

ENG-615

Topics in Autonomous Robotics

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Cursus	Sem.	Type
Robotics, Control and Intelligent Systems		Opt.

Language of teaching	English
Credits	4
Session	
Exam	Project report
Workload	120h
Hours	51
Lecture	27
Practical work	24
Number of positions	25

Frequency

Every 2 years

Remark

Next time: Spring 2025

Summary

Students will be introduced to modern approaches in control and design of autonomous robots through lectures and exercises.

Content

Content of 2023:

Tuesday March 28, 2023, 9:00 to 12:00. Reconfigurable robotics. Jamie Paik

Wednesday April 5, 2023, 9:00 to 12:00. Micro and Nanorobotics. Selman Sakar

Tuesday April 18, 2023, 13:30 to 16:30. Visual perception for robotics. Amir Zamir

Tuesday April 25, 2023, 13:30 to 17:30. Soft electrically-driven actuators for robotics and haptics. Herb Shea

Tuesday May 2, 13:30 to 17:30. Deep learning for Autonomous Vehicles. Alexandre Alahi

Monday May 8, 2023, 9:00 to 13:00. Robotics for Rehabilitation and Assistance.## Mohamed Bouri

Wednesday May 17, 2023, 9:00 to 12:00. Design and Control of Prosthetic Devices. Silvestro Micera

Tuesday May 23, 9:00 to 12:00. Locomotion control in swimming and legged biorobots. Auke Ijspeert

Keywords

Evolutionary Mobile Robotics Modular Locomotion, Human-robot, Interaction, Mobile Robot Design

Resources**Moodle Link**

- <https://go.epfl.ch/ENG-615>