Programme Specification Document

Approved, 2022.02

Overview

Programme Code	35583
Programme Title	Multimedia Computing
Awarding Institution	Liverpool John Moores University
Programme Type	Degree
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) - SBSH	See Learning Outcomes Below
Recruitable Target	Bachelor of Science with Honours - BSH	See Learning Outcomes Below
Alternative Exit	Diploma of Higher Education - DHE	Put into practice the theoretical knowledge and skills learned in lectures. Demonstrate a sound understanding of the principles of designing and building multimedia-based computer systems and will have applied these principles to their assessment. Evaluate the appropriateness of different approaches to problem solving.
Alternative Exit	Certificate of Higher Education - CHE	Develop computer programs using elementary programming constructs. Develop computer programs using elementary programming constructs. Apply a variety of tools and techniques for website design. Apply a variety of tools and techniques for website design. Discuss a range of practical aspects of computing and multimedia and apply the associated tools and techniques used in them. Discuss a range of practical aspects of computing and multimedia and apply the associated tools and techniques used in them. Discuss computer architecture at the hardware and software levels and basic security concepts. Discuss computer architecture at the hardware and software levels and basic security concepts. Develop robust models for the storage and processing of data. Develop robust models for the storage and processing of data. On the completion of Level 4 of the programme, the student will have a good understanding of the basics of the field of computing. On the completion of Level 4 of the programme, the student will have a good understanding of the basics of the field of computing. Understand the different approaches required to solve computer-based problems. Understand the different approaches required to solve computer-based problems. Have the skills and ability to communicate their ideas and take personal responsibility for their learning. Have the skills and ability to communicate their ideas and take personal responsibility for their learning.
Alternative Exit	Bachelor of Science (SW) - SBS	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) - SDHE	Put into practice the theoretical knowledge and skills learned in lectures. Demonstrate a sound understanding of the principles of designing and building multimedia-based computer systems and will have applied these principles to their assessment. Evaluate the appropriateness of different approaches to problem solving. 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.
Alternative Exit	Bachelor of Science - BS	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.

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	3 Years

Sandwich Year Out, Face to Face	September	LJMU Taught	4 Years

Aims and Outcomes

Educational Aims of the Programme

Multimedia Computing is a degree that provides students with a comprehensive education, skills and learning experience in Multimedia Computing technologies. The programme provides graduates with a solid computing background in general, specific knowledge and understanding of the latest developments in multimedia computing. The specific aims of the programme are as follows: • To provide students with a comprehensive understanding of current and developing multimedia technologies. • To provide students with relevant technical skill and experience in multimedia development. • To develop students' analytical, creative, problem-solving and evaluation skills. • To encourage students to become autonomous learners. • To provide a platform for career development, innovation and further postgraduate study. • To encourage students to engage with the development of employability skills by completing a self-awareness statement. • To facilitate students in the development of expertise in areas of direct and complementary relevance to gaining employment. • 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	Comprehend current and developing principles and practices within multimedia computing.
PLO2	Demonstrate knowledge and understanding of current issues, concepts, principles and theories related to multimedia use and development.
PLO3	Utilise problem solving skills.
PLO4	Creatively deploy appropriate tools and techniques for the development of multimedia applications.
PLO5	Appraise multimedia techniques and their range of applicability in different problems areas.
PLO6	Develop and evaluate applications for multimedia problematic domains.
PLO7	Deploy effective multimedia solutions.
PLO8	Use and develop supporting technologies for multimedia, such as application interoperability.
PLO9	Use a wide range of computing facilities effectively.
PLO10	Plan and manage projects.
PLO11	Use information technology, e.g. Software Development tools.
PLO12	Have widened and deepened their knowledge and skills in the area of multimedia, their applications and supporting technologies.
PLO13	Apply numerical and formal methods skills to cases involving a quantitative dimension.
PLO14	Communicate effectively by written or verbal means.

Code	Description
PLO15	Plan and manage learning and development.
PLO16	Have been exposed to and applied a range of tools and techniques currently being used in the development of multimedia computer systems.
PLO17	Have analysed and developed a major piece of work in the area.
PLO18	Understand current issues in the relevant aspects of multimedia systems.
PLO19	Study independently and have developed transferable skills.
PLO20	Work more effectively as part of a team or as a team leader.
PLO21	Independently investigate innovative technologies in multimedia development.
PLO22	Critically analyse innovative multimedia computing technologies and implement those technologies efficiently and effectively as an individual or as part of a team.

Programme Structure

Programme Structure Description

The placement year, module 5104COMSCI, 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 5114COMSCI. 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 - 480 credit points	
Level 5 - 120 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] 5112COMP Project Management Approved 2022.01 - 20 credit points	
[MODULE] 5114COMP Advanced Web Development Approved 2022.01 - 20 credit points	
[MODULE] 5127COMP Digital Media Production Approved 2022.01 - 20 credit points	
[MODULE] 5128COMP Interactive Multimedia Systems Approved 2022.01 - 20 credit points	
Optional placement - 120 credit points	OPTIONAL
Placement Year - 120 credit points	OPTIONAL
[MODULE] 5104COMSCI Sandwich Year - Multimedia Computing Approved 2022.01 - 120 credit points	
OR Study Abroad - 120 credit points	OPTIONAL
[MODULE] 5114COMSCI Study Year Abroad - Multimedia Computing 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] 6106COMP Mixed Reality Technologies Approved 2022.02 - 20 credit points	
[MODULE] 6112COMP Website and E-Commerce Management Approved 2022.01 - 20 credit points	
[MODULE] 6127COMP Advanced Multimedia Approved 2022.01 - 20 credit points	
[MODULE] 6128COMP Innovations in Software Development Approved 2022.01 - 20 credit points	

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

Approved variance from Academic Framework Regulations

Variance

A variance has been approved to permit delivery of 6106COMP as yearlong for the 2020-21 academic year only

Teaching, Learning and Assessment

These include lectures, tutorials, laboratory work, coursework (both individual and group coursework),projects, seminars and guided independent study. Students are given feedback on all assessed work produced. Students are motivated by being given a specific task with an achievable outcome, ranging from completion of a small tutorial exercise to a full-scale individual project at Level 6. Knowledge and understanding is assessed via formal examination, individual and team coursework, demonstration of practical work, and a full-scale individual project at Levels 6. Assessment methods for each module are specified in the module specifications. Each module is assessed by examination and/or coursework. Skill 1 is developed through tutorial group discussion, team work, coursework, projects and presentations. Skills 2, 3 and 4 are developed through laboratory work, coursework and projects Skills 4 is developed though coursework, projects and guided independent study. These skills are assessed by coursework (1-4) laboratory work (2-4),and formal exams (1, 2, 3 and 4),as well as project work, reports and presentations (3-4). Practical skills are developed throughout the programme. The many laboratory or workshop based modules reinforce the learning of practical skills. Coursework and projects are designed to provide practical opportunities for students to work independently and in groups. The various programming and computer based modules provide important exposure to industrial standards. Skills 1, 2, 3, and 4 are developed through laboratory work, coursework and project work. Skill 5 is developed through individual and group coursework, laboratory work and project work. Practical skills are assessed via laboratory sessions, workshops, submission of reports, demonstration of systems, industrial placement and individual projects. Personal Development opportunities are inherent within the programme. 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. Skill 1 is developed through a combination of research-related coursework, guided independent study, and projects. Skill 2 is developed through study of technical methods, examinations, coursework, and projects. Skill 3 is developed through report writing for coursework and projects, written examinations, teamwork, presentations, and group discussion. Skill 4 is developed via the management of learning tasks and deadlines for coursework and projects. Key skills are assessed as part of coursework (1-4),projects (1-4),written examinations (2,3) and presentations (3).

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. 5104COMSCI Sandwich Year Multimedia 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
A levels	Applicants should have or expect to obtain a total of 112 UCAS points with a maximum of 20 points from AS level qualifications.

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 Multimedia Computing to MCOMP Multimedia Computing 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.
International Baccalaureate	Applicants should have or expect to obtain a total of 112 UCAS points overall.
BTECs	BTEC Extended Diploma To the value of 112 UCAS points. BTEC Diploma / 90 Credit Diploma / Subsidiary Diploma /Certificate To the value of 112 UCAS points when combined with other qualifications.

Extra Entry Requirements