

---

Code	<b>ECE 513</b>
Name	<b>Introduction to Robotics</b>
Hour per week	3 (3 + 0)
Credit	3
ECTS	10
Level/Year	Graduate
Semester	Fall
Type	Elective
Prerequisites	none
Content	The purpose of this course is to provide the students with the fundamental tools of robotic system design, analysis, modeling, and control. The course content includes robot classifications, Rigid motions, Homogeneous transformations, Robot forward kinematics, Robot inverse kinematics, Differential kinematics and Jacobians, Motion planning and trajectory generation, Robot dynamics, Mobile robots, Independent joint control, and Robot sensors and actuators. The course provides self-learning and creative thinking abilities.

---