School of Computing

Postgraduate Taught Programmes - Canterbury

Head of School: Prof Richard Jones School Website: www.cs.kent.ac.uk

Please refer to the online Module Catalogue for full details of all modules:

www.kent.ac.uk/courses/modules

Note: It is ultimately your responsibility to ensure that you are registered for the correct modules for your programme.

Please select a link below to view the requirements for your programme:

- Advanced Computer Science
- Advanced Computer Science Epitech Students
- Advanced Computer Science (Computational Intelligence)
- Advanced Computer Science (Computational Intelligence) Epitech Students
- Computer Science
- Cyber Security
- Networks and Security
- Networks and Security Epitech Students

The information contained herein is correct at the time of publication. Please note, however, that if a module recruits fewer than 8 students it is possible that it will not run. In this event, you will be contacted and asked to select an alternative module.

INDUSTRIAL PLACEMENTS

Students can opt to undertake an industrial placement as part of their MSc programme. Programmes with an industrial placement are only available on a full-time basis. Placements normally commence after the project has been completed (September) and may vary in length from 8 to 50 weeks, extending the MSc programme to between 14 and 24 months. The timing and duration varies depend on the employer.

For the purpose of the credit framework the taught modules, project and placement constitute a single stage. However, commencement of the placement is conditional on satisfactory progress in the taught modules, as determined at the interim examination board in June. A student with resits amounting to more than 30 credits will normally be required to retrieve the credit before beginning a placement.

The Industrial Placement Co-ordinators (email csplacements@kent.ac.uk) will support you in finding a suitable placement but the search effort is primarily down to you. To help with this there will be employer presentations and specific skills talks.

The University does not guarantee every student will find a placement. Students who have not secured a placement by 31 July of the year in which the placement is due to commence will be transferred to the corresponding MSc programme without a placement.

Additional modules used for programmes with an industrial placement are as follows:

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	Office Use Only
CO902	Industrial Placement Report	15	Autumn &	7	COMP9020
			Spring		

Plus one of the following optional modules depending on the length of the placement:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	Office Use Only
CO915	Industrial Placement Experience (3 Months)	15	Autumn	7	COMP9150
CO916	Industrial Placement Experience (6 Months)	45	Autumn & Spring	7	COMP9160
CO917	Industrial Placement Experience (9 Months)	75	Autumn, Spring & Summer	7	COMP9170
CO918	Industrial Placement Experience (12 Months)	105	Year Long	7	COMP9180

The Industrial Placement modules cannot be compensated, condoned or repeated. However, the examination board may permit resubmission of an Industrial Placement Report if the failure was due to shortcomings in the report itself rather than in the work undertaken during the placement.

Any student who fails either of the placement modules (with the above exception) will be transferred to the corresponding MSc programme without an Industrial Placement.

EPITECH STUDENTS

Epitech students may only register for the following programmes:

- MSc Advanced Computer Science
- MSc Advanced Computer Science (Computational Intelligence)
- MSc Cyber Security
- MSc Networks and Security

Some adjustments apply to students from Epitech who are attending an MSc programme at Kent under the partnership arrangement between the two institutions. Epitech students should therefore view their own version of the requirements in this document when considering their module choices. Details of these adjustments are as follows:

Epitech students who have previously studied Java as part of their course at Epitech do not take modules from either of the programming streams (CO871/881/882). They must select an additional 15-credit option for the Autumn term instead.

Epitech students who have not previously studied Java may select the advanced programming stream (CO871) if they wish to learn Java. However, please be aware you will have encountered many of the concepts it covers in your courses at Epitech.

KENT GRADUATES

Students who undertook a previous degree at Kent are not permitted to repeat any module from their earlier programme as part of these postgraduate courses. If you have taken a compulsory module before then please contact the programme director for advice. Typically, when this situation arises a suitable alternative module will be substituted.

ADVANCED COMPUTER SCIENCE

STAGE 1 - 180 credits - 60 credits per term

You must take the following compulsory modules (15 credits):

Compulsory	MODULE TITLE	CREDIT	TERM	CREDIT	Office Use
modules:		AMOUNT	TAUGHT	LEVEL	Only
CO885	Project Research	15	Spring	7	COMP8850

ADCOMPSCI:MSC-T

You must take EITHER CO871 OR both CO881 AND CO882 depending on your prior experience of programming (15-30 credits):

CO871 is for students with substantial prior experience of programming.

CO881 & CO882 are for students with limited or no prior experience of programming.

Optional	MODULE TITLE	CREDIT	TERM	CREDIT	Office Use			
modules:		AMOUNT	TAUGHT	LEVEL	Only			
CO871	Advanced Java for Programmers	15	Autumn	7	COMP8710			
	OR							
CO881	Object-Oriented Programming	15	Autumn	7	COMP8810			
CO882	Advanced Object-Oriented Programming	15	Autumn	7	COMP8820			

You must take a further 30-45 credits from the Autumn term optional modules and 45 credits from the Spring term optional modules (ENLA6001 counts as a Spring module for this purpose):

Students may not choose more than 30 credits of Level 5 or 6 modules in total during their MSC

Optional	MODULE TITLE	CREDIT	TERM	CREDIT	Office Use
modules:		AMOUNT	TAUGHT	LEVEL	Only
CO545	Functional Programming	15	Spring	5	COMP5450
CO822	Introduction to Quantum Computing & Quantum	15	Spring	7	COMP8820
	Cryptography				
CO832	Data Mining and Knowledge Discovery	15	Spring	7	COMP8320
CO834	Security, Privacy and Trust Management	15	Spring	7	COMP8340
CO836	Cognitive Neural Networks	15	Autumn	7	COMP8360
CO837	Natural Computation	15	Autumn	7	COMP8370
CO838	Internet of Things and Mobile Devices Not running	15	Spring	7	COMP8380
	in 2020/21				
CO841	Cyber Law	15	Autumn	7	COMP8410
CO874	Networks and Network Security	15	Autumn	7	COMP8740
CO876	Computer Security	15	Autumn	7	COMP8760
CO884	Logic and Logic Programming	15	Spring	7	COMP8840
CO892	Advanced Network Security	15	Spring	7	COMP8920
CO894	Development Frameworks	15	Autumn	7	COMP8940
CO899	System Security	15	Spring	7	COMP8990
ENLA6001	Advanced English for Academic Study in the	15	Autumn &	6	ENLA6001
	Applied Sciences (This module is for International		Spring		
	Students whose first language is not English)				

PLUS 60 credits from the following project modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	CREDIT LEVEL	Office Use Only
CO880	Project and Dissertation*	60	7	COMP8800
CO843	Extended IT Consultancy Project*	60	7	COMP8430

^{*}Module cannot be compensated or condoned

ADVANCED COMPUTER SCIENCE - EPITECH STUDENTS

ADCOMPSCI (EP):MSC-T

STAGE 1 - 180 credits - 60 credits per term

You must take the following compulsory modules (15 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	Office Use Only
CO885	Project Research	15	Spring	7	COMP8850

You must take a further 60 credits from the Autumn term optional modules and 45 credits from the Spring term optional modules (ENLA6001 counts as a Spring module for this purpose):

Students may not choose more than 30 credits of Level 5 or 6 modules in total during their MSC.

Optional	MODULE TITLE	CREDIT	TERM	CREDIT	Office Use
modules:		AMOUNT	TAUGHT	LEVEL	Only
CO545	Functional Programming	15	Spring	5	COMP5450
CO822	Introduction to Quantum Computing & Quantum	15	Spring	7	COMP8820
	Cryptography				
CO832	Data Mining and Knowledge Discovery	15	Spring	7	COMP8320
CO834	Security, Privacy and Trust Management	15	Spring	7	COMP8340
CO836	Cognitive Neural Networks	15	Autumn	7	COMP8360
CO837	Natural Computation	15	Autumn	7	COMP8370
CO838	Internet of Things and Mobile Devices Not running	15	Spring	7	COMP8380
	in 2020/21				
CO841	Cyber Law	15	Autumn	7	COMP8410
CO871	Advanced Java for Programmers†	15	Autumn	7	COMP8710
CO874	Networks and Network Security	15	Autumn	7	COMP8740
CO876	Computer Security	15	Autumn	7	COMP8760
CO884	Logic and Logic Programming	15	Spring	7	COMP8840
CO892	Advanced Network Security	15	Spring	7	COMP8920
CO894	Development Frameworks	15	Autumn	7	COMP8940
CO899	System Security	15	Spring	7	COMP8990
ENLA6001	Advanced English for Academic Study in the	15	Autumn &	6	ENLA6001
	Applied Sciences (This module is for International		Spring		
	Students whose first language is not English)				

[†] Intended for those students who have not previously studied Java. Please be aware that many of the concepts will have been covered by the courses at Epitech.

PLUS 60 credits from the following project modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	CREDIT LEVEL	Office Use Only
CO880	Project and Dissertation*	60	7	COMP8800
CO843	Extended IT Consultancy Project*	60	7	COMP8430

^{*}Module cannot be compensated or condoned

ADVANCED COMPUTER SCIENCE (COMPUTATIONAL INTELLIGENCE) ADCS(CI):MSC-T

STAGE 1 - 180 credits - 60 credits per term

You must take the following compulsory module (15 credits):

Compulsory module:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	Office Use Only
CO885	Project Research	15	Spring	7	COMP8850

You must take EITHER CO871 OR both CO881 AND CO882 depending on your prior experience of programming (15-30 credits):

CO871 is for students with substantial prior experience of programming.

CO881 & CO882 are for students with limited or no prior experience of programming.

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	Office Use Only		
CO871	Advanced Java for Programmers	15	Autumn	7	COMP8710		
OR							
CO881	Object-Oriented Programming	15	Autumn	7	COMP8810		
CO882	Advanced Object-Oriented Programming	15	Autumn	7	COMP8820		

You must take AT LEAST 30 credits from the following optional modules:

Optional	MODULE TITLE	CREDIT	TERM	CREDIT	Office Use
modules:		AMOUNT	TAUGHT	LEVEL	Only
CO832	Data Mining and Knowledge Discovery‡	15	Spring	7	COMP8320
CO836	Cognitive Neural Networks‡	15	Autumn	7	COMP8360
CO837	Natural Computation‡	15	Autumn	7	COMP8370
CO884	Logic and Logic Programming‡	15	Spring	7	COMP8840

At least 30 credits of those modules marked with a ‡ must be passed without compensation or condonement.

The remaining credits in the Autumn and Spring (15-60) should be taken from the following optional modules, ensuring a combined total of 60 credits in each term (ENLA6001 counts as a Spring module for this purpose):

Students may not choose more than 30 credits of Level 5 or 6 modules in total during their MSC.

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	Office Use Only
CO545	Functional Programming	15	Spring	5	COMP5450
CO834	Security, Privacy and Trust Management	15	Spring	7	COMP8340
CO838	Internet of Things and Mobile Devices Not running in 2020/21	15	Spring	7	COMP8380
CO841	Cyber Law	15	Autumn	7	COMP8410
CO874	Networks and Network Security	15	Autumn	7	COMP8740
CO876	Computer Security	15	Autumn	7	COMP8760
CO892	Advanced Network Security	15	Spring	7	COMP8920
CO894	Development Frameworks	15	Autumn	7	COMP8940
CO899	System Security	15	Spring	7	COMP8990
ENLA6001	Advanced English for Academic Study in the Applied Sciences (This module is for International Students whose first language is not English)	15	Autumn & Spring	6	ENLA6001
PL583	Philosophy of Cognitive Science and Artificial Intelligence	30	Autumn	6	PHIL5830

PLUS 60 credits from the following project modules:

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Optional	MODULE TITLE	CREDIT	CREDIT	Office Use			
modules:		AMOUNT	LEVEL	Only			
CO880	Project and Dissertation*	60	7	COMP8800			
CO843	Extended IT Consultancy Project*	60	7	COMP8430			

^{*}Module cannot be compensated or condoned

ADVANCED COMPUTER SCIENCE (COMPUTATIONAL INTELLIGENCE) – EPITECH STUDENTS

ADCS(CI)(EP):MSC-T

STAGE 1 - 180 credits - 60 credits per term

You must take the following compulsory module (15 credits):

Compulsory module:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	Office Use Only
CO885	Project Research	15	Spring	7	COMP8850

You must take AT LEAST 30 credits from the following optional modules:

Optional	MODULE TITLE	CREDIT	TERM	CREDIT	Office Use
modules:		AMOUNT	TAUGHT	LEVEL	Only
CO832	Data Mining and Knowledge Discovery‡	15	Spring	7	COMP8320
CO836	Cognitive Neural Networks‡	15	Autumn	7	COMP8360
CO837	Natural Computation‡	15	Autumn	7	COMP8370
CO884	Logic and Logic Programming‡	15	Spring	7	COMP8840

At least 30 credits of those modules marked with a ‡ must be passed without compensation or condonement.

The remaining credits in the Autumn and Spring terms (45-75) should be taken from the following optional modules, ensuring a combined total of 60 credits in each term (ENLA6001 counts as a Spring module for this purpose):

Students may not choose more than 30 credits of Level 5 or 6 modules in total during their MSC.

Optional	MODULE TITLE	CREDIT	TERM	CREDIT	Office Use
modules:		AMOUNT	TAUGHT	LEVEL	Only
CO545	Functional Programming	15	Spring	5	COMP5450
CO834	Security, Privacy and Trust Management	15	Spring	7	COMP8340
CO838	Internet of Things and Mobile Devices Not running	15	Spring	7	COMP8380
	in 2020/21				
CO841	Cyber Law	15	Autumn	7	COMP8410
CO871	Advanced Java for Programmers†	15	Autumn	7	COMP8710
CO874	Networks and Network Security	15	Autumn	7	COMP8740
CO876	Computer Security	15	Autumn	7	COMP8760
CO892	Advanced Network Security	15	Spring	7	COMP8920
CO894	Development Frameworks	15	Autumn	7	COMP8940
CO899	System Security	15	Spring	7	COMP8990
ENLA6001	Advanced English for Academic Study in the	15	Autumn &	6	ENLA6001
	Applied Sciences (This module is for International		Spring		
	Students whose first language is not English)				
PL583	Philosophy of Cognitive Science and Artificial	30	Autumn	6	PHIL5830
	Intelligence				

[†] Intended for those students who have not previously studied Java. Please be aware that many of the concepts will have been covered by the courses at Epitech.

PLUS 60 credits from the following project modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	CREDIT LEVEL	Office Use Only
CO880	Project and Dissertation*	60	7	COMP8800
CO843	Extended IT Consultancy Project*	60	7	COMP8430

^{*}Module cannot be compensated or condoned

COMPUTER SCIENCE COMPSCI:MSC-T

STAGE 1 - 180 credits - 60 credits per term

You must take the following compulsory modules (75 credits):

Compulsory	MODULE TITLE	CREDIT	TERM	CREDIT	Office Use
modules:		AMOUNT	TAUGHT	LEVEL	Only
CO883	Systems Architecture	15	Autumn	7	COMP8830
CO884	Logic and Logic Programming	15	Spring	7	COMP8840
CO885	Project Research	15	Spring	7	COMP8850
CO886	Software Engineering	15	Spring	7	COMP8860
CO887	Web-Based Information Systems Development	15	Autumn	7	COMP8870

You must take EITHER CO871 OR both CO881 AND CO882 depending on your prior experience of programming (15-30 credits):

CO871 is for students with substantial prior experience of programming.

CO881 & CO882 are for students with limited or no prior experience of programming.

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	Office Use Only		
CO871	Advanced Java for Programmers	15	Autumn	7	COMP8710		
	OR						
CO881	Object-Oriented Programming	15	Autumn	7	COMP8810		
CO882	Advanced Object-Oriented Programming	15	Autumn	7	COMP8820		

Students who took CO871 must take 15 credits from the following optional modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	Office Use Only
CO836	Cognitive Neural Networks	15	Autumn	7	COMP8360
CO841	Cyber Law	15	Autumn	7	COMP8410
CO874	Networks and Network Security	15	Autumn	7	COMP8740

^{*}Module cannot be compensated or condoned

All students must take 15 credits from the following optional modules:

Optional	MODULE TITLE	CREDIT	TERM	CREDIT	Office Use
modules:		AMOUNT	TAUGHT	LEVEL	Only
CO558	Introduction to Cyber Security	15	Spring	5	COMP5580
CO832	Data Mining and Knowledge Discovery	15	Spring	7	COMP8320
CO834	Security, Privacy and Trust Management	15	Spring	7	COMP8340
ENLA6001	Advanced English for Academic Study in the	15	Autumn &	6	ENLA6001
	Applied Sciences (This module is for International		Spring		
	Students whose first language is not English)				

PLUS 60 credits from the following project modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	CREDIT LEVEL	Office Use Only
CO880	Project and Dissertation*	60	7	COMP8800
CO843	Extended IT Consultancy Project*	60	7	COMP8430

^{*}Module cannot be compensated or condoned

CYBER SECURITY CYBSEC:MSC-T CYBSEC(EP):MSC-T

STAGE 1 - 180 credits - 60 credits per term

You must take the following compulsory modules (180 credits):

Compulsory	MODULE TITLE	CREDIT	TERM	CREDIT	Office Use
modules:		AMOUNT	TAUGHT	LEVEL	Only
CO834	Security, Privacy and Trust Management	15	Spring	7	COMP8340
CO841	Cyber Law	15	Autumn	7	COMP8410
CO874	Networks and Network Security	15	Autumn	7	COMP8740
CO876	Computer Security	15	Autumn	7	COMP8760
CO880	Project and Dissertation*	60	Summer	7	COMP8800
CO885	Project Research	15	Spring	7	COMP8850
CO892	Advanced Network Security	15	Spring	7	COMP8920
CO899	System Security	15	Spring	7	COMP8990
EL844	Image Analysis with Security Applications	15	Autumn	7	DIGM8440

^{*}Module cannot be compensated or condoned

NETWORKS AND SECURITY

STAGE 1 - 180 credits - 60 credits per term

You must take the following compulsory modules (75 60 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	Office Use Only
CO838	Internet of Things and Mobile Devices Not running in 2020/21	15	Spring	7	COMP8380
CO874	Networks and Network Security	15	Autumn	7	COMP8740
CO876	Computer Security	15	Autumn	7	COMP8760
CO885	Project Research	15	Spring	7	COMP8850
CO892	Advanced Network Security	15	Spring	7	COMP8920

NETSEC:MSC-T

You must take EITHER CO871 OR both CO881 AND CO882 depending on your prior experience of programming (15-30 credits):

CO871 is for students with substantial prior experience of programming.

CO881 & CO882 are for students with limited or no prior experience of programming.

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	Office Use Only	
CO871	Advanced Java for Programmers	15	Autumn	7	COMP8710	
	OR					
CO881	Object-Oriented Programming	15	Autumn	7	COMP8810	
CO882	Advanced Object-Oriented Programming	15	Autumn	7	COMP8820	

PLUS if CO871 has been taken you must take a further 15 credits from the Autumn term optional modules below. All students must take 45 30 credits from the Spring term optional modules (ENLA6001 counts as a Spring module for this purpose):

Optional	MODULE TITLE	CREDIT	TERM	CREDIT	Office Use
modules:		AMOUNT	TAUGHT	LEVEL	Only
CO545	Functional Programming	15	Spring	5	COMP5450
CO822	Introduction to Quantum Computing & Quantum	15	Spring	7	COMP8820
	Cryptography				
CO832	Data Mining and Knowledge Discovery	15	Spring	7	COMP8320
CO834	Security, Privacy and Trust Management	15	Spring	7	COMP8340
CO836	Cognitive Neural Networks	15	Autumn	7	COMP8360
CO837	Natural Computation	15	Autumn	7	COMP8370
CO841	Cyber Law	15	Autumn	7	COMP8410
CO894	Development Frameworks	15	Autumn	7	COMP8940
CO899	System Security	15	Spring	7	COMP8990
EL844	Image Analysis with Security Applications	15	Autumn	7	DIGM8440
EL857	Biometric Technologies Not running in 2020/21	15	Autumn	7	EENG8570
ENLA6001	Advanced English for Academic Study in the	15	Autumn &	6	ENLA6001
	Applied Sciences (This module is for International		Spring		
	Students whose first language is not English)				

PLUS 60 credits from the following project modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	CREDIT LEVEL	Office Use Only
CO880	Project and Dissertation*	60	7	COMP8800
CO843	Extended IT Consultancy Project*	60	7	COMP8430

^{*}Module cannot be compensated or condoned

NETWORKS AND SECURITY - EPITECH STUDENTS

NETSEC(EP):MSC-T

STAGE 1 - 180 credits - 60 in each term

You must take the following compulsory modules (75 60 credits):

Compulsory modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	Office Use Only
CO838	Internet of Things and Mobile Devices Not running in 2020/21		Spring	7	COMP8380
CO874	Networks and Network Security	15	Autumn	7	COMP8740
CO876	Computer Security	15	Autumn	7	COMP8760
CO885	Project Research	15	Spring	7	COMP8850
CO892	Advanced Network Security	15	Spring	7	COMP8920

The remaining 45 60 credits in the Autumn and Spring terms must be taken from the following optional modules, ensuring a combined total of 60 credits in each term (ENLA6001 counts as a Spring module for this purpose):

Students may not choose more than 30 credits of Level 5 or 6 modules in total during their MSC.

Optional modules:	MODULE TITLE	CREDIT AMOUNT	TERM TAUGHT	CREDIT LEVEL	Office Use Only
CO545	Functional Programming	15	Spring	5	COMP5450
CO822	Introduction to Quantum Computing & Quantum Cryptography	15	Spring	7	COMP8820
CO832	Data Mining and Knowledge Discovery	15	Spring	7	COMP8320
CO834	Security, Privacy and Trust Management	15	Spring	7	COMP8340
CO836	Cognitive Neural Networks	15	Autumn	7	COMP8360
CO837	Natural Computation	15	Autumn	7	COMP8370
CO841	Cyber Law	15	Autumn	7	COMP8410
CO871	Advanced Java for Programmers†	15	Autumn	7	COMP8710
CO894	Development Frameworks	15	Autumn	7	COMP8940
CO899	System Security	15	Spring	7	COMP8990
EL844	Image Analysis with Security Applications	15	Autumn	7	DIGM8440
EL857	Biometric Technologies Not running in 2020/21	15	Autumn	7	EENG8570
ENLA6001	Advanced English for Academic Study in the Applied Sciences (This module is for International Students whose first language is not English)	15	Autumn & Spring	6	ENLA6001

[†] Intended for those students who have not previously studied Java. Please be aware that many of the concepts will have been covered by the courses at Epitech.

PLUS 60 credits from the following project modules:

Optional modules:	MODULE TITLE	CREDIT AMOUNT	CREDIT LEVEL	Office Use Only
CO880	Project and Dissertation*	60	7	COMP8800
CO843	Extended IT Consultancy Project*	60	7	COMP8430

^{*}Module cannot be compensated or condoned