

## Task 0 – Simulation Resources

### What is V-REP?

V-REP is a simulator which is based on a distributed control architecture: each object/model can be individually controlled via an embedded script, a plugin, a ROS node, a remote API client, or a custom solution. V-REP is a very versatile and ideal simulation software for various applications like simulation of factory automation systems, Remote monitoring, Hardware control, Robot related education etc. V-REP can be used as a stand-alone application or can easily be embedded into a main client application: its small footprint and elaborate API makes V-REP an ideal candidate to embed into higher-level applications.

In this task you will learn the following modules:

1. Getting started with V-REP Part 1
2. Getting started with V-REP Part 2

Follow the instructions given in each video and practice them.

1. Getting started with V-REP Part 1:

This tutorial covers the basic introduction to V-REP user interface, Position and Orientation of Objects, Simulation settings and Physics Engines.

**YouTube Link: <https://youtu.be/WB0zCufrHOM>**

2. Getting started with V-REP Part 2

This tutorial covers the Object properties of different shapes in V-REP, Joints and Force sensors.

**YouTube Link: <https://youtu.be/OKVcDioJlcY>**