(For all students in the Program)

Undergraduate Minor Program in Robotics

The Minor Program in Robotics is designed mainly for engineering students, but also open to students from other Schools with knowledge in foundation programming (e.g. COMP 1021/1022P/1022Q, ISOM 3230/3320) and computer organization (e.g. COMP 2611; or ELEC 1100/1200, ELEC 2200 and ELEC 2300). Any undergraduate students with an overall CGA of 2.5 or above may enroll in this Minor Program. Students must declare their intention to enroll in the Minor Program no earlier than the first regular term of their second year of study but no later than the last day of the add/drop period in the first regular term of their final year of study. Students who wish to withdraw from the Minor Program should apply before the last day of the add/drop period in the first regular term of their final year of study.

Minor Requirements

To graduate with a minor in Robotics, students must have enrolled in the Minor Program, complete a minimum total of 18 credits and all of the minor requirements, as well as the requirements of the major program of study.

For credit transfer, students can transfer a maximum total of 6 credits to the Minor Program.

Out of the total credits required by the minor program, at least 9 credits should be single-counted within the minor and are not used to fulfill any other requirements for graduation except the 120-credit degree requirement.

Students may use no more than 6 credits earned from courses offered in pure online delivery mode to satisfy the graduation requirements of a degree program. This 6-credit limit does not apply to credits obtained through the credit transfer procedures of the University.

Elective(s)

			Minimum credit(s) required
SENG		Robotics Electives (Courses from the specified elective list, of which at least 7 credits must be taken from Group A Electives and include at least 1 COMP course; at least 2 courses from Group B; and at least 1 course from Group C.)	18

Group A - Core Electives

ELEC	3300	Introduction to Embedded Systems	4
COMP	1029C	C Programming Bridging Course	1
COMP	2011	Programming with C++	4
MECH	2520	Design and Manufacturing I	3

Group B - Area Electives [Subject to approval of program office, students may request to use a PG course (e.g. ELEC 5660, COMP 5421) to substitute the elective course in this group]

ELEC	3200	System Modeling, Analysis and Control	4
ELEC	4220	Introduction to Robotics: From Mobile Robots to Manipulators	4
COMP	4211	Machine Learning	3
COMP	4421	Image Processing	3
IEDA	2100E	Computing in Industrial Applications	3
MECH	2907	Mechatronic Design and Prototyping	3
MECH	3610	Control Principles	3
MECH	4710	Introduction to Robotics	3

Group C - Robotics Project (ENGG 4950F and ENGG 4950T may not be counted towards this requirement)

ENGG	3960	Robotics Special Project	1-4
ENGG	4950	Engineering Special Project	1-4
MECH	4000D	Experiential Learning in Robotics Technologies	3