

EdX Course list

1. Python Basics for Data Science

This Python course provides a beginner-friendly introduction to Python for Data Science. Practice through lab exercises, and you'll be ready to create your first Python scripts on your own!

Duration - 3 weeks **Institution -** IBM

2. Introduction to Linux

Never learned Linux? Want a refresh? Develop a good working knowledge of Linux using both the graphical interface and command line across the major Linux distribution families.

Duration - 14 weeks **Institution –** The Linux Foundation

3. Introduction to Kubernetes

In this course, we'll discuss some of Kubernetes' basic concepts and talk about the architecture of the system, the problems it solves, and the model that it uses to handle containerized deployments and scaling. This course offers an introduction to Kubernetes and includes technical instructions on how to deploy a stand-alone and multi-tier application. You'll learn about ConfigMaps and Secrets, and how to use Ingress.

Duration - 14 weeks **Institution -** The Linux Foundation

4. Introduction to Data Science

Learn about the world of data science first-hand from real data scientists.

Duration - 6 weeks **Institution -** IBM

5. Introduction to Cloud Development with HTML5, CSS3, and JavaScript

Learn the key tools and programming languages to bootstrap your career as a Cloud Developer. Get started with web development using HTML5, CSS3, JavaScript and GitHub.



6. Leaders of Learning

Explore and understand your own theories of learning and leadership. Gain the tools to imagine and build the future of learning.

Duration - 10 weeks

Institution – Harvard University

7. Al for Everyone: Master the Basics

Learn what Artificial Intelligence (AI) is by understanding its applications and key concepts including machine learning, deep learning and neural networks.

Duration - 4 weeks **Institution -** IBM

8. How to Learn Online

Learn essential strategies for successful online learning.

Duration - 2 weeks **Institution -** edX

9. Data Science: Visualization

Learn basic data visualization principles and how to apply them using ggplot2.

Duration – 8 weeks **Institution –** Harvard University

10. Using Python for Research

Take your introductory knowledge of Python programming to the next level and learn how to use Python 3 for your research.

Duration – 12 weeks **Institution –** Harvard University

11. Introduction to Cloud Computing

Master the core concepts in Cloud Computing, from service and deployment models, to cloud architecture, security, new technologies, and possible careers.

Duration - 3 weeks **Institution -** IBM



12. Masterpieces of World Literature

Embark on a global journey to explore the past, present, and future of World Literature.

Duration – 12 weeks **Institution –** Harvard University

13. Introduction to Probability

Learn probability, an essential language and set of tools for understanding data, randomness, and uncertainty.

Duration – 10 weeks **Institution –** Harvard University

14. The Health Effects of Climate Change

Learnhow global warming impacts human health, and the wayswe can diminish those impacts.

Duration – 7 weeks **Institution –** Harvard University

15. Applied Scrum for Agile Project Management

Learn the project management processes, roles, mechanics, and philosophies behind Scrum, the simplest and most pure approach to managing work at the team level.

Duration – 4 weeks **Institution –** University of Maryland

16. Blockchain: Understanding Its Uses and Implications

Understand what blockchain is, and gain an appreciation for this transformative technology and its impact around the globe by analyzing use cases and future trends in technology, business, and enterprise products and institutions.

Duration - 14 weeks **Institution –** The Linux Foundation

17. Data Science: Probability

Learn probability theory -- essential for a data scientist -- using a case study on the financial crisis of 2007-2008.



Duration – 8 weeks **Institution –** Harvard University

18. Preparing to Network in English

Learn the basics of networking while you grow your social network and professional connections. Practice speaking to improve your English language skills for increased success in job hunting.

Duration – 8 weeks **Institution –** University of Washington

19. Six Sigma: Define and Measure

An introduction to the Six Sigma methodology and the DMAIC cycle for process improvement with a focus on the Define and Measure phases, including basic statistics for understanding sampling plans and calculating process capability.

Duration – 8 weeks **Institution –** Technische Universität München

20. Cybersecurity Basics

This course gives you the background needed to understand the basics of Cybersecurity. You will explore information security from its history to a description of various cybercriminals and cybersecurity threats concluding with the tools needed to prevent an attack.

Duration - 4 weeks **Institution -** IBM

21. CitiesX: The Past, Present and Future of Urban Life

Explore what makes cities energizing, amazing, challenging, and perhaps humanity's greatest invention.

Duration – 11 weeks **Institution –** Harvard University

22. Principles, Statistical and Computational Tools for Reproducible Data Science

Learn skills and tools that support data science and reproducible research, to ensure you can trust your own research results, reproduce them yourself, and communicate them to others.



23. Improving Global Health: Focusing on Quality and Safety

An introduction to the emerging field of global healthcare quality.

Duration – 10 weeks **Institution –** Harvard University

24. AWS Cloud Practitioner Essentials

Jumpstart your journey within the AWS Cloud! Whether you are new to the cloud or familiar with cloud technologies this course will introduce you to cloud concepts and core AWS services, security and architecture to advance your cloud knowledge and solve business challenges.

Duration – 4 weeks **Institution –** AWS

25. Solar Energy

Discover the power of solar energy and learn how to design a complete photovoltaic system.

Duration – 8 weeks **Institution –** Delft University of Technology (TuDelft)

26. Shakespeare's Life and Work

Learn how to read William Shakespeare's plays through his biography, Elizabethan and Jacobean history, and modern performance.

Duration – 4 weeks **Institution –** Harvard University

27. Developing Cloud Applications with Node.js and React

Learn how to develop and deploy web applications with JavaScript frameworks. Create server-side applications using Node.js and develop the front-end using React. Deploy the app on Cloud.

Duration - 3 weeks **Institution -** IBM

28. Improving Your Business Through a Culture of Health



Learn how a Culture of Health can transform your business to improve the well-being of your employees and company, while increasing revenue.

Duration – 9 weeks **Institution –** Harvard University

29. Machine Learning for Data Science and Analytics

Learn the principles of machine learning and the importance of algorithms.

Duration – 5 weeks **Institution –** Columbia University

30. Prescription Drug Regulation, Cost, and Access: Current Controversies in Context

Understand how the FDA regulates pharmaceuticals and explore debates on prescription drug costs, marketing, and testing.

Duration – 8 weeks **Institution –** Harvard University

31. Tangible Things: Discovering History Through Artworks, Artifacts, Scientific Specimens, and the Stuff Around You

Gain an understanding of history, museum studies, and curation by looking at, organizing, and interpreting art, artifacts, scientific curiosities, and the stuff of everyday life.

Duration – 10 weeks **Institution –** Harvard University

32. Product Design, Prototyping, and Testing

Translate product ideas into tangible assets by creating wireframes, 3D renderings, prototypes, and minimum viable products (MVPs) to test assumptions and validate customer interests.

Duration – 4 weeks **Institution –** University of Maryland

33. Introduction to Cloud Infrastructure Technologies

Learn the fundamentals of building and managing cloud technologies directly from The Linux Foundation, the leader in open source.

Duration - 14 weeks **Institution -** The Linux Foundation



34. How to Design a Successful Business Model

Learn how to create value for your customers and grow your business by designing a successful and sustainable business model.

Duration – 10 weeks **Institution –** Delft University of Technology (TuDelft)

35. Data Science: Inference and Modeling

Learn inference and modeling, two of the most widely used statistical tools in data analysis.

Duration – 8 weeks **Institution –** Harvard University

36. Data Science: Wrangling

Learn to process and convert raw data into formats needed for analysis.

Duration – 8 weeks **Institution –** Harvard University

37. Introduction to DevOps and Site Reliability Engineering

Learn how to start transforming your organization using the principles and practices of DevOps.

Duration - 10 weeks **Institution –** The Linux Foundation

38. Data Science: Productivity Tools

Keep your projects organized and produce reproducible reports using GitHub, git, Unix/Linux, and RStudio.

Duration – 8 weeks **Institution –** Harvard University

39. Statistical Thinking for Data Science and Analytics

Learn how statistics plays a central role in the data science approach.

Duration – 5 weeks **Institution –** Columbia University

40. AI Chatbots without Programming



Chatbots are increasingly in demand among global businesses. This course will teach you how to build, analyze, deploy and monetize chatbots - with the help of IBM Watson and the power of AI.

Duration - 2 weeks **Institution -** IBM

41. Data Science Tools

Learn about the most popular data science tools, including how to use them and what their features are.

Duration - 7 weeks **Institution -** IBM

42. High-Dimensional Data Analysis

A focus on several techniques that are widely used in the analysis of highdimensional data.

Duration – 4 weeks **Institution –** Harvard University

43. Exploring GraphQL: A Query Language for APIs

Learn about GraphQL, an alternative to REST, and practice GraphQL queries in an interactive playground.

Duration - 7 weeks **Institution –** The Linux Foundation

44. Marketing Innovative Products and Services

Learn essential marketing concepts and practical commercialization strategies to bring your new venture to market

Duration – 4 weeks **Institution –** University of Maryland

45. Fat Chance: Probability from the Ground Up

Increase your quantitative reasoning skills through a deeper understanding of probability and statistics.

Duration – 7 weeks **Institution –** Harvard University

46. Deep Learning Fundamentals with Keras



New to deep learning? Start with this course, that will not only introduce you to the field of deep learning but give you the opportunity to build your first deep learning model using the popular Keras library.

Duration - 5 weeks **Institution -** IBM

47. Let's Get Personal: Working with Personality Type

Effective leaders capitalize on their strengths & manage their weaknesses. Build your power skills by understanding the MBTI, personality type assessment, and how to use your type to your greatest advantage as an effective leader.

Duration – 6 weeks **Institution –** University of Maryland

48. Drinking Water Treatment

Learn about urban water services, focusing on conventional technologies for drinking water treatment.

Duration – 7 weeks **Institution –** Delft University of Technology (TuDelft)

49. Lessons from Ebola: Preventing the Next Pandemic

Understanding the context for the Ebola outbreak: What went right, what went wrong, and how we can all do better.

Duration – 4 weeks **Institution –** Harvard University

50. Introduction to Jenkins

Learn the fundamentals required to implement Continuous Integration (CI) and Continuous Delivery (CD) workflows using the Jenkins automation server.

Duration - 10 weeks **Institution –** The Linux Foundation

51. Managing Conflicts on Projects with Cultural and Emotional Intelligence

Great program managers understand and heal bad communication habits and conflicts that arise within project teams and stakeholders. Learn how by leveraging emotional and cultural intelligence using the Coordinated Management of Meaning (CMM).



52. Building a Cybersecurity Toolkit

Develop a set of skills and characteristics that expand beyond technical proficiency to become a successful cybersecurity professional.

Duration – 6 weeks **Institution –** University of Washington

53. Product Design: The Delft Design Approach

Learn to design meaningful products and services in this introductory design course.

Duration – 7 weeks **Institution –** Delft University of Technology (TuDelft)

54. Nutrition and Health: Food Safety

Learn about bacteria, pesticides and health hazards present in food. This online course is offered as a MOOC which means that you can study at your own pace, at your own time and anywhere you want.

Duration – 8 weeks **Institution –** Wageningen University & Research

55. Finding Your Cybersecurity Career Path

Learn about different career pathways in cybersecurity and complete a self-assessment project to better understand the right path for you.

Duration – 6 weeks **Institution –** University of Washington

56. Automated Software Testing: Unit Testing, Coverage Criteria and Design for Testability

Learn the software testing techniques, tools, and best practices required to deliver high-quality software.

Duration – 5 weeks **Institution –** Delft University of Technology (TuDelft)

57. Developing Cloud Native Applications



Learn about Cloud Native Computing. Understand and start using DevOps practices and tools. Work with REST APIs and JSON. Get started with developing applications on Cloud leveraging cloud services like AI-powered APIs and NoSQL databases to enrich your app.

Duration – 2 weeks **Institution –** IBM

58. Statistical Inference and Modeling for High-throughput Experiments

A focus on the techniques commonly used to perform statistical inference on high throughput data.

Duration – 4 weeks **Institution –** Harvard University

59. Sikhism Through Its Scriptures

This course examines the Sikh scripture from a doctrinal and historical perspective by providing an overview of Sikh teachings as well as the historical context within which the scripture evolved and became canonized.

Duration – 4 weeks **Institution –** Harvard University

60. Introduction to Water and Climate

Water is a crucial element in climate and for society. Find out about the latest engineering interventions for water management in rivers, coasts and the urban environment.

Duration – 10 weeks **Institution –** Delft University of Technology (TuDelft)

61. Introduction to Serverless on Kubernetes

Learn how to build serverless functions that can be run on any cloud, without being restricted by limits on the execution duration, languages available, or the size of your code.

Duration - 7 weeks **Institution –** The Linux Foundation

62.Introduction to FinOps

We now depend on Cloud to deliver digital value to customers. But DevOps and Cloud have broken traditional procurement. Learn how FinOps gets IT,



Business and Finance working together to leverage Cloud to innovate, deliver and make money.

Duration - 7 weeks **Institution -** The Linux Foundation

63. Introduction to Hyperledger Sovereign Identity Blockchain Solutions: Indy, Aries & Ursa

Learn how Hyperledger Aries, Indy and Ursa add a necessary layer of trust to the Internet, creating and using independent digital identities rooted on blockchains or other distributed ledgers.

Duration - 7 weeks **Institution -** The Linux Foundation

64. Indian & Tibetan River of Buddhism

Explore an overview of the history and philosophy of Buddhism throughout India, South and Southeast Asia, Tibet, and Central Asia, featuring the basics of the Buddhist view of reality and its educational principles of sciences, mind and social ethics.

Duration - 12 weeks **Institution -** Columbia University

65. Business Considerations for 5G with Edge, IoT, and Al

Learn how wireless networks are being redefined to support a 5G world and what is required of businesses to take advantage of new technologies like IoT, Edge and AI.

Duration - 10 weeks **Institution -** The Linux Foundation

66. MalariaX: Defeating Malaria from the Genes to the Globe

How can we eradicate malaria? Explore cutting-edge science and technology, and examine policies needed, to control and eliminate malaria.

Duration – 8 weeks **Institution –** Harvard University

67. Ethics in Al and Data Science

Learn how to build and incorporate ethical principles and frameworks in your AI and Data Science technology and business initiatives to add transparency, build trust, drive adoption, and lead with trust and responsibility.



68. Getting Started with Data Analytics on AWS

Learn how to go from raw data to meaningful insights using AWS with this one-week course.

Duration – 1 weeks **Institution –** IBM

69.Introduction to Open Source Networking Technologies

Learn technical fundamentals needed to adopt SDN, NFV, disaggregation, orchestration, network automation, and modern networking. Discover use cases and technical options for open networking. Plus: learn more about The Linux Foundation networking projects.

Duration - 14 weeks **Institution -** The Linux Foundation

70. Engineering Design for a Circular Economy

Discover and develop sustainable design and engineering methods to improve the reuse, repair, remanufacturing, and recycling of products for a circular economy.

Duration – 6 weeks **Institution –** Delft University of Technology (TuDelft)

71. Al Applications with Watson

Turbocharge your chatbot's IQ and AI capabilities with IBM Watson Discovery and powered by Watson Assistant. Learn to use and program tools and assitant services such as Tone Analyzer and Personality Insights to build queries, extract information big data repositories.

Duration – 3 weeks **Institution –** IBM

72. Electric Cars: Business

Get an in-depth understanding of varied profitable business models for electric cars.

Duration – 4 weeks **Institution –** Delft University of Technology (TuDelft)



73. The Value of Business Models

Learn the value of business models and essential tools to help you develop a sound business model for sustainable success.

Duration – 6 weeks **Institution –** Delft University of Technology (TuDelft)

74. Rethink the City: New approaches to Global and Local Urban Challenges

How do you plan future cities? Explore alternative theories and innovative solutions for urban challenges in the global south.

Duration – 7 weeks **Institution –** Delft University of Technology (TuDelft)

75. Building Modern Java Applications on AWS

In this course, we will be covering how to build a modern, greenfield serverless backend on AWS.

Duration – 6 weeks **Institution –** AWS

76. Understanding Nuclear Energy

Learn the science and technology behind nuclear energy and the special features of this energy source.

Duration – 6 weeks **Institution –** Delft University of Technology (TuDelft)

77. Indigenous Peoples' Rights

Examine how Indigenous Peoples have been contesting norms, institutions and global debates in the past 50 years, and how they have been re-shaping and gradually decolonizing these systems at international and national levels.

Duration – 10 weeks **Institution –** Columbia University

78. Building Modern Python Applications on AWS

In this course, we will be covering how to build a modern, greenfield serverless backend on AWS.

Duration – 6 weeks **Institution –** AWS



79. Big Data Strategies to Transform Your Business

Make your organization's business strategy and model, as well as your own career path, future-proof by using big data's disruptive power.

Duration – 6 weeks **Institution –** Delft University of Technology (TuDelft)

80. Business Model Testing

Learn how to stress test your business model to help you anticipate change and harness your business model's success.

Duration – 8 weeks **Institution –** Delft University of Technology (TuDelft)

81. Effective Decision Making: Dealing with Business Complexity

Learn how to solve complex problems in a business environment using analysis-based decision making.

Duration – 5 weeks **Institution –** Delft University of Technology (TuDelft)

82. Unix Tools: Data, Software and Production Engineering

Grow from being a Unix novice to Unix wizard status! Process big data, analyze software code, run DevOps tasks and excel in your everyday job through the amazing power of the Unix shell and command-line tools.

Duration – 6 weeks **Institution –** Delft University of Technology (TuDelft)

83. Agricultural Water Management: Water,-Society and Technology Interactions

Would you like to meet the increasing food demands around the world by contributing to optimisation of water governance and technologies? At Wageningen University & Research, the No. 1 agricultural university of the world, we approach water management from both a technical and a social perspective. Because, properly deploying water technologies for successful water management requires social and institutional agreement. Join us and learn the fundamentals of agricultural water management.

Duration – 10 weeks **Institution –** Wageningen University & Research

84. Business Considerations for Edge Computing



Edge Computing utilizes real-time processing and data analysis at the edge of the network - nearest the device or user - in order to enable digital transformation and power new technologies.

Duration – 7 weeks **Institution –** The Linux Foundation

85. First Nights - Handel's Messiah and Baroque Oratorio

Discover Handel's *Messiah* in this installment of First Nights, which will explore five masterpieces of western music.

Duration – 3 weeks **Institution –** Harvard University

86. Building Modern Nodejs Applications on AWS

In this course, we will be covering how to build a modern, greenfield serverless backend on AWS.

Duration – 6 weeks **Institution –** AWS

87. Building Modern .NET Applications on AWS

Learn how to build agile and scalable cloud native .NET applications using AWS with our new digital course, *Building Modern .NET Applications on AWS*

Duration – 6 weeks **Institution –** AWS

88. Responsible Innovation: Ethics, Safety and Technology

How to deal with risks and ethical questions raised by development of new technologies.

Duration – 7 weeks **Institution –** Delft University of Technology (TuDelft)

89. Landscape Leadership: Catalyse Sustainable Development in Landscapes

Learn how to become a landscape leader! Get the skills to mobilise human resources, manage and resolve conflict and facilitate and motivate stakeholders to achieve SDG-focused sustainable change.

Duration – 4 weeks **Institution –** Wageningen University & Research



90. NFV Acceleration: An Introduction to OPNFV

Learn how Network Functions Virtualization (NFV) is moving the industry from fixed-function, proprietary devices to flexible, software-driven environments, and how OPNFV (Open Platform for NFV) can help make the transition easier.

Duration – 14 weeks **Institution –** The Linux Foundation

