



Institiúid Teicneolaíochta Chorcaí
Cork Institute of Technology

APPROVED

Awards	
BSc	
Programme Code:	CR_KCOMP_7
Mode of Delivery:	Full Time, ACCS
No. of Semesters:	6
NFQ Level:	7
Embedded Award:	No
Programme Credits:	180
programmeReviewDate:	March 2020
Department:	COMPUTER SCIENCE
Field of Study:	Computer Software

Programme Outcomes

Upon successful completion of this programme the graduate will be able to demonstrate... :

PO1	Knowledge - Breadth
(a)	Knowledge of the theory and concepts of software development (languages, tools and methodologies), computer architecture, networking, data analytics and database systems.
PO2	Knowledge - Kind
(a)	A in-depth knowledge of programming languages, mathematics, computer architecture, data analytics and database systems and the process of software design, development and maintenance.
PO3	Skill - Range
(a)	The ability to analyse problems from various problem domains, design appropriate software solutions and implement and test solutions.
PO4	Skill - Selectivity
(a)	An ability to design and develop software applications using appropriate tools, languages and methods. The ability to work as part of a team with a specific focus on agile development. Ability to , select the appropriate tools and apply theoretical knowledge to design.
PO5	Competence - Context
(a)	The ability to analyse a problem domain, specify requirements, model and design an appropriate solution , implement and test within a particular application domain while adhering to a specified plan.
PO6	Competence - Role
(a)	Capable of independent work or as part of a team to effectively identify, formulate and solve high level problems in a creative manner.
PO7	Competence - Learning to Learn
(a)	The ability to investigate new technologies, articulate lessons learnt directly from experience and appreciate the need for continuous learning within the software industry.
PO8	Competence - Insight
(a)	The ability to articulate the wider social, political and business context within which IT professional operates and the need for high ethical and professional standards in ones work.

Semester Schedules

Stage 1 / Semester 1

Mandatory	
Module Code	Module Title
SOFT6018	Programming Fundamentals
SOFT6007	Web Development Fundamentals
COMH6002	Computer Architecture
COMP6035	Computer Security Principles
MATH6055	Maths for Computer Science
CMOD6001	Creativity Innovation&Teamwork

Stage 1 / Semester 2

Mandatory	
Module Code	Module Title
SOFT6017	Modular Programming
COMP6041	Introduction to Databases
COMP6042	Operating Systems in Practice
COMP6027	Networking Fundamentals
COMP6043	Physical Computing
MATH6004	Discrete Maths

Stage 2 / Semester 1

Mandatory	
Module Code	Module Title
SOFT7004	Object Oriented Principles
SOFT7007	Requirements Engineering
COMP7035	Linear Data Struct. & Alg.
SOFT7022	Database Design
SOFT7008	Server-side Web Development
Elective	
Module Code	Module Title
FREE6001	Free Choice Module
COMP7036	Linux Administration
SOFT7006	Operating Systems

Stage 2 / Semester 2

Mandatory	
Module Code	Module Title
COMP7013	Object Oriented Programming
COMP7037	NoSQL Data Architectures
SOFT7005	OO Analysis and Design
SOFT7019	C Programming
COMP7044	Systems Scripting
STAT7007	Probability and Statistics

Stage 3 / Semester 1

Mandatory	
Module Code	Module Title
SOFT8023	Distributed Sys. Programming
SOFT7003	Group Project
SOFT7031	Client-side Web Development
COMP7039	Agile Processes
SOFT8032	Programming for Data Analytics
Elective	
Module Code	Module Title
SOFT7021	Software Localisation
SOFT7035	Programming Mobile Devices
FREE6001	Free Choice Module

Stage 3 / Semester 2

Group Elective 1	
Module Code	Module Title
PLAC7009	Work Placement
Group Elective 2	
Module Code	Module Title
APEX8030	Approved External Study - 30 Credits
Group Elective 3	
Module Code	Module Title
COMP8045	Emerging Technological Trends
FREE6001	Free Choice Module
COMP7046	Technical Communication Skills
COMP7047	Open Source Projects