Computing

Programme Information

2022.01, Approved

Overview

Programme Code	46421
Programme Title	Computing
Awarding Institution	Liverpool John Moores University
Programme Type	Degree with Foundation

Awards

Award Type	Award Description	Award Learning Outcomes
Recruitable Target	Bachelor of Science with Honours (Fnd) - BSHF	A student successfully completing this award will have acquired the subject knowledge and understanding as well as skills and other attributes as detailed above but will not have successfully completed a placement year.
Target Award	Bachelor of Science with Honours (SW) (Fnd) - SBSHF	N/A

Alternate Award Names	

External Benchmarks

Subject Benchmark Statement	UG-Computing (2019)

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 Programme Length Unit
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	Number	Description
PLO1	1	Critically evaluate current and developing principles and practices in selected areas of computer systems technologies.
PLO2	2	Creatively plan and manage the development of a complex computer system.
PLO3	3	Implement and evaluate computer software in a wide range of domains.
PLO4	4	Manage computer systems projects.
PLO5	5	Work professionally as a member of a team.
PLO6	6	Apply numerical methods to computing problems involving a quantitative dimension.

PLO7	7	Communicate complex information effectively by written or verbal means.
PLO8	8	Identify job roles and opportunities that reflect personal interest and expertise.
PLO9	9	Plan and manage personal learning and development.
PLO10	10	Apply a wide and deep range of conceptual and practical knowledge and skills in selected areas of computer systems, in a wide range of domains.
PLO11	11	Utilise a range of tools and techniques used in the development of complex computer systems.
PLO12	12	Critically analyse a range of computer systems and application domains.
PLO13	13	Effectively and creatively manage a complex computer system.
PLO14	14	Use knowledge with originality and be innovative in solving computer systems problems.
PLO15	15	Deploy systematic and comprehensive knowledge and understanding of computer systems concepts, principles and theories to computing problems.
PLO16	16	Use knowledge with originality in system modelling, requirements analysis and design.
PLO17	17	Critically evaluate and test a computer-based system.

Course Structure

Programme Structure Description	The placement year, module 5119COMSCI, will follow Level 5 and students will be enrolled on a 480 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 480 credit honours with study abroad programme. Of those 480 credits, 120 will be taken via a Level 5 study abroad module 5120COMSCI. 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 - 620 credit points	
Level 3 - 120 credit points	
Level 3 Core - 120 credit points	CORE
[MODULE] 3100FNDET Algorithms and Computing Approved 2022.01 - 10 credit points	
[MODULE] 3102FNDET Foundation Mathematics for Engineering and Technology 1 Approved 2022.01 - 20 credit points	
[MODULE] 3106FNDET Programming Approved 2022.01 - 10 credit points	
[MODULE] 3201FNDCMP Personal, Academic and Skills Development Approved 2022.01 - 20 credit points	
[MODULE] 3209FNDCMP Information Systems Development Approved 2022.01 - 20 credit points	
[MODULE] 3210FNDCMP Creative Computing Approved 2022.01 - 20 credit points	
[MODULE] 3211FNDCMP Applied Computing Approved 2022.01 - 20 credit points	
Level 4 - 120 credit points	
Level 4 Core - 120 credit points	CORE
[MODULE] 4200COMP Introduction to Programming Approved 2022.01 - 20 credit points	
[MODULE] 4201COMP Computer Systems Approved 2022.01 - 20 credit points	
[MODULE] 4202COMP Networks and Web Development Approved 2022.01 - 20 credit points	
[MODULE] 4203COMP Professional Practice Approved 2022.01 - 10 credit points	
[MODULE] 4204COMP Data Modelling Approved 2022.01 - 10 credit points	
[MODULE] 4210COMP Fundamentals of Information Systems Approved 2022.01 - 20 credit points	
[MODULE] 4211COMP Problem Solving for Computing Approved 2022.01 - 20 credit points	
Level 5 - 220 credit points	
Level 5 Core - 100 credit points	CORE
[MODULE] 5200COMP Group Project Approved 2022.01 - 20 credit points	
[MODULE] 5201COMP Computer Networks Approved 2022.01 - 20 credit points	
[MODULE] 5213COMP Information Systems Development Approved 2022.01 - 20 credit points	

[MODULE] 5214COMP Advanced Web Development Approved 2022.01 - 20 credit points	
[MODULE] 5224COMP Data Analytics Approved 2022.01 - 20 credit points	
Level 5 Optional - No credit points	OPTIONAL
Optional Study Semester - 120 credit points	OPTIONAL
Placement Year - 120 credit points	OPTIONAL
[MODULE] 5119COMSCI Sandwich Year - Computing Approved 2022.01 - 120 credit points	
OR Study Semester - 120 credit points	OPTIONAL
[MODULE] 5120COMSCI Study Year Abroad - Computing Approved 2022.01 - 120 credit points	
Level 6 - 160 credit points	
Level 6 Core - 60 credit points	CORE
[MODULE] 6200COMP Project Approved 2022.01 - 40 credit points	
[MODULE] 6211COMP Advanced Information Systems Approved 2022.01 - 20 credit points	
Level 6 Optional - 100 credit points	OPTIONAL
[MODULE] 6209COMP Business Intelligence Approved 2022.01 - 20 credit points	
[MODULE] 6210COMP User Experience Design Approved 2022.01 - 20 credit points	
[MODULE] 6212COMP E-Commerce Systems Approved 2022.01 - 20 credit points	
[MODULE] 6213COMP Network Defence Approved 2022.01 - 20 credit points	
[MODULE] 6214COMP Advanced Networking Approved 2022.01 - 20 credit points	

Teaching, Learning and Assessment

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

Opportunities for work related learning
Level 4: 4203COMP Professional Practice - 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: 5200COMP Group Project – 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. 5119COMSCI Sandwich Year Computing - 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
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.
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.
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).
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.

Programme Contacts

Programme Leader

Contact Name
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Link Tutor

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