

Master of Science (MSc) in Robotics

Students may use [NUSMODS](#) to search for course descriptions.

Core Courses

ME5421	Robot Kinematics (2 Units) (Sem 1)
ME5409	Robot Dynamics and Control (2 Units) (Sem 1)
ME5410	Materials, Sensors, Actuators & Fabrication in Robotics (4 Units) (Sem 2)
ME5411	Robot Vision and AI (4 Units) (Sem 1) <i>(for up to cohort AY24/25 only)</i>
ME5400A	Robotics Project 1 (4 Units) (Sem 1 & 2) <i>(for up to cohort AY24/25 only)</i>

Elective Courses

ME5400	Robotics Project (2 semesters, 8 units)
ME5400A	Robotics Project 1 (4 units) <i>(for cohort AY25/26 onwards)</i>
ME5400B	Robotics Project 2 (4 Units) <i>(for up to cohort AY24/25 only)</i>
ME5401	Linear Systems (4 Units)
ME5411	Robot Vision and AI (4 Units) (Sem 1) <i>(for cohort AY25/26 onwards)</i>
ME5412	Robotics for Healthcare (4 Units)
ME5413	Autonomous Mobile Robotics (4 Units)
ME5414	Optimization Techniques for Dynamic Systems (4 Units)
ME5415	Advanced Soft Robotics (4 Units)
ME5416	Mathematics for Robotics Engineering (4 Units)
ME5418	Machine Learning in Robotics (4 Units)
ME5419	Probabilistic Robotics for Manipulation (4 Units)
ME5422	Computer Control and Applications (4 Units)
ME5423	Topics in Robotics (4 Units)
ME5424	Swarm Robotics and Aerial Robotics (4 Units)
ME5425	Cognitive Robotics (4 units)
ME5704	Numerical Methods in Mechanical Engineering and Robotics (4 units)
ME6401	Topics in Mechatronics 1 (4 Units)
ME6402	Topics in Mechatronics 2 (4 Units)
EE5112	Human-Robot Interaction (4 Units)
EE5114	Autonomous Robot Navigation (4 Units)
BN5211	Medical Robotics (4 Units)
CS5446	AI Planning and Decision Making (4 Units)
ME5888R	Robotics Internship (4 units)

(Not all courses listed above are necessarily available in any one year.)