

Industrial robot programming, Tampere University

The training package is carried out as an independent online study.

The main task of an industrial robot is to move a tool attached to its tool flange to specific positioning points as defined by programming. This module covers the basics of industrial robot programming from the perspective of the most common type of robot, the articulated robot. The same principles apply to nearly all robots, regardless of manufacturer or structure. After completing this training module, the student will understand the fundamentals of industrial robot programming, including program structures, the robot's command set, motion programming, motion types, coordinate systems, tool center points, peripheral device control, and error handling.

The material of the Industrial robot programming -training module includes the following sections of [the Industrial Robotics book](#) and the related video lecture. The module can also be completed on the basis of written material in The Industrial Robot Book, which you can buy or get from e-library.

If you wish, you can test your skills using an online test. The questions in the test are based on the following chapters in The Industrial Robot Book:

- 5. Industrial robots
- 11. Robot programming
- 12. Simulation and offline programming

Completing this study module

- Watch the lecture video and read the written material
- If you wish, you can test your skills with an online exam. To take the exam, do the following:
 - Log in to the Digicampus platform <https://digicampus.fi/>
 - Send an e-mail to jyrki.latokartano@tuni.fi stating that you want to take the exam at Digicampus. Also state what name and e-mail address you are logged in to Digicampus.
 - You will receive e-mail instructions on how to take the multiple choice exam

Links

The Industrial Robot book website: <https://industrialrobotbook.com/>

Lecture video: <https://youtu.be/gdr05HQ2ACM>