








Introduction to the course


 **Video:** Welcome to Customising your Models 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 Laurence Moroney
4 min

The Keras functional API

Variables and Tensors

Accessing model layers

Layer nodes

Freezing layers

Device placement

Programming assignment: Transfer learning



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 explains some of the fundamentals of TensorFlow, and applies it to the development of deep learning models. 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:

1. Proficiency in the python programming language. This