Computing and Information Technology

Programme Requirements:

Computing and Information Technology - MSc
60 credits from Module List: IS5198 - IS5199, CS5098 - CS5099 **and** 15 credits from Module List: CS5001 - CS5002 **and** CS5003 (15 credits) **and** Between 0 and 30 credits from Module List: CS4052, CS4100 - CS4450 **and** Between 60 and 75 credits from Module List: IS5102 - IS5150, CS5010 - CS5089, ID5059 MPhil: 120 credits from taught element of programme requirements (not including prjoect/dissertation) plus a thesis of up to 40, 000 words

Compulsory modules:

CS5003 Masters Programming Projects

SCOTCAT Credits:	15	SCQF Level 11	**Semester**	2
Academic year:	2018/9			
Planned timetable:	Variable			
This module reinforces key programming skills gained in CS5002, by means of a series of coursework assignments posed as small programming projects. These are designed to offer increasing depth and scope for creativity as the module progresses.				
Pre-requisite(s):	Before taking this module you must pass CS5002			
Anti-requisite(s)	You cannot take this module if you take IS5108			
Learning and teaching methods of delivery:	**Weekly contact**: Lectures, tutorials and practical classes.			
	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)			

One of:

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)			

CS5002 Programming Principles and Practice

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 computational thinking and problem solving skills to students who have no or little previous programming experience. It covers general programming concepts used in the development of software applications, such as data structures, functions, choice, iteration, recursion and input/output. An easy-to-learn programming language is used to illustrate these concepts, and programming skills are reinforced through practical assignments.				
Anti-requisite(s)	You cannot take this module if you take CS5001			
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)			

One of:

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)			

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)			

IS5198 Group Project and Dissertation in Information Technology

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 an approved topic in Information Technology which shows appropriate competences in the field. 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, the development of a software system or skilled use of one or more applications, a critical analysis and evaluation of the project outputs. 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.				
Anti-requisite(s)	You cannot take this module if you take IS5199			
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 (Dissertation) = 100%			
Module teaching staff:	TBC Module coordinator(s): Director of Postgraduate Teaching - Computer Science (dopgt-cs@st-andrews.ac.uk)			

IS5199 Dissertation in Information Technology

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 an approved topic in Information Technology which shows appropriate competences in the field. The project 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, the development of a software system or skilled use of one or more applications, a critical analysis and evaluation of the project outputs. Students are required to give a presentation of their work.				
Anti-requisite(s)	You cannot take this module if you take IS5198			
Learning and teaching methods of delivery:	**Weekly contact**: Meeting with supervisor			
	Scheduled learning: 12 hours		**Guided independent study:** 588 hours	
Assessment pattern:	**As used by St Andrews:** Coursework (Dissertation) = 100%			
Module teaching staff:	TBC Module coordinator(s): 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