

MASTERING ROS SPRING 2020



BEFORE YOU GO WEEK

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# GET ROS BASICS READY

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The  
Construct  

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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



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.

You can email your tutor to make an appointment for your personal tutoring.



**Ricardo Tellez**

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