



# Google AI for Anyone Syllabus

Google Al for Anyone is an introductory course on Artificial Intelligence (Al). The purpose of the course is to prepare you for a journey into the emerging fields of Al and ML and related technologies.

As its name suggests, this course is for ANYBODY — you do not need a computer science, mathematics, or AI background to understand it. No programming skills or prior knowledge are needed.

It is a self-paced course with an estimated duration of 2-3 hours for 4 weeks.

#### **Technological Prerequisites**

You can access the course learning materials from a computer, laptop, or a mobile device. In some parts of the course, where you will perform hands-on activities on Websites such as the Teachable Machine, Facets, What-If Tool, or Know Your Data, you will need to use a Computer or Laptop.

### Course Learning Objectives

- Discuss what AI is and isn't
- 2. Describe how Artificial Intelligence (AI), Machine Learning (ML), Deep Learning all fit together
- 3. Explain why data is important
- 4. Discuss the applications of Al
- 5. Explain what programming AI looks like computer-assisted decisions, gaming, etc.
- 6. Discuss the basics of neural networks
- 7. Explain the process of teaching a computer how to learn
- 8. Define loss and optimization in machine learning
- 9. Discuss how fairness and ethics work in Al
- 10. Discuss how AI applications can make mistakes because of poor data





# **Course Structure**

The course consists of three chapters. Each chapter has a set of lessons consisting of videos, reading pages, interactions, discussion prompts, and quizzes.

Chapter 1 Introduction to Al	Chapter 2 How Machines Learn	Chapter 3 Ethics and Bias in Al
Chapter 1 Introduction	Chapter 2 Introduction	Chapter 3 Introduction
1.1. What is Al?	2.1. Chapter 1 Recap	3.1. Chapter 1 and 2 Recap
1.2. Understanding Data	2.2. How Neurons Work	3.2. Understanding Bad Data
1.3. Play with Teachable Machine	2.3. What is Machine Learning?	3.3. Teachable Machine with Bad Data
Chapter 1 Graded Quiz 1	2.4. About Neurons	3.4. Explore Bias Busting Tools
1.4. Applications of Al - Computer Vision	Chapter 2 Graded Quiz 1	3.5. Al Ethics and Bias: More than Data
1.5. Play an Online Driving Game	2.5. What is Deep Learning	3.6. Responsible Al Guidelines
1.6. From Data to Training	2.6. Deep Learning for Computer Vision	3.7. Watch the TF Community Day Video
1.7. Play Tic Tac Toe	2.7. Reevaluating the Teachable Machine	3.8. Principles and Tools for Responsible Al
1.8. Other Al Applications	2.8. Chapter 2 Summary	3.9. Chapter Summary
1.9. Chapter 1 Summary	Chapter 2 Graded Quiz 2	Chapter 3 Graded Quiz 1
Chapter 1 Graded Quiz 2	Chapter 2 Technical Assessment	Chapter 3 Technical Assessment





# **Grading and Assessments**

You will have an opportunity to assess your learning and receive your course grade with the following learning activities and assessments.

**Practice Quiz (Ungraded):** Throughout the course, there will be practice quizzes with unlimited attempts to help you check your understanding of the course concepts. Although these don't count toward your final grade, we encourage you to complete these questions to assess your learning throughout the course.

**Graded Quiz:** In each chapter, you will have one to two graded quizzes based on the learning materials. These contribute to 70% of your final grade.

**Discussions (Graded and Ungraded):** There are two types of discussions in the course — graded and ungraded. In each chapter, you will be prompted to participate in 2-3 graded discussions and 1-2 ungraded discussions to share your experience with others, while engaging with the course materials. The graded discussions contribute to 20% of your final grade.

**Important Note for Graded Posts:** Please remember to take the **Discussion Participation Grade** quiz after posting to the forum and responding to two other posts in that thread.

**Technical Assessment (Self-graded):** In addition to the above, there will be two technical assessments in the course to assess your skills in training an AI model and using the Know Your Data tool. The technical assessments are self-graded and you will be provided with the guidelines to use a rubric to grade your assessment. The technical assessments contribute to 10% of your final grade.

**Passing Grade:** To earn a certificate, you must achieve a minimum of 70% in your final grade. (Please upgrade to a Verified Certificate track to earn your certificate).





#### Verified Certificate

edX allows you to earn a verified certificate for your participation in the course. The timelines for both enrolling in the verified track and completing the course assignments for a grade, can be found under the Course Schedule. You must earn a 70% grade to receive a Verified Certificate.

## Academic and Discussion Policy

edX encourages you to reach out directly to the edX Learner Help Center for assistance or issues related to the course. To get help with the course, click the Discussion tab and post a question by selecting the Question option. To get help with a technical problem, click **Help** to send a message to edX Student Support. For more information, refer to the edX Terms of Service.

#### **Discussion Forum Guidelines**

Discussions are a great way to start a new conversation or interact with others about an ongoing topic. You can access the course discussion forum from the **Discussion** tab in the top menu within this course or go to the lessons and access from within the lessons. You will have a minimum of two graded discussion prompts and one ungraded prompt in each chapter. After you make your post for each prompt, respond to two other posts in that thread. When you add a new post in a course discussion, you choose:

- The topic of the post
- The type of post: question or discussion
- Where to post: on the Discussions page or (for content-specific topics only) in the course unit.





Note: We don't recommend posting personal, private information such as your phone number, or address in the forum. For more help on how course and content discussions work, use this link.