learn about both the underlying concepts and how to get into building models with the most common machine learning tools this path is for you. In this course, you will learn the core principles of machine learning and how to use common tools and frameworks to train, evaluate, and use machine learning models.\n\nThis course is designed to prepare you for roles that include planning and creating a suitable working environment for data science workloads on Azure. You will learn how to run data experiments and train predictive models. In addition, you will manage, optimize, and deploy machine learning models into production.\n\nFrom the most basic classical machine learning models, to exploratory data analysis and customizing architectures, you'll be guided by easy -to-digest conceptual content and interactive Jupyter notebooks.\n\nIf you already have some idea what machine learning is about or you have a strong mathematical background this course is perfect for you. These modules teach some machine learning concepts, but move fast so they can get to the power of using tools like scikit-learn, TensorFlow, and PyTorch. This learning path is also the best one for you if you're looking for just enough familiarity to understand machine learning examples for products like Azure ML or Azure Databricks. It's also a good place to start if you plan to move beyond classic machine learning and get an education in deep learning and neural networks, which we only introduce here.\n\nThis program consists of 5 courses to help prepare you to take the Exam DP-100: Designing and Implementing a Data Science Solution on Azure. The certification exam is an opportunity to prove knowledge and expertise operate machine learning solutions at cloud scale using Azure Machine Learning. This specialization teaches you to leverage your existing knowledge of Python and machine learning to manage data ingestion and preparation, model training and deployment, and machine learning solution monitoring in Microsoft Azure . Each course teaches you the concepts and skills that are measured by the exam.	English
Microsoft Azure Developer Associate (AZ-204)	Create Serverless Applications	INTERMEDIATE	7.8	In this course, you will learn how Azure Functions enable the creation of event-driven, compute-on-demand systems that can be triggered by various external events. You will earn how to leverage functions to execute server-side logic and build serverless architectures. \n\nThis course will help you prepare for the Microsoft Certified: Azure Developer Associate certification. This course is part of a Specialization intended for developers who want to demonstrate their expertise in all phases of cloud development from requirements, definition, and design; to development, deployment, and maintenance; to performance tuning and monitoring. It is ideal for anyone interested in preparing for the AZ-204: Developing Solutions for Microsoft Azure exam. \n\nThis is the first course in a program of 8 courses to help prepare you to take the exam. Each course teaches you the concepts and skills that are measured by the exam. \n\nBy the end of this Professional Certificate program, you will be ready to take and sign-up for the Exam AZ-204: Developing Solutions for Microsoft Azure.	English

Microsoft Azure Developer Associate (AZ-204)	Manage Resources in Azure	INTERMEDIATE	3.8	In this course, you will learn how to work with the Azure command line and web portal to create, manage, and control cloud-based resources.\n\nYou will look at all three approaches to deploying cloud resources and how to make an informed decision about which one to leverage for your services. You'll also quickly look at the service models supported by Azure which can help you determine the services you should start with when planning out an Azure deployment. You will learn how to install the Azure CLI locally and use it to manage Azure resources. You will also use Azure PowerShell interactively for one-off tasks and write scripts to automate repeated tasks.\n\nYou'll learn about the major factors that influence the cost of running in the cloud. Along the way, you'll get hands-on experience with some of the tools you can use to estimate the costs of running your workloads on Azure to help ensure that you stay within budget and use only the services that you need.\n\nAzure Resource Manager has a number of features that you can use to organize resources, enforce standards, and protect critical Azure resources from accidental deletion. In this module, you'll take a tour through these features, and examine how you can use them to your advantage. You'll identify incorrectly assigned resources in Azure. You'll also assess whether resources can be moved, and validate a resource move operation. Then you'll move and verify resources between Azure resource groups.\n\nThis course will help you prepare for the Microsoft Certified: Azure Developer Associate certification. In this course, you will take a practice exam that covers key skills measured in the exam. This is the fifth course in a program of 8 courses to help prepare you to take the exam.\n\nThis course is part of a Specialization intended for developers who want to demonstrate their expertise in all phases of cloud development from requirements, definition, and design; to development, deployment, and maintenance; to performance tuning and monitoring. It is ideal for anyone interested in preparing for the AZ-204: Developing Solutions for Microsoft Azure exam. By the end of this program you will be ready to take and sign-up for the Exam AZ-204: Developing Solutions for Microsoft Azure.	English
Microsoft Azure Developer Associate (AZ-204)	Prepare for AZ-204: Developing Solutions for Microsoft Azure	INTERMEDIATE	2.8	Microsoft certifications give you a professional advantage by providing globally recognized and industry-endorsed evidence of mastering skills in digital and cloud businesses. In this course, you will prepare to take the Exam AZ-204: Developing Solutions for Microsoft Azure. \n\nIn this course, you will refresh your knowledge of hall phases of cloud development from requirements, definition, and design; to development, deployment, and maintenance; to performance tuning and monitoring. You will test your knowledge in a practice exam mapped to all the main topics covered in the AZ-204 exam, ensuring you're well prepared for certification success. Y\n\nYou will also get a more detailed overview of the Microsoft certification program and where you can go next in your career. You'll also get tips and tricks, testing strategies, useful resources, and information on how to sign up for the AZ-204 proctored exam. By the end of this course, you will be ready to sign-up for and take the certification exam.\n\nThis is the last course in a program of eight courses to help prepare you to take the exam so that you can have expertise in designing and implementing data solutions that use Microsoft Azure data services. The Developing Solutions for Microsoft Azure exam is an opportunity to prove knowledge expertise in designing, building, testing, and maintaining cloud applications and services on Microsoft Azure. Each course teaches you the concepts and skills that are measured by the exam.	English

| Microsoft Azure Developer Associate (AZ-204) | Data Storage in Microsoft Azure for Associate Developers | INTERMEDIATE | 3.7 | Azure provides a variety of ways to store data: unstructured, archival, relational, and more. In this course, you will learn the basics of storage management in Azure, how to create a Storage Account, and how to choose the right model for the data you want to store in the cloud.\n\nThis course part of a Specialization intended for Data engineers and developers who want to demonstrate their expertise in designing and implementing data solutions that use Microsoft Azure data services anyone interested in preparing for the Exam DP-203: Data Engineering on Microsoft Azure (beta). \n\nThis is the second in a program of 10 courses to help prepare you to take the exam so that you can have expertise in designing and implementing data solutions that use Microsoft Azure data services. The Data Engineering on Microsoft Azure exam is an opportunity to prove knowledge expertise in integrating, transforming, and consolidating data from various structured and unstructured data systems into structures that are suitable for building analytics solutions that use Microsoft Azure data services. Each course teaches you the concepts and skills that are measured by the exam. \n\nBy the end of this Professional Certificate program, you will be ready to take and sign-up for the Exam DP-203: Data Engineering on Microsoft Azure (beta). | English |
| Microsoft Azure Developer Associate (AZ-204) | Deploy a website to Azure with Azure App Service | INTERMEDIATE | 3.5 | In this course, you will see how web apps in Azure allow you to publish and manage your website easily without having to work with the underlying servers, storage, or network assets. Instead, you can focus on your website features and rely on the robust Azure platform to provide secure access to your site. \n\nYou will see how Azure App Service enables you to build and host web applications in the programming language of your choice without managing infrastructure. You will also learn how to create a website through the hosted web app platform in Azure App Service.\n\nYou will learn how to use the publishing features built into Visual Studio to deploy and manage ASP.NET Core web applications hosted on Azure. You'll use Azure App Service to scale a web app to match planned seasonal throughput requirements and also meet demand during short-term peak events. By the end of this course, you'll be able to create and maintain web apps that use Docker images that are stored in Container Registry.\n\nThis course will help you prepare for the Microsoft Certified: Azure Developer Associate certification. In this course, you will take a practice exam that covers key skills measured in the exam. This is the sixth course in a program of 8 courses to help prepare you to take the exam.\n\nThis course is part of a Specialization intended for developers who want to demonstrate their expertise in all phases of cloud development from requirements, definition, and design; to development, deployment, and maintenance; to performance tuning and monitoring. It is ideal for anyone interested in preparing for the AZ-204: Developing Solutions for Microsoft Azure exam. By the end of this program you will be ready to take and sign-up for the Exam AZ-204: Developing Solutions for Microsoft Azure. | English |

Microsoft Azure Developer Associate (AZ-204)	Deploy a website with Azure Virtual Machines	INTERMEDIATE	2.9	If your web hosting requirements aren't directly supported by the Azure Web app platform, you can leverage virtual machines to customize and control every aspect of ta webserver. In this course, you will learn how to create, configure, and manage virtual machines on Linux and Windows that host web apps.\n\nYou will look at the decisions made before creating a VM, the options to create and manage the VM, and the extensions and services you use to manage your VM. You will learn how to create a Linux virtual machine using the Azure portal. You will also see how Azure virtual machines (VMs) enable you to create dedicated compute resources in minutes that can be used just like a physical desktop or server machine. Finally, you will build and run a web application with the MEAN stack on an Azure Linux virtual machine\n\nThis course will help you prepare for the Microsoft Certified: Azure Developer Associate certification. In this course, you will take a practice exam that covers key skills measured in the exam.\n\nThis is the second course in a program of 8 courses to help prepare you to take the exam. Each course teaches you the concepts and skills that are measured by the exam. \n\nThis course is part of a Specialization intended for developers who want to demonstrate their expertise in all phases of cloud development from requirements, definition, and design; to development, deployment, and maintenance; to performance tuning and monitoring. It is ideal for anyone interested in preparing for the AZ-204: Developing Solutions for Microsoft Azure exam. By the end of this program you will be ready to take and sign-up for the Exam AZ-204: Developing Solutions for Microsoft Azure.	English
Microsoft Azure Developer Associate (AZ-204)	Secure your Cloud Data	INTERMEDIATE	3.3	Azure was designed for security and compliance. in this course, you will learn how to leverage the built-in services to store your app data securely to ensure that only authorized services and clients have access to it. This course will help you prepare for the Microsoft Certified: Azure Developer Associate certification. \n\nThis course will help you prepare for the Microsoft Certified: Azure Developer Associate certification. In this course, you will take a practice exam that covers key skills measured in the exam. This is the fifth course in a program of 8 courses to help prepare you to take the exam.\n\nThis course is part of a Specialization intended for developers who want to demonstrate their expertise in all phases of cloud development from requirements, definition, and design; to development, deployment, and maintenance; to performance tuning and monitoring. It is ideal for anyone interested in preparing for the AZ-204: Developing Solutions for Microsoft Azure exam. By the end of this program you will be ready to take and sign-up for the Exam AZ-204: Developing Solutions for Microsoft Azure.	English
Microsoft Azure Developer Associate (AZ-204)	Connect Your Services with Microsoft Azure Service Bus	INTERMEDIATE	4.2	Azure lets you create applications composed of various components: website front-ends, back-end services, and triggered functions that perform compute-on-demand services. Azure also includes various communication strategies to let these various components pass data to each other. In this course, you will learn how to leverage these communication services to create scalable, efficient solutions out of testable components. \n\nThis course will help you prepare for the Microsoft Certified: Azure Developer Associate certification. This course is part of a Specialization intended for developers who want to demonstrate their expertise in all phases of cloud development from requirements, definition, and design; to development, deployment, and maintenance; to performance tuning and monitoring. It is ideal for anyone interested in preparing for the AZ-204: Developing Solutions for Microsoft Azure exam. \n\nThis is the second course in a program of 8 courses to help prepare you to take the exam. Each course teaches you the concepts and skills that are measured by the exam. \n\nBy the end of this Professional Certificate program, you will be ready to take and sign-up for the Exam AZ-204: Developing Solutions for Microsoft Azure.	English

Microsoft Azure Security Engineer Associate (AZ-500)	Implement Platform Protection	INTERMEDIATE	8.4	Are you a security engineer who wants to learn how to lock down the infrastructure and network resources running in your Azure environment? Then, Implement Platform Protection is the right course for you!\n\nThroughout this course, you will explore perimeter security, network security, and host and containers security, along with various security components, tools, solutions, deployment methods, strategies, and services for protecting your Azure environment.\n\nYou'll examine connecting networks via peering, implementing hub-and-spoke topology and distributed denial of service (DDoS) protection, securing solutions with VPNs, traffic control with network virtual appliances (NVAs), and using Azure Web Application Firewall (WAF) to prevent attacks. \n\nWithin the course, you'll discover the ins and outs of defense in depth, endpoint protection host security, network client and server technology, privileged access, serverless compute, and virtual machines (VMs).\n\nYou'll learn how to configure, deploy, enable, and manage various security solutions, including Azure App Service, Azure Application Gateway, Azure Bastion, Azure Container Instances, Azure Container Registry, Azure Defender, Azure Disk Encryption, Azure ExpressRoute, Azure Firewall and Firewall Manager, Azure Front Door, Azure Functions, Azure Kubernetes Service, Azure Private Link, Azure Security Benchmarks, and Azure Update Management.\n\nThis is the third course in a series of seven courses that will prepare you to succeed in the AZ-500: Microsoft Azure Security Technologies exam.	English
Microsoft Azure Security Engineer Associate (AZ-500)	Capstone and Practice Exam (AZ-500)	INTERMEDIATE	3.5	Capstone and Practice Exam is the seventh course in the Microsoft Azure Security Engineer Associate Professional Certificate training program. It allows you to apply the skills gained from the previous six courses and prepare for the AZ-500 exam.\n\nThe course starts with a recap of courses 1 to 6, followed by a real-world capstone project. You will complete the tasks typically performed by an Azure security engineer and then submit the project for peer review. Then, you will evaluate other project submissions and discuss solutions with peers.\nFinally, you will take a program-level practice exam and receive guidance on enrolling in the AZ-500 Microsoft Azure security technologies exam.\n\nBy the end of this course, you will be able to:\n\n- Implement multifactor authentication.\n- Create a resource group and a new storage account and provide access to a user.\n- Create a strategy for implementing Azure security using security groups.\n- Set up a virtual machine (VM) to host a website, allowing only HTTP and HTTPS traffic.\n- Enable disk encryption on the VM.\n- Enable database auditing for a new Azure SQL database.\n- Enable Microsoft Defender for Azure SQL database.\n- List the steps to enroll in the AZ-500 exam.	English
Microsoft Azure Security Engineer Associate (AZ-500)	Manage Security Operations	INTERMEDIATE	4.9	Manage Security Operations, the sixth course in the Microsoft Azure Security Engineer Associate Professional Certificate program, equips you with vital skills to protect Azure resources and data, ensuring regulatory compliance. There are various tools available to manage security operations. You will learn to configure and manage Azure Monitor. You will also learn to enable and manage Microsoft Defender for Cloud. In addition, you will configure and monitor Microsoft Sentinel.\n\nBy the end of this course, you will be able to:\n\n- Configure and monitor metrics and logs in Azure Monitor.\n- Manage applications by using Azure Monitor Application Insights.\n- Create basic Azure Monitor log queries to extract information from log data.\n- Enable Azure Monitor alerts.\n- Configure properties for diagnostic logging.\n- Implement, configure, and deploy Microsoft Defender for Cloud.\n- Monitor your security status with Microsoft Defender for Cloud.\n- Implement just-in-time VPN access to protect against brute-force attacks.	English

Microsoft Azure Security Engineer Associate (AZ-500)	Secure Your Data at Rest	INTERMEDIATE	4.3	Secure Your Data at Rest is the fifth course in the Microsoft Azure Security Engineer Associate Professional Certificate training program. This course teaches storage security, data sovereignty, database monitoring, encryption, data masking, and using Defender for Cloud for advanced threat protection. You must secure data at rest as this will safeguard sensitive information, prevent unauthorized access, meet regulatory compliance, and ensure data confidentiality and integrity.\n\nBy the end of this course, you will be able to:\n\n- Deploy shared access signatures (SAS).\n- Generate SAS tokens.\n- Manage storage account access keys and key rollover.\n- Manage Azure Active Directory storage authentication.\n- Implement storage service encryption.\n- Configure blob data retention policies.\n- Configure Azure Files authentication.\n- Enable SQL database authentication with Azure Active Directory.\n- Monitor your database.\n- Enable and monitor database auditing.\n- Implement data discovery and classification.\n- Enable Defender for SQL for advanced threat protection.\n- Secure your data with dynamic data masking.\n- Implement transparent data encryption.\n- Deploy an Always Encrypted implementation.	English
Microsoft Azure Security Engineer Associate (AZ-500)	Identity Protection and Governance	INTERMEDIATE	7.1	Microsoft Azure provides a comprehensive suite of security tools and services to help you safeguard your organization's data and applications. Identity Protection and governance is the right course for you if you want to become an Azure security engineer. \n\nIn this course, you will learn how to protect identities in Azure AD, the core principles of enterprise governance, and Azure role-based access control (RBAC). \n\nYou will get acquainted with Conditional Access, multifactor authentication (MFA), and other capabilities. You will learn how to plan and configure privilege identity management (PIM). You will also learn how to manage, assign, activate, and approve requests for a privileged access group. You will explore how to investigate and remediate risks.\n\nThis course will give you an in-depth understanding of the shared responsibility model. You will learn to create policies and configure and deploy access to services using RBAC. You will see how to configure the built-in roles in Azure to control access to Azure resources. Finally, you will learn to monitor, maintain, and protect resources. \n\nThis is the second course in a series of seven courses that will prepare you to succeed in the AZ-500 exam.	English
Microsoft Azure Security Engineer Associate (AZ-500)	Secure Access with Azure Active Directory	INTERMEDIATE	8.3	Microsoft Azure provides a comprehensive suite of security tools and services to help you safeguard your organization's data and applications. Secure access with Azure Active Directory is the right course if you are interested in an IT security career and becoming an Azure security engineer. \n\nIn this course, you will learn about Azure Active Directory (Azure AD) and the various roles in Azure AD. You will learn to create and manage users and groups in Azure AD and manage administrative units. The content covers adding, updating, deleting, and restoring users and managing licenses. You will also delve into Azure AD Domain Services. \n\nYou will learn how to authenticate and authorize users and apps with Azure AD and password management. You will learn about multifactor and passwordless authentication. Additionally, you will learn how to implement pass-through authentication and federation with Azure AD. You will gain insight into deploying and configuring Azure AD Connect to create a hybrid identity solution for your organization. \n\nThis is the first course in a series of seven courses that will prepare you to succeed in the AZ-500 exam.	English

Microsoft Azure Security Engineer Associate (AZ-500)	Secure Your Applications	INTERMEDIATE	4.7	Microsoft Azure provides a comprehensive suite of security tools and services to help you safeguard your organization's data and applications. Secure Your Applications is the right course for you if you want to become an Azure security engineer. \nIn this course, you will learn how Azure Key Vault helps to safeguard cryptographic keys and secrets that cloud applications and services use using defense in depth strategy. \nYou will get acquainted with practice on how to create and manage access to secrets, certificates, and keys. \nThis course will thoroughly give you knowledge about the Microsoft identity platform, which enables you to configure and keep track of secure access to an application. You will also understand the important factors while developing web apps using user sign in, API calls, daemon, and noninteractive apps.\nYou will have the chance to learn about app registration and the various permissions that the Microsoft identity platform supports. You will also learn to set up an app registration, build an Azure Active Directory (Azure AD) tenant, and register an application with App registrations.\nIn this course, you will explore Microsoft Graph services and learn to configure Microsoft Graph permissions. You will gain an understanding of managed identities in detail. You will also learn to configure and deploy web app certificates.\nThis is the fourth course in a series of seven courses that will prepare you to succeed in the AZ-500 exam.	English
Microsoft Cybersecurity Analyst	Cybersecurity Management and Compliance	BEGINNER	5.7	In this course, you'll learn about data and record management, Information security, standards and policy formation, and implementation. You'll also explore cloud adoption frameworks and regulatory compliance frameworks. This course will take you one step closer to the Microsoft Cybersecurity Analyst Professional Certificate, which requires no degree or prior experience.\n\nAfter completing this course, you'll be able to: \n\n• Explain the principles of cloud security planning \n• Identify security requirements for cloud architecture\n• Explain Microsoft's privacy principles\n• Use available tools for compliance management\n\nThis is also a great way to prepare for the Microsoft SC-900 exam. By passing the SC-900 exam, you'll earn the Microsoft Security, Compliance, and Identity Fundamentals Certification.	English
Microsoft Cybersecurity Analyst	Cybersecurity Tools and Technologies	BEGINNER	6.8	This course engages you in the world of cybersecurity attack and defense, dealing with both sides and working with the tools associated with security testing within a cloud environment. \n\nYou'll gain knowledge on the penetration testing strategies employed by the industry to assess the integrity of their network. You'll also interpret the results of security scans and deal with mitigation strategies such as vulnerability management. This course will take you one step closer to the Microsoft Cybersecurity Analyst Professional Certificate, which requires no degree or prior experience.\n\nAfter completing this course, you'll be able to: \n\n•\tExplain the concept of system testing\n•\tCreate a penetration test plan\n•\tExecute penetration testing on a cloud platform\n\nThis is also a great way to prepare for the Microsoft SC-900 exam. By passing the SC-900 exam, you'll earn the Microsoft Security, Compliance, and Identity Fundamentals Certification.	English

Microsoft Cybersecurity Analyst	Introduction to Computers and Operating Systems and Security	BEGINNER	5.7	If you're interested in a cybersecurity career but don't know where to start, you've arrived at the right place! \n\nThis course forms part of a series of courses that offers a good starting point for a career in cybersecurity. It will help you gain knowledge and skills related to Computers and Operating Systems, Enterprise Systems, and Security, including Business Systems Applications. This course gets you one step closer to the Microsoft Cybersecurity Analyst Professional Certificate, which requires no degree or prior experience. \n\n After completing this course, you'll be able to: \n\n•\tIdentify the various components of a computer system \n•\tExplain how the various components of a computer system interact with an operating system \n•\tDescribe the basics of the cybersecurity landscape \n•\tDescribe the various business computing environments \n \n\nThis is also a great way to prepare for the Microsoft SC-900 exam. By passing the SC-900 exam, you'll earn the Microsoft Security, Compliance, and Identity Fundamentals Certification.	English
Microsoft Cybersecurity Analyst	Cybersecurity Solutions and Microsoft Defender	BEGINNER	8.2	In this course, you'll learn about the types of cloud security policies that protect against DDoS Attacks, Firewall Breaches, and Unauthorized Access. Explore tools like MS Defender for cloud, security information and event management (SICM) and security orchestration, automation, and response (SOAR).\n\nYou'll gain an understanding of security features available in Azure and best practices for protecting Azure resources, as well as Azure security standards and compliance. You'll also learn how to protect your organization's assets from various types of threats, including malware, phishing, and identity-based attacks. This course will take you one step closer to the Microsoft Cybersecurity Analyst Professional Certificate, which requires no degree or prior experience.\n\nAfter completing this course, you'll be able to:\n•\tExplain cloud-based security concepts\n•\tDiscuss security information and event management (SIEM)\n•\tDefine 365 Defender capabilities\n\nThis is also a great way to prepare for the Microsoft SC-900 exam. By passing the SC-900 exam, you'll earn the Microsoft Security, Compliance, and Identity Fundamentals Certification.	English
Microsoft Cybersecurity Analyst	Introduction to Networking and Cloud Computing	BEGINNER	9.8	This course forms part of a series of courses that offers a good starting point for a career in cybersecurity. It will help you gain knowledge and skills related to networking and cloud computing and get you one step closer to the Microsoft Cybersecurity Analyst Professional Certificate, which requires no degree or prior experience.\n \nAfter completing this course you'll be able to: \n• Identify the main concepts of networking \n• Explain common network infrastructure and monitoring \n• Describe network security components, approaches, and mitigation \n• Define and explain key concepts of the cloud computing environment, virtual machines, and cloud services.\n\nThis is also a great way to prepare for the Microsoft SC-900 exam. By passing the SC-900 exam, you'll earn the Microsoft Security, Compliance, and Identity Fundamentals Certification.	English

Microsoft Cybersecurity Analyst	Advanced Cybersecurity Concepts and Capstone Project	BEGINNER	6.6	In this course, you'll learn about threat mitigation by following the three stages of threat modeling. The steps are: decomposing the application, determining and ranking threats, and determining countermeasures and mitigation. You'll learn about access control, secure development, cryptography, as well as asset management. You'll also be introduced to the types of attacks that IoT (Internet of Things) devices and services face.\n\nAt the end of this course, you'll also complete a focused security mitigation strategy plan for a given business. This capstone project integrates the knowledge you'll have gained from the previous courses into a standalone portfolio piece, demonstrating your new cybersecurity skills. The course will take you one step closer to the Microsoft Cybersecurity Analyst Professional Certificate, which requires no degree or prior experience.\n\nAfter completing this course, you'll be able to: \n\n•\tExplain threat modeling\n•\tDiscuss security conscious design\n•\tPlan threat mitigation strategies\n\nThis is also a great way to prepare for the Microsoft SC-900 exam. By passing the SC-900 exam, you'll earn the Microsoft Security, Compliance, and Identity Fundamentals Certification.	English
Microsoft Cybersecurity Analyst	Cybersecurity Identity and Access Solutions using Azure AD	BEGINNER	8.5	Upon completing the first three courses of the Professional Certificate, you should have some foundational knowledge about computers, operating systems, networking, and cyberthreats, all of which put you in a good position to explore cybersecurity in greater detail. \n\nIn this course, you'll explore the world of authorization and authentication, and understand the concepts of two-step authentication and single sign-on policies. You'll also become familiar with the features and capabilities of Azure Active Directory (Azure AD), particularly those relating to the benefits of using Azure AD to manage an enterprise's security requirements including access management, identity governance, and management. This course will take you one step closer to the Microsoft Cybersecurity Analyst Professional Certificate, which requires no degree or prior experience.\n\nAfter completing this course, you'll be able to: \n\n•\tExplain the concept of Active Directory \n•\tDescribe Authentication methods \n•\tDiscuss access management\n \nThis is also a great way to prepare for the Microsoft SC-900 exam. By passing the SC-900 exam, you'll earn the Microsoft Security, Compliance, and Identity Fundamentals Certification.	English
Microsoft Cybersecurity Analyst	Cybersecurity Threat Vectors and Mitigation	BEGINNER	8.4	This course provides a comprehensive overview of threat vectors and the strategies for mitigating them, and aims to equip you with the necessary skills and knowledge to safeguard against cyber threats. \n\nYou'll gain a deep understanding of the threat vectors used by attackers, discover encryption techniques, and explore different compliance concepts. This course will get you one step closer to the Microsoft Cybersecurity Analyst Professional Certificate, which requires no degree or prior experience. \n\nAfter completing this course, you'll be able to: \n\n•\tDescribe the active threat landscape \n•\tDescribe common types of cyber attacks \n•\tClassify different types of encryption algorithms \n•\tExplain security and compliance concepts \n\nThis is also a great way to prepare for the Microsoft SC-900 exam. By passing the SC-900 exam, you'll earn the Microsoft Security, Compliance, and Identity Fundamentals Certification.	English

Microsoft Cybersecurity Analyst	Microsoft SC-900 Exam Preparation and Practice	BEGINNER	6.3	This course helps you practice your exam techniques and refresh your knowledge in all the key areas assessed in the Microsoft-certified Exam SC-900: Microsoft Security Compliance and Identity Fundamentals. \n\nYou'll test your knowledge in a series of practice exams mapped to all the main topics covered in the SC-900 exam, ensuring you're well prepared for certification success. You'll prepare by taking practice tests with similar formats and content.\n \nYou'll also get tips and tricks, testing strategies, and useful resources on how to sign up for the Microsoft SC-900 proctored exam. \n\nThis is also a great way to prepare for the Microsoft SC-900 exam. By passing the SC-900 exam, you'll earn the Microsoft Security, Compliance, and Identity Fundamentals Certification. Earning a Microsoft Certification is globally recognized evidence of real-world skills. \n\nAfter completing this course, you'll be able to: \n\n•\tDescribe the concepts of security, compliance, and identity \n•\tDescribe the capabilities of Microsoft Azure Active Directory, part of Microsoft Entra \n•\tDescribe the capabilities of Microsoft Security solutions \n•\tDescribe the capabilities of Microsoft compliance solutions	English
Microsoft Power BI Data Analyst	Harnessing the Power of Data with Power BI	BEGINNER	7.7	This course forms part of the Microsoft Power BI Analyst Professional Certificate. This Professional Certificate consists of a series of courses that offers a good starting point for a career in data analysis using Microsoft Power BI.\n\nIn this course, you'll learn about the role of a data analyst and the main stages involved in the data analysis process with a focus on applying them using Microsoft Power BI. \n\nAfter completing this course, you'll be able to: \n•\tDescribe how data is produced and gathered in businesses and organizations. \n•\tOutline the role of data in creating data-driven decisions and successful business outcomes. \n•\tClassify key stages in the data analysis process. \n•\tRecognize the skills needed by a Power BI analyst and the tools they use. \n•\tList the tasks performed by a Power BI Data Analyst. \n\nThis is also a great way to prepare for the Microsoft PL-300 exam. By passing the PL-300 exam, you'll earn the Microsoft Power BI Data Analyst certification.	English
Microsoft Power BI Data Analyst	Deploy and Maintain Power BI Assets and Capstone project	BEGINNER	9.9	This course forms part of the Microsoft Power BI Analyst Professional Certificate. This Professional Certificate consists of a series of courses that offers a good starting point for a career in data analysis using Microsoft Power BI.\n\nIn this course, you'll learn how to deploy and maintain assets in Power BI. Through hands-on exercises, you'll explore the process of creating, implementing, and managing Power BI workspaces.You'll also implement security and monitoring to protect data in organizations. At the end of the course, you will complete a capstone project to showcase all your new Power BI and data analytical skills. \n\nAfter completing this course, you'll be able to: \n\n•\tDescribe how SQL is used in enterprise data analysis. \n•\tCreate and publish an app in Power BI.\n•\tAudit usage in Reports and Dashboard.\n•\tManage and refresh datasets. \n•\tImplement dynamic reports in Power BI. \n•\tImplement security measures and alerting in a Power BI report or dashboard.\n•\tEstablish Row Level Security in a Power BI model.\n\nThis is also a great way to prepare for the Microsoft PL-300 exam. By passing the PL-300 exam, you'll earn the Microsoft Power BI Data Analyst certification.	English

Microsoft Power BI Data Analyst	Data Modeling in Power BI	BEGINNER	13.7	This course forms part of the Microsoft Power BI Analyst Professional Certificate. This Professional Certificate consists of a series of courses that offers a good starting point for a career in data analysis using Microsoft Power BI.\n\nIn this course, you'll learn how to use Power BI to create and maintain relationships in a data model and form a model using multiple Schemas. You'll explore the basics of DAX, Power BI's expression language, and add calculations to your model to create elements and analysis in Power BI. You'll discover how to configure the model to support Power BI features for insightful visualizations, analysis, and optimization. \n\nAfter completing this course you'll be able to:\n\n\tCreate and maintain relationships in a data model. \n•\tForm a model using a Star Schema \n•\tWrite calculations DAX to create elements and analysis in Power BI \n•\tCreate calculated columns and measures in a model \n•\tPerform useful time intelligence calculations in DAX \n•\tOptimize performance in a Power BI model \n\nThis is also a great way to prepare for the Microsoft PL-300 exam. By passing the PL-300 exam, you'll earn the Microsoft Power BI Data Analyst certification.	English
Microsoft Power BI Data Analyst	Microsoft PL-300 Exam Preparation and Practice	BEGINNER	11.5	This course forms part of the Microsoft Power BI Analyst Professional Certificate. This Professional Certificate consists of a series of courses that offer a starting point for a career in data analysis using Microsoft Power BI.\n\nThis course will help you prepare for the Microsoft PL-300 exam. In this course, you'll refresh your knowledge of all the key areas assessed in the Microsoft-certified Exam PL-300: Microsoft Power BI Data Analyst. \n \nIn addition, you will prepare for the certification exam by taking a mock exam with a similar format and content as in the Microsoft PL-300 exam. \n \nYou'll also get tips and tricks, testing strategies, useful resources, and information on how to sign up for the Microsoft PL-300 proctored exam.\n\nThis course is a great way to prepare for the Microsoft PL-300 exam. By passing the PL-300 exam, you'll earn the Microsoft Power BI Data Analyst certification. Earning a Microsoft Certification is globally recognized evidence of real-world skills. \n\nAfter completing this course, you'll be able to: \n•\tPrepare the data \n•\tModel the data \n•\tVisualize and analyze the data \n•\tDeploy and maintain assets	English
Microsoft Power BI Data Analyst	Preparing Data for Analysis with Microsoft Excel	BEGINNER	9.3	This course forms part of the Microsoft Power BI Analyst Professional Certificate. This Professional Certificate consists of a series of courses that offers a good starting point for a career in data analysis using Microsoft Power BI.\n\nNo prior skills are needed to be successful in this course.\n\nIn this course, you'll learn how to make use of Excel in business scenarios for data analysis. You'll also learn how to utilize formulas and functions for data analysis. \n\nSpecifically, this course will help you gain knowledge and skills for preparing data for analysis using Microsoft Excel and take you one step closer to becoming a Microsoft Power BI Analyst. \n\nAfter completing this course, you'll be able to: \n\n•\tCreate data in Microsoft Excel and prepare it for data analysis. \n•\tMake use of common formulas and functions in a worksheet. \n•\tPrepare Excel data for analysis in Power BI using functions.	English

| Microsoft Power BI Data Analyst | Creative Designing in Power BI | BEGINNER | 9.9 | This course forms part of the Microsoft Power BI Analyst Professional Certificate. This Professional Certificate consists of a series of courses that offers a good starting point for a career in data analysis using Microsoft Power BI.\n\nIn this course, you will learn how to creatively design dashboards, reports and charts that are easier for the audience to use. You will learn how to create cohesive business intelligence reports and dashboards, as well as what common problems to avoid. The insights that you will gain will help you to tell compelling stories using specialist chart visualizations and visual elements such as videos, streaming data and QR Codes. \n\nAfter completing this course, you'll be able to: \n\n•\tCreate compelling and cohesive reports and dashboards \n•\tRecognize common problems in design in Power BI Reports and Dashboards \n•\tProduce audience focused reports and dashboards \n•\tWork in detail with specialist chart visualizations \n•\tUse visualizations in reports \n•\tAdd elements such as videos, streaming data and QR codes to dashboards \n\nThis is also a great way to prepare for the Microsoft PL-300 exam. By passing the PL-300 exam, you'll earn the Microsoft Power BI Data Analyst certification. | English |
| Microsoft Power BI Data Analyst | Extract, Transform and Load Data in Power BI | BEGINNER | 9.7 | This course forms part of the Microsoft Power BI Analyst Professional Certificate. This Professional Certificate consists of a series of courses that offers a good starting point for a career in data analysis using Microsoft Power BI.\n\nIn this course, you will learn the process of Extract, Transform and Load or ETL. You will identify how to collect data from and configure multiple sources in Power BI and prepare and clean data using Power Query. You'll also have the opportunity to inspect and analyze ingested data to ensure data integrity. \n\nAfter completing this course, you'll be able to: \n\n•\tIdentify, explain and configure multiple data sources in Power BI \n•\tClean and transform data using Power Query \n•\tInspect and analyze ingested data to ensure data integrity\n\nThis is also a great way to prepare for the Microsoft PL-300 exam. By passing the PL-300 exam, you'll earn the Microsoft Power BI Data Analyst certification. | English |

| Microsoft Power BI Data Analyst | Data Analysis and Visualization with Power BI | BEGINNER | 14.4 | This course forms part of the Microsoft Power BI Analyst Professional Certificate. This Professional Certificate consists of a series of courses that offers a good starting point for a career in data analysis using Microsoft Power BI.\n\nIn this course, you will learn report design and formatting in Power BI, which offers extraordinary visuals for building reports and dashboards. Additionally, you will learn how to use report navigation to tell a compelling, data-driven story in Power BI. You will explore how to get a statistical summary for your data and how to create and export reports in Power BI. You will also perform advanced analytics in Power BI to get deeper and more meaningful data insights. \n\nAfter completing this course, you'll be able to: \n\n\t Recognize the different types of visualizations in Power BI \n●\tAdd visualizations to reports and dashboards \n●\tApply formatting choices to visuals \n●\tAdd useful navigation techniques to the Power BI report \n●\tDesign accessible reports and dashboards \n●\tUse visualizations to perform data analysis \n\nThis is also a great way to prepare for the Microsoft PL-300 exam. By passing the PL-300 exam, you'll earn the Microsoft Power BI Data Analyst certification. | English |
| SAP Technology Consultant | SAP Professional Fundamentals | BEGINNER | 8.9 | SAP Professional Fundamentals is the first course in the SAP Technology Consultant Professional Certificate program. The course introduces you to the world of consulting and the range of skills that you need to succeed in this competitive field.\n\nYou'll explore SAP professional consulting roles and discover what technical consultants, functional consultants, and other professionals do. You'll investigate the wide range of skills consultants need to have, for example strategic thinking, business process analysis, systems and design thinking, and understanding data, as well as effective soft skills, communication and relationship management. You'll explore various planning and project management methodologies such as Waterfall, Agile, DevOps, and Cloud. Plus, you'll start to get a feel for the whole SAP journey, from engaging with the customer to deploying a solution.\n\nBy the end of this course, you will be able to:\n\nExplain what is meant by the SAP ecosystem and the value it brings to customers.\nDescribe what different SAP professionals do and how they engage with customers.\nUnderstand the core and soft consulting skills that are both in highest demand, and frequently not taught in classroom environments.\nDescribe a typical SAP engagement and how key professional skills are used at each stage of the SAP Implementation Lifecycle.\nDescribe key roles with whom an SAP professional typically collaborates. | English |

SAP Technology Consultant	Implementing an SAP Solution	BEGINNER	5.8	Implementing an SAP Solution is the fifth course in the SAP Technology Consultant Professional Certificate program. You'll learn how to collaborate with stakeholders and other SAP professionals for key phases in the SAP Implementation lifecycle. \n\nYou'll explore how to build and prepare system and test environments for implementation and look at different types of testing. You'll learn how to cleanse and anonymize test data, and use automation tools. You'll look at SAP Best Practice Explorer and build your understanding of baseline configurations and integrations. You'll learn how to document issues, bugs, and recommended fixes after testing. Plus, you'll look at the process for going-live and getting sign off for a project.\n\nBy the end of this course, you will be able to:\n\nExplain what a technology consultant does in the implement, monitor and QA/testing phases of the SAP lifecycle.\n\nImplement and deploy a technical solution approved in the design, pitch, and re-design phases.\n\nExplain how to test an implemented technical solution including creating test plans, writing test scripts, and issuing fix or bug resolutions.\n\nExplain how to conduct a post-implementation review including developing the Post-Implementation Review Report and the Post-Production Roadmap.	English
SAP Technology Consultant	Designing an SAP Solution	BEGINNER	5.1	Designing an SAP Solution is the fourth course in the SAP Technology Consultant Professional Certificate program. The course dives into the SAP Implementation lifecycle so you can immerse yourself in the key phases, including design, pitch, and re-design. \n\nYou'll work with SAP Activate methodology and look at how to identify business requirements to determine system and data requirements. You'll learn how to interrogate the gaps between SAP technical capabilities within Business Technology Platform and the customer's existing environment. \n\nYou'll explore the SAP iterative approach, understand how the predefined content available for the most common SAP solutions can provide you a baseline to build your demos and showcase the solution capabilities. You'll learn how to incorporate customer feedback so any gaps will be addressed and how to reach consensus regarding what should be developed, when it should be developed and how it should be developed.\n\nBy the end of this course, you will be able to: \n\nExplain what a technology consultant does in the Design, Pitch and Re-Design phases of the SAP Implementation lifecycle.\n\nExplain how to review a solution proposal and business requirements to determine SAP application technical requirements for customers.\n\nDescribe how to interrogate gaps between SAP technical capabilities and the customer's existing environment.\n\nExplain how to design an SAP technical solution that fulfills the business requirements documented in the customer interview, analysis, and communication phases.\n\nDevelop a Technical Design Outline in accordance with provided parameters.	English

SAP Technology Consultant	SAP Technology Consultant Hands-on Project	BEGINNER	5.5	SAP Technology Consultant Hands-on Project is the sixth course in the SAP Technology Consultant Professional Certificate program. This is your opportunity to put the knowledge and skills you have gained over the previous five courses into practice.\nThis fun and interesting project is a high-level challenge based on a real-world problem. You'll identify key players in the proposed project and take the necessary steps to understand their current technical landscape. You'll identify their business requirements and develop a solution proposal. Once you've obtained sign off from the customer, you'll then identify the key technology elements you need to cover and assess the stakeholders and other SAP professionals you'll be working with. You'll work on and present your design, including your assumptions, proposed recommendations, and other considerations. Then you'll implement your proposed solution and complete QA/testing activities. And finish off by creating a Post-Implementation Review Report documenting the lessons learnt and the future roadmap.\nOverall, this project presents an ideal opportunity to gain experience in assessing the digital transformation drivers in a real-life situation.\nBy the end of this project, you will be able to:\nReview, understand and respond to a customer implementing a new SAP solution.\nComplete typical technology consultant project tasks for each SAP lifecycle phase.\nDevelop and present selected technology consultant project deliverables.\nCompare course project work against provided best practice examples and identify gaps or opportunities for development.	English
SAP Technology Consultant	SAP Customer Engagement and Discovery	BEGINNER	6.8	SAP Customer Engagement and Discovery is the third course in the SAP Technology Consultant Professional Certificate program. The course introduces you to SAP Activate methodology and teaches you how to engage with customers and work with them in exploring how to achieve their transformation goals.\n\nYou'll learn how to gather information and insights about a customer's business, technology, and data. You'll investigate SAP's fit-to-standard analysis approach. You'll consider how to accurately understand and assess a client's needs. And you'll look at SAP's Customer Journey Roadmap, which includes how to identify and communicate the value of a solution to stakeholders and get signoff.\n\nBy the end of this course, you will be able to:\nDescribe the key elements of the SAP Activate methodology and Customer Engagement Model.\nExplain the program planning and set up activities for a typical SAP customer project.\nExplain what a technology consultant does in the Customer Engagement and Discovery phase of SAP projects.\nExplain how to gather relevant information and insights about customer strategy, objectives, processes, technology, and data.\nDescribe how to conduct discovery workshops and interviews.\nExplain SAP's fit-to-standard approach and key preparation activities and develop a Customer Journey Roadmap.\nIdentify and communicate the business value of a proposed SAP solution.	English

SAP Technology Consultant	Understanding the Enterprise Systems Environment	BEGINNER	7.9	Understanding the Enterprise Systems Environment is the second course in the SAP Technology Consultant Professional Certificate program. The course builds your understanding of the digital landscape. \nYou'll explore business processes and organizational alignment. You'll get an overview of how systems are designed and developed, and consider architecture, infrastructure, application development, data science, cloud, privacy, and security. You'll build your understanding of the SAP platform and consider key development and deployment models covering Advanced Business Application Programming (ABAP), Java, SAP API, and SAP Fiori. Plus, you'll explore gap analysis using SAP RISE and Activate and become familiar with SAP cloud strategy, architecture, and tools.\nBy the end of this course, you will be able to:\nDescribe how digital transformation can impact a customer's organization, business processes and tools (people/process/tools).\nIdentify the key elements of system design and development and how they relate to specific IT requirements.\nIdentify different computing models (e.g. Compute Network Storage, OnPrem, Cloud etc) and architectures (e.g. Native, Hybrid, Multi-Cloud).\nExplain the key elements of the SAP platform and environment.\nDescribe key Application, Development and Programming models.\nExplain the key elements of the SAP Cloud Strategy.\nUnderstand the key questions to keep in mind when faced with a specific request from a prospective client.	English
SAP Technology Consultant	Becoming an SAP Professional	BEGINNER	2.2	Becoming a Certified SAP Professional is the seventh course in the SAP Technology Consultant Professional Certificate program. Now that you've completed the first 6 courses, including the project, you'll spend time considering the next steps in your SAP career. \n\nYou'll explore different industries, portfolios, and domains. You'll dig deep into available career development resources, build your resume, practice interviewing, and look at the jobs available in the market. You'll spend time assessing what SAP learning journey you wish to pursue, including what certifications are required for which role. You'll then create your own SAP career development plan, listing the actions you need to take to achieve your desired SAP role.\n\nBy the end of this course, you will:\nKnow the next steps you need to take to become an SAP professional.\nHave a clear understanding of the different industries, portfolios, and domains you may want to specialize in as an SAP professional.\nKnow the SAP certification opportunities available on the SAP Learning Hub.\nBe aware of other industry-standard technical certifications and how they can support and enhance your SAP credentials and experience.\nHave clear guidance on writing CVs or resumes, undertaking interviews and positioning yourself as the best you can be.	English

Meta Back-End Developer	Introduction to Back-End Development	BEGINNER	8.7	Welcome to Introduction to Back-End Development, the first course in the Meta Back-End Developer program. \n\nThis course is a good place to start if you want to become a web developer. You will learn about the day-to-day responsibilities of a web developer and get a general understanding of the core and underlying technologies that power the internet. You will learn how front-end developers create websites and applications that work well and are easy to maintain. \n\nYou'll be introduced to the core web development technologies like HTML and CSS and get opportunities to practice using them. You will also be introduced to modern UI frameworks such as Bootstrap and React that make it easy to create interactive user experiences. \n\nBy the end of the course, you will be able to: \n- Describe the front-end developer role \n- Explain the core and underlying technologies that power the internet \n- Use HTML to create a simple webpage \n- Use CSS to control the appearance of a simple webpage \n- Explain what React is \n- Describe the applications and characteristics of the most popular UI frameworks \n\nFor the final project in this course, you will create and edit a webpage using HTML and the Bootstrap CSS framework. Using a responsive layout grid, you will construct a responsive webpage containing text and images that looks great on any size screen. \n\nThis is a beginner course intended for learners eager to learn the fundamentals of web development. To succeed in this course, you do not need prior web development experience, only basic internet navigation skills and an eagerness to get started with coding.	English
Meta Back-End Developer	Programming in Python	BEGINNER	14.0	In this course, you will be introduced to foundational programming skills with basic Python Syntax. You'll learn how to use code to solve problems. You'll dive deep into the Python ecosystem and learn popular modules, libraries and tools for Python. \n\nYou'll also get hands-on with objects, classes and methods in Python, and utilize variables, data types, control flow and loops, functions and data structures. You'll learn how to recognize and handle errors and you'll write unit tests for your Python code and practice test-driven development.\n\nBy the end of this course, you will be able to:\n•\tPrepare your computer system for Python programming\n•\tShow understanding of Python syntax and how to control the flow of code\n•\tDemonstrate knowledge of how to handle errors and exceptions\n•\tExplain object-oriented programming and the major concepts associated with it\n•\tExplain the importance of testing in Python, and when to apply particular methods\n\nThis is a beginner course for learners who would like to prepare themselves for a career in back-end development or database engineering. To succeed in this course, you do not need prior web development experience, only basic internet navigation skills and an eagerness to get started with coding.	English
Meta Back-End Developer	Version Control	BEGINNER	5.6	Learn how modern software developers collaborate across the world without messing up each other's code. You will look at the different version control systems and how to create an effective software development workflow. You will be introduced to some of the most commonly used Linux commands that you can use to work with files on your hard drive and create powerful workflows that will automate your work, saving you time and effort. \n\nFinally, you will see how Git can be used in software development projects to manage team files. And you will create a repository that can manage code revisions.	English

Meta Back-End Developer	Introduction to Databases for Back-End Development	BEGINNER	7.5	Back-end developers write applications that end-users use to interact with databases. Some common tasks that end-users carry out using these applications include storing, searching, extracting and manipulating data.\n\nTherefore, it's essential that all back-end developers possess strong knowledge and experience with how databases work.\n\nIn this course, you'll receive an introduction to databases and explore the different ways in which they can be used to store and manage data. You'll also learn to distinguish between different types of database management systems. You'll then practice basic creation and data selection tasks with the use of Structured Query Language (SQL) commands.\n\nBy the end of this course, you'll be able to:\n\n- Demonstrate a working knowledge of the concepts and principles that underpin how databases work\n- Identify and explain the different types of core technology and management systems used in\n databases\n- Identify and interpret basic SQL statements and commands\n- Manipulate records in a database with the use of SQL statements and commands\n- Outline alternatives to SQL\n- and plan and design a simple relational database system\n\nYou'll also gain experience with the following:\n- Fundamental concepts in database \n- Basic MySQL syntax and commands\n- Database management systems\n- Relational databases	English
Meta Back-End Developer	Django Web Framework	BEGINNER	19.7	It's time to build something bigger. In this course, you will use the Django web framework to build, secure and administer a web server. You will have the opportunity to create, design and configure a web app using the Django framework in-line with best practices. \n\nExplore the usage of models in Django and their relationship to databases. Use views to render requested data to meaningful template structures for a composed user interface (UI). Implement proactive security practices and mitigate common security risks.\n\nBy the end of the course you will be able to:\n\n• Design a Django web application using Python, HTML and CSS.\n• Describe and implement the HTTP request response cycle by creting views, routes and templates.\n• Describe and build a data model to create database tabless and dynamic web forms.\n• Explore the Django Template Language to create dyanamic webpages that display data stored in a database.\n• Create, share and test your web application by using industry standard best practice and guidelines. \n\nTo succeed in this course, you are required to have a fundamental knowledge of the following:\nHTML and CSS\nPython\nMySQL\n\nYou also require basic internet navigation skills and an eagerness to get started with coding in Django!	English
Meta Back-End Developer	APIs	INTERMEDIATE	16.1	Delve deeper into the processes and concepts behind APIs and their infrastructure. Explore the key concepts that underpin API development and the principles of representational state transfer architectural style (REST) architecture. Build basic API and REST data backbones for web apps using Django. Discover emerging API technology and practice other ways to build and work with APIs. Finally, you will test, optimize and develop documentation for an API.\n\nBy the end of this course you will be able to:\n\n• \tWork with and build APIs\n• \tBuild basic API and REST data backbones for web apps using Django\n• \tDiscover emerging API technology \n• \tTest, optimize and develop documentation for an API\n\nTo complete this course, you will need Django experience. Additionally, it always helps to have a can-do attitude!	English

Meta Back-End Developer	The Full Stack	INTERMEDIATE	8.6	As you prepare for your role in back-end development, practice bringing together multiple skills to build a full-stack Django app. You'll start by setting up an environment for a local practical project, and refactoring the front and back-ends of an existing application. You will then have the opportunity to create the front and back-ends of a new application using your full-stack developer skills.\n\nBy the end of this course you will be able to:\n- Explain common concepts related to full stack development\n- Use HTML, CSS and JavaScript to develop well-structured, interactive and responsive websites\n- Build a full stack application using Django that stores its data in models on a MySQL database and updates its pages with forms and API endpoints\n- Describe the different environments that web applications are deployed to\n\nTo complete this course you will need previous experience with back-end development, Python, version control, databases, Django web framework and APIs.	English
Meta Back-End Developer	Cloud Computing	BEGINNER	NOT CALIBRATED	Learn about the different tools and systems involved in cloud computing and dev ops. Explore popular cloud solutions and the benefits to cloud computing along with the core cloud architecture concepts and approaches. \n\nYou'll also learn about the pipelines, integration techniques and workflows involved in dev ops. You'll understand the methods and tools involved in delivery and deployment. Plus, you'll learn about the core concepts that underpin the use of containers such as Docker and Kubernetes and how they are used. Finally, discover how all the different dev ops principles come together to form the practice of site reliability engineering.	English
Meta Back-End Developer	Back-End Developer Capstone	INTERMEDIATE	5.9	The Capstone project enables you to demonstrate multiple skills by solving an authentic real-world problem. You'll test your abilities in full-stack back-end development in a real-life scenario by composing a Django web app. Each module includes a brief recap of, and links to, content that you have covered in previous courses in this program. \n\nYou will use clean and bug-free coding to create a Django web server with multiple API endpoints and connect it to a MySQL database. You'll also create a template system driven by Django views.\n\nBy the end of the course you will be able to:\n\n• Compose a backend application using multiple skills\n• Use Django to serve static HTML content\n• Commit the project to a Git repository \n• Connect the backend to the database\n• Implement the menu and table booking APIs\n• Set up user registration and authentication\n• Test the application with unit tests and Insomnia\n• Synthesize the skills from this course and evaluate other learners\n• Reflect on this project's content and on the learning path that lies ahead.\n\nOn completion of the Capstone project, you'll have a project-based portfolio that you can show to potential employers when interviewing for an engineering role.\n\nTo complete this course, you will need back-end developer experience. Additionally, it always helps to have a can-do attitude!	English

Meta Back-End Developer	Coding Interview Preparation	INTERMEDIATE	3.5	The final course in this program will help prepare you for the unique aspects of a coding job interview, with approaches to problem-solving and computer science foundations needed to land the job. Ultimately you'll gain strategic insights and tips for successful interviewing. \n\nBy the end of this course, you'll have knowledge of:\n• Appropriate communication during a coding interview\n• Successful interviewing strategies\n• Using pseudocode\n• The fundamentals of computer science\n• The capabilities of data structures and how to implement them\n• How to review data structures in the context of coding interviews\n• The concept of algorithms and common approaches to working with them\n• How to visualize an algorithm\n• Combining new and previously learned coding patterns to solve problems\n\nIdeally, you should have completed all the courses in this professional certificate.	English
Meta Front-End Developer	Introduction to Front-End Development	BEGINNER	10.7	Welcome to Introduction to Front-End Development, the first course in the Meta Front-End Developer program. \n\nThis course is a good place to start if you want to become a web developer. You will learn about the day-to-day responsibilities of a web developer and get a general understanding of the core and underlying technologies that power the internet. You will learn how front-end developers create websites and applications that work well and are easy to maintain. \n\nYou'll be introduced to the core web development technologies like HTML and CSS and get opportunities to practice using them. You will also be introduced to modern UI frameworks such as Bootstrap and React that make it easy to create interactive user experiences. \n\nBy the end of the course, you will be able to: \n- Describe the front-end developer role \n- Explain the core and underlying technologies that power the internet \n- Use HTML to create a simple webpage \n- Use CSS to control the appearance of a simple webpage \n- Explain what React is \n- Describe the applications and characteristics of the most popular UI frameworks \n\nFor the final project in this course, you will create and edit a webpage using HTML and the Bootstrap CSS framework. Using a responsive layout grid, you will construct a responsive webpage containing text and images that looks great on any size screen. \n\nThis is a beginner course intended for learners eager to learn the fundamentals of web development. To succeed in this course, you do not need prior web development experience, only basic internet navigation skills and an eagerness to get started with coding.	English
Meta Front-End Developer	Programming with JavaScript	BEGINNER	15.8	JavaScript is the programming language that powers the modern web. In this course, you will learn the basic concepts of web development with JavaScript. You will work with functions, objects, arrays, variables, data types, the HTML DOM, and much more. You will learn how to use JavaScript and discover interactive possibilities with modern JavaScript technologies. Finally, you will learn about the practice of testing code and how to write a unit test using Jest.	English

Meta Front-End Developer	Version Control	BEGINNER	5.6	Learn how modern software developers collaborate across the world without messing up each other's code. You will look at the different version control systems and how to create an effective software development workflow. You will be introduced to some of the most commonly used Linux commands that you can use to work with files on your hard drive and create powerful workflows that will automate your work, saving you time and effort. \n\nFinally, you will see how Git can be used in software development projects to manage team files. And you will create a repository that can manage code revisions.	English
Meta Front-End Developer	HTML and CSS in depth	BEGINNER	12.9	In this course, you'll use software development tools like HTML to build attractive web pages that work well—and you'll use structured semantic data to control how websites appear to the end user. \n\nYou will then dive deeper into CSS by applying increasingly specific styling to various elements. You'll learn to use Bootstrap's grid system to create layouts and work with components and themes. Finally, you'll explore debugging and learn how it can be utilized to banish common front-end errors.\n\nBy the end of this course you will be able to:\n\n\tCreate a simple form with a responsive layout using HTML5 and CSS\n•\tCreate a responsive layout using CSS \n•\tCreate a UI using Bootstrap\n•\tImplement debugging tools\n\nThis is a beginner course for learners who would like to prepare themselves for a career in front-end development. To succeed in this course, you do not need prior development experience, only basic internet navigation skills and an eagerness to get started with coding.	English
Meta Front-End Developer	React Basics	BEGINNER	10.3	React is a powerful JavaScript library that you can use to build user interfaces for web and mobile applications (apps). In this course, you will explore the fundamental concepts that underpin the React library and learn the basic skills required to build a simple, fast, and scalable app.\n\nBy the end of this course, you will be able to:\n•\tUse reusable components to render views where data changes over time\n•\tCreate more scalable and maintainable websites and apps \n•\tUse props to pass data between components \n•\tCreate dynamic and interactive web pages and apps\n•\tUse forms to allow users to interact with the web page \n•\tBuild an application in React\n\nYou'll gain experience with the following tools and software: \n•\tReact.js\n•\tJSX\n•\tReact\n•\tHTML, CSS and JavaScript \n•\tVSCode\n\nYou will be able to leverage the potential of this course to develop new skills, improve productivity, act effectively with data and boost your career.\n\nThis is a beginner course for learners who would like to prepare themselves for a career in mobile development. To succeed in this course, you do not need prior development experience, only basic internet navigation skills and an eagerness to get started with coding.	English

Meta Front-End Developer	Advanced React	INTERMEDIATE	12.3	Learn how to use more advanced React concepts and features, become proficient in JSX, and confidently test your applications.\n\nYou'll examine different types of React components and learn various characteristics and when to use them. You'll dig into more advanced hooks and create your own. You'll look into building forms with React. You'll explore component composition and new patterns, such as Higher Order Components and Render Props. You'll create a web application that consumes API data and get familiar with the most commonly used React framework integrations, tools, and testing techniques.\n\nBy the end of this course, you will be able to:\n•\tRender lists and form components efficiently in React.\n•\tLift shared state up when several components need the updated data.\n•\tLeverage React Context to share global state for a tree of components.\n•\tFetch data from a remote server.\n•\tUse advanced hooks in React, and put them to use within your application.\n•\tBuild your own custom hooks.\n•\tUnderstand JSX in depth.\n•\tEmbrace component composition techniques\n•\tUse advanced patterns to encapsulate common behavior via Higher Order Components and Render Props.\n•\tTest your React components.\n•\tBuild a portfolio using React.\n\nYou'll gain experience with the following tools and software:\n•\tReact.js\n•\tJSX\n•\tReact\n•\tHTML, CSS, and JavaScript \n•\tVSCode\n\nYou will be able to leverage the potential of this course to develop new skills, improve productivity, act effectively with data and boost your career.\n\nTo take this course, you should understand the basics of React, HTML, CSS, and JavaScript. Additionally, it always helps to have a can-do attitude!	English
Meta Front-End Developer	Principles of UX/UI Design	BEGINNER	6.8	Learn the fundamentals of User Experience (UX) research and design. Become immersed in the UX process of identifying problems and iterating and testing designs to find appropriate solutions. You'll learn how to empathize with users through best-practice research approaches, and create common UX artifacts such as user personas. And you'll use UX insights to make appropriate design decisions. \n\nBy utilizing the User Interface (UI) design process, you will be able to create wireframes for features in Figma, and turn them into Minimum Viable Product (MVP) style prototypes from your mockups. You'll also learn the core principles of design such as hierarchy and the use of grids.\n\nBy the end of this course you will be able to: \n\n• Design digital products that create value and solve a user's problems in meaningful ways. \n• Recognize what constitutes successful UX UI and evaluate existing interfaces for design consistency and quality.\n• Identify best practice interaction design methods and evaluate and improve your own and others' designs.\n• Create, share and test your UX UI designs following best practice guidelines.\n\nThis is a beginner course for learners who would like to prepare themselves for a career in UX UI development. To succeed in this course, you do not need prior development experience, only basic internet navigation skills and an eagerness to learn.	English
Meta Front-End Developer	Front-End Developer Capstone	INTERMEDIATE	5.9	The Capstone project enables you to demonstrate multiple skills from the Certificate by solving an authentic real-world problem. Each module includes a brief recap of, and links to, content that you have covered in previous courses in this program. \n\nThis course will test your knowledge and understanding, and provide you with a platform to show off your new abilities in front-end web development using React. During this course, you will be guided through the process of building an app, combining all the skills and technologies you've learned throughout this program to solve the problem at hand. \n\nOn completion of the Capstone project, you'll have a job-ready portfolio that you can show to recruiters, demonstrate during interviews and impress potential employers.\n\nTo complete this course, you will need front-end developer experience. Additionally, it always helps to have a can-do attitude!	English

Meta Front-End Developer	Coding Interview Preparation	INTERMEDIATE	3.5	The final course in this program will help prepare you for the unique aspects of a coding job interview, with approaches to problem-solving and computer science foundations needed to land the job. Ultimately you'll gain strategic insights and tips for successful interviewing. \n\nBy the end of this course, you'll have knowledge of:\n• Appropriate communication during a coding interview\n• Successful interviewing strategies\n• Using pseudocode\n• The fundamentals of computer science\n• The capabilities of data structures and how to implement them\n• How to review data structures in the context of coding interviews\n• The concept of algorithms and common approaches to working with them\n• How to visualize an algorithm\n• Combining new and previously learned coding patterns to solve problems\n\nIdeally, you should have completed all the courses in this professional certificate.	English
Meta iOS Developer	Introduction to iOS Mobile Application Development	BEGINNER	5.0	Learn about iOS development by learning about the OS and the development platform. Discover how to set up and prepare a local environment. Get acquainted with the Swift playground and write code in Swift. \n\nBy the end of this course, you'll be able to: \n \n-Demonstrate a working knowledge of the general principles of mobile apps and the iOS ecosystem \n-Set up and explore the XCode environment \n-Demonstrate an understanding of how XCode is used in the Swift app development process \n-Write Swift code and create UI with the use of Swift playgrounds \n-Navigate the Swift UI \n-Manipulate data in Swift \n \nYou'll gain experience with the following tools and software: \n \n-Swift application and software \n-iOS software and development environment \n-Mobile OS \n-XCode \n-Objective-C \n-UI frameworks \n-Testflight \n-UI storyboard \n-MVC \n-APIs	English
Meta iOS Developer	Version Control	BEGINNER	5.6	Learn how modern software developers collaborate across the world without messing up each other's code. You will look at the different version control systems and how to create an effective software development workflow. You will be introduced to some of the most commonly used Linux commands that you can use to work with files on your hard drive and create powerful workflows that will automate your work, saving you time and effort. \n\nFinally, you will see how Git can be used in software development projects to manage team files. And you will create a repository that can manage code revisions.	English

Meta iOS Developer	Programming Fundamentals in Swift	BEGINNER	9.4	This course is ideal for beginners eager to learn the fundamental concepts that underpin the Swift programming language. Explore the basic programming concepts and data structures that are core to any language, while discovering the unique aspects that make Swift as versatile as it is today.\n\nIn this course, you will receive hands-on practice utilizing these concepts. More specifically, you will learn how to use constants and variables with different data types and explore how to sort and store information in collection types such as arrays, tuples and dictionaries. Finally, you will discover how to make your code reusable and more expressive by using functions and closures. \n\nBy the end of this course, you will be able to:\n•\tDemonstrate a working knowledge of general programming principles\n•\tPrepare your computer system for Swift programming\n•\tShow understanding of Swift syntax and how to control the flow of code\n•\tDemonstrate knowledge of how to declare, use and modify constants and variables\n•\tDifferentiate between the different types of operators and their functions\n•\tDemonstrate how to create simple control flow patterns and call functions using Swift\n\nThis is a beginner course for learners who would like to prepare themselves for a career in iOS development. To succeed in this course, you do not need prior web development experience, only basic internet navigation skills and an eagerness to get started with coding.		English
Meta iOS Developer	Principles of UX/UI Design	BEGINNER	6.8	Learn the fundamentals of User Experience (UX) research and design. Become immersed in the UX process of identifying problems and iterating and testing designs to find appropriate solutions. You'll learn how to empathize with users through best-practice research approaches, and create common UX artifacts such as user personas. And you'll use UX insights to make appropriate design decisions. \n\nBy utilizing the User Interface (UI) design process, you will be able to create wireframes for features in Figma, and turn them into Minimum Viable Product (MVP) style prototypes from your mockups. You'll also learn the core principles of design such as hierarchy and the use of grids.\n\nBy the end of this course you will be able to: \n\n• Design digital products that create value and solve a user's problems in meaningful ways. \n• Recognize what constitutes successful UX UI and evaluate existing interfaces for design consistency and quality.\n• Identify best practice interaction design methods and evaluate and improve your own and others' designs.\n• Create, share and test your UX UI designs following best practice guidelines.\n\nThis is a beginner course for learners who would like to prepare themselves for a career in UX UI development. To succeed in this course, you do not need prior development experience, only basic internet navigation skills and an eagerness to learn.		English
Meta iOS Developer	Create the User Interface with SwiftUI	BEGINNER	10.3	In this course learners will learn how to build meaningful and functional user interfaces for iOS using Swift and UI frameworks. \n \nBy the end of this course, you'll be able to: \n \n-Utilize a range of different approaches for building UI with Swift \n-Build a basic UI with the Swift Interface Builder \n-Create and control UI views with the UIKit framework \n-Create simple applications with the UIKit framework \n-Build interfaces using the SwiftUI framework \n-Utilize lists and forms in SwiftUI in order to build frameworks \n-Organize UI with the use of containers \n-Create stylish UI using advanced views \n-Enhance views with the use of transformations, drawings and animations \n \nYou'll gain experience with the following tools and software: \n \n-Swift UI framework \n-Interface building software \n-UIKit application and view building features \n-Lists and forms \n-UI containers \n-UI transformation, drawing and animation tools\n\nTo take this course, you should understand the basics of Swift and cross-platform development for mobile applications. Additionally, it always helps to have a can-do attitude!		English

Meta iOS Developer	iOS Mobile Lifecycle and Software Development Approaches	BEGINNER	NOT CALIBRATED	Develop a working knowledge of different approaches to designing and building data-rich, interactive applications for the iOS platform. \n \nBy the end of this course, you'll be able to: \n \n- Compare methodologies for organizing and architecting Swift applications and their implications on code quality and team velocity \n- Identify and follow the life-cycle events from source of generation to methods of response \n- Review and apply different types of SwiftUI interactivity from user input handling to gestures \n- Utilize best practice when working with data in a SwiftUI application \n \nYou'll gain experience with the following tools and software: \n \n- Mobile app development tools and software \n- UIKit, MVC and MVVM \n- SwiftUI app development features	English
Meta iOS Developer	React Basics	BEGINNER	10.3	React is a powerful JavaScript library that you can use to build user interfaces for web and mobile applications (apps). In this course, you will explore the fundamental concepts that underpin the React library and learn the basic skills required to build a simple, fast, and scalable app.\n\nBy the end of this course, you will be able to:\n•\tUse reusable components to render views where data changes over time\n•\tCreate more scalable and maintainable websites and apps \n•\tUse props to pass data between components \n•\tCreate dynamic and interactive web pages and apps\n•\tUse forms to allow users to interact with the web page \n•\tBuild an application in React\n\nYou'll gain experience with the following tools and software: \n•\tReact.js\n•\tJSX\n•\tReact\n•\tHTML, CSS and JavaScript \n•\tVSCode\n\nYou will be able to leverage the potential of this course to develop new skills, improve productivity, act effectively with data and boost your career.\n\nThis is a beginner course for learners who would like to prepare themselves for a career in mobile development. To succeed in this course, you do not need prior development experience, only basic internet navigation skills and an eagerness to get started with coding.	English
Meta iOS Developer	React Native	INTERMEDIATE	8.5	React Native is an open-source framework for building cross-platform applications (apps) using React and the platform's native capabilities. In this course, you will move from the basics of React to a more advanced implementation using React Native. You'll review a wide range of different React components and ways of styling them. And you'll get to practice using different mobile methods of interactivity with React Native.\n\nSome of the basics skills you will learn include:\n•\tBuilding a single-page React Native app and styling it using basic components\n•\tBuilding large lists and configuring user inputs within a React Native app\n•\tUsing the Pressable component to build buttons and other clickable areas\n•\tSetting up an app with React Navigation and moving between screens\n\nYou'll gain experience with the following tools and software: \n•\tReact\n•\tReact Native\n•\tFront End development languages (HTML, CSS and JavaScript)\n•\tJSX\n•\tCode editing programs, such as Expo and Visual Studio Code\n\nThis course is for learners who would like to prepare themselves for a career in mobile development. To succeed in this course, you will need foundational knowledge of React basics, internet navigation skills and an eagerness to code.	English

Meta iOS Developer	The Web and Databases in iOS	BEGINNER	NOT CALIBRATED	In this course, you'll move outside of the platform and begin working with integrations like web frameworks, tools and asynchronous programming techniques. \n \nBy the end of this course, you'll be able to: \n \n- Demonstrate a working knowledge of how Swift applications communicate over the web \n- Apply asynchronous programming techniques using Swift \n- Utilize a variety of methods to take advantage of the Core Data package in a Swift application \n- Add connections from an app to other languages to provide access to custom built web APIs and database management systems through both the Django REST framework and Swift \n \nYou'll gain experience with the following tools and software: \n \n- Swift database features and tools \n- Web communication technologies such as HTTP \n- SQL CRUD operations \n- Programming languages like JSON, Python and Django \n- Database web developer tools such as CloudKit, RxSwift and Swift libraries \n- Core data \n- Fetching	English
Meta iOS Developer	iOS App Capstone	INTERMEDIATE	6.9	In this capstone course, you'll demonstrate your proficiency in your new skill set by creating a native iOS app. \n\nAt this point in the program, you've gained all the skills you need to successfully complete this project. But you might need to refresh your memory when it comes to the previous courses in the program. For that reason, each module in this course will take you through a brief recap of relevant content from previous courses in the program. And don't worry, there will be links too so you can review content in more detail if necessary. In this way, you will be guided through the process of building the Little Lemon app which allows you to show off your new development skills.\n \nThis course is ideal for intermediate learners who would like to prepare themselves for a career in iOS development. On completion of the capstone project, you'll have an interactive mobile application that you can share with recruiters and impress potential employers with.\n \nTo complete this course, you will need experience in iOS and a good understanding of the Swift programming language. Additionally, it always helps to have a can-do attitude!\n\n \nBy the end of this course, you'll be able to: \n \n-Build a native iOS mobile app \n-Publish and sell it on the Apple Store	English
Meta Android Developer	Introduction to Android Mobile Application Development	BEGINNER	5.9	This course is an ideal stepping stone if you want to become a mobile developer. We'll introduce you to this career path and give you a high-level overview of programming and the tools needed to develop Android applications. \n\nExplore the Android Studio and the fundamental concepts of Android app development. Learn about operating systems and different platforms for creating mobile apps. You'll conclude your introduction to Android application development by building out each aspect of a guided project.	English
Meta Android Developer	Version Control	BEGINNER	5.6	Learn how modern software developers collaborate across the world without messing up each other's code. You will look at the different version control systems and how to create an effective software development workflow. You will be introduced to some of the most commonly used Linux commands that you can use to work with files on your hard drive and create powerful workflows that will automate your work, saving you time and effort. \n\nFinally, you will see how Git can be used in software development projects to manage team files. And you will create a repository that can manage code revisions.	English

Meta Android Developer	Programming Fundamentals in Kotlin	BEGINNER	9.7	Practice and expand on the fundamentals of programming that are core to any language as well as the unique aspects of Kotlin syntax. You will work with data types, functions, conditionals, operators, collections-arrays, variables and loops. \n\nFurthermore, you will declare and initialize different types of variables and explain their scope as well as create arrays and collections in Kotlin. You'll create control flow patterns using conditionals and loops. There will be opportunities to practice using structs and classes while considering best cases for both. Discover deeper ways to use objects in Kotlin through exploring interfaces and classes.\n\nAfter completing this course, you will be able to:\n\n•\tDescribe basic types and variables \n•\tExplain numbers in Kotlin \n•\tExplain what conditions are \n•\tDescribe how to use loops\n•\tExplain the concept of a function \n•\tDifferentiate between a parameter and an argument \n•\tExplain that a function can return a value and describe how it works \n•\tExplain the difference between a class, an object and a type \n•\tDifferentiate between various visibility modifiers \n•\tDescribe the use of collections in programming \n•\tIdentify which collection type to use in any given situation\n•\tExplain the difference between List, Set and Map\n•\tSynthesize the skills you gained from the course to create code for the Bank Account project. \n\nThis is a beginner course for learners who would like to prepare themselves for a career as an Android developer using Kotlin. To succeed in this course, you do not need prior web development experience, only basic internet navigation skills and an eagerness to get started with coding.	English
Meta Android Developer	Principles of UX/UI Design	BEGINNER	6.8	Learn the fundamentals of User Experience (UX) research and design. Become immersed in the UX process of identifying problems and iterating and testing designs to find appropriate solutions. You'll learn how to empathize with users through best-practice research approaches, and create common UX artifacts such as user personas. And you'll use UX insights to make appropriate design decisions. \n\nBy utilizing the User Interface (UI) design process, you will be able to create wireframes for features in Figma, and turn them into Minimum Viable Product (MVP) style prototypes from your mockups. You'll also learn the core principles of design such as hierarchy and the use of grids.\n\nBy the end of this course you will be able to: \n\n• Design digital products that create value and solve a user's problems in meaningful ways. \n• Recognize what constitutes successful UX UI and evaluate existing interfaces for design consistency and quality.\n• Identify best practice interaction design methods and evaluate and improve your own and others' designs.\n• Create, share and test your UX UI designs following best practice guidelines.\n\nThis is a beginner course for learners who would like to prepare themselves for a career in UX UI development. To succeed in this course, you do not need prior development experience, only basic internet navigation skills and an eagerness to learn.	English
Meta Android Developer	Create the User Interface in Android Studio	INTERMEDIATE	13.3	This is a beginner course for learners who would like to prepare themselves for a career in Android development. To succeed in this course, you should understand the basics of Kotlin and cross-platform development for mobile applications.\n\nThe course introduces you to creating a User Interface (UI) in Android Studio on a foundational level. \n\nYou will learn about the fundamentals that will enable you to build meaningful and functional user interfaces for Android using Android Studio and Kotlin.\n\nBy the end of this course, you will be able to: \n\n•\tIdentify different approaches for building UI with Kotlin and build a basic UI.\n•\tYou will learn about Jetpack compose, describe how composables are decorated with modifiers, how to handle state management and how to better lay out composables based on Material Design guidelines.\n•\tYou will also learn how to apply themes, custom styles and animations to develop an attractive UI.	English

Meta Android Developer	Android Mobile Lifecycle and Software Development Approaches	BEGINNER	NOT CALIBRATED	Learn how to manage the lifecycle and data collections of mobile applications. Compare different methodologies for organizing and architecting Android applications and the implications on code quality and team velocity. You will follow the lifecycle activities of fragments from the source of generation and learn how to respond. You will do this by reviewing the Android lifecycle. \n\nYou'll review and apply different types of Kotlin user interface (UI) interactivity from user input handling to gestures. You'll get to practice different aspects of working with data in an Android application and you'll build out a lifecycle and data.	English
Meta Android Developer	The Web and Databases in Android	BEGINNER	NOT CALIBRATED	Learn how to work with web technologies and persistent data on Android applications even after you close or restart an app. There is a focus on web communication and developer tools and you will discover how Kotlin applications communicate over the web. You'll learn how data formats and web protocols work in relation to Kotlin apps. Furthermore, you will practice applying asynchronous programming techniques using Kotlin. \n\nLearn the core functionality and uses of the SQLite database management system (DBMS). Learn about web clients and databases by adding connections from your app to other languages to access custom built web application programming interfaces (APIs) and database management systems.	English
Meta Android Developer	React Basics	BEGINNER	10.3	React is a powerful JavaScript library that you can use to build user interfaces for web and mobile applications (apps). In this course, you will explore the fundamental concepts that underpin the React library and learn the basic skills required to build a simple, fast, and scalable app.\n\nBy the end of this course, you will be able to:\n•\tUse reusable components to render views where data changes over time\n•\tCreate more scalable and maintainable websites and apps \n•\tUse props to pass data between components \n•\tCreate dynamic and interactive web pages and apps\n•\tUse forms to allow users to interact with the web page \n•\tBuild an application in React\n\nYou'll gain experience with the following tools and software: \n•\tReact.js\n•\tJSX\n•\tReact\n•\tHTML, CSS and JavaScript \n•\tVSCode\n\nYou will be able to leverage the potential of this course to develop new skills, improve productivity, act effectively with data and boost your career.\n\nThis is a beginner course for learners who would like to prepare themselves for a career in mobile development. To succeed in this course, you do not need prior development experience, only basic internet navigation skills and an eagerness to get started with coding.	English

Meta Android Developer	React Native	INTERMEDIATE	8.5	React Native is an open-source framework for building cross-platform applications (apps) using React and the platform's native capabilities. In this course, you will move from the basics of React to a more advanced implementation using React Native. You'll review a wide range of different React components and ways of styling them. And you'll get to practice using different mobile methods of interactivity with React Native.\n\nSome of the basics skills you will learn include:\n•\tBuilding a single-page React Native app and styling it using basic components\n•\tBuilding large lists and configuring user inputs within a React Native app\n•\tUsing the Pressable component to build buttons and other clickable areas\n•\tSetting up an app with React Navigation and moving between screens\n\nYou'll gain experience with the following tools and software: \n•\tReact\n•\tReact Native\n•\tFront End development languages (HTML, CSS and JavaScript)\n•\tJSX\n•\tCode editing programs, such as Expo and Visual Studio Code\n\nThis course is for learners who would like to prepare themselves for a career in mobile development. To succeed in this course, you will need foundational knowledge of React basics, internet navigation skills and an eagerness to code.	English
Meta Android Developer	Android App Capstone	INTERMEDIATE	3.0	This course gives you the opportunity to demonstrate the skills you have gained throughout the Android Developer Professional Certificate program. You'll do this by developing an Android app to order food from the Little Lemon restaurant. In other words, you'll create a solution to a real-world problem.\n \nAt this point in the program, you've gained all the skills you need to successfully complete this project. But you might need to refresh your memory when it comes to the previous courses in the program. For that reason, each module in this course will take you through a brief recap of relevant content from previous courses in the program. And, don't worry, there will be links too so you can review content in more detail if necessary. In this way, you will be guided through the process of building the Little Lemon food ordering app which allows you to show off your Android development skills.\n\nBy the end of the course, you will be able to:\n- Set up a Jetpack Compose application\n- Commit a project to a Git repository\n- Plan the UI and UX of an application\n- Set up a navigation hierarchy between app screens\n- Create a user onboarding flow\n- Develop a food menu user interface\n \nOn completion of the Capstone Project, you'll have an interactive mobile application that you can share with recruiters and impress potential employers with.\n \nThis is an advanced course, intended for learners with a background in Android app development. And, it always helps to have a can-do attitude!	English
Meta Database Engineer	Introduction to Databases	BEGINNER	6.9	In this course, you will be introduced to databases and explore the modern ways in which they are used. Learn to distinguish between different types of database management systems then practice basic creation and data selection with the use of Structured Query Language (SQL) commands. \n \nBy the end of this course, you'll be able to: \n\n- Demonstrate a working knowledge of the concepts and principles that underpin how databases work\n- Identify and explain the different types of core technology and management systems used in\n databases\n- Identify and interpret basic SQL statements and commands\n- Manipulate records in a database with the use of SQL statements and commands\n- Outline alternatives to SQL\n- and plan and design a simple relational database system\n\nYou'll also gain experience with the following:\n\n• Fundamental concepts in database \n• Basic MySQL syntax and commands\n• Database management systems\n• MySQL software\n• Relational databases	English

Meta Database Engineer	Version Control	BEGINNER	5.6	Learn how modern software developers collaborate across the world without messing up each other's code. You will look at the different version control systems and how to create an effective software development workflow. You will be introduced to some of the most commonly used Linux commands that you can use to work with files on your hard drive and create powerful workflows that will automate your work, saving you time and effort. \n\nFinally, you will see how Git can be used in software development projects to manage team files. And you will create a repository that can manage code revisions.	English
Meta Database Engineer	Database Structures and Management with MySQL	BEGINNER	9.0	Develop a working knowledge of the MySQL database management system (DBMS). Gain DBMS skills such as data creation, querying and manipulation. You'll gain further experience with SQL statements, clauses and data types. \n \nBy the end of this course, you'll be able to: \n \n- Utilize the MySQL DBMS to build and modify relational databases with SQL \n- Add records to a MySQL database \n- Perform intricate queries on database records with filters and groupings \n- Create simple joins and unions within a database \n- Create relationships between tables using primary and foreign keys \n- Demonstrate the ability to complete a database normalization project\n\nYou'll gain experience with the following tools and software: \n \n- MySQL DBMS \n- Joins and Unions \n- SQL statements, clauses and data types \n- Primary and foreign keys \n- Database normalization	English
Meta Database Engineer	Advanced MySQL Topics	INTERMEDIATE	7.8	In this course, you'll begin to push beyond simple SQL statements in MySQL to an advanced level in database engineering.\n\nBy the end of this course, you'll be able to:\n\n- Use control statements and variables in different contexts in MySQL\n- Develop user defined functions and procedures\n- Optimize MySQL database queries\n- Demonstrate a working knowledge of common table expressions and the JSON data type\n- Understand how and when to use triggers and events\n- Utilize subqueries, JOINS, views and transactions to perform data analysis\n- and use database optimization techniques such as MySQL transactions\n\nYou'll gain experience with the following advanced MySQL database skills:\n\n- MySQL user defined functions\n- Advanced MySQL stored procedures\n- MySQL optimization techniques including Indexes, Transactions, CTE and JSON\n- MySQL triggers and events\n- Database analytics in MySQL\n- Advanced SQL queries for data analysis with JOINS, views and subqueries\n\nThrough this course you'll develop new skills, improve your productivity, learn to act effectively with data and boost your career prospects.\n\nTo be successful in this course, you should have already completed the previous course, "Database Structures and Management with MySQL," or have prior experience with the skills taught in that course.	English

Meta Database Engineer	Programming in Python	BEGINNER	14.0	In this course, you will be introduced to foundational programming skills with basic Python Syntax. You'll learn how to use code to solve problems. You'll dive deep into the Python ecosystem and learn popular modules, libraries and tools for Python. \n\nYou'll also get hands-on with objects, classes and methods in Python, and utilize variables, data types, control flow and loops, functions and data structures. You'll learn how to recognize and handle errors and you'll write unit tests for your Python code and practice test-driven development.\n\nBy the end of this course, you will be able to:\n•\tPrepare your computer system for Python programming\n•\tShow understanding of Python syntax and how to control the flow of code\n•\tDemonstrate knowledge of how to handle errors and exceptions\n•\tExplain object-oriented programming and the major concepts associated with it\n•\tExplain the importance of testing in Python, and when to apply particular methods\n\nThis is a beginner course for learners who would like to prepare themselves for a career in back-end development or database engineering. To succeed in this course, you do not need prior web development experience, only basic internet navigation skills and an eagerness to get started with coding.	English
Meta Database Engineer	Database Clients	INTERMEDIATE	11.3	Explore how to write database driven applications in Python by creating various types of clients that connect to MySQL databases using Python code and Python-related MySQL features and tools. \n \nBy the end of this course, you'll be able to: \n \n- Utilize Python code to create, populate and manipulate MySQL databases and tables \n- Access advanced functionality in MySQL using custom built Python clients \n- Develop working familiarity with advanced topics in MySQL \n- Apply the principles of advanced MySQL topics to problem solving using Python \n- Develop a working knowledge of the methods by which a MySQL database connects to the web via a Django API \n- Create a useful Python application capable of administration of a MySQL database \n \nYou'll gain experience with the following tools and software: \n \n- Python code \n- Python-related MySQL features and tools \n- Django REST framework \n- _meta API\n\nTo take this course, you must have completed the previous course Advanced MySQL topics. You must also be eager to continue your journey with coding.	English
Meta Database Engineer	Advanced Data Modeling	INTERMEDIATE	8.2	Develop a working knowledge and familiarity with advanced database concepts such as usage, modeling, automation, storage, optimization and administration. \n\nTo take this course, you must have completed the previous Database courses. You must also be eager to continue your journey with coding.\n\nThe Professional Certificates create opportunities so that anyone regardless of education, background or experience can learn high-quality skills to land a high-growth career—no degree or experience required to get started. \n \nBy the end of this course, you'll be able to: \n \n- Deploy basic data modeling skills and navigate modern storage options for a data warehouse \n- Apply planning and execution of ETL style database engineering by building upon existing MySQL skills \n- Develop a working knowledge of the different aspects of managing a database including administration of database operations and concerns, alongside processes and solutions for monitoring, reporting and debugging \n- Demonstrate data modeling skills within a real-world project environment \n \nYou'll gain experience with the following tools and software: \n \n- Workbench data modeling software \n- Syntaxes used to interact with a data warehouse \n- Extract, transform and loading (ETL) techniques and methods \n- MySQL data warehouse administration \n- Data warehouse monitoring and reporting tools \n- Database debugging and testing tools \n- Data modeling tools	English

Meta Database Engineer	Database Engineer Capstone	INTERMEDIATE	5.5	In this course you'll complete a capstone project in which you'll create a database and client for Little Lemon restaurant.\n\nTo complete this course, you will need database engineering experience. \n\nThe Capstone project enables you to demonstrate multiple skills from the Certificate by solving an authentic real-world problem. Each module includes a brief recap of, and links to, content that you have covered in previous courses in this program. \n\nIn this course, you will demonstrate your new skillset by designing and composing a database solution, combining all the skills and technologies you've learned throughout this program to solve the problem at hand. \n\n\nBy the end of this course, you'll have proven your ability to:\n-Set up a database project,\n-Add sales reports,\n-Create a table booking system,\n-Work with data analytics and visualization,\n-And create a database client.\n\nYou'll also demonstrate your ability with the following tools and software:\n-Git,\n-MySQL Workbench,\n-Tableau,\n-And Python.	English

| Tally Bookkeeper | Fundamentals of Accounting and Reporting | BEGINNER | 7.0 | This course is for those interested in starting a career in bookkeeping. The course will help you learn and apply the basic concepts of computerized accounting using TallyPrime, fundamentals of accounting, book-keeping, day-to-day business transactions, creating charts of accounts, preparing and analyzing management information systems, and how to secure company data.\n\nThe course is enriched with numerous real business scenarios, screenshots, observations, solved illustrations, and practice scenarios to help you experience the simplicity and the power of technology of working on TallyPrime as you solve these real-life business scenarios. \n\nYou will gain skills in the intricacies of business operations and learn to handle such transactions in the daily work environment with ease.\n\nBy the end of the course, you will be able to: \n- Explain and apply the fundamentals of accounting\n- Use TallyPrime as an integrated business management software\n- Create and maintain chart of accounts\n- Record and maintain accounting transactions\n- Describe and manage banking payments\n- Generate and analyze financial statements\n- Implement security control to protect data\n- Backup and restore company data\n\nNo prior experience in bookkeeping is required, but you should have an interest and aptitude in working with numbers. | English |

| Tally Bookkeeper | Principles of Accounts Payable and Receivable Management | INTERMEDIATE | 6.9 | This course is for those interested in starting a career in bookkeeping. The course builds on the knowledge and skills covered in the first course in this professional certificate, Fundamentals of Accounting and Reporting, and dives deeper into accounts payable and receivable management. \n\nYou will not only learn concepts related to accounts payable and receivable, but also demonstrate the basic concepts of computerized accounting using Tally. Tally is a revolutionary product which has been created with greater flexibility and a new look and feel.\n\nBy the end of the course, you will be able to:\n- Classify inventory\n- Manage accounts receivable and accounts payable\n- Manage purchase and sales orders\n- Track costs of purchase\n- Manage cost and profit centers\n- Create and maintain budgets using TallyPrime\n- Generate reports\n\nNo prior experience in bookkeeping is required. To be successful in this course, you should have completed the first course in this program, Fundamentals of Accounting and Reporting, or have the equivalent skills and knowledge. | English |
| Tally Bookkeeper | Basics of Statutory Compliance and Taxation | INTERMEDIATE | 4.1 | This course is for those interested in starting a career in bookkeeping. The course builds on the knowledge and skills covered in the first two courses in this professional certificate to dive deeper into concepts related to taxation. You will apply those concepts in scenarios using the TallyPrime software.The course includes several real-life business scenarios, charts, images, observations, solved illustrations, and practice scenarios on TallyPrime.\n \nBy the end of the course, you will be able to:\n- Apply the concept of goods and services tax (GST)\n- Configure tax deducted as source (TDS)\n- Manage business data\n- Manage data across companies\n \nNo prior experience in bookkeeping is required. To be successful in this course, you should have completed the first two courses in this program, Fundamentals of Accounting and Reporting (course 1) and Principles of Accounts Payable and Receivable Management (course 2), or have the equivalent skills and knowledge. | English |

| Goodwill Career Coach & Navigator | Foundations of Career Navigating and Coaching | BEGINNER | 11.4 | This course is for those who are passionate about helping people find jobs aligned with their skills and interests so they can earn a living through fulfilling work. This first course in the Career Coach and Navigator Professional Certificate will provide foundational knowledge of the Career Navigator and Coach roles, and introduce relationship management and human-centered coaching and navigating.\n\nBy the end of the course, you will be able to: \n1. Explain the foundational concepts of Career Coaching and Navigating.\n2. Familiarize clients with the Career Coaching and Navigation experience.\n3. Discover career possibilities for Career Navigators and Career Coaches\n4. Describe common Career Development theories, models, and tools.\n5. Summarize Coaching Agreements and Career Service Plans.\n6. Identify professional and ethical standards.\n7. Describe human-centered approaches to Career Coaching and Navigating.\n\nTo be successful in this course, no prior experience with career coaching or navigation is required. You just need a passion to help people, along with basic computer skills (some knowledge of word processing, spreadsheets, presentations and email). | English |

Goodwill Career Coach & Navigator	Client Intake, Assessments, Skill Analysis and Planning	BEGINNER	11.4	You have begun your journey toward becoming a Career Coach or Navigator because you are passionate about helping people earn a good living and find fulfilling work. Now continue that journey in this second course in the Career Coach and Navigator Professional Certificate. This course will equip you with the skills and knowledge to recruit people, complete the intake process, assess a person's skills, and work with the person to create an action plan.\n\nBy the end of the course, you will be able to: \n1. Assist people in career exploration and development.\n2. Help people identify personal interests that map to career goals and career possibilities.\n3. Inform people of the programs, services, and resources available to them.\n4. Identify barriers to employment.\n5. Assist people in planning career moves and developing essential skills to help them be successful in the workforce.\n6. Guide people towards sustainable career paths.\n7. Assist people who desire to pursue a career, make a career change, or work towards career advancement.\n\nTo be successful in this course, no prior experience with career coaching or navigation is required; but we recommend completing the first course in the program so you can build on the knowledge and skills from that course here.	English
Goodwill Career Coach & Navigator	Supporting Clients	BEGINNER	10.0	To reach your goal of becoming a Career Coach or Navigator, you have learned about relationship management and human-centered career coaching in course 1 and gained skills to recruit and work with clients in course 2. This third course in the Career Coach and Navigator Professional Certificate will help you advise people as they move along their career paths; assist with job searches, interviewing, and resume creation; and set them up for success as they start their careers.\n\nBy the end of the course, you will be able to: \n1. Assist people who desire to pursue a career, make a career change, or work towards career advancement.\n2. Guide people in finding relevant employment opportunities that meet their needs and the labor market.\n3. Assist, review, and provide feedback on developing resumes, CVs, and cover letters.\n4. Help people develop interviewing skills.\n\nTo be successful in this course, no prior experience with career coaching or navigation is required; but we recommend completing the first two courses in the program so you can build on the knowledge and skills from those courses here.	English

| Goodwill Career Coach & Navigator | Career Support Community and Resources | BEGINNER | 8.4 | As you've explored a role as a Career Coach or Navigator in the preceding courses in this program, you've gained skills and knowledge about the profession and how to help clients find fulfilling jobs that allow them to earn a good living.\n\nThis final course in the Career Coach and Navigator Professional Certificate will explore how the changing technology landscape affects the career landscape and what to do about it, develop skills for virtual coaching and career fairs, work with community organizations to develop referral relationships, understand funding sources, and complete a capstone project that will help you prepare for the role of a Career Coach or Navigator.\n\nBy the end of the course, you will be able to: \n1. Research and act on technology trends.\n2. Develop computer application skills for virtual coaching.\n3. Engage community partners and businesses to identify resources.\n4. Identify career development opportunities for Career Coaches and Navigators.\n5. Complete a capstone project.\n\nTo be successful in this course, no prior experience with career coaching or navigation is required; but we recommend completing the previous courses in the program so you can build on the knowledge and skills from those courses here. | English |
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| IBM IT Project Manager | Introduction to Project Management | BEGINNER | 5.3 | Project management is a booming field with many opportunities for those with the appropriate skills. This course is designed for anyone interested in starting a career in this field and provides a comprehensive introduction to project management. \n\nToday's industries are increasingly becoming oriented around projects. As a result, more organizations need project management professionals and Agile Scrum Masters to help plan, manage, and execute these projects. By controlling various factors such as time and resources, project management enables organizations to increase the success rate of their projects, mitigate project risks, and reduce overall costs. \n\nIn this course, you will learn what project management is, its benefits, and challenges encountered by project managers. You will also learn how recent trends, such as remote work, Agile, and artificial intelligence, have re-shaped modern project management. \n\nThis course also addresses opportunities for different careers within project management. It will discuss jobs across different industries and experience levels, as well as the various technical and soft skills required for project management work. \n\nThroughout this course, you will learn through lectures, interviews with experienced project management professionals, readings, activities, and quizzes designed to teach you the fundamentals of project management. You will gain a range of technical and practical knowledge and get insights and guidance from experts in the field. | English |
| IBM IT Project Manager | Project Management Foundations, Initiation, and Planning | BEGINNER | 9.3 | To navigate today's complex and rapidly changing work environments, many organizations divide work into projects. Project management provides a structured approach to plan and manage projects in order to achieve on-time, within-budget, and scope as planned delivery. \n\nCompare and contrast predictive and adaptive project management models. Learn to avoid common causes of project failure. Investigate how to lead effective meetings and how motivating your team can lead to project success. Create essential documents required during the project initiation phase like the business case, project charter, project brief, stakeholder register, and stakeholder engagement plan. Prepare other project documents to help you scope a project and plan accurate project schedules and budgets. \n\nYou will gain practical experience with hands-on labs. Upon completion, you will have a portfolio of widely used project initiation and planning assets to demonstrate your skills to potential employers.\n \nThis course is set up to help you succeed as a project manager. It is well-suited for those looking to step up their careers or new graduates seeking to establish their project management careers.\n\nThis course is part of series of courses intended to help you prepare for CAPM and PMP certification exam.\n\nRECOMMENDED: It is good for everyone gearing toward a career in Project Management to have basic to intermediate skills in an Office Productivity Suite, such as Microsoft Office 365. We highly recommend enrolling in the SkillUp EdTech Office Productivity Software Specialization, which covers Word Processing, Spreadsheets, PowerPoint, Messaging, and Email. | English |

| IBM IT Project Manager | Introduction to Software Engineering | BEGINNER | 6.4 | Are you curious about the lucrative field that is software engineering and how you might be a part of it? This is the course for you! By taking this course you will gain foundational knowledge of software development, programming, and the many exciting job roles and career paths that the IT industry offers. \n\nLearn about the power of the Software Development Lifecycle (SDLC), and modern software development frameworks methodologies like Agile and Scrum. Explore fundamental programming principles and foundations of design, architecture, and deployment. The course offers a number of labs that will help you get important hands-on experience. These include, getting started with an IDE, basics of programming in Python, and Hello World in 10 languages. \n\nThe field of software engineering is growing at an estimated rate of 22% according to the US Bureau of Labor and Statistics. In addition to aspiring software engineers, front-end, back-end, full stack developers and DevOps professionals, this course is also suitable for those in related careers such as Product and Project Managers, IT Managers, Information Developers, UI/UX designers and others who communicate and interact with software engineers.   \n\nYou will learn about the different job opportunities and possible career paths in the software engineering field and also hear from industry professionals about what they do on a day-to-day basis. \n\nProfessionals in the software engineering field are in great demand and now is a great time to learn more about this exciting domain. Start by enrolling now! | English |
| IBM IT Project Manager | Introduction to Agile Development and Scrum | BEGINNER | 5.0 | Get started with using Agile Development and Scrum with this self-paced introductory course! After successfully completing this course, you will be able to embrace the Agile concepts of adaptive planning, iterative development, and continuous improvement - resulting in early deliveries and value to customers. \n\nYou will look at Scrum as a framework and learn how to apply it alongside Agile. You will also become familiar with related methodologies like Waterfall, Extreme Programming (XP), and Kanban. \n\nApply Agile practices derived from lean manufacturing concepts, like test-driven development. Learn how a scrum team functions. Also learn about the importance of Agile iterative planning and enable yourself to write good user stories and track your team's progress using a kanban board. \n\nCreate and refine a product backlog collaboratively with the team and the customer, in a flexible and blameless culture. You'll also learn how to use burndown charts, achieve sprint goals, and conduct the sprint review and retrospective. This approach will lead you to higher levels of efficiency, with the ability to plan and execute sprints with your development team, measuring success with actionable metrics. \n\nThis course is about more than facts and processes. It is about working collaboratively on a self-organizing team, coached by a scrum master, and building what is needed, rather than simply following a plan. Developed and taught by an experienced Agile practitioner, the course includes hands-on practice through realistic scenario-based labs using GitHub and ZenHub. \n\nThe course will benefit anyone who wants to get started with working the Agile way or transform the organizational culture to adopt and realize the benefits of Scrum. This includes Project Managers, Product Managers, and Executives. It is particularly suitable for IT practitioners such as software developers, development managers, and IT Scrum Masters. | English |

IBM IT Project Manager	Information Technology (IT) Fundamentals for Everyone	BEGINNER	6.5	This course will guide you through fundamental concepts and skills to confidently navigate various aspects of IT and the digital world. You will be introduced to the vast field of IT, covering a wide range of topics to build your IT knowledge. You will delve into hardware, operating systems technology, software, programming, databases, networking, storage, cybersecurity, cloud computing, and support and operations.\n\nDesigned to summarize the IT Fundamentals and Cloud specialization courses, this course is ideal for individuals seeking non-IT practitioner roles, such as project managers. It provides essential insights into the IT field, equipping you to collaborate effectively with IT teams and make informed decisions within your role. Each lesson contains materials such as hands-on labs and interactive activities to practice your newfound skills, glossaries to help you learn new vocabulary, as well as practice and graded quizzes to assess what you've learned.\n\nIf you seek a non-technical role in the IT industry, this course provides you with a strong foundation so you can thrive in the ever-evolving IT landscape.	English
IBM IT Project Manager	Project Management Capstone	ADVANCED	3.9	This capstone project course will give you the chance to practice the work that project managers do in real life when managing projects. You will assume the role of a project manager and gain hands-on experience managing a project from start to finish. \n\nYou will plan, execute, and close the project. By the end, you will have many artifacts that will showcase both your knowledge of predictive and adaptive methodologies, which can then be added to your portfolio to show employers. \n\nAs part of this course, you will produce common project deliverables. Artifacts you will create using a predictive methodology include a work breakdown structure, network diagram, budget, quality and communications management plans, and a risk register. Artifacts that showcase your adaptive methodology skills include user stories, examples of product and sprint backlogs, and a burndown chart analysis. You will also produce a project status report, a change form, and a closeout report. \n\nThis capstone course is a great way to build out your project management portfolio and showcase your skills to prospective employers.	English

| IBM IT Project Manager | Project Management Communication, Stakeholders & Leadership | BEGINNER | 6.6 | Project management is a highly valued skill that provides a structured approach to managing projects. Communication, stakeholder management, leadership skills are core to any project manager's success. \n\nThis course is intended for anyone interested in project management, be it a beginner or an experienced professional looking to switch or advance their career in project management. \n\nIn this course, you will learn how to lead, communicate, and manage stakeholders as a project manager. This course will teach you how to cultivate a healthy project environment and review the benefits of empowering team members. You will learn different ways of communicating with team members across different types of stakeholders using appropriate communication mediums and channels. You will explore the leadership skills used to improve stakeholder engagement and facilitate successful projects from their inception through closing. \n\nThroughout this course, you will work with numerous hands-on labs and real-world examples to develop your communication, leadership, and stakeholder management skills.\n\nThis course is part of a series of courses that will help you prepare for certifications offered by the Project Management Institute (PMI) including Certified Associate of Project Management (PMI-CAPM) and Project Management Professional (PMI-PMP).\n\nRECOMMENDED: It is good for everyone gearing toward a career in Project Management to have basic to intermediate skills in an Office Productivity Suite, such as Microsoft Office 365. We highly recommend enrolling in the SkillUp EdTech Office Productivity Software Specialization, which covers Word Processing, Spreadsheets, PowerPoint, Messaging, and Email. | English |
| IBM IT Project Manager | Introduction to Scrum Master Profession | BEGINNER | 3.0 | Unleash your career potential with our course on the fundamentals of the Scrum Master role. Whether you're new to Agile methodologies or seek to enhance your project management skills, this course will equip you with the knowledge and tools needed to excel as a Scrum Master. \n\nThroughout the course, you'll learn the essential aspects of being a Scrum Master. By contrasting Scrum with traditional project management methods, you'll gain a deep understanding of why Scrum is a game-changer in today's dynamic business landscape. \n\nWe also dive into the practical skills required to become a highly effective Scrum Master. Through hands-on practice and real-life scenarios, you'll develop your abilities to navigate challenges, foster collaboration, and drive successful project outcomes. \n\nAlthough this course is beneficial for learners who are already project managers, it is not essential for them to have project management experience. \n\nWith engaging video content and interactive exercises, you'll find yourself immersed in the world of Scrum. The course is designed to prepare you for the final exam, designed to simulate the certification exams you may encounter. Gain the confidence and experience you need to ace those tests and prove your expertise as a Scrum Master. | English |

| IBM IT Project Manager | Project Lifecycle, Information Sharing, and Risk Management | BEGINNER | 6.2 | Every project comes with risk. If risk occurs the project team operates in a reactive mode potentially moving towards project failure. As a project manager, you will need to be vigilant and constantly evaluate and mitigate potential risks. In this course, you will learn the compelling art of risk management throughout the project lifecycle while using information sharing techniques to keep all stakeholders informed and aligned. \n\nThis course introduces you to different phases in the project lifecycle, and explains the difference in the phases based on the selected project methodology. Additionally, you will have the opportunity to explore best practices for information sharing with project teams and external stakeholders while equipping yourself with effective information sharing techniques.\n\nThe course delves into the risk management lifecycle, from planning and identifying risks through to evaluation. You will also learn different strategies to respond to risks. You will learn about various tools, such as risk reports, risk registers, and the risk matrix, and the opportunity to apply your skills to create these artifacts for given project scenarios.\n\nThis course is set up to help you succeed as a project manager. It is well-suited for those looking to step up their careers or new graduates seeking to establish their project management careers.\n\nThis course is part of a series of courses that will help you prepare for certifications offered by the Project Management Institute (PMI) including Certified Associate of Project Management (PMI-CAPM) and Project Management Professional (PMI-PMP).\n\nRECOMMENDED: It is good for everyone gearing toward a career in Project Management to have basic to intermediate skills in an Office Productivity Suite, such as Microsoft Office 365. We highly recommend enrolling in the SkillUp EdTech Office Productivity Software Specialization, which covers Word Processing, Spreadsheets, PowerPoint, Messaging, and Email. | English |
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IBM Front-End Developer	Designing User Interfaces and Experiences (UI/UX)	BEGINNER	4.9	UI and UX design is a thriving industry with numerous prospects for anyone with the right skills. This course is designed for those who are interested in starting a career in designing UI and UX experiences as well as developers who want to create web and front-end applications. It emphasizes the key concepts, tools, and methodologies used in front-end development. \n\nWeb and mobile-accessible devices are transforming the world. Nowadays, everyone has a smartphone, tablet, smart TV, and/or laptop, which they use for communication and data searching. Companies are increasingly turning to front-end developers, mobile app developers, and UI/UX designers to assist them in producing user-friendly products. Therefore, it is crucial to provide users with a robust yet intuitive user interface and experience. \n\nIn this course, you will learn about the best practices of visual design development and identify the differences between well-designed and poor user interfaces. You will explore typography, readability, and colour theory in UI design. \n\nYou will gain insight into key methodologies in visual design like Responsive Web Design (RWD) and Progressive Web Design (PWD). \n\nYou will gain exposure to tools like Figma, a collaborative cloud-based app used for interface design. You will discover the steps to set up a Figma account and learn about its configuration. In addition, you will explore the various components, styles, libraries, and layout grids used in Figma that are essential for design. \n\nThroughout this course, you will learn through videos, readings, activities, and quizzes designed to teach you the fundamentals of visual web and mobile design and development. You will gain a range of technical and practical knowledge and get insights and guidance from experts in the field. \n \nThe practical knowledge you will gain from the hands-on labs will further strengthen your base and enable you to perform better. \n\nThis is a beginner's course, intended for learners with basic computer operating skills who have a fundamental knowledge of visual design development and are familiar with Figma. \n\nTo be successful in this course, you should have a basic understanding of User Interface (UI) and User Experience (UX) design as well as website wireframes, familiarity with the different kinds of layouts and tools used for visual design in various devices, and familiarity with the Figma application.	English
IBM Front-End Developer	Introduction to Software Engineering	BEGINNER	6.4	Are you curious about the lucrative field that is software engineering and how you might be a part of it? This is the course for you! By taking this course you will gain foundational knowledge of software development, programming, and the many exciting job roles and career paths that the IT industry offers. \n\nLearn about the power of the Software Development Lifecycle (SDLC), and modern software development frameworks methodologies like Agile and Scrum. Explore fundamental programming principles and foundations of design, architecture, and deployment. The course offers a number of labs that will help you get important hands-on experience. These include, getting started with an IDE, basics of programming in Python, and Hello World in 10 languages. \n\nThe field of software engineering is growing at an estimated rate of 22% according to the US Bureau of Labor and Statistics. In addition to aspiring software engineers, front-end, back-end, full stack developers and DevOps professionals, this course is also suitable for those in related careers such as Product and Project Managers, IT Managers, Information Developers, UI/UX designers and others who communicate and interact with software engineers. \n\nYou will learn about the different job opportunities and possible career paths in the software engineering field and also hear from industry professionals about what they do on a day-to-day basis. \n\nProfessionals in the software engineering field are in great demand and now is a great time to learn more about this exciting domain. Start by enrolling now!	English

| IBM Front-End Developer | Introduction to Web Development with HTML, CSS, JavaScript | BEGINNER | 6.2 | Want to take the first steps to become a Web Developer? This course will help you discover the languages, frameworks, and tools that you will need to create interactive and engaging websites right from the beginning. \n\nYou will begin by learning about the roles of front-end, back-end, and full-stack developers and how they work together on development projects. Through this, you will also become familiar with the terminology and skills needed in your career as a web developer. \n\nNext, you will explore the languages needed for developing websites or applications. You will gain a thorough understanding of HTML and CSS and learn how a combination of both technologies can help developers create the structure and style of their websites. \n\nFinally, you will learn how JavaScript can make your webpages dynamic with features that include interactive forms, dynamic content modification, and sophisticated menu systems. \n\nBy learning the fundamentals of HTML5, CSS, and JavaScript you will be able to combine them to: \n- create the basic structure of a website \n- create format and layout for web applications \n- enhance your website and create rich, interactive applications \n- increase user interactivity and enhance user experience \n- give your website a real wow factor! \n\nIn this course you will practice what you learn with numerous hands-on labs. Lastly, you will complete a final project where you will create a webpage to showcase your skills and have a great addition to your portfolio! | English |
| IBM Front-End Developer | Developing Front-End Apps with React | INTERMEDIATE | 3.6 | React is one of the most popular frameworks in the Web and Front-end application Development category.   \n\nIn this course, you will   \n- build rich Front-End applications with React and ES6   \n- connect React components using data and state   \n- write rich React components with advanced features like Hooks and Redux \n\nIn addition, you will explore how to access the React web framework user interface (UI) library and run rich React applications. You will find ways to use React components and change their properties and states in a dynamic user interface. You will learn to connect to an external server from a React page. The course introduces different testing tools that you can use to test the component without manual verification. \n\nThroughout the course, you will complete numerous hands-on labs to gain practical experience. At the end of the course, you will demonstrate your React skills with a final project to add to your portfolio.   \n\nThis course will help you succeed as a front-end or full-stack developer. It suits those in IT looking to step up in their careers or new graduates seeking to establish their client-side skills. \n\nNote: This course requires knowledge of HTML, CSS, JavaScript, and Git/GitHub | English |

| IBM Front-End Developer | Getting Started with Git and GitHub | BEGINNER | 2.9 | Get started with Git and GitHub in this self-paced, introductory course! You'll become familiar with collaborative version control and popular Git platforms. Collaboration and social coding are crucial parts of contemporary Software Engineering practices and the DevOps culture. \n\nYou will begin this course with an overview of Git and Github fundamentals and explore key Git concepts such as branching and repositories, as well as the use of Git commands. You will also learn and practice various Git concepts such as forking, cloning and merging workflows using hands-on labs. And you'll learn to use GitHub to work effectively as a team, and perform common Git operations, from both the Web UI and command line. \n\nThe course wraps up with a final project where you will start building your portfolio by creating and sharing a public/open-source GitHub project. By completing this course you will demonstrate your Git and Github skills as well as add a project to your resume! \n\nAll hands-on activities in this course can be performed using web-browser based tools and interfaces. Installation of any specialized software is NOT required on your own computer in order to complete the course. | English |
| IBM Front-End Developer | Developing Cloud Native Applications | INTERMEDIATE | 8.6 | Do you want to learn about developing applications that are cloud native right from conception to implementation? In this course, you'll begin with some crucial cloud concepts such as Cloud Native Applications, CNCF and Hybrid Cloud. You will dive into specific tools and techniques for developing cloud native apps. \n\nYou'll then learn how to use CLI to develop, test and deploy applications for IBM Cloud with the use of Node.js . You will further use DevOps to maintain application development using Web IDE features, Git repository and Delivery Pipeline. You will familiarize yourself with concepts like REST Architecture, JSON and Watson API.\n\nYou will also look at two key areas of cloud thinking: modernization and continuous integration/continuous delivery. Throughout this course you will practice with hands-on labs and gain skills with tools used by professionals!\n\nLastly you will complete a final project where you will build your own CI/CD enabled application with a NoSQL database and have a great addition to your portfolio. | English |

| IBM Front-End Developer | Intermediate Web and Front-End Development | INTERMEDIATE | 4.6 | Do you want to learn how to optimize your websites for search engines? This course will teach you how Search Engine Optimization (SEO) techniques can help improve the visibility of your website.\n\nThen you will investigate automated build tools and bundlers like Webpack, which helps with bundling assets, modules, and dependencies into a single bundle, allowing developers to focus on development.\n\nFollowing that, you will explore how web optimization assesses and perceives the user experience of load time and runtime. You'll examine how JavaScript Testing frameworks like Mocha and Jasmine can automate testing to improve testing speed and efficiency, test accuracy, and reduce test maintenance costs and risks.\n\nFinally, you will discover why debugging is such an important part of the software development process. You will learn how to use Google Chrome DevTools to debug a program without recompiling or changing its source code, as well as how to use a variety of add-ons or extensions to debug a program. | English |
| IBM Front-End Developer | Front-End Development Capstone Project | ADVANCED | 3.6 | According to internetlivestats.com, there are over 1.58 billion websites of which 200 million are active websites. This number is constantly growing with most businesses leaning towards building their own websites or enhancing them. This requires skilled web developers to get the job done.\n\nA key objective of this capstone project is to help you get all your design and coding skills together to implement a responsive website. This will help you gain the confidence and comfort in building websites and better your job prospects.\n\nIn this six-week capstone project, you will design and develop website component layouts and push it to a GitHub repository.\n\nReady to enhance your professional portfolio with a comprehensive website built using HTML, CSS, and React? This capstone project will help you get closer to that goal!\n\nWe assume that you have completed all the previous courses in the IBM Front-End Developer Professional Certificate. | English |

CVS Health Call Center Customer Service	Call Center Customer Service	BEGINNER	7.6	The Call Center Customer Service course requires a practical skill set of data entry and organization of information/resources. In addition, communicating with only the voice uses a wide range of communication skills. This course will provide you with practical experience in data entry and customer privacy, and the opportunity to evaluate sample interactions between a call center customer service representative and a customer. You will also have the opportunity to respond to sample calls where you can demonstrate great customer service. \n \n-By the end of the course, you will be able to: \n-Create positive interactions with customers \n-De-escalate conflict with customers \n-Create solutions to customer problems \n-Describe the different roles in call center customer service \n \nTo be successful in this course, it is recommended that you complete the two courses in this program.	English

CVS Health Call Center Customer Service	Preparing for Your Call Center Customer Service Role	BEGINNER	1.6	Demonstrate Excellent Customer Service provides resume and social media presence guidance to learners looking for a career in customer service. This allows you to optimize your resume for a customer service position and be prepared for your first interview. In addition, you will apply your knowledge gained over the previous courses in the program to a hands-on project that allows you to demonstrate the skills you've learned in each course. \n \n-By the end of the course, you will be able to: \n-Create positive interactions with customers \n-De-escalate conflict with customers \n-Create solutions to customer problems \n-Describe the different roles in call center customer service \n \nTo be successful in this course, it is recommended that you complete the first four courses in this program.	English
CVS Health Call Center Customer Service	Introduction to Customer Service	BEGINNER	8.4	The Introduction to Customer Service course presents an in-depth look at communication, time management and de-escalation needed for a career in customer service. This course presents frameworks for communication, time management and problem-solving that allow you to improve your skills immediately and to evaluate customer service interactions. In addition, hands-on activities and community observations and projects are a part of this course, allowing you to get a real-world idea of key areas of customer service happening in your community. \n\nBy the end of the course, you will be able to: \n- Create positive interactions with customers \n- De-escalate conflict with customers \n- Process retail transactions in real-world situations \n- Describe the different roles in retail customer service \n\nNo prior experience in customer service is necessary to be successful in this course.	English

CVS Health Call Center Customer Service	Interacting with Customers	BEGINNER	7.0	This course presents the different customer interactions that happen in a retail setting and allows you to experience real interactions through simulations and scenarios. Interactions examined include in-person, on the phone, or through social media. In addition, you will take your knowledge into the community to observe and evaluate interactions at any business that provides customer service. You will rate interactions by distinguishing between successful interactions and interactions that need improvement interactions as each type of interaction is presented. \n\nBy the end of the course, you will be able to: \n- Create positive interactions with customers \n- De-escalate conflict with customers \n- Process retail transactions in real-world situations \n- Describe the different roles in retail customer service \n\nTo be successful in this course, it is recommended that you complete the first course in this program.	English

CVS Health Retail Customer Service	Preparing for Your Retail Customer Service Role	BEGINNER	1.5	This course provides resume and social media presence guidance to learners looking for a career in customer service. This allows you to optimize your resume for a customer service position and be prepared for your first interview. In addition, you will apply your knowledge gained over the previous courses in the program to a hands-on project that allows you to demonstrate the skills you've learned in each course. \n\nBy the end of the course, you will be able to: \n- Create positive interactions with customers \n- De-escalate conflict with customers \n- Create solutions to customer problems \n- Describe the different roles in call center customer service \n\nTo be successful in this course, it is recommended that you complete the first three courses in this program.	English
CVS Health Retail Customer Service	Introduction to Customer Service	BEGINNER	8.4	The Introduction to Customer Service course presents an in-depth look at communication, time management and de-escalation needed for a career in customer service. This course presents frameworks for communication, time management and problem-solving that allow you to improve your skills immediately and to evaluate customer service interactions. In addition, hands-on activities and community observations and projects are a part of this course, allowing you to get a real-world idea of key areas of customer service happening in your community. \n\nBy the end of the course, you will be able to: \n- Create positive interactions with customers \n- De-escalate conflict with customers \n- Process retail transactions in real-world situations \n- Describe the different roles in retail customer service \n\nNo prior experience in customer service is necessary to be successful in this course.	English

CVS Health Retail Customer Service	Interacting with Customers	BEGINNER	7.0	This course presents the different customer interactions that happen in a retail setting and allows you to experience real interactions through simulations and scenarios. Interactions examined include in-person, on the phone, or through social media. In addition, you will take your knowledge into the community to observe and evaluate interactions at any business that provides customer service. You will rate interactions by distinguishing between successful interactions and interactions that need improvement interactions as each type of interaction is presented. \n\nBy the end of the course, you will be able to: \n- Create positive interactions with customers \n- De-escalate conflict with customers \n- Process retail transactions in real-world situations \n- Describe the different roles in retail customer service \n\nTo be successful in this course, it is recommended that you complete the first course in this program.	English
CVS Health Retail Customer Service	Retail Customer Service	BEGINNER	5.3	The Retail Customer Service course examines the day-to-day tasks that will be tackled in a retail customer service setting, including advanced skills such as returns and exchanges. You will apply guidelines for transactions such as sales, returns, exchanges, and data entry for customer information in real simulations. You will also observe the skills within a retail community location, evaluating the types of tasks observed and shared with a group of peers. You will complete sample transactions for peer evaluation, ensuring all steps are executed and excellent customer service is provided during any transaction. \n\nBy the end of the course, you will be able to: \n- Create positive interactions with customers \n- De-escalate conflict with customers \n- Process retail transactions in real-world situations \n- Describe the different roles in retail customer service \n\nTo be successful in this course, it is recommended that you complete the first two courses in this program.	English

| Akamai Customer Consulting and Support | Managing Relational Databases | BEGINNER | 10.1 | Students will learn about the structure and design of relational databases including primary and foreign key fields, one-to-many and one-to-one relationships. Students will learn about the Structured Query Language (SQL) and use SQL to examine the database structure. They will also learn to create and manage databases, tables, and records. The focus of the course is on data analysis. Students will start with basic SQL queries then learn to add conditional statements, and logical, comparison and arithmetic operators. Students will learn to query for a range of values, and to use pattern matching and regular expressions. Then they will progress to using multiple conditions, and complex criteria, adding functions to create calculated fields, retrieve unique records and aggregate data. Then students will learn to query multiple tables using joins, creating complex queries using subqueries, nested subqueries, and subqueries in the WHERE and FROM clauses. Students will use SQL to control the output of data including parsing text and numbers, grouping results and using ROLLUP. Students will perform labs that give practical experience and then they will complete a capstone project to demonstrate mastery of course objectives. | English |

Akamai Customer Consulting and Support	Introduction to IT Security	BEGINNER	7.8	Students will learn about the security management process. They will examine risk and risk management, including quantitative and qualitative risk assessments. The course includes discussion of security control types and physical security controls. Students will explore all aspects of Identity and Access Management (IAM) including single-factor and multi-factor authentication, account and access control, single sign-on and federation. Students will learn to harden endpoint devices including mobile and IoT devices. Students explore cryptography including symmetric and asymmetric encryption, hashing and digital signatures, and using Public Key Infrastructure (PKI) to create and manage certificates. Students explore network security including defense in depth, firewalls, IDS/IPS, wireless security, remote access, and cloud computing. Students explore vulnerability management, ethical hacking, and compliance. Then they learn about attackers, social engineering, malware, software/network attacks, wireless and password attacks. Students learn about incident response, forensics, and planning for business continuity. Labs encourage students to apply security concepts to their personal lives, practice applying security to networks, and even include hacking and forensic simulations. At the end of the course, students will complete a capstone project to demonstrate mastery of course objectives and use for personal branding.	English
Akamai Customer Consulting and Support	Operating Systems Fundamentals	BEGINNER	8.4	Covers all basic functions in Linux. Students first learn about Linux distributions and Copyleft. Then they learn to use shell commands to query the system for basic information and to get help from the operating system. The course covers Linux file systems, including managing disks and directories, working with absolute and relative paths, and how to organize, backup and restore files. Students learn to work with text files from the shell and use expressions to search files, directories and file contents. Students also learn about managing users and groups including passwords and user profiles. Students use security principles to set permissions and ownership. Finally, students learn to manage jobs, processes, the boot process, and system settings including SELinux. Students will build their own Linux machine using virtualization and use the machine for all labs. At the end of the course, students will complete a capstone project to demonstrate mastery of course material.	English

Akamai Customer Consulting and Support	Introduction to Web Applications	BEGINNER	14.4	Students start by learning about the HyperText Markup Language (HTML) and basic rules for creating compliant HTML. They learn tags for creating web pages and formatting text on the page including lists and special characters. Students will learn how to embed images, video and audio in web pages and format information in tables. They will learn to create hyperlinks, and to use text and images for hyperlinks including creating image maps. Students will also create HTML forms to collect user information. Then students will learn about Cascading Style Sheets (CSS) including in-line styles, embedded style sheets and external style sheets. They will use CSS to format web pages using combinators, and attribute, structural and pseudo-element selectors to change colors, and add creative elements including borders, drop-shadows, block quotes, background images, and gradients. They will use CSS to control page layout including creating flexible box layouts and newspaper style columns. They will also use CSS to create transitions and animations. The labs guide students through the process of creating a multiple page website with a consistent theme that includes tables, forms, and animated elements. Then they will complete a capstone project to demonstrate mastery of course objectives.	English
Akamai Customer Consulting and Support	Python Scripting Fundamentals	BEGINNER	10.2	Students will start with a brief discussion of the programming process and the history of Python, including fundamental rules for authoring Python code and Python syntax. Students will learn about variables, data types, functions, and arithmetic operators. Then they will master core concepts including using conditional statements, logical operators, identity operators, and loops. They will learn to use complex variable types including lists, tuples, sets, ranges and dictionaries. They will write code to process sequences, use nested sequences, and add loop control. Students will learn to structure code for reuse including defining, and calling their own functions, as well as returning data. They will learn to use Python to interact with files and directories, databases, and to create dynamic web content and handle web form data. Students will complete labs to develop four applications from scratch: an age calculator, a word guessing game, a lemonade stand game, and a text-based adventure game. Then students will complete a capstone project to demonstrate mastery of course objectives that includes writing the code to connect a web site to a backend database with code that creates uses, authenticates logins, and displays dynamic content.	English

Akamai Customer Consulting and Support	Networking Fundamentals	BEGINNER	7.6	Students start by learning basic network theory and terminology including network components, node functions, types of networks and network models. Students will gain an understanding of the Open Systems Interconnection (OSI) model and the TCP/IP Model including encapsulation and common network protocols. Students learn about data transmission methods and ethernet including CSMA/CD and CSMA/CA. The course covers wired and wireless networking standards, and networking hardware including switches and routers. Students will gain a thorough understanding of TCP/IP including binary numbers, CIDR notation, ANDing, and configuring routes in a network using routers and NAT routers. Students learn to configure DHCP and DNS, and then examine regulating traffic between network zones including implementing a DMZ, and using IDS/IPS technology, and configuring VPNs. The course includes a thorough discussion of troubleshooting wired and wireless networks including using packet sniffers. Students will use software that will allow them to simulate sophisticated networks to achieve practical experience. The course ends with a capstone that students will complete to demonstrate mastery of course objectives.	English

Akamai Network Engineering	Managing Relational Databases	BEGINNER	10.1	Students will learn about the structure and design of relational databases including primary and foreign key fields, one-to-many and one-to-one relationships. Students will learn about the Structured Query Language (SQL) and use SQL to examine the database structure. They will also learn to create and manage databases, tables, and records. The focus of the course is on data analysis. Students will start with basic SQL queries then learn to add conditional statements, and logical, comparison and arithmetic operators. Students will learn to query for a range of values, and to use pattern matching and regular expressions. Then they will progress to using multiple conditions, and complex criteria, adding functions to create calculated fields, retrieve unique records and aggregate data. Then students will learn to query multiple tables using joins, creating complex queries using subqueries, nested subqueries, and subqueries in the WHERE and FROM clauses. Students will use SQL to control the output of data including parsing text and numbers, grouping results and using ROLLUP. Students will perform labs that give practical experience and then they will complete a capstone project to demonstrate mastery of course objectives.	English
Akamai Network Engineering	Introduction to IT Security	BEGINNER	7.8	Students will learn about the security management process. They will examine risk and risk management, including quantitative and qualitative risk assessments. The course includes discussion of security control types and physical security controls. Students will explore all aspects of Identity and Access Management (IAM) including single-factor and multi-factor authentication, account and access control, single sign-on and federation. Students will learn to harden endpoint devices including mobile and IoT devices. Students explore cryptography including symmetric and asymmetric encryption, hashing and digital signatures, and using Public Key Infrastructure (PKI) to create and manage certificates. Students explore network security including defense in depth, firewalls, IDS/IPS, wireless security, remote access, and cloud computing. Students explore vulnerability management, ethical hacking, and compliance. Then they learn about attackers, social engineering, malware, software/network attacks, wireless and password attacks. Students learn about incident response, forensics, and planning for business continuity. Labs encourage students to apply security concepts to their personal lives, practice applying security to networks, and even include hacking and forensic simulations. At the end of the course, students will complete a capstone project to demonstrate mastery of course objectives and use for personal branding.	English

Akamai Network Engineering	Operating Systems Fundamentals	BEGINNER	8.4	Covers all basic functions in Linux. Students first learn about Linux distributions and Copyleft. Then they learn to use shell commands to query the system for basic information and to get help from the operating system. The course covers Linux file systems, including managing disks and directories, working with absolute and relative paths, and how to organize, backup and restore files. Students learn to work with text files from the shell and use expressions to search files, directories and file contents. Students also learn about managing users and groups including passwords and user profiles. Students use security principles to set permissions and ownership. Finally, students learn to manage jobs, processes, the boot process, and system settings including SELinux. Students will build their own Linux machine using virtualization and use the machine for all labs. At the end of the course, students will complete a capstone project to demonstrate mastery of course material.	English
Akamai Network Engineering	Python Scripting Fundamentals	BEGINNER	10.2	Students will start with a brief discussion of the programming process and the history of Python, including fundamental rules for authoring Python code and Python syntax. Students will learn about variables, data types, functions, and arithmetic operators. Then they will master core concepts including using conditional statements, logical operators, identity operators, and loops. They will learn to use complex variable types including lists, tuples, sets, ranges and dictionaries. They will write code to process sequences, use nested sequences, and add loop control. Students will learn to structure code for reuse including defining, and calling their own functions, as well as returning data. They will learn to use Python to interact with files and directories, databases, and to create dynamic web content and handle web form data. Students will complete labs to develop four applications from scratch: an age calculator, a word guessing game, a lemonade stand game, and a text-based adventure game. Then students will complete a capstone project to demonstrate mastery of course objectives that includes writing the code to connect a web site to a backend database with code that creates uses, authenticates logins, and displays dynamic content.	English

Akamai Network Engineering	Networking Fundamentals	BEGINNER	7.6	Students start by learning basic network theory and terminology including network components, node functions, types of networks and network models. Students will gain an understanding of the Open Systems Interconnection (OSI) model and the TCP/IP Model including encapsulation and common network protocols. Students learn about data transmission methods and ethernet including CSMA/CD and CSMA/CA. The course covers wired and wireless networking standards, and networking hardware including switches and routers. Students will gain a thorough understanding of TCP/IP including binary numbers, CIDR notation, ANDing, and configuring routes in a network using routers and NAT routers. Students learn to configure DHCP and DNS, and then examine regulating traffic between network zones including implementing a DMZ, and using IDS/IPS technology, and configuring VPNs. The course includes a thorough discussion of troubleshooting wired and wireless networks including using packet sniffers. Students will use software that will allow them to simulate sophisticated networks to achieve practical experience. The course ends with a capstone that students will complete to demonstrate mastery of course objectives.	English

IBM Project Manager	Introduction to Project Management	BEGINNER	5.3	Project management is a booming field with many opportunities for those with the appropriate skills. This course is designed for anyone interested in starting a career in this field and provides a comprehensive introduction to project management. \n\nToday's industries are increasingly becoming oriented around projects. As a result, more organizations need project management professionals and Agile Scrum Masters to help plan, manage, and execute these projects. By controlling various factors such as time and resources, project management enables organizations to increase the success rate of their projects, mitigate project risks, and reduce overall costs. \n\nIn this course, you will learn what project management is, its benefits, and challenges encountered by project managers. You will also learn how recent trends, such as remote work, Agile, and artificial intelligence, have re-shaped modern project management. \n\nThis course also addresses opportunities for different careers within project management. It will discuss jobs across different industries and experience levels, as well as the various technical and soft skills required for project management work. \n\nThroughout this course, you will learn through lectures, interviews with experienced project management professionals, readings, activities, and quizzes designed to teach you the fundamentals of project management. You will gain a range of technical and practical knowledge and get insights and guidance from experts in the field.	English
IBM Project Manager	Project Management Foundations, Initiation, and Planning	BEGINNER	9.3	To navigate today's complex and rapidly changing work environments, many organizations divide work into projects. Project management provides a structured approach to plan and manage projects in order to achieve on-time, within-budget, and scope as planned delivery. \n\nCompare and contrast predictive and adaptive project management models. Learn to avoid common causes of project failure. Investigate how to lead effective meetings and how motivating your team can lead to project success. Create essential documents required during the project initiation phase like the business case, project charter, project brief, stakeholder register, and stakeholder engagement plan. Prepare other project documents to help you scope a project and plan accurate project schedules and budgets. \n\nYou will gain practical experience with hands-on labs. Upon completion, you will have a portfolio of widely used project initiation and planning assets to demonstrate your skills to potential employers.\n \nThis course is set up to help you succeed as a project manager. It is well-suited for those looking to step up their careers or new graduates seeking to establish their project management careers.\n\nThis course is part of series of courses intended to help you prepare for CAPM and PMP certification exam.\n\nRECOMMENDED: It is good for everyone gearing toward a career in Project Management to have basic to intermediate skills in an Office Productivity Suite, such as Microsoft Office 365. We highly recommend enrolling in the SkillUp EdTech Office Productivity Software Specialization, which covers Word Processing, Spreadsheets, PowerPoint, Messaging, and Email.	English

| IBM Project Manager | Practice Exam for CAPM Certification | ADVANCED | 3.9 | Are you ready to ace the CAPM Exam and take a leap in your project management career? In this course you will learn about the Certified Associate Project Manager (CAPM) certification offered by the Project Management Institute (PMI) and have the opportunity to take our carefully designed practice exam. \n \nPreparing for the CAPM Exam can be overwhelming, but this course provides you with in-depth insight into the exam format, duration, coverage, and objectives. You'll gain a clear understanding of the exam's key topics, ensuring you maximize your study efforts.\n\nWe also share proven strategies to optimize your exam results. From time management techniques to tackling questions strategically, we provide tools and tips you need to achieve your best score.\n \nThen, leveraging the information gathered in course, your prior project management program work, and personal experience, you will take a 150-question mock exam, designed to prepare you to pass the real thing and gain your CAPM Certification.\n\nThis course assumes you are familiar with the project management knowledge that the CAPM exam tests. If you do not, we recommend you complete one of the following programs prior to taking this course: \n- IBM Project Management Professional Certificate \n- IBM IT Project Management Professional Certificate\n- SkillUp Modern Project management Specialization | English |
| IBM Project Manager | Introduction to Agile Development and Scrum | BEGINNER | 5.0 | Get started with using Agile Development and Scrum with this self-paced introductory course! After successfully completing this course, you will be able to embrace the Agile concepts of adaptive planning, iterative development, and continuous improvement - resulting in early deliveries and value to customers. \n\nYou will look at Scrum as a framework and learn how to apply it alongside Agile. You will also become familiar with related methodologies like Waterfall, Extreme Programming (XP), and Kanban. \n\nApply Agile practices derived from lean manufacturing concepts, like test-driven development. Learn how a scrum team functions. Also learn about the importance of Agile iterative planning and enable yourself to write good user stories and track your team's progress using a kanban board. \n\nCreate and refine a product backlog collaboratively with the team and the customer, in a flexible and blameless culture. You'll also learn how to use burndown charts, achieve sprint goals, and conduct the sprint review and retrospective. This approach will lead you to higher levels of efficiency, with the ability to plan and execute sprints with your development team, measuring success with actionable metrics. \n\nThis course is about more than facts and processes. It is about working collaboratively on a self-organizing team, coached by a scrum master, and building what is needed, rather than simply following a plan. Developed and taught by an experienced Agile practitioner, the course includes hands-on practice through realistic scenario-based labs using GitHub and ZenHub. \n\nThe course will benefit anyone who wants to get started with working the Agile way or transform the organizational culture to adopt and realize the benefits of Scrum. This includes Project Managers, Product Managers, and Executives. It is particularly suitable for IT practitioners such as software developers, development managers, and IT Scrum Masters. | English |

| IBM Project Manager | Project Management Capstone | ADVANCED | 3.9 | This capstone project course will give you the chance to practice the work that project managers do in real life when managing projects. You will assume the role of a project manager and gain hands-on experience managing a project from start to finish. \n\nYou will plan, execute, and close the project. By the end, you will have many artifacts that will showcase both your knowledge of predictive and adaptive methodologies, which can then be added to your portfolio to show employers. \n\nAs part of this course, you will produce common project deliverables. Artifacts you will create using a predictive methodology include a work breakdown structure, network diagram, budget, quality and communications management plans, and a risk register. Artifacts that showcase your adaptive methodology skills include user stories, examples of product and sprint backlogs, and a burndown chart analysis. You will also produce a project status report, a change form, and a closeout report. \n\nThis capstone course is a great way to build out your project management portfolio and showcase your skills to prospective employers. | English |
| IBM Project Manager | Project Management Communication, Stakeholders & Leadership | BEGINNER | 6.6 | Project management is a highly valued skill that provides a structured approach to managing projects. Communication, stakeholder management, leadership skills are core to any project manager's success. \n\nThis course is intended for anyone interested in project management, be it a beginner or an experienced professional looking to switch or advance their career in project management. \n\nIn this course, you will learn how to lead, communicate, and manage stakeholders as a project manager. This course will teach you how to cultivate a healthy project environment and review the benefits of empowering team members. You will learn different ways of communicating with team members across different types of stakeholders using appropriate communication mediums and channels. You will explore the leadership skills used to improve stakeholder engagement and facilitate successful projects from their inception through closing. \n\nThroughout this course, you will work with numerous hands-on labs and real-world examples to develop your communication, leadership, and stakeholder management skills.\n\nThis course is part of a series of courses that will help you prepare for certifications offered by the Project Management Institute (PMI) including Certified Associate of Project Management (PMI-CAPM) and Project Management Professional (PMI-PMP).\n\nRECOMMENDED: It is good for everyone gearing toward a career in Project Management to have basic to intermediate skills in an Office Productivity Suite, such as Microsoft Office 365. We highly recommend enrolling in the SkillUp EdTech Office Productivity Software Specialization, which covers Word Processing, Spreadsheets, PowerPoint, Messaging, and Email. | English |

| IBM Project Manager | Project Lifecycle, Information Sharing, and Risk Management | BEGINNER | 6.2 | Every project comes with risk. If risk occurs the project team operates in a reactive mode potentially moving towards project failure. As a project manager, you will need to be vigilant and constantly evaluate and mitigate potential risks. In this course, you will learn the compelling art of risk management throughout the project lifecycle while using information sharing techniques to keep all stakeholders informed and aligned. \n\nThis course introduces you to different phases in the project lifecycle, and explains the difference in the phases based on the selected project methodology. Additionally, you will have the opportunity to explore best practices for information sharing with project teams and external stakeholders while equipping yourself with effective information sharing techniques.\n\nThe course delves into the risk management lifecycle, from planning and identifying risks through to evaluation. You will also learn different strategies to respond to risks. You will learn about various tools, such as risk reports, risk registers, and the risk matrix, and the opportunity to apply your skills to create these artifacts for given project scenarios.\n\nThis course is set up to help you succeed as a project manager. It is well-suited for those looking to step up their careers or new graduates seeking to establish their project management careers.\n\nThis course is part of a series of courses that will help you prepare for certifications offered by the Project Management Institute (PMI) including Certified Associate of Project Management (PMI-CAPM) and Project Management Professional (PMI-PMP).\n\nRECOMMENDED: It is good for everyone gearing toward a career in Project Management to have basic to intermediate skills in an Office Productivity Suite, such as Microsoft Office 365. We highly recommend enrolling in the SkillUp EdTech Office Productivity Software Specialization, which covers Word Processing, Spreadsheets, PowerPoint, Messaging, and Email. | English |
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HRCI Human Resource Associate	Learning and Development	BEGINNER	7.7	This course presents an overview of best practices for creating effective training in your organization. You will learn different methods of identifying training needs and delivering training. You will also learn how to evaluate the effectiveness of training programs. \n\nBy the end of this course, you will be able to:\n● Create and deliver learning to your organization\n● Explain and propose different methods to access the processes and outcomes of training\n● Explain different ways to deliver training\n● Evaluate key metrics that will demonstrate training outcomes and results\n\nNo prior experience in Human Resources is needed to be successful in this course.	English
HRCI Human Resource Associate	Compensation and Benefits	BEGINNER	7.7	This course examines the intricacies of the total rewards package for employment. You will learn how to structure a compensation strategy and evaluate benefit trends in the market. You will also learn about different benefit types and options as well as various pay systems and HR technology.\n\nBy the end of this course, you will be able to:\n● Explain the most common theories and motivational principles associated with total rewards\n● Evaluate how your organization wants to structure compensation strategy\n● Explain how job evaluation techniques are used to align compensation strategy with actual pay\n● Explain different benefit types and options\n● Appraise different types of pay systems\n\nNo prior experience in Human Resources is needed to be successful in this course.	English

HRCI Human Resource Associate	Talent Acquisition	BEGINNER	10.3	This course focuses on all aspects of the talent acquisition process. You will learn how to forecast workforce needs, source and recruit talented candidates, and hire and onboard new employees.\n\nBy the end of this course, you will be able to:\n● Create a recruitment strategy\n● Perform a job analysis and write a job description\n● Explain the talent acquisition life cycle\n● Identify core elements of negotiation, job offers, and employment contracts\n● Implement best practices for employee onboarding\n\nNo prior experience in Human Resources is needed to be successful in this course.	English
HRCI Human Resource Associate	Employee Relations	BEGINNER	8.0	This course explores how to create and administer policies and procedures for an organization. You will evaluate the values and attitudes between the workforce and employees. You will learn performance methods for all levels of employees. \n\nBy the end of this course, you will be able to:\n● Create policies for the workforce and employees of an organization\n● Evaluate different attitudes and values between the workforce and organization\n● Summarize company culture and how it is monitored and how it evolves \n● Explain performance management concepts for all levels of employees\n● Outline organizational design principles and strategies for effectiveness\n\nNo prior experience in Human Resources is needed to be successful in this course.	English

| HRCI Human Resource Associate | Compliance and Risk Management | BEGINNER | 6.9 | This course introduces risk management and compliance strategy. You will examine risk assessment and learn how to have a risk management mindset. You will learn different types of compliance, including legal and safety compliance, and its role in operational policies. You will also explore the role Human Resources has in organizational restructuring.\n\nBy the end of this course, you will be able to:\n● Explain the criticality of compliance for the ongoing operations and sustainability of an organization\n● Explain, implement, and apply compliance for an organization\n● Explain and identify key laws and procedural requirements necessary for compliance\n● Explore HR's role in organizational restructuring such as in mergers, acquisitions, and rightsizing\n● Explain and identify key operational activities which require formal risk management policies and procedures \n\nNo prior experience in Human Resources is needed to be successful in this course. | English |
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AWS Cloud Technology Consultant	Skills for Working as an AWS Cloud Consultant	BEGINNER	1.8	Being a successful cloud consultant is finding the balance of soft skills and hard skills when investigating and solving customer problems. This course is designed to improve students' understanding of key soft skills necessary to become successful cloud consultants. \n\nThe course's first week provides foundational knowledge of what cloud consulting is and then dives into important skills for solving customers' business problems. During the second week, students learn how to work with customers (gather requirements, propose a solution, plan and build out the project, monitor progress, and conclude final tasks) and how different soft skills can help them throughout all stages of the process. The third week of the course focuses on helping students develop and maintain strong business relationships. The main emphasis of this week is on developing soft skills that are necessary to build relationships, earn trust, manage changes, establish a brand, and build a good reputation. Finally, in week 4, students receive different recommendations and techniques on how to design a plan to improve their soft skills and grow as a leader.	English
AWS Cloud Technology Consultant	Introduction to Information Technology and AWS Cloud	BEGINNER	3.7	Technology is omnipresent, but how did we get here? And what does the future hold for a world that's increasingly connected, mobile and data-rich? This course is intended to give learners enough technical context to understand how to build solutions in the cloud starting from zero technical knowledge. Before diving into the cloud, we will cover the basics of: how do computers work (including software and operating systems), an introduction to information technology, the basics of modern IT infrastructure, and the cloud careers that will be increasingly in-demand. We will then move into the world of internet connected networks (the Internet), covering local hosts, web servers, web applications, web security, the inner workings of a website and the differences between static and dynamic content. We'll close the course by introducing Cloud Computing, its role in our world, the differences between public, private and hybrid, and why APIs are so important.	English

AWS Cloud Technology Consultant	Developing Applications in Python on AWS	BEGINNER	2.7	This course gives you a thorough introduction to the python programming language. You'll start by learning the definition of python, its history, semantics, and how it works. The first week concludes by writing a python script to solve a problem. In Week 2, you'll learn about Serverless Architectures and understand the differences between microservices, service-oriented and monolith architectures. You'll build a microservices architecture by learning how to use the following tools: AWS Lambda, Amazon API Gateway, and Cloud9. It's then time to go deep with AWS Databases. You'll see Amazon RDS and Amazon DynamoDB in action, visualizing the important role they play in developing applications in python. The course's final week will cover application integration services. Amazon's Simple Notification Service (SQS), Simple Queue Service (SQS), and EventBridge take center stage as important "glue" components for scalable, cloud-based applications. You'll close the course with a hands-on project, writing some code to use some hardcoded data to write to dynamodb and then convert that into a lambda function.	English
AWS Cloud Technology Consultant	Automation in the AWS Cloud	BEGINNER	1.8	Automation in the Cloud can simplify processes, enable agility and scalability, and help you deploy faster. But how should you master these topics to enhance your career potential? The course kicks off by introducing automation in the cloud, comparing the differences between on-premises and cloud. We'll answer why automation is so powerful and you'll get hands-on by working with AWS CLI. Week 1 closes with automation with scripting by sharing examples of how automation helps and the benefits of using scripts. A focus on Automation isn't complete with an overview of Infrastructure as Code. You'll get introduced to Provisioning and Configuration Management and solve an automation problem with AWS CloudFormation. The instructors will then share some simple automation examples and how various tools can help you get the job done. In the course's final week, we'll cover the various AWS Services and features used for automation, how to scale resource management, and use the Systems Manager console and AWS Config for compliance.	English

| AWS Cloud Technology Consultant | Capstone: Following the AWS Well Architected Framework | BEGINNER | 1.8 | This course provides a thorough review of the AWS Well-Architected Framework to help you understand how to make informed decisions about your architecture in a cloud-native way and understand the impact of design decisions. By using the Well-Architected Framework, you can understand the risks in your architecture, and learn ways to mitigate them. \n\nIn the course, you'll walk through each of the framework's six pillars, which help you produce stable and efficient systems. The Operational Excellence pillar includes the ability to support development and run workloads effectively, gain insight into their operation, and continuously improve supporting processes and procedures to delivery business value. The Security pillar includes the ability to protect data, systems, and assets to take advantage of cloud technologies to improve your security. The Reliability pillar encompasses the ability of a workload to perform its intended function correctly and consistently when it's expected to. The Performance Efficiency pillar includes the ability to use computing resources efficiently to meet system requirements. The Cost Optimization pillar includes the ability to run systems to deliver business value at the lowest price point. The final pillar (Sustainability) addresses the long-term environmental, economic, and societal impact of your business activities. | English |
| AWS Cloud Technology Consultant | Providing Technical Support for AWS Workloads | BEGINNER | 2.5 | As a cloud consultant, you might be working with companies of various sizes. Based on a company's unique business needs, you might be responsible for evaluating their existing business solutions and offering more efficient cloud resources. In this course, you'll understand the types of services available and their capabilities and know how to appropriately map the right solution for each unique use case. You'll gain familiarity with the AWS cloud infrastructure, support methods, and mitigation techniques. The course begins with a review of AWS infrastructure, including a review of the foundational compute, networking, storage and database services. You'll then get introduced to the troubleshooting mindset and learn about the tools available and the importance of making a plan. You'll then get the details on troubleshooting with AWS services (Amazon EC2, Amazon Lambda, Amazon VPC) before closing the course with preventative controls and scenarios when using Amazon S3, Amazon RDS, AWS IAM, and AWS Organizations. By completion of this course, you'll be well-versed in listening to a customer's cloud technology concerns and how to best position the most efficient and cost-effective solution. | English |

| AWS Cloud Technology Consultant | DevOps on AWS and Project Management | BEGINNER | 2.2 | Curious about how software gets built, tested, and deployed? Do you wonder how a team of multiple people work on a code base? You've heard about DevOps, but are you sure you understand what it means? \n\nIf you've wondered about these questions, this course is for you. We'll cover the basic steps you need to take to dive into the wonderful world of DevOps and project management.\n\nIn Week 1, you'll learn about the definition and characteristics of a project. We will introduce project management best practices, including how to justify your project, developing a project summary and a project plan. The week will conclude with an overview of all phases of the software development lifecycle. The course continues with an overview of the pitfalls and perils of working without project management principles. We'll then introduce common project frameworks such as waterfall, agile, scrum and kanban. In Week 3, we'll define a Continuous Integration/Continuous Development pipeline, introduce source control and get hands-on by learning how AWS CodeCommit and AWS CodeBuild can help you when it is time to build. The course closes by highlighting the importance of testing and the various types of testing to consider. You'll learn when to deploy code and the different strategies that are available. A closing exercise will have you interacting with Cloud 9, CodeCommit, CodeBuild, CodeDeploy, CodePipeline. | English |
| AWS Cloud Technology Consultant | Data Analytics and Databases on AWS | BEGINNER | 2.5 | Data is everywhere. If you or your company don't know what data you have and what insights you can uncover through your data, you are at a competitive disadvantage. In this course, you'll get introduced to data analytics and the upside of data-driven decisions. You'll learn about the omnipresence of data in today's world and what it takes to start thinking and acting like a data analyst. Week 1 concludes by comparing and contrasting ETL (Extract, Transform, Load) and ELT(Extract, Load, Transform) and where data is transformed and how data warehouses retain data. Week 2 kicks off with an overview of data workflow and database foundations. The four vs (volume, velocity, variety and veracity) of data are explained along with walk-throughs of collecting, processing, and storing data. In the course's final week, you'll get briefed on some of the AWS services that can be leveraged for ETL. You'll extract data with Amazon API Gateway, process data with AWS Lambda, load data with Amazon RDS, and visualize data with Amazon QuickSight. There's the right tool for each unique data analysis task. | English |

AWS Cloud Technology Consultant	AWS Cloud Technical Essentials	BEGINNER	7.8	Are you in a technical role and want to learn the fundamentals of AWS? Do you aspire to have a job or career as a cloud developer, architect, or in an operations role? If so, AWS Cloud Technical Essentials is an ideal way to start. This course was designed for those at the beginning of their cloud-learning journey - no prior knowledge of cloud computing or AWS products and services required!\n\nThroughout the course, students will build highly available, scalable, and cost effective application step-by-step. Upon course completion, you will be able to make an informed decision about when and how to apply core AWS services for compute, storage, and database to different use cases. You'll also learn about cloud security with a review of AWS' shared responsibility model and an introduction to AWS Identity and Access Management (IAM). And, you'll know how AWS services can be used to monitor and optimize infrastructure in the cloud.\n\nAWS Cloud Technical Essentials is a fundamental-level course and will build your competence, confidence, and credibility with practical cloud skills that help you innovate and advance your professional future. Enroll in AWS Cloud Technical Essentials and start learning the technical fundamentals of AWS today!\n\nNote: This course was designed for learners with a technical background. If you are new to the cloud or come from a business background, we recommend completing AWS Cloud Practitioner Essentials (https://www.coursera.org/learn/aws-cloud-practitioner-essentials) before enrolling in this course.	English

| IBM and ISC2 Cybersecurity Specialist | Incident Response, BC, and DR Concepts | BEGINNER | 1.6 | Welcome to course 2 of 5 of this Specialization, Incident Response, BC, and DR Concepts.\n\nThis course focuses on the availability part of the CIA triad and the importance of maintaining availability of both human and system resources. These are usually accomplished through the implementation of Incident Response (IR), Business Continuity (BC) and Disaster Recovery (DR) plans. While these three plans may seem to overlap in scope, they are three distinct plans that are vital to the survival of any organization.\n\nAfter completing this course, the participant will be able to: \n\nExplain how organizations respond to, recover from and continue to operate during unplanned disruptions. \n\n- Recall the terms and components of incident response. \n- Summarize the components of a business continuity plan. \n- Identify the components of disaster recovery.\n- Practice the terminology of and review incident response, business continuity and disaster recovery concepts.\n\nAgenda\n\nCourse Introduction\nModule 1: Incident Response (IR)\nModule 2: Business Continuity (BC)\nModule 3: Disaster Recovery (DR)\nModule 4: Incident Response, Business Continuity, and Disaster Recovery Review\n\nThis training is for IT professionals, career changers, college students, recent college graduates, advanced high school students and recent high school graduates looking to start their path toward cybersecurity leadership by taking the Certified in Cybersecurity entry-level exam.\n\nThere are no prerequisites to take the training or the exam. It is recommended that candidates have basic Information Technology (IT) knowledge. No work experience in cybersecurity or formal education diploma/degree is required. | English |
| IBM and ISC2 Cybersecurity Specialist | Introduction to Cybersecurity Careers | BEGINNER | 3.6 | There is a great demand for cybersecurity professionals and expected to continue into the foreseeable future. Thus making it the right time to launch into a cybersecurity career. \n\nThis course gives an insight into the various career options in cybersecurity. It is designed to give you the knowledge required to find and secure the right career for you in the information security (Infosec) industry. The course begins by addressing the widening employment gap in cybersecurity, detailing the various roles and responsibilities associated with different career levels. \n\nYou will learn the importance of both technical and soft skills, providing a balanced approach to professional development. In addition, you will also become familiar with the most recognized certifications in the field provided by organizations such as CompTIA, ISC2 like A+ and CISSP and so on. \n\nThroughout this course you will hear from several cybersecurity experts sharing their insights and experiences on how to start a career in cybersecurity.\n\nThis course is suitable for anyone who aspires to launch a rewarding career in cybersecurity. It does not require any prior degree or cybersecurity background. | English |

IBM and ISC2 Cybersecurity Specialist	Access Control Concepts	BEGINNER	1.9	Welcome to course 3 of 5 of this Specialization, Access Control Concepts.\n\nIn Course 1, we introduced access control concepts. Now, we will take a more detailed look at the types of access control that every information security professional should be familiar with. We will discuss both physical and logical controls and how they are combined to strengthen the overall security of an organization. This is where we describe who gets access to what, why access is necessary, and how that access is managed.\n\nAfter completing this course, the participant will be able to: \n\nSelect access controls that are appropriate in a given scenario.\n\n- Relate access control concepts and processes to given scenarios.\n- Compare various physical access controls.\n- Describe logical access controls.\n- Practice the terminology of access controls and review concepts of access controls.\n\nAgenda\n\nCourse Introduction\nModule 1: Key Concepts \nModule 2: Administrative Controls\nModule 3: Physical Controls\nModule 4:Logical Controls\nModule 5: Controls Review\n\nThis training is for IT professionals, career changers, college students, recent college graduates, advanced high school students and recent high school graduates looking to start their path toward cybersecurity leadership by taking the Certified in Cybersecurity entry-level exam.\n\nThere are no prerequisites to take the training or the exam. It is recommended that candidates have basic Information Technology (IT) knowledge. No work experience in cybersecurity or formal education diploma/degree is required.	English
IBM and ISC2 Cybersecurity Specialist	Introduction to Software, Programming, and Databases	BEGINNER	4.6	Take the next step in your IT professional journey with this self-paced, beginner friendly course! This course covers the basics of software, cloud computing, web browsers, application development concepts, programming languages, and database fundamentals. \n\nYou will first be introduced to computing platforms and software applications. You'll learn about the software lifecycle, software compatibility across different platforms, and software versioning. You'll also learn about installing and managing web browsers, using extensions and plug-ins, and keeping them secure and updated. \n\nNext you will learn about basic programming concepts, coding logic, and the different programming languages like Python. You'll move on to data and database fundamentals and learn how to use, interface with, access and backup databases. \n\nAfter completing this course, you'll have a better grasp of software processes and feel more confident about using and securing applications. From mobile phone operating systems to workplace database applications, this course covers a wide range of software. Discover the benefits of cloud-based technologies and see how using the cloud can help businesses create and deploy applications faster. \n\nTo solidify your understanding and put your skills to the test, the course includes numerous hands-on labs. It ends with a final project where you'll showcase your newfound expertise and demonstrate your understanding of software, programming, and databases. \n\nEnroll now to take the next step in developing expertise in IT Fundamentals.	English

| IBM and ISC2 Cybersecurity Specialist | Network Security | BEGINNER | 3.3 | Welcome to course 4 of 5 of this Specialization, Network Security.\n\nIn this course, we will look at computer networking and securing the network. In today's world, the internet connects nearly everyone and everything, and this is accomplished through networking. While most see computer networking as a positive, criminals routinely use the internet, and the networking protocols themselves, as weapons and tools to exploit vulnerabilities and for this reason we must do our best to secure the network. We will review the basic components of a network, threats and attacks to the network, and learn how to protect them from attackers. Network security itself can be a specialty career within cybersecurity; however, all information security professionals need to understand how networks operate and are exploited to better secure them. \n\nAfter completing this chapter, the participant will be able to: \n\nExplain the concepts of network security. \n\n- Recognize common networking terms and models. \n- Identify common protocols and ports and their secure counterparts. \n- Identify types of network (cyber) threats and attacks. \n- Discuss common tools used to identify and prevent threats. \n- Identify common data center terminology. \n- Recognize common cloud service terminology. \n- Identify secure network design terminology. \n- Practice the terminology of and review network security concepts. \n\nAgenda\n\nCourse Introduction\nModule 1: Network Concepts and Models \nModule 2: Common Network Threats and Attacks\nModule 3: Network Security Infrastructure\nModule 4: Network Security Review\n\nThis training is for IT professionals, career changers, college students, recent college graduates, advanced high school students and recent high school graduates looking to start their path toward cybersecurity leadership by taking the Certified in Cybersecurity entry-level exam.\n\nThere are no prerequisites to take the training or the exam. It is recommended that candidates have basic Information Technology (IT) knowledge. No work experience in cybersecurity or formal education diploma/degree is required. | English |
| IBM and ISC2 Cybersecurity Specialist | Introduction to Networking and Storage | BEGINNER | 3.8 | Jumpstart your career in Information Technology (IT) with this beginner friendly, self-paced course! By taking this course you will enhance your base knowledge of essential skills in networking, storage, and system administration. \n\nYou'll first learn about networking fundamentals which include: network types, network cables, topologies, and models. Understand how data travels across a network, and discover how protocols and standards enable all network activity. Then, you'll learn how to set up and configure devices and cables for both wired and wireless networks. \n\nNext, you'll learn to diagnose and troubleshoot network connectivity issues and discover how to use command line utilities and network tools in Windows settings. \n\nAfter that, you'll identify different types of storage drives and discover the difference between short-term and long-term memory. You'll learn the features of local, offsite, and cloud storage and when to use each. And you'll investigate file, block, and object storage and work out which cloud provider solutions work best for different networking scenarios. \n\nVideos, practice activities, and virtual hands-on labs will help you develop and apply the skills you need to diagnose and repair basic networking and storage issues so you can keep users connected and their data accessible. \n\nAt the end of this course, you will complete a final quiz and assignment where you will demonstrate your understanding of the course content. | English |

IBM and ISC2 Cybersecurity Specialist	Introduction to Cloud Computing	BEGINNER	7.4	Start your cloud computing journey with this self-paced introductory course! Whether you need general cloud computing knowledge for school or business, or you are considering a career change, this beginner-friendly course is right for you. \n\nIn this course you'll learn about essential characteristics of cloud computing and emerging technologies supported by cloud. You'll explore cloud service models, including Infrastructure as a Service (IaaS), Platform as a Service (PaaS), Software as a Service (SaaS), and Public, Private, and Hybrid deployment models. \n\nDiscover the offerings of prominent cloud service providers AWS, Google, IBM, Microsoft, and others, and review cloud computing case studies. Learn about cloud adoption, blockchain, analytics, and AI. \n\nYou will learn about the many components of cloud computing architecture including datacenters, availability zones, virtual machines, containers, and bare metal servers. You will also familiarize yourself with different types of cloud storage options, such as Object Storage. \n\nYou'll gain foundational knowledge of emergent cloud trends and practices including Hybrid, Multicloud, Microservices, Serverless, DevOps, Cloud Native, Application Modernization, as well as learn about cloud security and monitoring. You'll also explore cloud computing job roles and possible career paths and opportunities. \n\nYou will complete a number of labs and quizzes throughout this course to increase your understanding of course content. At the end of the course, you will complete a final project where you will deploy an application to Cloud using a serverless architecture, a valuable addition to your portfolio. \n\nAfter this course, check out the related courses to help you towards your new career as a cloud engineer, full stack developer, DevOps engineer, cybersecurity analyst, and others.	English
IBM and ISC2 Cybersecurity Specialist	Security Operations	BEGINNER	3.1	Welcome to course 5 of 5 of this Specialization, Security Operations.\n\nThis course focuses our attention on the day-to-day, moment-by-moment active use of the security controls and risk mitigation strategies that an organization has in place. We will explore ways to secure the data and the systems they reside on, and how to encourage secure practices among people who interact with the data and systems during their daily duties. \n\nAfter completing this course, the participant will be able to: \n\nExplain concepts of security operations.\n\n- Discuss data handling best practices.\n- Identify important concepts of logging and monitoring.\n- Summarize the different types of encryption and their common uses.\n- Describe the concepts of configuration management.\n- Explain the application of common security policies.\n- Discuss the importance of security awareness training.\n- Practice the terminology of and review the concepts of network operations.\n\nAgenda\n\nCourse Introduction\nModule 1: Understanding Data Security and Encryption\nModule 2: Controls and Asset Management\nModule 3: Best Practice Security Policies\nModule 4: Understand Security Education Training and Awareness (SETA)\nModule 5: Security Operations Review\nFinal Assessment\n\nThis training is for IT professionals, career changers, college students, recent college graduates, advanced high school students and recent high school graduates looking to start their path toward cybersecurity leadership by taking the Certified in Cybersecurity entry-level exam.\n\nThere are no prerequisites to take the training or the exam. It is recommended that candidates have basic Information Technology (IT) knowledge. No work experience in cybersecurity or formal education diploma/degree is required.	English

IBM and ISC2 Cybersecurity Specialist	Cybersecurity Specialist Capstone	INTERMEDIATE	NOT CALIBRATED	With an increasing number of organizations implementing cybersecurity measures, this is a growing job market. The cybersecurity market is expected to reach $900 billion by 2032, as per Global Market Insights. Filling these jobs requires enhanced cybersecurity skills and certifications like Certified in Cybersecurity (CC) from ISC2. \n\nTargeted toward helping learners pursue a cybersecurity career, the goal of this capstone project is to help you apply your conceptual knowledge and skills to demonstrate your proficiency in developing a robust security plan to protect your systems, data, and network from cyber-attacks in a given scenario. \n\nIn addition to the project, an assessment similar to the Certified in Cybersecurity (CC) exam is part of the course. This gives you an opportunity to check your readiness for the exam. \n\nThe course will even prepare you for interviews for cybersecurity roles. \n\nSuccessful completion of the six modules will get you the Cybersecurity Specialist Professional Certificate (subject to completion of all previous courses), the confidence to take the certification exam, and applying for jobs!	English
IBM and ISC2 Cybersecurity Specialist	Introduction to Hardware and Operating Systems	BEGINNER	4.9	Get ready to enter the thriving field of Information Technology (IT), with job ready skills! This beginner friendly course provides the core hardware and operating system knowledge needed by anyone new to IT and computer hardware who wants to start a new career in technology, including IT Support, Networking, Cybersecurity, and Software Development. \n\nYou will first be introduced to computing fundamentals, the four functions of computing, and the benefits of computing. You will become knowledgeable of internal computer components, including motherboards, central processing units (CPUs), memory, hard drives, expansion slots, and others. Learn to identify interfaces, ports, connectors, and peripherals. \n\nYou will become familiar with tasks that IT professionals perform; including workstation procurement, workstation setup processes, configure commonly used operating system settings & screen capture commands, computer acquisition practices, and job-essential troubleshooting processes. \n\nBy the end of this course, you will become knowledgeable about hardware and operating systems, mobile operating systems, interfaces and connectors, Linux, and macOS. Throughout the course you will practice what you learn using interactive exercises and hands-on labs. At the end of the course, you will have the opportunity to complete a final project where you will apply your understanding of course content. \n\nThis course is also part of the series to help you prepare for CompTIA ITF+ and A+ certification exams.	English

| IBM and ISC2 Cybersecurity Specialist | Introduction to Cybersecurity Essentials | BEGINNER | 2.6 | With this beginner friendly course, learn fundamental Cybersecurity skills that are crucial for anyone using computing devices and connecting to the Internet. \n\nYou will first learn to recognize common security threats and risks that individuals and organizations may face, such as theft, tampering, and destruction of sensitive information. You'll then discover the characteristics of cyber-attacks and learn how you can employ best practices to guard against them. \n\nNext, you'll learn about the best practices against cyberattacks. These include using strong passwords, good password management, and multi-factor authentication. You'll learn ways in which you can strengthen your security plan with techniques like device hardening, encryption and more. \n\nYou'll then learn about safe browsing practices. You'll gain an understanding of why you must practice safe browsing; to protect yourself against hackers, phishing, identity theft, security leaks, privacy issues and more. You'll also explore methods for securing and managing confidential information. Then, discover how to configure browsers to help reduce security breaches. \n\nThroughout this course you will complete many hands-on labs which will enhance your understanding of course material. At the end of this course, you will have the opportunity to complete a final project where you will demonstrate your proficiency in cybersecurity. \n\nDesigned specifically for beginners and those who are interested in a Cybersecurity Specialist or Analyst roles as well as entry-level roles in Information Security (Infosec) engineering. This course dives into the world of cybersecurity to give you the critical skills employers need. It also supports the needs of technical and IT support roles, who can find themselves on the front lines of defense for cybersecurity issues. | English |
| IBM and ISC2 Cybersecurity Specialist | Security Principles | BEGINNER | 3.3 | Welcome to course 1 of 5 of this Specialization, Security Principles.\n\n\nAfter completing this course, the participant will be able to: \n\nDiscuss the foundational concepts of cybersecurity principles.\n\n- Recognize foundational security concepts of information assurance.\n- Define risk management terminology and summarize the process.\n- Relate risk management to personal or professional practices.\n- Classify types of security controls.\n- Distinguish between policies, procedures, standards, regulations and laws.\n- Demonstrate the relationship among governance elements.\n- Analyze appropriate outcomes according to the canons of the (ISC)2 Code of Ethics when given examples.\n- Practice the terminology and review security principles.\n\nAgenda\n\nCourse Introduction\nModule 1: Information Assurance \nModule 2: Risk Management Process \nModule 3: Security Controls\nModule 4: Governance\nModule 5: (ISC)2 Code of Ethics\nModule 6: Course Summary\n\nThis training is for IT professionals, career changers, college students, recent college graduates, advanced high school students and recent high school graduates looking to start their path toward cybersecurity leadership by taking the Certified in Cybersecurity entry-level exam.\n\nThere are no prerequisites to take the training or the exam. It is recommended that candidates have basic Information Technology (IT) knowledge. No work experience in cybersecurity or formal education diploma/degree is required. | English |

| Tableau Business Intelligence Analyst | Business Analysis Process | BEGINNER | 4.8 | The Business Analysis Process course will give you a foundational understanding of the process of business analysis and will introduce you to a framework that can be used within a variety of industries and organizations. You'll see how an analyst assesses a business problem, prepares business requirements, and implements a solution. You will learn how to identify stakeholders, to analyze them, and to define their role in a business analysis project. You'll also learn how to gather requirements from these stakeholders, analyze them, and create a business requirements document that conforms to industry best practices. Lastly, you'll explore the functions and practical uses of crafting visual models, gaining hands-on experience in creating common models used by business intelligence analysts.\n\nThis course is for anyone who is curious about entry-level roles that demand fundamental Tableau skills, such as business intelligence analyst or data reporting analyst roles. It is recommended (but not required) that you have some experience with Tableau Public, but even if you're new to Tableau Public, you can still be successful in this program.\n\nBy the end of the course, you will be able to:\n-Demonstrate an in-depth knowledge of the business analysis process.\n-Describe the methods used to identify stakeholders, and define their role in a business analysis project.\n-Describe the methods used for gathering requirements from stakeholders.\n-Create a business requirements document that conforms to industry best practices.\n-Create a visual model of a business process. | English |

Tableau Business Intelligence Analyst	Advanced Data Visualization with Tableau	BEGINNER	5.6	The Advanced Data Visualization with Tableau Course teaches you how to create advanced data visualizations such as dual-axis charts, bar-in-bar charts, and more. You will also learn how to customize and add complexity to your visualizations by incorporating the use of features such as maps, map customization, polygon spatial data, and more. These skills will allow you to effectively communicate insights to your stakeholders. \n\nThis course is for anyone who is curious about entry-level roles that demand fundamental Tableau skills, such as business intelligence analyst or data reporting analyst roles. It is recommended (but not required) that you have some experience with Tableau Public, but even if you're new to Tableau Public, you can still be successful in this program.\n\nBy the end of the course, you will be able to:\n-Create advanced data visualizations to communicate analytic insights to the intended stakeholders, such as dual-axis charts, bar-in-bar charts, and more.\n-Create and customize spatial analytics data visualizations to communicate insights to the intended stakeholders, such as maps, map customization, polygon spatial data, and more.\n-Add complexity to the visualizations produced in your analysis by incorporating detail and multilayers.	English
Tableau Business Intelligence Analyst	Data Analysis with Tableau	BEGINNER	7.7	The Data Analysis with Tableau Course will teach you how to manipulate and prepare data for analysis and reporting. You will also learn how to use the analytics features in Tableau to more effectively calculate analytics versus manual calculations. In this course, you will perform exploratory data analysis as well as create reports using descriptive statistics and visualizations. \n\nThis course is for anyone who is curious about entry-level roles that demand fundamental Tableau skills, such as business intelligence analyst or data reporting analyst roles. It is recommended (but not required) that you have some experience with Tableau Public, but even if you're new to Tableau Public, you can still be successful in this program.\n\nBy the end of the course, you will be able to:\n-Apply Tableau Public techniques to manipulate and prepare data for analysis.\n-Perform exploratory data analysis using Tableau and report insights using descriptive statistics and visualizations.\n-Identify the benefits of the analytics feature in Tableau by utilizing this tool versus manually calculating the analytics.	English

Tableau Business Intelligence Analyst	Communicating Data Insights with Tableau	BEGINNER	6.2	The Communicating Data Insights with Tableau Course focuses on reporting best practices using Tableau. You will learn how to create interactive dashboards and craft compelling presentations based on your data analysis. This course will also teach you best practices for data storytelling to convey business insights and provide stakeholders with the data to effectively explore and build their own insights. \n\nThis course is for anyone who is curious about entry-level roles that demand fundamental Tableau skills, such as business intelligence analyst or data reporting analyst roles. It is recommended (but not required) that you have some experience with Tableau Public, but even if you're new to Tableau Public, you can still be successful in this program.\n\nBy the end of the course, you will be able to:\n-Identify data storytelling best principles to convey business insights.\n-Build interactive dashboards and stories in Tableau Public.\n-Utilize data storytelling design principles to craft a compelling presentation so stakeholders can explore and disaggregate data to build their own insights.	English
Tableau Business Intelligence Analyst	Introduction to Business Analytics	BEGINNER	4.0	The Introduction to Business Analytics teaches you the foundational skills in Tableau and business analytics. You will be introduced to essential concepts like analytics and insights and the foundational steps of the business analysis process. You'll learn about the different types of analytics that businesses use, and you'll be introduced to a data analytics lifecycle framework. You'll also learn some of the foundational project management skills often used by analysts, and you'll arrive at a greater understanding of data literacy.\n\nThis course is for anyone who is curious about entry-level roles that demand fundamental Tableau skills, such as business intelligence analyst or data reporting analyst roles. It is recommended (but not required) that you have some experience with Tableau Public, but even if you're new to Tableau Public, you can still be successful in this program.\n\nBy the end of the course, you will be able to:\n-Demonstrate a foundational knowledge of the business analyst role.\n-Describe the data analytics lifecycle framework.\n-Explain the foundational project management topics and skills used by a BI analyst.\n-Describe data literacy and its importance for a BI analyst.	English

Tableau Business Intelligence Analyst	Introduction to Tableau	BEGINNER	5.8	The Introduction to Tableau course will give you an understanding of the value of data visualizations. You will learn how to preprocess data and how to combine data from multiple tables found within the same data source as well as other data sources in Tableau Public. You will have developed the skills to leverage data visualization as a powerful tool for making informed decisions.\n\nThis course is for anyone who is curious about entry-level roles that demand fundamental Tableau skills, such as business intelligence analyst or data reporting analyst roles. It is recommended (but not required) that you have some experience with Tableau Public, but even if you're new to Tableau Public, you can still be successful in this program.\n\nBy the end of the course, you will be able to:\n-Describe the value of data visualizations in the field of business analytics.\n-Preprocess data in Tableau Public.\n-Combine data from multiple tables found within the same data source as well as other data sources in Tableau Public.	English
Tableau Business Intelligence Analyst	Data Visualization with Tableau	BEGINNER	6.6	The Data Visualization with Tableau course provides you with a foundational understanding of presenting data through clear and easily comprehensible visuals using Tableau. Throughout the course, you'll explore a diverse range of visualization types and their ideal applications with the Tableau Public platform. By examining how experts leverage Tableau to create exceptional charts and maps, and acquiring the skills to craft interactive tables, you'll gain proficiency in essential visualization techniques. Understanding these techniques is crucial for those pursuing entry-level roles in the field of business analytics.\n\nThis course is for anyone who is curious about entry-level roles that demand fundamental Tableau skills, such as business intelligence analyst or data reporting analyst roles. It is recommended (but not required) that you have some experience with Tableau Public, but even if you're new to Tableau Public, you can still be successful in this program.\n\nBy the end of the course, you will be able to:\n-Identify the value and structure of Tableau Public as it applies to data visualization in the industry of business analytics.\n-Create data visualizations to communicate analytic insights to the intended audience, such as business stakeholders.\n-Build interactive tables by connecting, preparing, and customizing data in Tableau Public.	English

| Tableau Business Intelligence Analyst | Data Ecosystem | BEGINNER | 2.8 | The Data Ecosystem course will give you a foundational understanding of the entire data ecosystem, including data management. Specifically, this course shows how a business intelligence analyst would organize, access, and use data. You will learn about a variety of data sources along with the use and purpose of each type. Additionally, you'll learn about the importance of data quality and data governance in relation to effective data management. You'll also learn about the goals of data management and the principles that form the foundation of modern data architecture. Having a solid understanding of the data ecosystem is important for entry-level roles in business analytics.\n\nThis course is for anyone who is curious about entry-level roles that demand fundamental Tableau skills, such as business intelligence analyst or data reporting analyst roles. It is recommended (but not required) that you have some experience with Tableau Public, but even if you're new to Tableau Public, you can still be successful in this program.\n\nBy the end of the course, you will be able to:\n-Describe the purpose and applications of tabular data, databases, data warehouses, data lakes, and ETLs.\n-Describe the importance of data quality and data governance in relation to data management.\n-Identify the goals of data management.\n-Identify the principles that form the foundation of modern data architecture. | English |
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| IBM AI Product Manager | Generative AI: Foundation Models and Platforms | BEGINNER | 2.2 | This course is for all enthusiasts and practitioners with a genuine interest in the rapidly developing field of generative AI, which is transforming our world. \nThe course focuses on the core concepts and generative AI models that form the building blocks of generative AI. You will explore deep learning and large language models (LLMs). You will learn about GANs, VAEs, transformers, and diffusion models; the building blocks of generative AI. You will become familiar with the concept of foundation models. You will also learn about the capabilities of pre-trained models and platforms for AI application development and how foundation models use them to generate text, images, and code. You will explore different generative AI platforms like IBM watsonx and Hugging Face.   \n Hands-on labs, included in the course, provide an opportunity to explore the use cases of generative AI through the IBM generative AI classroom and platforms like IBM watsonx. In this course, you will explore different models, such as IBM Granite, OpenAI GPT, Google flan, and Meta Llama. You will also hear from expert practitioners about the capabilities, applications, and tools of generative AI. | English |
| IBM AI Product Manager | Generative AI: Prompt Engineering Basics | BEGINNER | 2.0 | This course is designed for everyone, including professionals, executives, students, and enthusiasts interested in leveraging effective prompt engineering techniques to unlock the full potential of generative artificial intelligence (AI) tools like ChatGPT. \n\nPrompt engineering is a process to effectively guide generative AI models and control their output to produce desired results. In this course, you will learn the techniques, approaches, and best practices for writing effective prompts. \n\nYou will learn about prompt techniques like zero-shot and few-shot, which can improve the reliability and quality of large language models (LLMs). You will also explore various prompt engineering approaches like Interview Pattern, Chain-of-Thought, and Tree-of-Thought, which aim at generating precise and relevant responses. \n\nYou will be introduced to commonly used prompt engineering tools like IBM watsonx Prompt Lab, Spellbook, and Dust. \n\nThe hands-on labs included in the course offer an opportunity to optimize results by creating effective prompts in the IBM Generative AI Classroom. You will also hear from practitioners about the tools and approaches used in prompt engineering and the art of writing effective prompts. | English |

| IBM AI Product Manager | Generative AI: Introduction and Applications | BEGINNER | 2.4 | This course is designed for everyone, including professionals, executives, students, and enthusiasts, interested in learning about generative AI and leveraging its capabilities in their work and lives. \n\nThis course is your first step toward understanding the capabilities of generative AI, powered by different models, including large language models (LLMs). \n\nIn this course, you will learn about the fundamentals and evolution of generative AI. You will explore the capabilities of generative AI in different domains, including text, image, audio, video, virtual worlds, code, and data. You will understand the applications of generative AI across different sectors and industries. You will learn about the capabilities and features of common generative AI models and tools, such as GPT, DALL-E, Stable Diffusion, and Synthesia.   \n\nHands-on labs, included in the course, provide an opportunity to explore the use cases of generative AI through IBM Generative AI Classroom and popular tools like ChatGPT. You will also hear from the practitioners about the capabilities, applications, and tools of generative AI. | English |
| IBM AI Product Manager | Generative AI: Supercharge Your Product Management Career | INTERMEDIATE | NOT CALIBRATED | As generative AI disrupts every business and industry, the product manager's role is also constantly transforming. This course enables product managers to expand their skill sets and give them an edge in their careers by leveraging AI.\n\nFor example, an AI product manager must understand generative AI tools and models, ethical considerations, and their practical application over and above product management skills.\n\nThis course demonstrates how you can use generative AI tools, frameworks, and platforms to significantly increase or "supercharge" your overall product management effectiveness. You will learn to harness the power of Generative AI to improve your ability to ideate, design, develop, launch, and deliver products that are a customer's delight while keeping ethical considerations in mind.\n\nThroughout this course, you will apply the concepts learned in hands-on labs and a final project. You will use Generative AI tools and models like ChatGPT, DALL-E, Gemini, CoPilot, etc.\n\nEnroll now and be part of that niche group of AI-enabled product managers! | English |

IBM AI Product Manager	Product Management: Building AI-Powered Products	BEGINNER	1.7	Generative AI is transforming how businesses operate. According to a McKinsey survey, over 78% of organizations are implementing AI, making its impact undeniable. Netflix's AI-driven recommendations feature is one such example. With companies leaning to develop AI-powered products, the AI product manager role is becoming increasingly critical.\n\nThis course covers the AI product manager's role in managing product lifecycles with AI. You will learn about the AI process and how to balance traditional and AI skills, build the right team, and communicate with stakeholders. You will also explore common challenges and reasons for AI project failures. Next, you will learn about the AI product development stages and product management phases. You will also understand AI's impact across industries and review real-world use cases, commercialization strategies, and future trends.\n\nThroughout this short self-paced course, you will be presented with instructional guidance through videos followed by hands-on labs to practice what you learn. You will also complete a final project to showcase your AI product manager skills.\n\nEnroll now to master AI product management!	English
IBM AI Product Manager	Introduction to Artificial Intelligence (AI)	BEGINNER	4.7	In this course you will learn what Artificial Intelligence (AI) is, explore use cases and applications of AI, understand AI concepts and terms like machine learning, deep learning and neural networks. You will be exposed to various issues and concerns surrounding AI such as ethics and bias, & jobs, and get advice from experts about learning and starting a career in AI. You will also demonstrate AI in action with a mini project.\n \nThis course does not require any programming or computer science expertise and is designed to introduce the basics of AI to anyone whether you have a technical background or not.	English

| IBM AI Product Manager | Product Management: An Introduction | BEGINNER | 5.1 | In today's fast-changing global market, companies need skilled product managers to develop breakthrough products or to expand their existing offerings. By the end of this course, you will understand what a product manager does in their role and the skills you need to become one. \n\nThis introductory course is a valuable investment for those looking to start a career in product management. \n\nLearn key product management concepts such as the product lifecycle, personas, value creation, and SWOT analysis. Gain an understanding of the job opportunities in product management and the industry-standard Guide to the Product Management Body of Knowledge, ProdBoK®. \n\nThe hands-on labs provide opportunities to investigate product management in simulated real-world settings. You'll hear from industry experts discussing their points of view, so you learn about their first-hand experiences. \n\nThis course is the first in a series of courses, which, once completed, will earn you the IBM Product Management Professional Certificate. Anyone can take this beginner-level course, which does not require any prior Product Management skills or background. | English |
| IBM AI Product Manager | Product Management: Developing and Delivering a New Product | BEGINNER | 5.1 | In this course you will be introduced to the steps required to effectively develop and launch a new product. These are important phases of the product management lifecycle and generally consume majority of the product manager's time. \n\nThe course highlights how resources are assigned to design, create, and test the new product. The course also walks you through best practices to ensure a smooth transition from product development to product launch and delivery. Then, once the lifecycle of the product has come to an end, you will learn about how the Product Manager oversees retirement processes for the product. \n\nThroughout this course, several product management experts will share their insights and experiences in product management. Practice quizzes and graded quizzes will test your knowledge throughout. Also, you will put what you have learned to the test in a series of practical exercises that culminates in a final project allowing you to demonstrate real-word product management expertise. \n\nThis course is suitable for anyone who aspires to apply for product management jobs. It requires no prior experience or knowledge of product management. | English |

IBM AI Product Manager	Product Management: Initial Product Strategy and Plan	BEGINNER	5.5	A Product Manager's role in an organization is to drive product strategy development and implementation. They effectively engage with stakeholders to transform how an organization does business through high-impact product solutions.\n\nThis course will provide an overview of the Product Management Lifecycle. You will then learn about the Product Conceive and Plan phases in detail. You will discover tools and techniques used in product concept identification. In addition, you will acquire skills to work with SWOT analysis and the Product Concept document. \n\nThe course also prepares you to establish a team and develop a project charter. Hands-on labs will help you practice working on market and solution analysis using a Market Requirement Document. You will also investigate a product business case and perform a financial analysis. \n\nThroughout this course, several product management experts will share their insights and experiences in product management. Practice quizzes and graded quizzes will test your knowledge. You will be able to apply the concepts learned in the course in a final project. \n\nThis course is suitable for anyone who aspires to apply for product management jobs and understand various lifecycles used in product management, including agile. It does not require any prior degree.	English
IBM AI Product Manager	Product Management: Foundations & Stakeholder Collaboration	BEGINNER	6.8	Product managers play a crucial role in driving the development and success of a product, serving as a critical link between customers, stakeholders, and the development team.\n\nThey are responsible for understanding market requirements, defining product objectives and features, and overseeing the entire product lifecycle from conception to its release.\n\nThis course will provide you with valuable skills in fostering productive collaborations, engaging stakeholders effectively, and enhancing communication abilities.\n\nYou will learn about Kotler's Five Levels of product and market segmentation. In addition, you'll explore the product manager's role in business development, SWOT analysis, and Porter's Five Forces Model for market assessment.\n\nThe course also helps you understand the concepts of innovation and ideation and equip you with crucial skills for effective communication and teamwork in the field of Product Management.\n\nThroughout this course, several product management experts will share their insights and experiences in product management. Practice quizzes and graded quizzes will test your knowledge. You will be able to apply the concepts learned in the course in a final project.\n\nThis course is suitable for anyone who aspires to apply for product management jobs. It requires no prior experience or knowledge of product management.	English

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IBM Product Manager	Introduction to Agile Development and Scrum	BEGINNER	5.0	Get started with using Agile Development and Scrum with this self-paced introductory course! After successfully completing this course, you will be able to embrace the Agile concepts of adaptive planning, iterative development, and continuous improvement - resulting in early deliveries and value to customers. \n\nYou will look at Scrum as a framework and learn how to apply it alongside Agile. You will also become familiar with related methodologies like Waterfall, Extreme Programming (XP), and Kanban. \n\nApply Agile practices derived from lean manufacturing concepts, like test-driven development. Learn how a scrum team functions. Also learn about the importance of Agile iterative planning and enable yourself to write good user stories and track your team's progress using a kanban board. \n\nCreate and refine a product backlog collaboratively with the team and the customer, in a flexible and blameless culture. You'll also learn how to use burndown charts, achieve sprint goals, and conduct the sprint review and retrospective. This approach will lead you to higher levels of efficiency, with the ability to plan and execute sprints with your development team, measuring success with actionable metrics. \n\nThis course is about more than facts and processes. It is about working collaboratively on a self-organizing team, coached by a scrum master, and building what is needed, rather than simply following a plan. Developed and taught by an experienced Agile practitioner, the course includes hands-on practice through realistic scenario-based labs using GitHub and ZenHub. \n\nThe course will benefit anyone who wants to get started with working the Agile way or transform the organizational culture to adopt and realize the benefits of Scrum. This includes Project Managers, Product Managers, and Executives. It is particularly suitable for IT practitioners such as software developers, development managers, and IT Scrum Masters.	English

IBM Product Manager	Product Management: Capstone Project	ADVANCED	3.4	In this comprehensive capstone course, you'll apply your product management skills to take on the role of a product manager and, using the scenario provided, produce 16 essential industry-recognized product management artifacts. \n \nYou'll create an Ansoff matrix, the product vision document, the Product Requirements Document (PRD), and the product roadmap. You'll also develop the business case and create the product narrative, the positioning statement, marketing collateral recommendations, a demand generation plan, and an end-of-life plan. \n \nYou'll submit your completed artifacts for peer review and grade your peers' submissions. These artifacts can help you demonstrate your readiness for entry-level product manager roles to future employers. \n\nThen, test your knowledge with questions similar to those you will experience when taking the Association of International Product Marketing & Management (AIPMM) Certified Product Manager (CPM) certification exam. \n \nTake advantage of the bonus module to get personal portfolio tips that can help you showcase your product management acumen to prospective employers. You'll also get helpful resume tips and advice about starting your product manager job search.	English

Keller Williams Real Estate Agent	Sales Fundamentals	BEGINNER	9.1	In the Sales Fundamentals course, you will build on and apply the previously learned concepts of lead generation and database management to obtain a deeper understanding of how real estate agents work with leads and how agents convert leads to potential, current, and future business. You will also learn how agents create a lasting client experience that fosters long-term relationships and continuously feeds new leads into their business. Additionally, you will explore the opportunity to grow a business with the rental market.\n\nBy the end of this course, you'll be able to explain how real estate agents:\n\n1. Generate leads through a variety of methods and convert those leads to appointments.\n2. Manage leads in a database.\n3. Construct a customer experience centered around business growth.\n4. Compose brand standards that enhance the customer experience. \n5. Grow a real estate business with a variety of different referral types. \n6. Leverage the business opportunities of working with rental properties and leases.	English
Keller Williams Real Estate Agent	The Principles of Real Estate	BEGINNER	11.1	This course is the first in a series of five courses designed to equip you with the knowledge and skills for achieving a successful career in real estate. In the Principles of Real Estate course, you will discover the day-to-day tasks of a real estate agent and how those tasks translate into successfully closed real estate transactions. You will also learn how a real estate agent gets paid, finds homes to sell, and identifies prospective buyers. Additionally, you will learn the importance of establishing and maintaining relationships that can impact a real estate business.\n\nBy the end of this course, you'll be able to explain how real estate agents:\n\n1. Define their job tasks and duties.\n2. Receive payment for real estate services. \n3. Identify and prioritize day-to-day tasks.\n4. Analyze, interpret, and reframe market data and communicate its story to potential clients. \n5. Generate leads through a variety of methods to grow their business. \n6. Build, use and manage a database.	English

| Keller Williams Real Estate Agent | Manage a Real Estate Business | BEGINNER | 4.8 | The Manage a Real Estate Business course teaches you relevant real estate laws and their potential impact on your licensed real estate agent business. Throughout this course, you will acquire the skills needed to establish a strong foundation for a financially sound business, including the development of best practices. Additionally, you will dig into effective organizational and administrative strategies essential for business ownership. Lastly, this course will encourage you to reflect on your individual journey in real estate, aligning your personal goals with the various career options available in the field.\n\nBy the end of this course, you'll be able to explain how real estate agents:\n\n1. Adhere to relevant real estate laws.\n2. Build a financially sound real estate business \n3. Create organizational office and administrative systems for business success.\n4. Employ personal development strategies for achieving a thriving real estate career.\n5. Obtain a real estate license. | English |
| Keller Williams Real Estate Agent | Establish Clients for Life with Buyers | BEGINNER | 7.9 | The Establish Clients for Life with Buyers course explores the comprehensive approach that real estate agents take when working with buyers. You will learn how to generate buyer leads, conduct property showings, and nurture client relationships beyond the transaction's conclusion, and all the essential steps in between. \n\nBy the end of this course, you'll be able to explain how real estate agents:\n\n1. Manage the entire buyer lifecycle, from lead to closed contract.\n2. Find buyer leads and how they convert the leads to appointments.\n3. Plan and conduct buyer consultations that end with signed buyer representation agreements.\n4. Show homes to buyers.\n5. Prepare offers, negotiate offers, and get offers accepted. \n6. Manage the post-closing process. | English |

| Keller Williams Real Estate Agent | Establish Clients for Life with Sellers | BEGINNER | 6.6 | In the Establish Clients for Life with Sellers course, you will gain insight into a real estate agent's comprehensive approach to working with sellers. This includes generating seller leads, mastering the art of conducting a listing consultation, navigating the listing selling process, and nurturing client relationships beyond the transaction's conclusion. \n\nBy the end of this course, you'll be able to explain how real estate agents:\n\n1. Execute the process of listing and selling a home.\n2. Find seller leads and convert the leads to appointments.\n3. Conduct listing consultations that end with a signed listing agreement.\n4. Market homes to get them sold. \n5. Make, receive, present, and negotiate offers for listings. \n6. Manage the post-closing process. | English |

IBM Business Intelligence (BI) Analyst	Statistical Analysis Fundamentals using Excel	INTERMEDIATE	4.9	This course is aimed at familiarizing Data and Business professionals with the basic concepts of statistical analysis and methods used for data-driven decision-making.\n\nAfter completing this course, you will be able to apply descriptive and inferential analysis methods, use data visualization methods to communicate data, apply concepts of probability in real-life scenarios, and apply regression techniques to predict trends. \n\nThe course takes a hands-on approach to statistical analysis using Microsoft Excel and uses examples to illustrate the concepts to help you gain the foundational knowledge of statistical techniques needed to solve business intelligence (BI) problems. \n\nA hands-on project will provide you an opportunity to apply the concepts to a real-life scenario involving data-driven decision-making and an understanding of basic statistical thinking and reasoning. \n\nThis course is suitable for professionals or students who aspire to embark on a career in the BI or Data Analytics fields by equipping them with the crucial skills and knowledge in statistical analysis. It is expected that learners be familiar with Excel/spreadsheet basics and high school mathematics prior to starting this course.	English
IBM Business Intelligence (BI) Analyst	Business Intelligence (BI) Essentials	BEGINNER	7.6	This course provides a comprehensive introduction to business intelligence (BI), its key concepts, components, and the benefits and challenges of implementing BI solutions. It also discusses career opportunities and roles available in the BI arena and the skills and qualifications required.\n\nYou will also gain insight into the data ecosystem, BI analytics landscape, data repositories, and the extract, transform, and load (ETL) process. Additionally, you will be introduced to the role of statistical analysis in mining and visualizing data to identify patterns and trends and how to weave a compelling story with data.\n\nThe course offers practical exposure with hands-on activities and a final project that enables you to apply your knowledge in real-world scenarios. This specialized program is tailored for individuals interested in pursuing a career as a BI analyst, and no prior data analytics experience or degree is required to take this course.	English

IBM Business Intelligence (BI) Analyst	Data Visualization and Dashboards with Excel and Cognos	BEGINNER	5.5	Learn how to create data visualizations and dashboards using spreadsheets and analytics tools. This course covers some of the first steps for telling a compelling story with your data using various types of charts and graphs. You'll learn the basics of visualizing data with Excel and IBM Cognos Analytics without having to write any code. \n\nYou'll start by creating simple charts in Excel such as line, pie and bar charts. You will then create more advanced visualizations with Treemaps, Scatter Charts, Histograms, Filled Map Charts, and Sparklines. Next you'll also work with the Excel PivotChart feature as well as assemble several visualizations in an Excel dashboard. \n\nThis course also teaches you how to use business intelligence (BI) tools like Cognos Analytics to create interactive dashboards. By the end of the course you will have an appreciation for the key role that data visualizations play in communicating your data analysis findings, and the ability to effectively create them. \n\nThroughout this course there will be numerous hands-on labs to help you develop practical experience for working with Excel and Cognos. There is also a final project in which you'll create a set of data visualizations and an interactive dashboard to add to your portfolio, which you can share with peers, professional communities or prospective employers.	English
IBM Business Intelligence (BI) Analyst	Excel Basics for Data Analysis	BEGINNER	7.6	Spreadsheet tools like Excel are an essential tool for working with data - whether for data analytics, business, marketing, or research. This course is designed to give you a basic working knowledge of Excel and how to use it for analyzing data. \n \nThis course is suitable for those who are interested in pursuing a career in data analysis or data science, as well as anyone looking to use Excel for data analysis in their own domain. No prior experience with spreadsheets or coding is required - all you need is a device with a modern web browser and the ability to create a Microsoft account to access Excel online at no cost. If you have a desktop version of Excel, you can also easily follow along with the course. \n\nThroughout this course, you'll gain valuable experience working with data sets and spreadsheets. We'll start by introducing you to spreadsheets like Microsoft Excel and Google Sheets, and show you how to load data from multiple formats. From there, you'll learn how to perform basic data wrangling and cleansing tasks using functions, and expand your knowledge of data analysis through the use of filtering, sorting, and pivot tables. \n \nThere is a strong focus on practice and applied learning in this course. With each lab, you'll have the opportunity to manipulate data and gain hands-on experience using Excel. You'll learn how to clean and format your data efficiently, and convert it into a pivot table to make it more organized and readable. The final project will allow you to showcase your newly acquired data analysis skills by working with real data sets and spreadsheets. \n \nBy the end of this course, you'll have a solid foundation in using Excel for data analysis. You'll have worked with multiple data sets and spreadsheets, and will have the skills and knowledge needed to effectively clean and analyze data without having to learn any code. So let's get started!	English

| IBM Business Intelligence (BI) Analyst | Getting Started with Data Warehousing and BI Analytics | INTERMEDIATE | 7.0 | Kickstart your Data Warehousing and Business Intelligence (BI) Analytics journey with this self-paced course. You will learn how to design, deploy, load, manage, and query data warehouses and data marts. You will also work with BI tools to analyze data in these repositories. \n\nYou will begin this course by understanding different kinds of analytics repositories including data marts, data warehouses, data lakes, data lakehouses, and data reservoirs, and their functions and uses. They are designed to enable rapid business decision making through accurate and flexible reporting and data analysis. \n\nA data warehouse is one of the most fundamental business intelligence tools in use today, and one that successful Data Engineers must understand. In this course, you will learn to design, model and implement data warehouses and explore data-warehousing architectures such as Star and Snowflake schemas. You will also learn how to populate data warehouses using ETL and ELT processes, verify data, query data and how to use Cubes, Rollups, and materialized views/tables. \n\nYou will become familiar with different BI tools used by experts in the industry such as IBM Cognos Analytics, Tableau, and Microsoft PowerBI. You will also use a BI tool to create data visualizations and build interactive dashboards to gain insights from data. \n\nThe hands-on labs in this course will enable you to apply what you learn and gain a practical knowledge of Data Warehousing and BI Analytics. You will work with repositories like MySQL, PostgreSQL, and IBM Db2. You will also use BI tools like Cognos Analytics. At the end of this course, you will complete a project to demonstrate the skills you acquired in each module. | English |
| IBM Business Intelligence (BI) Analyst | Introduction to Relational Databases (RDBMS) | BEGINNER | 6.4 | Are you ready to dive into the world of data engineering? In this beginner level course, you will gain a solid understanding of how data is stored, processed, and accessed in relational databases (RDBMSes). You will work with different types of databases that are appropriate for various data processing requirements. \n\nYou will begin this course by being introduced to relational database concepts, as well as several industry standard relational databases, including IBM DB2, MySQL, and PostgreSQL. Next, you'll utilize RDBMS tools used by professionals such as phpMyAdmin and pgAdmin for creating and maintaining relational databases. You will also use the command line and SQL statements to create and manage tables. \n\nThis course incorporates hands-on, practical exercises to help you demonstrate your learning. You will work with real databases and explore real-world datasets. You will create database instances and populate them with tables and data. \n\nAt the end of this course, you will complete a final assignment where you will apply your accumulated knowledge from this course and demonstrate that you have the skills to: design a database for a specific analytics requirement, normalize tables, create tables and views in the database, load and access data. \n\nNo prior knowledge of databases or programming is required. \n\nAnyone can audit this course at no-charge. If you choose to take this course and earn the Coursera course certificate, you can also earn an IBM digital badge upon successful completion of the course. | English |

| IBM Business Intelligence (BI) Analyst | SQL: A Practical Introduction for Querying Databases | BEGINNER | 3.9 | Much of the world's data lives in databases. SQL (or Structured Query Language) is a powerful programming language that is used for communicating with and manipulating data in databases. A working knowledge of databases and SQL is a must for anyone who wants to start a career in Data Engineering, Data Warehousing, Data Analytics, Data Science or Business Intelligence. The purpose of this course is to help you learn and apply foundational and intermediate knowledge of the SQL language, and become familiar with many relational database (RDBMS) concepts along the way.\n\nYou will start with performing basic Create, Read, Update and Delete (CRUD) operations using CREATE, SELECT, INSERT, UPDATE and DELETE statements. You will then learn to filter, order, sort, and aggregate data. You will work with functions, perform sub-selects and nested queries, as well as JOIN data in multiple tables. You will also work with VIEWS, transactions and create stored procedures.\n\nThe emphasis in this course is on hands-on, practical learning. As such, you will work with real database systems, use real tools, and real-world datasets. You will create a database instance in the cloud. Through a series of hands-on labs, you will practice building and running SQL queries. At the end of the course you will apply and demonstrate your skills with a final project.\n\nThe SQL skills you learn in this course will be applicable to a variety of RDBMSes such as MySQL, PostgreSQL, IBM Db2, Oracle, SQL Server and others.\n\nNo prior knowledge of databases, SQL or programming is required, however some basic data literacy is beneficial. | English |