Computing and Information Systems

Programme Information

2022.01, Approved

Overview

Programme Code	30269
Programme Title	Computing and Information Systems
Awarding Institution	Liverpool John Moores University
Programme Type	Masters

Awards

Award Type	Award Description	Award Learning Outcomes
Target Award	Master of Science - MS	N/A
Alternative Exit	Postgraduate Diploma - PD	For the award of Postgraduate Diploma, in addition to the outcomes for Postgraduate Certificate, students will be capable of taking an innovative and informed position in relation to Computing and Information Systems and they will be able to devise and synthesise appropriate research methodologies as well as plan relevant research and/or development projects. Students will also be able to demonstrate creativity in critical analysis, reflection and contextual awareness in a wide range of topics associated with Computing and Information Systems.

Alternate Award Names	

External Benchmarks

Subject Benchmark Statement	

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 further learning 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	1 Years

Aims and Outcomes

Educational Aims of the Programme	The overall aim of the programme is to provide people of graduate status working, or planning to work, in a computing environment with the opportunity to enhance their career prospects by gaining additional knowledge and skills in the areas of Computing, Information Systems and Management of Computer Technology. The specific aims of the programme are as follows: To provide students with a fuller, systematic understanding of current and developing computer technologies. To enable students to explore the issues surrounding the Management of Information Technology in Business and Industrial contexts. To facilitate students in the development of expertise and interest in topic areas of direct and complementary relevance to their work. To encourage students to become advanced autonomous learners. To provide students with a comprehensive understanding, critical awareness and ability to conduct evaluation of current research issues. 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 such as PhD.

Learning Outcomes

Code	Number	Description
PLO1	1	Critically review current and developing principles and practices within the computing industry.
PLO2	2	Perform original system modelling, requirements analysis and design.
PLO3	3	Conduct critical evaluation and testing of a computer based system.
PLO4	4	Deploy appropriate methods and tools creatively for the development of a complex computer based system.
PLO5	5	Apply appropriate research methods critically to conduct original computer related research.
PLO6	6	Develop and evaluate computer based systems.
PLO7	7	Manage computer based projects.
PLO8	8	Use a wide range of computing facilities effectively.
PLO9	9	Work individually and/or as a team member.

PLO10	10	Use information technology, e.g. Web and internet, for effective information retrieval.
PLO11	11	Apply numerical skills to cases involving a quantitative dimension.
PLO12	12	Demonstrate deep conceptual and practical knowledge and skills in the areas of Computing and Information Systems.
PLO13	13	Communicate effectively by written or verbal means.
PLO14	14	Plan and manage learning and development.
PLO15	15	Engage with complex debates around legal, ethical, social and professional issues regarding Computing and Information Systems.
PLO16	16	Critically select a range of tools and techniques used in the development of complex computer based systems.
PLO17	17	Critically analyse a range of applications domains.
PLO18	18	Effectively and creatively manage Information Technology and its users in the workplace.
PLO19	19	Use knowledge with originality and be innovative when applying IT solutions to business problems.
PLO20	20	Comprehensively and critically understand current research issues in the relevant aspects of Computing and Information Systems.
PLO21	21	Study independently at an advanced level and have developed effective methodology skills for original research.
PLO22	22	Demonstrate systematic and comprehensive knowledge of IT concepts, principles and theories.

Course Structure

Programme Structure Description	For an MSc award, students are required to attain 180 credits at Level 7. 120 credits from taught modules, and 60 credits from the project dissertation; For a PG Diploma award, 120 credits of taught modules at Level 7 are required; For a PG Certificate award, 60 credits of taught modules at Level 7 are required. 7101COMP Research Methods must be passed prior to the submission of the Project Dissertation (7136COMP Project Dissertation).

Programme Structure - 180 credit points	
Level 7 - 180 credit points	
Level 7 Core - 180 credit points	CORE
[MODULE] 7101COMP Research Methods Approved 2022.01 - 20 credit points	
[MODULE] 7107COMP Computer Systems Technology Approved 2022.01 - 20 credit points	
[MODULE] 7120COMP Management of E-Business Approved 2022.01 - 20 credit points	
[MODULE] 7127COMP Database Design and Technology Approved 2022.01 - 20 credit points	
[MODULE] 7129COMP Software Development with Java Approved 2022.01 - 20 credit points	
[MODULE] 7131COMP Computer Security Approved 2022.01 - 20 credit points	
[MODULE] 7136COMP Project Dissertation Approved 2022.01 - 60 credit points	
Level 7 Optional - No credit points	OPTIONAL

Teaching, Learning and Assessment

Teaching, Learning and Assessment	Core knowledge and understanding is acquired via lectures, tutorials, practicals, coursework, projects, seminars and guided independent study. Specifically, acquisition of 1 is via a combination of lectures, projects, seminars, and guided independent study. Acquisition of 2, 3, 4, 5 and 6 is via a mixture of lectures, tutorials, laboratory work, coursework, and projects. Acquisition of 7 and 8 is via lectures, coursework, projects, seminars, and guided independent study. Students are given feedback on all work produced. Assessment methods for the knowledge and understanding are specified in module specifications. Each module is assessed by examination and/or coursework. Specifically the assessment takes the form of written examinations (1-3, 5, 6),laboratory work (2-4),coursework reports (1-3, 5-8),and/or project work, reports and presentations (1-8). Cognitive skills are developed throughout the programme via tutorial, group discussion, teamwork, coursework, projects and presentations. Specifically, skill 9 is developed through tutorial group discussion, teamwork, coursework, projects, and presentations. Skills 10, 11 and 12 are developed through laboratory work, coursework, and projects. Skill 13 is developed through coursework, projects, and guided independent study. Assessment of cognitive skills is through written examinations, laboratory work, coursework reports, project work, reports and presentations. Specifically, written examinations (9, 10),laboratory work (9-12),coursework reports (1-5),and/or project work, reports and presentations (9-13). Practical skills are developed throughout the programme. Coursework and projects are designed to provide practical opportunities for students to work independently or in groups. Specifically, skills 14, 15 and 16 are developed through laboratory work, coursework, and project work. Skill 17 is developed through individual and group coursework, laboratory work, and project work. Assessment of practical skills is normally by coursework (14-18) and projects (14-18). 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. Skill 18 is developed through a combination of research-related coursework, guided independent study, and projects. Skill 19 is developed through study of technical methods, examinations, coursework, and projects. Skill 20 is developed through report writing for coursework and projects, written examinations, teamwork, presentations, and group discussion. Skill 21 is developed via the management of learning tasks and deadlines for coursework and projects. Key skills are assessed as part of coursework (18-22),projects (18-22),written examinations (19,20) and presentations (20).

Opportunities for work related learning

Opportunities for work related learning
Self-knowledge: Students reflect on their strengths and skills to select their project. With support of project supervisor; Project and time management skills, during Coursework and Project Dissertation; Oral presentation skills, in seminars and project presentation; Professional networking skills, during School Seminars ; Courseworks based on real-world industrial case studies / applications, including group work in some modules; Industrial guest speakers; Learning about Intellectual Property and Copyright, during Research Methods; Application of a wide range of ICT tools and techniques; Learning statistical tools for data analysis; Development of Interpersonal skills and knowledge of group dynamics, during group coursework and workshops.

Entry Requirements

Type	Description
Other international requirements	Where candidate's first degree was not taught and assessed in English, a minimum IELTS 6 (with a minimum of 5.5 on each component) or equivalent.

Alternative qualifications considered	Applicants should normally have one of the following qualifications: Degree, not necessarily in Computing, when the applicant has relevant skills, or Degree equivalent professional qualifications e.g. the BCS Professional Graduate Diploma in IT, or DipHE or HND plus a minimum of 3 years relevant professional experience. Students with non-standard entry qualifications, relevant industry experience or certification are also encouraged to apply. Admissions for these candidates will be at the discretion of the Programme Leader. Applicants with non-standard qualifications may be required to submit a CV and references.

Programme Contacts

Programme Leader

Contact Name
Rubem Pereira

Link Tutor

Contact Name