

MASTERING ROS SPRING 2020



BEFORE YOU GO WEEK

GET ROS BASICS READY



The
Construct

For ROS Developers

BEFORE YOU GO WEEK

Get ROS Basics Ready (*OPTIONAL)



Course Duration: 30 hours

Location: Online

This week's course is optional. If you do not have any knowledge of ROS, or would like to enhance your ROS Basics knowledge, we recommend that you start the following courses online before the course week in Barcelona:

- **ROS BASICS IN 5 DAYS**
- **TF ROS 101**

Within those courses, you will learn the fundamental concepts and tools to be able to understand and create basic ROS related projects.

You have permanent access to the courses above so you can learn or review ROS Basics at any time.

 **ROS**



DAY 1 - DAY 4

Suggested learning schedule



ROS BASICS IN 5 DAYS

Learn the fundamentals of ROS to understand and be able to program robots.

[Start Learning](#)

DAY 1

Unit 0 - Introduction

Unit 1 - ROS Deconstruction

2,5 hours

Unit 2 - ROS Basics

DAY 2

Unit 3 - Understanding ROS Topics - Publishers

4 hours

Unit 4 - Understanding ROS Topics - Subscribers & Messages

DAY 3

Unit 5 - Understanding ROS Services - Clients

5 hours

Unit 6 - Understanding ROS Services - Server

DAY 4

Unit 8 - Understanding ROS Actions - Clients

6 hours

Unit 9 - Understanding ROS Actions - Servers

DAY 5

Suggested learning schedule



TF ROS 101

To finally understand TF and Robot State Publisher in ROS.

[Start Learning](#)

DAY 5

Unit 2 - TF Basics

Unit 3 - Publish & Subscribe to TF data

Unit 4 - Understanding Robot State Publisher & Joint State Publisher

Unit 5 - Understanding Static Transforms

Unit 6 - Create your own robot with TF from Scratch

6 hours

YOUR TUTOR

Personal tutoring



Miguel Angel Rodriguez

If you take this optional course, you will have **2 additional sessions of 30 minutes** of personal tutoring with one of the teachers. He will follow your ROS learning and support you remotely during this week.



Personal tutoring time: From February 17 to February 21, 10 a.m. - 7 p.m. CET



Contact your tutor: duckfrost@theconstructsim.com