

Module Details	
Module Title:	Software Development
Module Code:	COS7009-B
Academic Year:	2019-20
Credit Rating:	20
School:	Department of Computer Science
Subject Area:	Computer Science
FHEQ Level:	FHEQ Level 7 (Masters)
Pre-requisites:	
Co-requisites:	

Contact Hours	
Type	Hours
Lectures	12
Laboratory	24
Directed Study	164

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Semester 1 (Sep - Jan)

Module Aims
The aim of this module is to introduce basic programming skills through a modern object-oriented programming language, design methods and tools.

Outline Syllabus
1. Object-oriented programming. 2. Object-oriented design method. 3. Modern operating system and its tools. 4. Programming constructs, data and control structures. 5. Advanced topics in programming. 6. Testing and debugging programs.

Learning Outcomes	
1	demonstrate an advanced and systematic knowledge of design and development through testing of software applications using object oriented principle.
2	analyse and effectively use integrated development environment.
3	apply modern paradigms to software development transferring theoretical concepts to practical applications.
4	solve complex software development problems both systematically and creatively.

Learning, Teaching and Assessment Strategy
Programme delivered in a series of lectures, supported by supervised laboratory work. Module assessment is comprised of two classroom tests to test skills, practical understanding and theoretical concepts on: test 1 (Object-oriented concepts and applications. Operating Systems. Basic Algorithms) and test 2 (Object-oriented applications, Object-oriented design and Object-oriented programming in depth). The supplementary assessment follows a full classroom test model to address deficiencies encountered at the first attempt.

Mode of Assessment				
Type	Method	Description	Length	Weighting
Summative	Classroom test	One phased laboratory test	2 hours	50%
Referral	Classroom test	Supplementary assessment: One phased laboratory test	3 hours	100%
Summative	Classroom test	One phased laboratory test	2 hours	50%

Reading List
To access the reading list for this module, please visit https://bradford.rl.talis.com/index.html .

Please note:

This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.