

FACULTY OF ENGINEERING, COMPUTER AND MATHEMATICAL SCIENCES



2017 STUDY PLAN

| | | |
|--|---|------------------------------------|
| FOR ADVANCED STANDING - OFFICE USE ONLY | | |
| <input checked="" type="checkbox"/> Please mark the box to indicate advanced standing granted (use CONDITIONAL to denote conditional advanced standing) | | |
| Unspecified Elective Credit: units | | |
| Student ID Number: | Student Name: _____, | Date: 3/02/17 |
| Assessor Name: | Advanced Standing Granted: units | Remaining Program Duration: 1 year |
| Applicant's Previous Institution: | Applicant's Previous Qualification: | |
| Assessor Comments: | | |

This study plan should be used to guide enrolment for the current academic year. Some students may need to modify their enrolment based on previous study (e.g. students granted advanced standing/credit, students repeating previously failed courses).

| GRADUATE DIPLOMA IN COMPUTER SCIENCE | | | | | |
|--------------------------------------|----|---|--|--|---|
| YEAR 1 | S1 | Foundation Elective (3 units) <input type="checkbox"/> | Foundation Elective (3 units) <input type="checkbox"/> | Foundation Elective (3 units) <input type="checkbox"/> | Foundation Elective (3 units) or General Elective (3 units) or Advanced Elective (3 units) <input type="checkbox"/> |
| | S2 | COMP SCI 7015 Software Engineering & Project (3 units) <input type="checkbox"/> | General Elective (3 units) <input type="checkbox"/> | General Elective (3 units) <input type="checkbox"/> | General Elective (3 units) <input type="checkbox"/> |

| CHOOSE FROM THE FOLLOWING ELECTIVES* | | | | |
|--------------------------------------|--|---|--|--|
| FOUNDATION ELECTIVES | COMP SCI 7202 Foundations of Computer Science (6 units) <input type="checkbox"/> | COMP SCI 7207 Web & Database Computing (3 units) <input type="checkbox"/> | COMP SCI 7081 Computer Systems (3 units) <input type="checkbox"/> | <input type="checkbox"/> |
| | COMP SCI 7204 Advanced Programming Paradigms (3 units) <input type="checkbox"/> | COMP SCI 7088 Systems Programming (3 units) <input type="checkbox"/> | COMP SCI 7201 Algorithm & Data Structure Analysis (3 units) <input type="checkbox"/> | <input type="checkbox"/> |
| GENERAL ELECTIVES | COMP SCI 7307 Secure Programming (3 units) <input type="checkbox"/> | COMP SCI 7026 Computer Architecture (3 units) <input type="checkbox"/> | COMP SCI 7305 Parallel & Distributed Computing <input type="checkbox"/> | COMP SCI 7027 Computational Cognitive Science (3 units) <input type="checkbox"/> ^NOT OFFERED 2017 |

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|--------------------|---|---|---|---|
| | COMP SCI 7064 Operating Systems (3 units) <input type="checkbox"/> | COMP SCI 7059 Artificial Intelligence (3 units) <input type="checkbox"/> | COMP SCI 7039 Computer Networks & Applications (3 units) <input type="checkbox"/> | COMP SCI 7076 Distributed Systems (3 units) <input type="checkbox"/> |
| | COMP SCI 7089 Event Driven Computing (3 units) <input type="checkbox"/> | COMP SCI 7090 Computer Graphics (3 units) <input type="checkbox"/> | COMP SCI 7306 Mining Big Data (3 units) <input type="checkbox"/> | <input type="checkbox"/> |
| ADVANCED ELECTIVES | COMP SCI 7000 Software Architecture (3 units) <input type="checkbox"/> ^NOT OFFERED 2017 | COMP SCI 7005 Adaptive Business Intelligence (3 units) <input type="checkbox"/> ^NOT OFFERED 2017 | COMP SCI 7007 Specialised Programming (3 units) <input type="checkbox"/> | COMP SCI 7009 Modern Heuristic Methods (3 units) <input type="checkbox"/> ^NOT OFFERED 2017 |
| | COMP SCI 7010 Special Topics in Computer Science A (3 units) <input type="checkbox"/> ^NOT OFFERED 2017 | COMP SCI 7012 Special Topics in Computer Science B (3 units) <input type="checkbox"/> ^NOT OFFERED 2017 | COMP SCI 7022 Computer Vision (3 units) <input type="checkbox"/> | COMP SCI 7023 Software Process Improvement (3 units) <input type="checkbox"/> |
| | COMP SCI 7409 Search Based Software Engineering (3 units) <input type="checkbox"/> | COMP SCI 7407 Advanced Algorithms (3 units) <input type="checkbox"/> | COMP SCI 7044 Computer System Security (3 units) <input type="checkbox"/> ^NOT OFFERED 2017 | COMP SCI 7045 Distributed High Performance Computing (3 units) <input type="checkbox"/> ^NOT OFFERED 2017 |
| | COMP SCI 7077 Solving Engineering Models (3 units) <input type="checkbox"/> | COMP SCI 7091 Commercialising IT Research (3 units) <input type="checkbox"/> ^NOT OFFERED 2017 | COMP SCI 7092 Mobile & Wireless Systems (3 units) <input type="checkbox"/> | COMP SCI 7093 Evolutionary Computation (3 units) <input type="checkbox"/> |
| | COMP SCI 7094 Distributed Databases & Data Mining (3 units) <input type="checkbox"/> | COMP SCI 7401 Introduction to Statistical Machine Learning (3 units) <input type="checkbox"/> | COMP SCI 7402 Introduction to Geometric Algorithms (3 units) <input type="checkbox"/> | <input type="checkbox"/> |
| | COMP SCI 7054 High Integrity Software Engineering (3 units) <input type="checkbox"/> ^NOT OFFERED 2017 | COMP SCI 7041 Language Translators (3 units) <input type="checkbox"/> ^NOT OFFERED 2017 | <input type="checkbox"/> | <input type="checkbox"/> |

*Before enrolling into electives, students are advised to seek course advice from an academic in the School of Computer Science to ensure pre-requisites for level IV electives are met.

**Unless exempted by the Faculty, all international students are required to undertake a specialist course ELEC ENG 7057 Engineering Communication & Critical Thinking. This course must be completed in the first semester of study and will be presented in lieu of a Foundation elective.

STUDENTS WITH PROGRAMMING EXPERIENCE:

May undertake this program full time as per the above study plan.

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STUDENTS WITH NO PROGRAMMING EXPERIENCE:

This program is able to be completed on a part-time basis only, due to a requirement to complete the course COMP SCI 7202 Foundations of Computer Science (6 units) prior to completing any other courses. Please note in this case the completion of this program will extend to 4 semesters.

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| <input checked="" type="checkbox"/> Please mark the box to indicate advanced standing granted (use CONDITIONAL to denote conditional advanced standing) | | |
| Unspecified Elective Credit: units | | |
| Student ID Number: | Student Name: _____ , _____ | Date: 3/02/17 |
| Assessor Name: | Advanced Standing Granted: units | Remaining Program Duration: 1 year |
| Applicant's Previous Institution: | Applicant's Previous Qualification: | |
| Assessor Comments: | | |

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| GRADUATE DIPLOMA IN COMPUTER SCIENCE – Semester 2 Start | | | | | |
|---|----|---|--|--|---|
| YEAR 1 | S2 | Foundation Elective (3 units) <input type="checkbox"/> | Foundation Elective (3 units) <input type="checkbox"/> | Foundation Elective (3 units) <input type="checkbox"/> | COMP SCI 7015 Software Engineering & Project (3 units) <input type="checkbox"/> |
| | S1 | Foundation Elective (3 units) or General Elective (3 units) or Advanced Elective (3 units) <input type="checkbox"/> | General Elective (3 units) <input type="checkbox"/> | General Elective (3 units) <input type="checkbox"/> | General Elective (3 units) <input type="checkbox"/> |

| CHOOSE FROM THE FOLLOWING ELECTIVES* | | | | |
|--------------------------------------|--|---|--|--------------------------|
| FOUNDATION ELECTIVES | COMP SCI 7202 Foundations of Computer Science (6 units) <input type="checkbox"/> | COMP SCI 7207 Web & Database Computing (3 units) <input type="checkbox"/> | COMP SCI 7081 Computer Systems (3 units) <input type="checkbox"/> | <input type="checkbox"/> |
| | COMP SCI 7204 Advanced Programming Paradigms (3 units) <input type="checkbox"/> | COMP SCI 7088 Systems Programming (3 units) <input type="checkbox"/> | COMP SCI 7201 Algorithm & Data Structure Analysis (3 units) <input type="checkbox"/> | <input type="checkbox"/> |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

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|--------------------|---|---|---|---|
| GENERAL ELECTIVES | COMP SCI 7307 Secure Programming (3 units) <input type="checkbox"/> | COMP SCI 7026 Computer Architecture (3 units) <input type="checkbox"/> | COMP SCI 7305 Parallel & Distributed Computing <input type="checkbox"/> | COMP SCI 7027 Computational Cognitive Science (3 units) <input type="checkbox"/> ^NOT OFFERED 2017 |
| | COMP SCI 7064 Operating Systems (3 units) <input type="checkbox"/> | COMP SCI 7059 Artificial Intelligence (3 units) <input type="checkbox"/> | COMP SCI 7039 Computer Networks & Applications (3 units) <input type="checkbox"/> | COMP SCI 7076 Distributed Systems (3 units) <input type="checkbox"/> |
| | COMP SCI 7089 Event Driven Computing (3 units) <input type="checkbox"/> | COMP SCI 7090 Computer Graphics (3 units) <input type="checkbox"/> | COMP SCI 7306 Mining Big Data (3 units) <input type="checkbox"/> | <input type="checkbox"/> |
| ADVANCED ELECTIVES | COMP SCI 7000 Software Architecture (3 units) <input type="checkbox"/> ^NOT OFFERED 2017 | COMP SCI 7005 Adaptive Business Intelligence (3 units) <input type="checkbox"/> ^NOT OFFERED 2017 | COMP SCI 7007 Specialised Programming (3 units) <input type="checkbox"/> | COMP SCI 7009 Modern Heuristic Methods (3 units) <input type="checkbox"/> ^NOT OFFERED 2017 |
| | COMP SCI 7010 Special Topics in Computer Science A (3 units) <input type="checkbox"/> ^NOT OFFERED 2017 | COMP SCI 7012 Special Topics in Computer Science B (3 units) <input type="checkbox"/> ^NOT OFFERED 2017 | COMP SCI 7022 Computer Vision (3 units) <input type="checkbox"/> | COMP SCI 7023 Software Process Improvement (3 units) <input type="checkbox"/> |
| | COMP SCI 7409 Search Based Software Engineering (3 units) <input type="checkbox"/> | COMP SCI 7407 Advanced Algorithms (3 units) <input type="checkbox"/> | COMP SCI 7044 Computer System Security (3 units) <input type="checkbox"/> ^NOT OFFERED 2017 | COMP SCI 7045 Distributed High Performance Computing (3 units) <input type="checkbox"/> ^NOT OFFERED 2017 |
| | COMP SCI 7077 Solving Engineering Models (3 units) <input type="checkbox"/> | COMP SCI 7091 Commercialising IT Research (3 units) <input type="checkbox"/> ^NOT OFFERED 2017 | COMP SCI 7092 Mobile & Wireless Systems (3 units) <input type="checkbox"/> | COMP SCI 7093 Evolutionary Computation (3 units) <input type="checkbox"/> |
| | COMP SCI 7094 Distributed Databases & Data Mining (3 units) <input type="checkbox"/> | COMP SCI 7401 Introduction to Statistical Machine Learning (3 units) <input type="checkbox"/> | COMP SCI 7402 Introduction to Geometric Algorithms (3 units) <input type="checkbox"/> | <input type="checkbox"/> |
| | COMP SCI 7054 High Integrity Software Engineering (3 units) <input type="checkbox"/> ^NOT OFFERED 2017 | COMP SCI 7041 Language Translators (3 units) <input type="checkbox"/> ^NOT OFFERED 2017 | <input type="checkbox"/> | <input type="checkbox"/> |

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STUDENTS WITH PROGRAMMING EXPERIENCE:

Students with previous programming knowledge may undertake this program full time as per the above study plan.

STUDENTS WITH NO PROGRAMMING EXPERIENCE:

This program is able to be completed on a part-time basis only due to a requirement to complete the course COMP SCI 7202 Foundations of Computer Science (6 units) prior to completing any other courses. Please note in this case the completion of this program will extend to 3 semesters.