

Service Robotics, 5 HE credits

Servicerobotik, 5 hp

Established: 2018-12-21

Established by: Department of Engineering Science

Applies from: H19

Learning outcomes

After completion of the course, the student should be able to demonstrate:

- Knowledge and understanding about concepts within probabilistic robotics.
- In-depth knowledge and understanding about methods for localization and path planning.
- In-depth knowledge and understanding about the construction and function of service robots.
- Skill and ability to use, combine and analyse existing algorithms for control of service robots.
- Skill and ability to develop and deploy a service robot system.

Entry requirements

Degree of Bachelor of Science in computer engineering, electrical engineering, mechanical engineering or industrial engineering and management. Additionally the Bachelor of Science degree must be comprised of a minimum of 5 HE credits in programming and 15 HE credits in mathematics. Verified knowledge of English corresponding to the course English B/English 6 in the Swedish Upper Secondary School (high school) or equivalent.

General entry requirements and approved result from the following course/courses:

SST600-Sensor technology and

DEA700-Design of Automationsystem and

POP700-Manufacturing Optimisation or the equivalent.

The forms of assessment of student performance

The course is assessed by laborations, with written reports and oral presentations, individual and in groups.

Other regulations

Course grading: F/Fx/E/D/C/B/A - Insufficient, Insufficient- more work required before the credit can be awarded, Sufficient, Satisfactory, Good, Very Good, Excellent

Course language: The teaching is conducted in English.

General rules pertaining to examination at University West are available at www.hv.se.

If the student has a decision/recommendation on special support due to disability, the examiner has the right to examine the student in a customized examination form.

Course Overlap

AUR600

Read about course overlap in the Swedish version of this course syllabus.

Cycle

Second cycle

Progressive specialization

A1F - second cycle, has second-cycle course/s as entry requirements

Main field of study

Automation, Production Technology