



DISTANCE LAB PILOT: REMOTE LEARNING OPPORTUNITIES AND SKILLS FULFILMENT

Coursera online learning platform



University of Latvia Dāvis Vītols, Zane Zeibote



Contents

1. Coursera platform	1
1.1. General information about the platform	1
2. Artificial Intelligence and Machine Learning	3
2.1. AI For Business Specialization by the University of Pennsylvania	3
2.2. Machine Learning Specialization	4
2.3. Natural Language Processing Specialization	5
2.4. Machine Learning Engineering for Production (MLOps) Specialization	6
3. Data analysis and visualization tools	7
3.1. Data Analysis and Visualization Foundations Specialization	7
3.2. Business Statistics and Analysis Specialization	8
3.3. Data Analysis with R Specialization	9
4. Programming skills	
4.1. Python for Everybody Specialization	
4.2. Coding for Everyone: C and C++ Specialization	
4.3. Java Programming and Software Engineering Fundamentals Specialization	
4.4. Learn SQL Basics for Data Science Specialization	
5. Automation for business processes	
5.1. Implementing RPA with Cognitive Automation and Analytics Specialization	
5.2. Robotic Process Automation (RPA) Specialization	15
5.3. Automation for Business	
6. Big data and big data analysis	
6.1.Big Data Specialization	
6.2. Modern Big Data Analysis with SQL Specialization	
6.3. Software Architecture for Big Data Specialization	
7. Online marketing tools	
7.1. Digital Marketing Specialization	
7.2. Search Engine Optimization (SEO) Specialization	21
7.3. Introduction to Social Media Marketing	22
8. Web Development	23
8.1. Web Design for Everybody: Basics of Web Development & Coding Specialization	23
8.2. Meta Front-End Developer Professional Certificate	24
8.3. Meta Back-End Developer Professional Certificate	25



aimer





1. Coursera platform

1.1. General information about the platform

<u>Coursera</u> is an online learning platform that provides a wide range of courses for anyone to learn at their own pace. The platform was first launched in 2012 and since then it has become the global leader in online learning courses with over 7,000 courses available. Coursera collaborates with top universities and experts to create high-quality courses that feature interactive content and peer-reviewed assignments. Besides, one can enhance their learning experience by participating in community discussion forums and live events.



1.1.1. Purpose and Objective

Coursera was founded with a vision to make education more affordable as compared to traditional methods and accessible to everyone from anywhere. The platform offers a wide variety of courses, specializations, professional certificates, and degrees from top universities and organizations worldwide.

1.1.2. Benefits for applicants

- Many courses and specializations on Coursera are designed to equip learners with the skills needed in the job market.
- Accessible from anywhere from a computer/smartphone/tablet as long as there is an internet connection.
- Learning at own pace and own schedule.
- Courses for various levels of topics.
- Certification after completion of a course, specialization, and degree learning paths.
- High quality content of courses developed by professionals.
- Possibility to access course materials and complete courses free of charge.

1.1.3. Costs

Coursera offers a 7-day free trial that grants access to all courses. After the end of the free trial, you can select your subscription plan:

	Single learning program	Coursera Plus Monthly	Coursera Plus Annual
Learning possibilities	Single selected course	Access to 7,000+ courses and specializations	Access to 7,000+ courses and specializations
Certification	Single certificate	Unlimited certificate amount	Unlimited certificate amount
Costs	45-73 euro/ Month	54 euro/month	370 euro/year upfront expense
Extras		Participate in 1,000 applied projects.	Participate in 1,000 applied projects.
		Possibility to obtain	Possibility to obtain
		certificates from <u>Google</u> ,	certificates from <u>Google</u> ,



	Facebook and other industry	Facebook and other industry
	leaders.	leaders.

1.1.4. Application process

To start the learning journey in Coursera, creating a personal profile is necessary, which can be done on the <u>sign-up page</u>. You can use your email, Google or Facebook account to create a profile.

After the signing up process, you can start your free 7-day trial.

To explore and find relevant courses for you, search in the taskbar for the exact topic of interest or start exploring the available courses from the **Explore bar** (see picture below).



If you want to browse from all available courses go to the <u>Browse all page</u>.

At the top right corner of the Coursera main page, you can access information about courses that you have enrolled in through *My Courses*, edit your profile and information about yourself on the Coursera page through *Profile*, see all the purchases and subscriptions through *My Purchases*, edit and update information about your account details and preferences through *Settings*, check information about enrolled courses, specialisations and degrees through *Updates*, see all your successfully finished learning paths through *Accomplishments*, use Coursera *help centre* to find or ask any relevant question.

In the following sections, you can find information about the learning courses that are best rated and most popular among topics of Artificial Intelligence, data and business analysis, programming languages, business process automation, big data and big data analysis, online marketing tools, and website creation.

English ∨	¢	D ^
My Courses		
Profile		
My Purchase	S	
Settings		
Updates		
Accomplishm	nents	
Help Center		
Log Out		



2. Artificial Intelligence and Machine Learning

2.1. AI For Business Specialization by the University of Pennsylvania

2.1.1. What the specialization is about

<u>Al For Business Specialization</u> developed by one of the top Universities of the USA, the University of Pennsylvania will introduce participants to possibilities that AI offer to support businesses from various aspects.



2.1.2. For whom it is and its difficulty, benefits of the specialization

The course is for beginners with little to no experience who want to learn AI, machine learning and big data fundamentals, and how to apply them to support your business.

By the end of this course, you will have an understanding of ethical AI, and the relationship between data analytics, AI and ML. More specifically, you will understand how to use AI, ML and data analytics for marketing, Finance, People management, and governance.

2.1.3. Brief content of the specialization

The specialization is divided into 4 courses:

- AI Fundamentals for Non-Data Scientists.
- AI Applications in Marketing and Finance.
- AI Applications in People Management.
- AI Strategy and Governance.

2.1.4. Duration of the course

The course is estimated to take 10 hours per week for a month to complete.



2.2. Machine Learning Specialization

2.2.1 What the specialization is about

<u>The Machine Learning Specialization</u> is an online program developed by Standford University together with DeepLearning.Ai that teaches the basics of machine learning and how to use it in real-world AI applications.

2.2.2. For whom it is and its difficulty, benefits of the specialization

The course is for beginners who know basic level coding (for loops, functions, if/else statements) & high school-level math (arithmetic, algebra).

After completion of the course, you will be able to build ML models, apply unsupervised learning techniques for your model, build neural networks, and more.

2.2.3. Brief content of the specialization

The specialization is divided into 3 course series:

- Supervised Machine Learning: Regression and Classification.
- Advanced Learning Algorithms.
- Unsupervised Learning, Recommenders, Reinforcement Learning.

2.2.4. Duration of the course

The course is estimated to take 10 hours per week for two months to complete.



2.3. Natural Language Processing Specialization

2.3.1 What the specialization is about

<u>Natural Language Processing Specialization</u> is designed to give participants information and practical tasks to learn about the subcategory of AI, Natural Language Processing (NLP). This

technology is critical for effectively analysing massive quantities of unstructured, text-heavy data, and is one of the most widely applied areas of machine learning.

2.3.2. For whom it is and its difficulty, benefits of the specialization

This is an intermediate-level specialization for those who have a working knowledge of machine learning, intermediate Python experience including DL frameworks & proficiency in calculus, linear algebra, & statistics.

After course completion you will be able to:

- Use logistic regression, naïve Bayes, word veg, hidden Markov models, and word embeddings to autocorrect misspelt words, autocomplete partial sentences, and identify part-of-speech tags for words.
- Use dense and recurrent neural networks, LSTMs, GRUs, and Siamese networks in TensorFlow and Trax to perform advanced sentiment analysis, text generation, named entity recognition, and to identify duplicate questions.
- Use encoder-decoder, causal, and self-attention to perform advanced machine translation of complete sentences, text summarization, question-answering, and to build chatbots. Learn T5, BERT, transformer, reformer, and more.

2.3.3. Brief content of the specialization

The specialization is divided into 4 courses:

- Natural Language Processing with Classification and Vector Spaces.
- Natural Language Processing with Probabilistic Models.
- Natural Language Processing with Sequence Models.
- Natural Language Processing with Attention Models.

2.3.4. Duration of the course

It is estimated that the course takes 3 months at 10 hours per week of practice and learning to complete.





2.4. Machine Learning Engineering for Production (MLOps) Specialization

2.4.1 What the specialization is about

<u>Machine Learning Engineering for Production (MLOps) Specialization</u> is for those who want to become machine learning experts and be able to conceptualize, build, and maintain integrated systems that continuously operate in production.

2.4.2. For whom it is and its difficulty, benefits of the specialization.

This is an advanced-level specialization, and it is recommended to have knowledge in AI/ deep learning, intermediate Python skills, and experience with any deep learning framework (PyTorch, Keras, or TensorFlow).

After completion of the specialization, you will be able to:

- Design an ML production system end-to-end: project scoping, data needs, modeling strategies, and deployment requirements.
- Establish a model baseline, address concept drift, and prototype how to develop, deploy, and continuously improve a production ML application.
- Build data pipelines by gathering, cleaning, and validating datasets.
- Implement feature engineering, transformation, and selection with TensorFlow Extended.
- Establish data lifecycle by leveraging data lineage and provenance metadata tools and follow data evolution with enterprise data schemas.
- Apply techniques to manage modelling resources and best serve offline/online inference requests.
- Use analytics to address model fairness, and explainability issues, and mitigate bottlenecks.
- Deliver deployment pipelines for model serving that require different infrastructures.
- Apply best practices and progressive delivery techniques to maintain a continuously operating production system.

2.4.3. Brief content of the specialization

The specialization is divided into 4 courses:

- Introduction to Machine Learning in Production.
- Machine Learning Data Lifecycle in Production.
- Machine Learning Modeling Pipelines in Production.
- Deploying Machine Learning Models in Production.

2.4.4. Duration of the course

It is estimated that the course takes 2 months at 10 hours per week of practice and learning to complete.



🕑 DeepLearning.Al



3. Data analysis and visualization tools

3.1. Data Analysis and Visualization Foundations Specialization

3.1.1. What the specialization is about

Data Analysis and Visualization Foundations Specialization is designed to provide participants with basic knowledge of Excel and Cognos applications. This Specialization is designed for learners interested in starting a career in the field of Data or Business Analytics.



Data Analysis and Visualization Foundations

coursera

3.1.2. For whom it is and its difficulty, benefits of the specialization

To participate in the course, you do not need any prior experience in data analytics. The course will equip participants with the knowledge to explain the basic functionality of spreadsheets and utilize Excel to perform a variety of data analysis tasks, list various types of charts and plots and create them, describe the data ecosystem, and tasks a Data Analyst performs.

3.1.3. Brief content of the specialization

The specialization is divided into 4 courses:

- Introduction to Data Analytics.
- Excel Basics for Data Analysis.
- Data Visualization and Dashboards with Excel and Cognos.
- Assessment for Data Analysis and Visualization Foundations.

3.1.4. Duration of the specialization

To complete the specialization, it is estimated to take the learning of 10 hours a week for 1 month.

3.2. Business Statistics and Analysis Specialization

3.2.1. What the specialization is about

Business Statistics and Analysis Specialization developed by Rice University is one of the best-rated specializations among those that focus on beginnerlevel data and business analysis. The content and practical tasks facilitate a basic understanding of business data analysis tools and techniques.





This course is for beginners with no experience in data analysis. This course is for beginners with no experience in data analysis.

After completion of the specialization, you will have knowledge in essential spreadsheet functions, descriptive business data measures, data modelling, basic probability concepts, linear regression models and more.

3.2.3. Brief content of the specialization

The specialization is divided into 5 courses:

- Introduction to Data Analysis Using Excel.
- Basic Data Descriptors, Statistical Distributions, and Application to Business Decisions.
- Business Applications of Hypothesis Testing and Confidence Interval Estimation.
- Linear Regression for Business Statistics.
- Business Statistics and Analysis Capstone.

3.2.4. Duration of the specialization

To complete the specialization, you need to invest 10 hours a week for 3 months.



3.3. Data Analysis with R Specialization

3.3.1. What the specialization is about

Data Analysis with R Specialization developed by Duke University is for those who want to learn how to use R and RStudio, one of the most popular and powerful statistical and analytical programming languages. R programming language is designed to generate statistical calculations, analysis, and visualizations, though R use cases are numerous.



3.3.2. For whom it is and its difficulty, benefits of the specialization

The specialization is designed so that anyone with no prior experience and knowledge in data analysis with R can learn the fundamentals.

In this Specialization, you will learn to:

- analyse and visualize data in R and create reproducible data analysis reports.
- Demonstrate a conceptual understanding of the unified nature of statistical inference.
- Perform frequentist and Bayesian statistical inference and modeling to understand natural phenomena and make data-based decisions.
- Communicate statistical results correctly, effectively, and in context without relying on statistical jargon.
- Critique data-based claims and evaluate data-based decisions.
- Wrangle and visualize data with R packages for data analysis.

3.3.3. Brief content of the specialization

The specialization is divided into 3 courses:

- Introduction to Probability and Data with R.
- Inferential Statistics.
- Linear Regression and Modeling.

3.3.4. Duration of the specialization

To complete the specialization, you need to invest 10 hours a week for 3 months.



4. Programming skills

4.1. Python for Everybody Specialization

4.1.1. What the specialization is about

<u>Python for Everybody Specialization</u> is the first step into understanding and being able to utilize the possibilities that Python programming language provides for analysing data.



4.1.2. For whom it is and its difficulty, benefits of the specialization

This course is for beginners with no prior experience in Python programming.

In the track, you will learn about data structures, networked application program interfaces, and databases. The theoretical learning part, combined with practical tasks will give you experience and a better understanding of how to design and create your applications for data retrieval, processing, and visualization.

4.1.3. Brief content of the specialization

The specialization is divided into 5 courses:

- Programming for Everybody(getting started with python).
- Python Data Structures.
- Using Python to Access Web Data.
- Using Databases with Python.
- Capstone: Retrieving, Processing, and Visualizing Data with Python.

4.1.4. Duration of the specialization

To complete the specialization, you need to invest 10 hours a week for 2 months.

4.2. Coding for Everyone: C and C++ Specialization

4.2.1. What the specialization is about

<u>Coding for Everyone: C and C++ Specialization</u> introduces participants to C and C++ which are two of the most widely used programming languages. C is one of the first programming languages designed for system programming, which is still relevant today and from whom many other languages are built. Understanding C and C++ can provide a solid foundation for learning other languages more easily.



4.2.2. For whom it is and its difficulty, benefits of the specialization

This Specialization is intended for all programming enthusiasts, as well as beginners, computer and other scientists, and artificial intelligence enthusiasts seeking to develop their programming skills in the foundational languages of C and C++.

In the specialization, you will learn about algorithms and how to properly express them, as well as how to write and debug code in both languages.

4.2.3. Brief content of the specialization

The specialization is divided into 4 courses:

- C for Everyone: Programming Fundamentals.
- C for Everyone: Structured Programming.
- C++ For C Programmers, Part A.
- C++ For C Programmers, Part B.

4.2.4. Duration of the specialization

To complete the specialization, you need to invest 10 hours a week for 1 month.

4.3. Java Programming and Software Engineering Fundamentals Specialization

4.3.1. What the specialization is about

Java Programming and Software Engineering Fundamentals Specialization is a comprehensive learning programme that is valuable for those who want to build a career in software engineering or for those who want to learn core programming concepts to solve complex problems. Java is used for the development of web applications, mobile applications, enterprise applications, embedded systems and more.



4.3.2. For whom it is and its difficulty, benefits of the specialization

The course is designed to first introduce participants to basic principles, therefore, no prior experience is required.

After completion of this specialization, you will have gained skills in:

- Software engineering.
- Java programming.
- Data structures.
- Computer programming.
- HTML.
- Debugging.
- JavaScript.
- Cascading Style Sheets(CSS).
- Software design.

4.3.3. Brief content of the specialization

The specialization is divided into 5 courses:

- Programming Foundations with JavaScript, HTML and CSS.
- Java Programming: Solving Problems with Software.
- Java Programming: Arrays, Lists, and Structured Data.
- Java Programming: Principles of Software Design.
- Java Programming: Build a Recommendation System.

4.3.4. Duration of the specialization

To complete the specialization, you need to invest 10 hours a week for 6 months.

4.4. Learn SQL Basics for Data Science Specialization

4.4.1. What the specialization is about

Learn SQL Basics for Data Science Specialization is developed by the University of California, Davis, and is aimed at those who want to learn about databases. SQL stands for Structured Query Language which is a programming language used for collecting, managing, storing and utilizing structured data.



This specialization is beneficial for companies that on a daily basis receive extensive amounts of structured data and want to use it to their benefit.

4.4.2. For whom it is and its difficulty, benefits of the specialization

This Specialization is intended for a learner with no previous coding experience seeking to develop SQL query fluency. In this specialization you will learn to:

- Use SQL commands to filter, sort, & summarize data; manipulate strings, dates, & numerical data from different sources for analysis.
- Assess and create datasets to solve your business questions and problems using SQL.
- Use the collaborative Databricks workspace and create an end-to-end pipeline that reads data, transforms it, and saves the result.
- Use programmes such as Apache Spark and methods like data wrangling, AB testing, Delta Lake and more.

4.4.3. Brief content of the specialization

The specialization is divided into 4 courses:

- SQL for Data Science.
- Data Wrangling, Analysis and AB Testing with SQL.
- Distributed Computing with Spark SQL.
- SQL for Data Science Capstone Project.

4.4.4. Duration of the specialization

To complete the specialization, you need to invest 10 hours a week for 2 months.



5. Automation for business processes

5.1. Implementing RPA with Cognitive Automation and Analytics Specialization

5.1.1. What the specialization is about and its format

Implementing RPA with Cognitive Automation and Analytics Specialization is designed to introduce RPA, provide a foundation of the RPA lifecycle--from design to bot deployment--and implement RPA with cognitive automation and analytics. With RPA, companies can deploy software robots to automate repetitive tasks,



improving business processes and outcomes. When used in combination with cognitive automation and automation analytics, RPA can help transform the nature of work, adopting the model of a Digital Workforce for organizations.

5.1.2. For whom it is and its difficulty, benefits of the specialization

Experienced and novice users and developers of RPA will all benefit from completing this Specialization.

During the track, you will learn to design a project plan for RPA implementation, deploy cognitive bots and monitor their performance via the IQ Bot portal, develop & test bots in AAE Client and deploy & monitor them via the Web Control Room, generate operational analytics on AAE Client and business analytics on Bot Insight.

5.1.3. Brief content of the specialization

The specialization consists of 4 courses:

- RPA Lifecycle: Introduction, Discovery and Design.
- RPA Lifecycle: Development and Testing.
- RPA Lifecycle: Deployment and Maintenance.
- Cognitive Solutions and RPA Analytics.

5.1.4. Duration of the course

The course should take approximately 1 month at 10 hours a week to complete.



5.2. Robotic Process Automation (RPA) Specialization

5.2.1. What the specialization is about and its format

<u>The Robotic Process Automation (RPA) specialization</u> offers comprehensive knowledge and professional-level skills focused on developing and deploying software robots. UPath ***** 4.7 (213) | 5.7K Students Robotic Process Automation (RPA)

5.2.2. For whom it is and its difficulty, benefits of the specialization

This is a beginner-level specialization, however, it is recommended to have basic programming skills.

After specialization completion, you will have learned the basic concepts of Robotic Process Automation, how to independently design and create automation for business processes, and UiPath Platform configurations.

5.2.3. Brief content of the specialization

The specialization consists of 6 courses:

- RPA Basics and Introduction to UiPath.
- Data Manipulation in RPA.
- UI Automation and Selectors.
- Control Flow in RPA.
- Automation Techniques in RPA.
- UiPath Orchestrator and Capstone Projects

5.2.4. Duration of the course

The course should take approximately 1 month at 10 hours per week to complete.



5.3. Automation for Business

5.3.1. What the course is about and its format

<u>Automation for Business</u> is a short course that gives theoretical knowledge and skills to harness the transformative power of automation in today's business environment.

5.3.2. For whom it is and its difficulty, benefits of the course

While no prior automation experience is required, a general understanding of business operations and technology concepts will be beneficial.

coursera

5.3.3. Brief content of the course

In the course, you will learn fundamental automation concepts and terminologies, how to Analyze automation opportunities and strategies for implementation, Comprehend the benefits, challenges, and tools of business automation, and Evaluate the impact of automation on business operations and the future of work.

5.3.4. Duration of the course

The course should take approximately 4 hours to complete.



6. Big data and big data analysis

6.1.Big Data Specialization

6.1.1. What the specialization is about and its format

The <u>Big Data Specialization track</u> developed by UC SanDiego is a 6-course series that will teach you from basics about Big Data and Big Data tools. The data amount generated every day is immense and to manage huge amounts of data, typical data analysis



tools fall short. Big data tools provide frameworks and methods to deal with large amounts of data and to get the best out of it.

6.1.2. For whom it is and its difficulty, benefits of the specialization

This track is for beginners who want to build an understanding of Big Data and Big data tools.

After completion of the track, you will know the basics of different tools of Big Data such as Apache Spark, Apache Hive, Apache Pig, and frameworks such as Hadoop MapReduce. This specialization will prepare you to ask the right questions about data, communicate effectively with data scientists, and do basic exploration of large, complex datasets.

6.1.3. Brief content of the specialization

The Specialization is divided into 6 courses:

- Introduction to Big Data.
- Big Data Modeling and Management Systems.
- Big Data Integration and Processing.
- Machine Learning with Big Data.
- Graph Analytics for Big Data.
- Big Data Capstone Project.

6.1.4. Duration of the specialization

It is estimated to take 3 months at 10 hours per week to complete this specialization.



6.2. Modern Big Data Analysis with SQL Specialization

6.2.1. What the specialization is about and its format

Modern Big Data Analysis with SQL Specialization track is designed to show participants how to create modern distributed SQL engines for big data storage, as traditional relational databases fail to store large volumes of data. The track provides both theoretical and practical learning opportunities.



6.2.2. For whom it is and its difficulty, benefits of the specialization

The course is for beginners with no prior experience as well as for those who know SQL traditional relational databases but also want to gain skills for Big Data analysis. The track is for those who want to obtain skills in Big Data management with modern distributed SQL engines such as Apache Hive, Apache Impala, Apache Drill and Presto.

6.2.3. Brief content of the specialization

The Specialization is divided into 3 courses:

- Foundations for Big Data Analysis with SQL.
- Analysing Big Data with SQL.
- Managing Big Data in Clusters and Cloud Storage.

6.2.4. Duration of the specialization

It is estimated to take 1 month at 10 hours per week to complete this specialization.



6.3. Software Architecture for Big Data Specialization

6.3.1. What the specialization is about and its format

Software Architecture for Big Data Specialization

track is an advanced level track for software engineers interested in the principles of building and architecting large software systems that use big data. The course series covers software architecture, transforming big data prototypes into



tested production software, and building a production-ready distributed system. The instructors share their experiences to guide students throughout the courses.

6.3.2. For whom it is and its difficulty, benefits of the specialization

The course is an advanced level course and requires experience in software engineering or big data.

After completing the track, you will be able to test the first development of architecture, refactoring, continuous integration, and continuous delivery, create a performant, scalable distributed system that handles big data, and architect and create a big data or distributed system using rest collaboration, event collaboration, and batch processing.

6.3.3. Brief content of the specialization

The Specialization is divided into 3 courses:

- Fundamentals of Software Architecture for Big Data.
- Software Architecture Patterns for Big Data.
- Applications of Software Architecture for Big Data.

6.3.4. Duration of the specialization

It is estimated to take 2 months at 10 hours per week to complete this specialization.



7. Online marketing tools

7.1. Digital Marketing Specialization

7.1.1. What the course is about and its format

The <u>Digital Marketing Specialization</u> track developed by the University of Illinois is designed to give participants fundamental knowledge about digital marketing and an overview of the latest digital marketing skills.

7.1.2. For whom it is and its difficulty, benefits of the specialization



This track is for those who have no experience in digital marketing and are keen on learning about digital marketing analytics, search engine optimization, social media marketing, and 3D Printing.

Upon finishing the Digital Marketing Specialization, you will gain a better comprehension of the fundamental principles of the modern digital marketing industry. You will also obtain a fresh batch of stories, concepts, and tools that will allow you to create, distribute, promote, and price products and services digitally.

7.1.3. Brief content of the specialization

The track is divided into 7 courses:

- The Digital Marketing Revolution.
- Marketing in a Digital World.
- Digital Marketing Analytics in Theory.
- Digital Marketing Analytics in Practice.
- Digital Media and Marketing Principles.
- Digital Media and Marketing Strategies.
- Digital Marketing Capstone.

7.1.4. Duration of the specialization

It is estimated to take 4 months at 10 hours per week to complete this specialization.



7.2. Search Engine Optimization (SEO) Specialization

7.2.1. What the specialization is about and its format

Search Engine Optimization (SEO) Specialization track by the University of California, Davis, offers to equip individuals with knowledge in search engines to improve company or product visibility on Google search and other search engines. The theoretical content provides



information from fundamental concepts to advanced frameworks and tactics that can be used for achieving great product or service placement on search engines.

7.2.2. For whom it is and its difficulty, benefits of the specialization

This track is designed for beginners with little to no knowledge of search engines and their optimization, however, it is recommended to have some business experience.

After course completion you will be able to:

- Perform a competitive analysis on a webpage,
- Create influencer relationships and collaborations and analyse data to see which content gets the most shares,
- Develop a solid approach for achieving a productive and successful relationship with your client,
- Create a final report of your findings and recommendations for SEO and present your recommendations to your client.

7.2.3. Brief content of the specialization

The track is divided into 5 courses:

- Introduction to Google SEO.
- Google SEO Fundamentals.
- Optimizing a Website for Google Search.
- Advanced Content and Social Tactics to Optimize SEO.
- Google SEO Capstone Project.

7.2.4. Duration of the specialization

It is estimated to take 3 months at 10 hours per week to complete this specialization.

7.3. Introduction to Social Media Marketing

7.3.1. What the course is about and its format

Introduction to Social Media Marketing developed by Meta, owner of Facebook, Instagram, and WhatsApp, has developed a short course for individuals planning on using one of the social media platforms for promotion of products and services. This course is part of the Meta Social Media Marketing Professional Certificate.



7.3.2. For whom it is and its difficulty, benefits of the course

The course is for individuals with no experience in social media or digital marketing.

After course completion, you will be able to:

- Understand the landscape of traditional, digital, and social media marketing,
- Create SMART goals, identify KPIs, and define your target audience and their customer journey,
- Understand how major social media platforms work,
- Choose the right social media platforms for your needs.

7.3.3. Brief content of the course

The course is divided into 5 modules:

- The Social Media Landscape,
- Social Media Platforms Overview,
- Goals and Planning for success,
- Understand Your Audience,
- Choose Your Social Media Channels.

7.3.4. Duration of the course

It is estimated to take 17 hours to complete this course.



8. Web Development

8.1. Web Design for Everybody: Basics of Web Development & Coding Specialization

8.1.1. What the specialization is about and its format

Web Design for Everybody: Basics of Web Development & Coding Specialization developed by the University of Michigan is a great starting point for those who want to build and design their website. In this track, you will learn to use tools such as JavaScript, Cascading Style Sheets (CSS), and HTML5 for website creation.



8.1.2. For whom it is and its difficulty, benefits of the specialization

The specialization does not require prior knowledge of any of the tools used for WEB development and designing.

After completion of the track you will have basic knowledge in CSS, JavaScript and HTML5, and you will be able to write syntactically correct HTML and CSS code for websites, add interactive experience by using JavaScript, Use the Document Object Model (DOM) to modify pages, Apply a responsive design to enable the page to be viewed by various devices.

8.1.3. Brief content of the specialization

The track is divided into 5 courses:

- Introduction to HTML5.
- Introduction to CSS3.
- Interactivity with JavaScript.
- Advanced Styling with Responsive Design.
- Web Design for Everybody Capstone.

8.1.4. Duration of the specialization

It is estimated to take 2 months at 10 hours a week to complete this course.



8.2. Meta Front-End Developer Professional Certificate

8.2.1. What the specialization is about and its format

Meta Front-End Developer Professional Certificate is designed by software engineers at Meta, responsible for Facebook and Instagram website and mobile app design and user interface (UI). The combination of theoretical lectures and practical learning projects provides a valuable learning opportunity for everyone who wants to



master developing and designing websites that people will interact with.

8.2.2. For whom it is and its difficulty, benefits of the specialization

The specialization does not require prior knowledge of Front-End Developer programming.

In this professional certificate track you will learn to:

- Create a responsive website using HTML to structure content.
- Use CSS to handle visual style.
- Use JavaScript to develop interactive experiences.
- Use React in relation to Javascript libraries and frameworks.
- Bootstrap CSS Framework to create webpages and work with GitHub repositories and version control.

8.2.3. Brief content of the specialization

The track is divided into 9 courses:

- Introduction to Front-End Development.
- Programming with JavaScript.
- Version Control.
- HTML and CSS in depth.
- React Basics.
- Advanced React.
- Principles of UX/UI Design.
- Front-End Developer Capstone.
- Coding Interview Preparation.

8.2.4. Duration of the specialization

It is estimated to take 7 months at 6 hours a week to complete this course.



8.3. Meta Back-End Developer Professional Certificate

8.3.1. What the specialization is about and its format

Participants of the <u>Meta Back-End Developer</u> <u>Professional Certificate</u> learn to develop, maintain, and manage servers and databases while ensuring secure processes for webpages and mobile applications. This comprehensive learning opportunity utilises theoretical learning practices with practical tasks after each course.



8.3.2. For whom it is and its difficulty, benefits of the specialization

The specialization does not require prior knowledge of Back-End Developer programming.

In this professional certificate track, you will learn to use programming systems including Python Syntax, Linux commands, Git, SQL, Version Control, Cloud Hosting, APIs, JSON, XML and more.

8.3.3. Brief content of the specialization

The track is divided into 9 courses:

- Introduction to Back-End Development.
- Programming in Python.
- Version Control.
- Introduction to Databases for Back-End Development.
- Django Web Framework.
- APIs.
- The Full Stack.
- Back-End Developer Capstone.
- Coding Interview Preparation.

8.3.4. Duration of the specialization

It is estimated to take 8 months at 6 hours a week to complete this course.



Disclaimer

This information provided for the Distance Lab project is based on the information, pictures and sources available on the Coursera platform (https://www.coursera.org/). It contains links to other websites or content belonging to or originating from third parties or links to websites. Such external links are not investigated, monitored, or checked for accuracy, adequacy, validity, reliability, availability or completeness by us. We do not warrant, endorse, guarantee, or assume responsibility for the accuracy or reliability of any information offered by third-party websites linked through the site or any website and feature linked in any banner or other advertising, we will not be a party to or in any way be responsible for monitoring any transaction between you and third party providers of products or services.