

THE UNIVERSITY OF HONG KONG

Credit Unit Statement (CUS) of Taught Programmes

Faculty / Offering Unit:	<u>Faculty of Engineering / Department of Industrial and Manufacturing Systems Engineering</u>
Programme title:	<u>Master of Science in Engineering in Robotics and Intelligent Systems</u>
Applicable student cohort(s):	<u>2025-26 and thereafter</u>

The Master of Science in Engineering in Robotics and Intelligent Systems curriculum offers two types of courses, namely taught courses and capstone courses. The total contact hours and total study load of the curriculum (72 credits of courses) is under the range of 270-330 hours and 1440-2160 hours respectively. The majority of taught courses are 6-credit courses comprising lectures and tutorials. The curriculum also has one 12-credit Project or one 24-credit Dissertation as Capstone Experience. The norm for a 6-credit course represents a range of 120 to 180 hours of student learning activity, whereas a range of 240 to 360 hours of student learning activity will be the norm for a 12-credit Project, and 480-720 hours of student learning activity will be the norm for a 24-credit Dissertation.

There are three categories of courses in this programme, as outlined below:

1. Taught courses (6 credits per course)

These courses aim at providing students with advanced education and training in the philosophy, methods and techniques of Robotics and Intelligent Systems. The total study load of each of these courses is normally between 120 and 150 hours, including 30 – 40 contact hours of lectures and/or tutorials. The assessment is generally based on coursework assignments and written examination. The written examination is normally 2 – 3 hours. The weightings of continuous assessment and examination range from 40% and 100% for continuous assessment and 0% to 60% for examination. The output requirement varies with the nature of the course selected.

2. Project (12 credits per course)

The Project provides Capstone Experience of the curriculum. It aims to provide an opportunity for students to apply what they have learnt from working on a project with support from their supervisor and fellow students, making their learning experience inclusive and career beneficial. The total contact hours with their supervisor are expected around 30. The total study load is expected to be in the range of 240 to 360 hours. Students will work in groups. Groups are expected to generate project deliverables of a variety of forms including patents, software copyrights, research papers, proof-of-the-concept solutions and products, consultancy reports / whitepapers, etc. The expected output of each group includes the project deliverables, presentation, demonstration, and project reports, where the total written output for the project is expected to be around 15,000 words for a group; and around 5,000 to 10,000 words including individual contributions to deliverables for an individual student. All assessment results will contribute to the final result of the Project and is 100% based on coursework.

3. Dissertation (24 credits per course)

The Dissertation provides Capstone Experience of the curriculum. Its primary aim is to give individual students an opportunity to handle a practical or research engineering problem within the practical constraints and to present the findings in a precise and concise report under the supervision of a teacher. An important part of Dissertation lies in the way in which the students plan and carry out the tasks, and apply their engineering knowledge sensibly and diligently to solve the problem. The way in which the students present their findings is equally important.

The total contact hours with their supervisor are expected around 30. The total study load is expected to be in the range of 480 to 720 hours, including the dissertation itself and supporting course components, which might be in the form of workshops and/or seminars and/or visits with individual assessments such as project reports. The total written output for the dissertation is expected to be around 15,000 words. All assessment results will contribute to the final result of Dissertation and is 100% based on coursework.