THE CONSTRUCT

COURSE CATALOG

ROS eLearning Solutions Built for Campus

Génération ROBOTS
ROS2 Basics in 5 Days (Python)

ABOUT THIS COURSE

Learn the fundamentals of ROS2 to understand and be able to program robots.

ROS2 is finally here! This introductory course is intended not only for new ROS users but also ROS1 old users that want to start with ROS2.

ROS2 adds a lot of new features that will get traction in the next year. This course will give you the basics for starting ROS2, more than the bells and whistles of ROS2 that are much more advanced topics and will be addressed in their respective specialized courses.

Learning Objectives

- Creation of ROS2 packages
- Management of the new Colcon universal building system
- Topic Publishers and subscribers in ROS2 Python
- New Launch system based on Python
- Service servers and client generation for ROS2
- Basic use of ROS1-Bridge to communicate ROS2 systems with ROS1 systems
- Use of Debugging tools in ROS2

COURSE EXERCISES

- **Topics**: Control the Turtlebot3 robot based on the laser readings.
- **Services**: Create a Service to control the Turtlebot3 robot using input strings.
- **Actions**: Create a custom action to control the Turtlebot3 robot while reading the robot’s status.