Programme Specification Document

Approved, 2022.02

Overview

Programme Code	45580
Programme Title	Computer Studies
Awarding Institution	Liverpool John Moores University
Programme Type	Degree with Foundation
Language of Programme	All LJMU programmes are delivered and assessed in English
Programme Leader	Denis Reilly
Link Tutor(s)	

Awards

Award Type	Award Description	Award Learning Outcomes
Target Award	Bachelor of Science with Honours (SW) (Fnd) - SBSHF	See Learning Outcomes Below
Recruitable Target	Bachelor of Science with Honours (Fnd) - BSHF	See Learning Outcomes Below
Alternative Exit	Bachelor of Science (Fnd) - BSF	Demonstrate a broad and comparative knowledge of the general scope of the subject, its different areas and applications, and its interactions with related subjects. A detailed knowledge of a defined subject or a more limited coverage of a specialist area balanced by a wider range of study. In each case, specialised study will be informed by current developments in the subject. Demonstrate a critical understanding of the essential theories, principles and concepts of the subject(s) and of the ways in which these are developed through the main methods of enquiry in the subject.
Alternative Exit	Certificate of Higher Education (Fnd) - CHEF	Develop computer programs using elementary programming constructs. Apply a variety of tools and techniques for website design including human computer interaction (HCI) principles. Develop skills in the planning, design and management of information systems. Discuss a range of practical aspects of computing and apply the associated tools and techniques. Discuss computer architecture at the hardware and software levels and discuss basic networking concepts. Understand of the basics of data modelling and abstraction. Understand the different approaches required to solve computer based problems. Understand ethical frameworks and their application within the computing industry. Communicate their ideas and take personal responsibility for their learning.
Alternative Exit	Diploma of Higher Education (Fnd) - DHEF	Critically analyse the requirements of a business system using structured techniques. Critically evaluate and apply ethical theories to IT activities. Understand and explain the fundamentals of object oriented design and programming and be able to develop object oriented applications. Understand advanced web technologies and apply them to the design of advanced web applications. Develop a logical schema and create and manipulate data using a database management system. Understand and apply basic research skills in order to critique and review existing research and plan new research. Understand and apply project management techniques and tools. Identify and demonstrate their employability skills.
Alternative Exit	Bachelor of Science (SW) (Fnd) - SBSF	Demonstrate a broad and comparative knowledge of the general scope of the subject, its different areas and applications, and its interactions with related subjects. A detailed knowledge of a defined subject or a more limited coverage of a specialist area balanced by a wider range of study. In each case, specialised study will be informed by current developments in the subject. Demonstrate a critical understanding of the essential theories, principles and concepts of the subject(s) and of the ways in which these are developed through the main methods of enquiry in the subject.

Alternative Exit	Diploma in Higher Education (SW) (Fnd) - SDHEF	Critically analyse the requirements of a business system using structured techniques. Critically evaluate and apply ethical theories to IT activities. Understand and explain the fundamentals of object oriented design and programming and be able to develop object oriented applications. Understand advanced web technologies and apply them to the design of advanced web applications. Develop a logical schema and create and manipulate data using a database management system. Understand and apply basic research skills in order to critique and review existing research and plan new research. Understand and apply project management techniques and tools. Identify and demonstrate their employability skills. A student who successfully completes a placement year will be eligible for the Sandwich award and will, in addition to the above, be able to demonstrate the professional and personal skills necessary for effective employment within a professional environment.

Alternate Award Names	

External Benchmarks

Subject Benchmark Statement	UG-Computing (2022)

Accreditation
Programme Accredited by

PSRB Name	Type of Accreditation	Valid From Date	Valid To Date	Additional Notes
BCS, the Chartered Institute for IT	Accredited by BCS, the Chartered Institute for IT for the purposes of fully meeting the academic requirement for registration as a Chartered IT Professional.			

Programme Offering(s)

Mode of Study, Mode of Delivery	Intake Month	Teaching Institution	Programme Length
Full-Time, Face to Face	September	LJMU Taught	4 Years
Sandwich Year Out, Face to Face	September	LJMU Taught	5 Years

Aims and Outcomes

Educational Aims of the Programme

The programme aims to produce graduates who are able to play a significant role in the provision of information in a business environment by the development of effective and reliable computer-based systems. The specific aims of the course are as follows: -To understand the underlying concepts, formal foundations and theory of computer-based information systems. -To develop the knowledge, skills and abilities necessary for the investigation, analysis, design and development of large scale software systems. -To provide an educational underpinning that both addresses leading edge developments in the industry and provides for future professional development, equipping students with the appropriate knowledge and skills for a wide variety of employment and/or further study. -To encourage students to engage with the development of employability skills by completing a self-awareness statement. -To encourage students to become advanced autonomous learners. -To further develop students' originality in applying analytical, creative, problem solving and research skills. -To provide advanced, conceptual understanding, underpinning career development, innovation and further study. -For students undertaking a placement year the aim is to provide students with an extended period of work experience at an approved partner that will complement their programme of study at LJMU. This will give the students the opportunity to develop professional skills relevant to their programme of study, as well as attitude and behaviours necessary for employment in a diverse and changing environment

Learning Outcomes

Code	Description
PLO1	Be critically aware of current and developing principles and practices of selected areas of computer systems technologies.
PLO2	Deploy appropriate methods and tools creatively for the development of a complex computer system.
PLO3	Develop and evaluate computer systems in selected areas from a wide range of domains.
PLO4	Manage computer systems projects.
PLO5	Use a wide range of computing facilities effectively.
PLO6	Work individually and/or as a team member.
PLO7	Use information technology, e.g. Web and Internet, for effective information retrieval.
PLO8	Apply numerical skills to cases involving a quantitative dimension.
PLO9	Communicate effectively by written or verbal means.
PLO10	Plan and manage learning and development.
PLO11	Have widened and deepened conceptual and practical knowledge and skills in selected areas of computer systems, in a wide range of domains.
PLO12	Have been exposed to and applied a range of tools and techniques used in the development of complex computer systems.
PLO13	Have critically analysed a range of computer systems and application domains.
PLO14	Have a clear understanding of how to effectively and creatively manage computer systems.
PLO15	Use knowledge with originality and be innovative in solving computer systems problems.

Code	Description
PLO16	Demonstrate systematic and comprehensive knowledge and understanding of computer systems concepts, principles and theories.
PLO17	Use such knowledge with originality in system modelling, requirements analysis and design of computer systems and applications in selected areas from a wide range of domains.
PLO18	Perform critical evaluation and testing for computer systems in selected areas from a wide range of domains.

Programme Structure

Programme Structure Description

The placement year, module 5101COMSCI, will follow Level 5 and students will be enrolled on a 600 credit honours sandwich programme. The Level 5 mean for the final award mark will be calculated based upon the 240 credits at Level 5. Students successfully completing the assessment of the placement year are eligible for a Sandwich award. Students not undertaking a placement year are registered on the non-sandwich version of the programme and will have the opportunity of an additional study year abroad following Level 5. Students will be enrolled on a 600 credit honours with study abroad programme. Of those 600 credits, 120 will be taken via a Level 5 study abroad module 5111COMSCI. The modules to be studied in the host institution must be agreed in advance. The Level 5 mean for the final award mark will be calculated based upon the 240 credits at Level 5.

Programme Structure - 600 credit points	
Level 3 - 120 credit points	
Level 3 Core - 120 credit points	CORE
[MODULE] 3100FNDET Algorithms and Computing Approved 2022.02 - 10 credit points	
[MODULE] 3101FNDAPM Engineering and Technology Practice Approved 2022.01 - 20 credit points	
[MODULE] 3102FNDET Foundation Mathematics for Engineering and Technology 1 Approved 2022.02 - 20 credit points	
[MODULE] 3103FNDET Foundation Mathematics for Engineering and Technology 2 Approved 2022.03 - 20 credit points	
[MODULE] 3106FNDET Programming Approved 2022.01 - 10 credit points	
[MODULE] 3107FNDET Introductory Foundation Physics Approved 2022.01 - 20 credit points	
[MODULE] 3209FNDCMP Information Systems Development Approved 2022.01 - 20 credit points	
Level 4 - 120 credit points	
Level 5 - 240 credit points	
Level 5 Core - 120 credit points	CORE
[MODULE] 5100COMP Research Skills Approved 2022.01 - 10 credit points	
[MODULE] 5101COMP Professional Issues Approved 2022.01 - 10 credit points	
[MODULE] 5102COMP Database Systems Approved 2022.01 - 20 credit points	
[MODULE] 5104COMP Object Oriented Systems Development Approved 2022.01 - 20 credit points	
[MODULE] 5112COMP Project Management Approved 2022.01 - 20 credit points	
[MODULE] 5113COMP Information Systems Analysis and Design Approved 2022.01 - 20 credit points	
[MODULE] 5114COMP Advanced Web Development Approved 2022.01 - 20 credit points	
Level 5 Optional - No credit points	OPTIONAL
Optional placement - 120 credit points	OPTIONAL
Placement Year - 120 credit points	OPTIONAL
[MODULE] 5101COMSCI Sandwich Year - Computer Studies Approved 2022.01 - 120 credit points	
OR Study Semester - 120 credit points	OPTIONAL
[MODULE] 5111COMSCI Study Year Abroad - Computer Studies Approved 2022.01 - 120 credit points	
Level 6 - 120 credit points	
Level 6 Core - 120 credit points	CORE
[MODULE] 6100COMP Project Approved 2022.01 - 40 credit points	

[MODULE] 6109COMP	Business Systems Analysis Approved 2022.01 - 20 credit points	
[MODULE] 6110COMP	User Experience Design Approved 2022.02 - 20 credit points	
[MODULE] 6111COMP	Advanced Topics in Information Systems Approved 2022.01 - 20 credit points	
[MODULE] 6112COMP	Website and E-Commerce Management Approved 2022.01 - 20 credit points	

Module specifications may be accessed at https://proformas.ljmu.ac.uk/Default.aspx

Teaching, Learning and Assessment

Core knowledge and understanding is acquired via lectures, tutorials, practical work, workshops and guided independent study. Independent study is used where appropriate resource material is available and increases as the programme progresses. Students are given feedback on all work produced. Assessment methods are specified in each module specification. All learning outcomes in a module are assessed and the type of assessment specified for each outcome. Each module is assessed by examination and/or course work. The nature of the course work varies for each module. Cognitive skills are developed throughout the programme via tutorial, group discussion, teamwork, coursework, projects and presentations. Assessment of cognitive skills is through written examinations, laboratory work, coursework reports, project work, reports and presentations. Practical skills are developed throughout the programme. Coursework and projects are designed to provide practical opportunities for students to work independently or in groups. Assessment of practical skills is normally by coursework and projects. The placement year is assessed, by portfolio, on a pass / fail basis. Key skills are developed throughout the programme in a variety of forms. Specifically through a combination of research related coursework, guided independent study and projects, examinations, group work and presentations. Key skills are assessed as part of coursework, projects, written examinations and presentations.

Opportunities for work related learning

Level 4: 4103COMP Personal and Professional Development - this module provides students with an opportunity to consider their future role as a computing professional and develop a plan to enable them to progress in their chosen career. Level 5: 5101COMP Professional Issues – this module provides further insight into developing the role of the student becoming a computing professional. Students will be encouraged to become student members of appropriate professional bodies for the computing industry (e.g. ACM, IEEE or BCS) as part of their development. 5101COMSCI Sandwich Year Computer Studies - The aim is to provide students with an extended period of work experience at an approved partner that will complement their programme of study at LJMU. This will give students the opportunity to develop professional skills relevant to their programme of study as well as the attitude and behaviours necessary for employment in a diverse and changing environment.

Entry Requirements

Type	Description
Alternative qualifications considered	Qualifications deemed equivalent to the above upon completion of appropriate assessment will be considered acceptable. Applicants should have five GCSE (or equivalent) passes of at least grade C including Mathematics and English (or IELTS 6.0). BSc Computer Studies to MCOMP Computer Studies transfer is allowed with the permission of the Programme Leader and the maintenance of good academic performance, normally with averages above 60% at levels 4 and 5. Such requests for transfer must be made before the end of level 5 of the programme.

Other international requirements	Applicants offering other awards will be considered on an individual basis in line with the agreed entry criteria. All applicants should have achieved IELTS 6 or equivalent.
BTECs	BTEC Extended Diploma To the value of 88 UCAS points. BTEC Diploma / 90 Credit Diploma / Subsidiary Diploma /Certificate To the value of 88 UCAS points when combined with other qualifications.
International Baccalaureate	Applicants should have or expect to obtain a total of 88 UCAS points overall.
A levels	Applicants should have or expect to obtain a total of 88 UCAS points with a maximum of 20 points from AS level qualifications.

Extra Entry Requirements