

Introduction to the course

- Video:** Welcome to Probabilistic Deep Learning with TensorFlow 2
2 min
- Reading:** About Imperial College & the team
10 min
- Reading:** How to be successful in this course
10 min
- Reading:** Grading policy
10 min
- Reading:** Additional readings & helpful references
10 min
- Discussion Prompt:** Introduce yourself
10 min
- Pre-Course Survey**
15 min
- Video:** Interview with Paige Bailey
7 min
- Video:** The TensorFlow Probability library
2 min
- Practice Quiz:** [Knowledge check] Standard distributions
6 questions

Univariate distributions

Multivariate distributions

The Independent distribution

Broadcasting rules

Sampling and log probs

Trainable distributions

Programming Assignment:

Naive Bayes and logistic regression

No



How to be successful in this course

Tips for studying online

Having all the freedom to study online is nice, but this might make it difficult to focus and start studying. When learning online, you should become a self-directed learner!

Here are some great tips for you, collected from [this blog](#), on how to be successful in your online class:

1. Read the syllabus: all the important information can be found [here](#)!
2. Plan weekly study times
3. Log on to the class at least 3 times a week
4. Ask questions
5. Make connections with your fellow learners

Requirements

This course uses many of the fundamental concepts of TensorFlow as covered in the first two courses in this Specialization, and applies them to the development of probabilistic deep learning models, using the TensorFlow Probability library. As a learner, you will practice with these concepts and in order to do so you'll find exercises that require different types of interactivity. Alongside video lectures and quizzes, you'll also get to work with Jupyter Notebooks. These are integrated within the course: you don't need any specific hardware or software packages to access these.

If you experience any difficulties whilst working on these exercises, please consult the Discussion Forum as other learners may have posted questions and answers that may help to solve your problem. Alternatively, you can visit the [Coursera Help Centre](#) for more information on the different types of assignments and how to troubleshoot problems.

Prerequisites

The prerequisite knowledge required in order to be successful in this course is as follows: