Course

Robot Design

MTRN4110 | 6 Units of Credit

Overview

The course is aimed at developing skills on how to design and implement the capabilities of a robotic platform. Half of the course is lecture-based and deals with the following contents: Introduction to robot design. Mechanisms and kinematic of wheeled robots. Sensors used for the perception capabilities of the robot. Perception applied to allow the robot to understand the context of operation. Motion planning and control of the robot in complex contexts. Optimal planning (Dynamic Programming approach).

In the practical component of the course, the students implement perception and control modules and test them in actual robots.
<table>
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<tr>
<th><strong>Faculty</strong></th>
<th>Faculty of Engineering</th>
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<tbody>
<tr>
<td><strong>School</strong></td>
<td>School of Mechanical and Manufacturing Engineering</td>
</tr>
<tr>
<td><strong>Study Level</strong></td>
<td>Undergraduate</td>
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<tr>
<td><strong>Offering Terms</strong></td>
<td>Term 2</td>
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<td><strong>Campus</strong></td>
<td>Kensington</td>
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<td><strong>Delivery Mode</strong></td>
<td>Fully on-site</td>
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<td><strong>Indicative contact hours</strong></td>
<td>4</td>
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<tr>
<td><strong>Timetable</strong></td>
<td>Visit timetable website for details</td>
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</table>
Conditions for Enrolment

prerequisites: ELEC1111 OR DPST1081 OR ELEC1112 AND MTRN2500 AND MMAN3200
Exclusion Courses

MTRN3100 | 6 UOC
Robot Design
Course Outline

To access course outline, please visit:

MTRN4110 Course Outline
Fees

Commonwealth Supported Students  $1191
Domestic Students  $5970
International Students  $5970

DISCLAIMER
Please note that the University reserves the right to vary student fees in line with relevant legislation. This fee information is provided as a guide and more specific information about fees, including fee policy, can be found on the fee website.

For advice about fees for courses with a fee displayed as "Not Applicable", including some Work Experience and UNSW Canberra at ADFA courses, please contact the relevant Faculty.

Where a Commonwealth Supported Students fee is displayed, it does not guarantee such places are available.
Pre-2019 Handbook Editions

Access past handbook editions (2018 and prior)

Pre-2019 Handbook Editions
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Authorised by Deputy Vice-Chancellor (Academic)
CRICOS Provider Code 00098G
ABN: 57 195 873 179