The University of Southern Queensland  

Course specification

### Description: Intelligent Agent Technology

<table>
<thead>
<tr>
<th>Subject</th>
<th>Cat-nbr</th>
<th>Class</th>
<th>Term</th>
<th>Mode</th>
<th>Units</th>
<th>Campus</th>
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<td>CSC</td>
<td>3405</td>
<td>40352</td>
<td>1, 2005</td>
<td>ONC</td>
<td>1.00</td>
<td>Toowoomba</td>
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**Academic group:** FOSCI  
**Academic org:** FOS003  
**Student contribution band:** 2  
**ASCED code:** 020119

### STAFFING

Examiner: Peter Cattell  
Moderator: Zhongwei Zhang

### OTHER-REQUISITES

Recommended Pre-requisite: MAT1101 and CSC1401

### RATIONALE

Modern approaches to Artificial Intelligence include studies of intelligent agents. Artificial Intelligence now has found applications in many industrial, scientific and business areas. Knowledge of Artificial Intelligence is important to computer programmers and information scientists. Prolog is used in this course. Prolog not only assists students to become familiar with the style of AI languages but also allows them to develop practical application programs.

### SYNOPSIS

This course covers the basics of Prolog programming including recursions, list processing, control, input/output and built-in predicates. Prolog is then used in typical artificial intelligence applications including intelligent agent technology. This course is not offered at Wide Bay in odd years.

### OBJECTIVES

On successful completion of this course students will be able to:

1. demonstrate basic knowledge of Intelligent Agent Technology;
2. write programs in Prolog;
3. develop simple AI applications using Prolog.

### TOPICS

<table>
<thead>
<tr>
<th>Description</th>
<th>Weighting (%)</th>
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<tbody>
<tr>
<td>1. Prolog Programming</td>
<td>40.00</td>
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</table>
2. Intelligent Agents 20.00
3. Intelligent Agent Systems 20.00
4. Multi Agent Systems 20.00

TEXT and MATERIALS required to be PURCHASED or ACCESSED

ALL textbooks and materials are available for purchase from USQ BOOKSHOP (unless otherwise stated). Orders may be placed via secure internet, free fax 1800642453, phone 07 46312742 (within Australia), or mail. Overseas students should fax +61 7 46311743, or phone +61 7 46312742. For costs, further details, and internet ordering, use the 'Textbook Search' facility at http://bookshop.usq.edu.au click 'Semester', then enter your 'Course Code' (no spaces).

Introductory Book 2005, Course CSC3405 Intelligent Agent Technology, USQ Distance and e-Learning Centre, Toowoomba.
Selected Readings 2005, Course CSC3405 Intelligent Agent Technology, USQ Distance and e-Learning Centre, Toowoomba.
Study Book 2005, Course CSC3405 Intelligent Agent Technology, USQ Distance and e-Learning Centre, Toowoomba.

REFERENCE MATERIALS

Reference materials are materials that, if accessed by students, may improve their knowledge and understanding of the material in the course and enrich their learning experience.

STUDENT WORKLOAD REQUIREMENTS

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>HOURS</th>
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<tbody>
<tr>
<td>Assessment</td>
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<tr>
<td>Examinations</td>
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<tr>
<td>Lectures</td>
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<td>Private Study</td>
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<td>Tutorials</td>
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ASSESSMENT DETAILS

<table>
<thead>
<tr>
<th>Description</th>
<th>Marks out of</th>
<th>Wtg(%)</th>
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<td>ASSIGNMENT 2</td>
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<td>20.00</td>
<td>28 May 2005</td>
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NOTES

1. Examination dates will be available during the semester. Please refer to the examination timetable when published.

IMPORTANT ASSESSMENT INFORMATION

1. Attendance requirements:
   It is the students' responsibility to attend and participate appropriately in all activities (such as lectures, tutorials, laboratories and practical work) scheduled for them, and to study all material provided to them or required to be accessed by them to maximise their chance of meeting the objectives of the course and to be informed of course-related activities and administration.

2. Requirements for students to complete each assessment item satisfactorily:
   To complete each of the assessment items satisfactorily, students must obtain at least 50% of the marks available for each assessment item.

3. Penalties for late submission of required work:
   If students submit assignments after the due date without prior approval then a penalty of 10% of the total marks gained by the student for the assignment will apply for each working day late.

4. Requirements for student to be awarded a passing grade in the course:
   To be assured of receiving a passing grade a student must achieve at least 50% of the available weighted marks for the summative assessment items.

5. Method used to combine assessment results to attain final grade:
   Final grades for students will be determined by the addition of the marks obtained in each assessment item, weighted as in the Assessment Details.

6. Examination information:
   In a Closed Examination, candidates are allowed to bring only writing and drawing instruments into the examination.

7. Examination period when Deferred/Supplementary examinations will be held:
Students who obtain an overall passing mark, but who do not perform satisfactorily in an examination, may, at the discretion of the Examiner, be granted a supplementary examination. Students will be granted a deferred examination only if they perform satisfactorily in all other assessment items. Any Deferred or Supplementary examinations for this course will be held during the examination period at the end of the semester of the next offering of this course.

8 University Regulations:
Students should read USQ Regulations 5.1 Definitions, 5.6. Assessment, and 5.10 Academic Misconduct for further information and to avoid actions which might contravene University Regulations. These regulations can be found at the URL http://www.usq.edu.au/corporateservices/calendar/part5.htm or in the current USQ Handbook.

ASSESSMENT NOTES

9 The due date for an assignment is the date by which a student must despatch the assignment to the USQ. The onus is on the student to provide proof of the despatch date, if requested by the Examiner.

10 Student may be required to provide a copy of assignments submitted for assessment purposes. Such copies should be despatched to the USQ within 24 hours of receipt of a request to do so.

11 The examiner of a course may grant an extension of the due date of an assignment in extenuating circumstances.

12 Students will require access to a web browser, to e-mail and internet access to USQConnect for this course.