Artificial Intelligence with English Language

Programme Requirements:

Artificial Intelligence (with English Language) - MSc
40 credits from Module List: ET5400 - ET5401 **and** CS5001 (15 credits) **And** (CS5098 (60 credits) **or** CS5099 (60 credits)) **and** ET5402 (20 credits) **and** 30 credits from Module List: CS5010 - CS5011 **and** Between 15 and 45 credits from Module List: CS4402, CS5012, CS5014 **and** Between 0 and 30 credits from Module List: CS4052, CS4100 - CS4450 **and** Between 0 and 30 credits from Module List: IS5102 - IS5150 **and** Between 0 and 60 credits from Module List: CS5003 - CS5089, ID5059 (except CS5029, CS5039)

Compulsory modules:

ET5400 English for Academic Purposes (Combined Masters)

SCOTCAT Credits:	20	SCQF Level 11	**Semester**	2
Academic year:	2018/9			
Availability restrictions:	Available only to students on 'with English Language' MSc programmes in the School of Computer Science.			
Planned timetable:	To be arranged.			
This module is designed to develop the academic literacy of students entering onto a taught masters programme at the University of St Andrews. Students develop the academic competence required for writing, delivering presentations, participating in seminars, researching for and evaluating source material, and developing criticality in respect of all aspects of their studies.				
Learning and teaching methods of delivery:	**Weekly contact**: 6 class tutorials (x 11 weeks) , 0.5 individual supervision meeting (x 5 weeks)			
	Scheduled learning: 69 hours		**Guided independent study:** 132 hours	
Assessment pattern:	**As used by St Andrews:** 2-hour Written Examination = 25%, Coursework = 75% Coursework contains 2 elements: a extended essay ((50% of grade) and a presentation (25% of grade).			
Re-assessment pattern:	2-hour Written Examination = 50%, Coursework = 50%			
Module coordinator:	Mr J W Harvey			
Module teaching staff:	Mr J Harvey, Mrs K Tavakoli, Ms L Thirkell			

ET5401 English for Computer Science 1

SCOTCAT Credits:	20	SCQF Level 11	**Semester**	2
Academic year:	2018/9			
Availability restrictions:	Available only to students on 'with English Language' MSc programmes in the School of Computer Science.			
Planned timetable:	To be arranged.			
This module is designed to develop the academic literacy of students entering onto MSc programmes in the School of Computer Science, and this module runs in parallel with English for Academic Purposes (ET5400). Strategies learnt in ET5400 will be applied to specific Computer Science-based texts, and written and spoken tasks. Students will also participate in assessed group projects modelled on similar assessments in 5000-level Computer Science (CS) modules.				
Learning and teaching methods of delivery:	**Weekly contact**: 6 class tutorials (x 11 weeks), one individual supervision meeting (.05 hours, x 5 weeks)			
	Scheduled learning: 69 hours		**Guided independent study:** 132 hours	
Assessment pattern:	**As used by St Andrews:** Coursework = 100%			
Re-assessment pattern:	Coursework = 100%			
Module coordinator:	Ms A J Brooks			
Module teaching staff:	Ms J Brooks, Ms M Carr			

ET5402 English for Computer Science 2

SCOTCAT Credits:	20	SCQF Level 11	**Semester**	2
Academic year:	2018/9			
Availability restrictions:	Available only to students on 'with English Language' MSc programmes in the School of Computer Science.			
Planned timetable:	To be arranged.			
This module is designed to follow on from ET5401 and ET5400 to further enhance the academic literacy of students on MSc Programmes in the School of Computer Science. Strategies learnt on the two modules mentioned above will be applied to specific Computer Science-based texts, and written and spoken tasks. Students will also participate in assessed group projects modelled on similar assessments in 5000-level CS modules.				
Learning and teaching methods of delivery:	**Weekly contact**: 6 class tutorials (x 11 weeks), one individual supervision meeting (0.5 hours, 5 weeks)			
	Scheduled learning: 72 hours		**Guided independent study:** 132 hours	
Assessment pattern:	**As used by St Andrews:** Coursework = 100%			
Re-assessment pattern:	Coursework = 100%			
Module coordinator:	Ms A J Brooks			
Module teaching staff:	Ms J Brooks, Ms M Carr			

CS5001 Object-Oriented Modelling, Design and Programming

SCOTCAT Credits:	15	SCQF Level 11	**Semester**	Both
Academic year:	2018/9			
Availability restrictions:	This module is only available in Semester 2 to students enrolled on the 'with English Language' version of the programme. All other students must take the module in Semester 1.			
Planned timetable:	Variable			
This module introduces and revises object-oriented modelling, design and implementation up to the level required to complete programming assignments within other MSc modules. Students complete a number of practical exercises in laboratory sessions.				
Anti-requisite(s)	You cannot take this module if you take CS5002			
Learning and teaching methods of delivery:	**Weekly contact**: Lectures, tutorials and practical classes.			
Assessment pattern:	Coursework = 100%			
Module teaching staff:	TBC Module coordinator(s): Director of Postgraduate Teaching - Computer Science (dopgt-cs@st-andrews.ac.uk)			

CS5010 Artificial Intelligence Principles

SCOTCAT Credits:	15	SCQF Level 11	**Semester**	1
Academic year:	2018/9			
Planned timetable:	To be arranged.			
This module covers foundational knowledge of Artificial Intelligence (AI). The module gives an overview of AI and its philosophy. It covers fundamental principles in AI: logical reasoning, reasoning in the presence of uncertainty, and machine learning. It shows how search is used to solve a variety of problems in AI. Notions such as agency and uncertainty in AI are covered. Finally, the philosophy of AI in practice and the philosophical problems in AI are shown.				
Pre-requisite(s):	Before taking this module you must (pass CS2001 or pass CS2101) and pass CS2002 - relates to ug programmes only			
Anti-requisite(s)	You cannot take this module if you take CS3105			
Learning and teaching methods of delivery:	**Weekly contact**: Lectures, seminars, tutorials and practical classes.			
	Scheduled learning: 25 hours		**Guided independent study:** 125 hours	
Assessment pattern:	**As used by St Andrews:** 2-hour Written Examination = 60%, Coursework = 40%			
Re-assessment pattern:	2-hour Written Examination = 60%, Existing Coursework = 40%			
Module teaching staff:	TBC Module coordinator(s): Director of Postgraduate Teaching - Computer Science (dopgt-cs@st-andrews.ac.uk)			

CS5011 Artificial Intelligence Practice

SCOTCAT Credits:	15	SCQF Level 11	**Semester**	1
Academic year:	2018/9			
Planned timetable:	To be arranged.			
This module covers practical design and implementation of Artificial Intelligence (AI). It provides grounding in AI technique, covering techniques in the areas of AI reasoning, planning, doing, and learning. Finally, it is shown how to implement AI ideas in software and how to evaluate such implementation.				
Pre-requisite(s):	Before taking this module you must pass CS3105 or pass CS5010			
Learning and teaching methods of delivery:	**Weekly contact**: Lectures, seminars, tutorials and practical classes.			
Assessment pattern:	Coursework = 100%			
Re-assessment pattern:	No Re-assessment available			
Module teaching staff:	TBC Module coordinator(s): Director of Postgraduate Teaching - Computer Science (dopgt-cs@st-andrews.ac.uk)			

Either:

CS4402 Constraint Programming

SCOTCAT Credits:	15	SCQF Level 10	**Semester**	2
Academic year:	2018/9			
Planned timetable:	To be arranged.			
This module introduces constraint-based reasoning as a powerful mechanism for knowledge representation and inference. It provides a thorough grounding in the constraint satisfaction/constrained optimisation problem formalism, and covers both basic techniques for implementing constraint solvers and the use of advanced techniques with a modern solver.				
Pre-requisite(s):	Before taking this module you must pass CS2002 and (pass CS2001 or pass CS2101)			
Learning and teaching methods of delivery:	**Weekly contact**: 2 lectures (x 11 weeks) and fortnightly tutorial.			
	Scheduled learning: 28 hours		**Guided independent study:** 122 hours	
Assessment pattern:	**As used by St Andrews:** 2-hour Written Examination = 60%, Coursework = 40%			
Re-assessment pattern:	2-hour Written Examination = 60%, Existing Coursework = 40%			
Module teaching staff:	TBC Module coordinator(s): Honours Coordinator - Computer Science (hons-coord-cs@st-andrews.ac.uk)			

Or:

CS5012 Language and Computation

SCOTCAT Credits:	15	SCQF Level 11	**Semester**	2
Academic year:	2018/9			
Planned timetable:	To be arranged.			
This module covers the major aspects of natural language processing and speech understanding, including computational syntax, computational semantics, discourse processing, machine translation and speech recognition.				
Pre-requisite(s):	Before taking this module you must pass CS5010 or pass CS3052			
Learning and teaching methods of delivery:	**Weekly contact**: Lectures, seminars, tutorials and practical classes.			
	Scheduled learning: 25 hours		**Guided independent study:** 125 hours	
Assessment pattern:	**As used by St Andrews:** 2-hour Written Examination = 60%, Coursework = 40%			
Re-assessment pattern:	2-hour Written Examination = 60%, Existing Coursework = 40%			
Module teaching staff:	TBC Module coordinator(s): Director of Postgraduate Teaching - Computer Science (dopgt-cs@st-andrews.ac.uk)			

CS5098 Group Project and Dissertation in Computer Science

SCOTCAT Credits:	60	SCQF Level 11	**Semester**	Full Year
Academic year:	2018/9			
Planned timetable:	To be arranged.			
This module is a group-based MSc project on a topic in Computer Science. It results in an individual dissertation of no more than 15,000 words submitted by each student. Typically the dissertation comprises a review of related work, the extension of old or development of new ideas, software implementation and testing, analyses and evaluation. The dissertation may also include an agreed collaboratively-written group report. Each student is individually assessed, taking into account both individual and group submissions. Students are required to give a presentation of their work.				
Pre-requisite(s):	Requires admission to dissertation phase of msc and permission of the head of school.			
Anti-requisite(s)	You cannot take this module if you take CS5099			
Learning and teaching methods of delivery:	**Weekly contact**: Meetings with supervisor.			
	Scheduled learning: 13 hours		**Guided independent study:** 587 hours	
Assessment pattern:	**As used by St Andrews:** Coursework = 100%			
Module teaching staff:	TBC Module coordinator(s): Director of Postgraduate Teaching - Computer Science (dopgt-cs@st-andrews.ac.uk)			

Or:

CS5099 Dissertation in Computer Science

SCOTCAT Credits:	60	SCQF Level 11	**Semester**	Full Year
Academic year:	2018/9			
Planned timetable:	To be arranged.			
This module is an individually supervised MSc project on a topic in Computer Science. It results in a dissertation of no more than 15,000 words. Typically the dissertation comprises a review of related work, the extension of old or development of new ideas, software implementation and testing, analyses and evaluation. Students are required to give a presentation of their work.				
Pre-requisite(s):	Requires admission to dissertation phase of msc and permission of the head of school			
Anti-requisite(s)	You cannot take this module if you take CS5098			
Learning and teaching methods of delivery:	**Weekly contact**: Meeting with supervisor.			
	Scheduled learning: 0 hours		**Guided independent study:** 0 hours	
Assessment pattern:	**As used by St Andrews:** Coursework = 100%			
Module teaching staff:	TBC Module coordinator(s): Director of Postgraduate Teaching - Computer Science (dopgt-cs@st-andrews.ac.uk)			

Optional modules are available - see the pdf online called Computer Science optional modules 2018-2019