PROGRAMME SPECIFICATION

Bachelor of Science with Honours (SW) in Multimedia Computing

Awarding institution	Liverpool John Moores University
Teaching institution	LJMU
UCAS Code	GG54
JACS Code	I150
Programme Duration	Full-Time: 3 Years, Sandwich Thick: 4 Years
Language of Programme	All LJMU programmes are delivered and assessed in English
Subject benchmark statement	Computing (2007)
Programme accredited by	BCS, The Chartered Institute for IT
Description of accreditation	Initial CITP. *Confirmation of full accreditation will be sought in 2019.
Validated target and alternative exit awards	Bachelor of Science with Honours in Multimedia Computing
	Bachelor of Science with Honours (SW) in Multimedia Computing
	Diploma of Higher Education in Multimedia Computing
	Diploma in Higher Education (SW) in Multimedia Computing
	Certificate of Higher Education in Multimedia Computing
Programme Leader	Denis Reilly

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.

Alternative Exit/ Interim Award Learning Outcomes - Certificate of Higher Education

A student who is eligible for this award will be able to:

Develop computer programs using elementary programming constructs.

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 computer architecture at the hardware and software levels and basic security concepts.

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.

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.

Alternative Exit/ Interim Award Learning Outcomes - Diploma of Higher Education

A student who is eligible for this award will be able to:

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.

Target award Learning Outcomes - Bachelor of Science with Honours (SW)

A student successfully completing the programme of study will have acquired the following subject knowledge and understanding as well as skills and other attributes.

A student who is eligible for this award will be able to:

1. Comprehend current and developing principles and practices within multimedia computing.

2. Have widened and deepened their knowledge and skills in the area of multimedia, their applications and supporting technologies.

3. Have been exposed to and applied a range of tools and techniques currently being used in the development of multimedia computer systems.

4. Have analysed and developed a major piece of work in the area.

5. Understand current issues in the relevant aspects of multimedia systems.

6. Study independently and have developed transferable skills.

7. Work more effectively as part of a team or as a team leader.

8. Independently investigate innovative technologies in multimedia development.

9. Critically analyse innovative multimedia computing technologies and implement those technologies efficiently and effectively as an individual or as part of a team.

10. Demonstrate knowledge and understanding of current issues, concepts, principles and theories related to multimedia use and development.

11. Utilise problem solving skills.

12. Creatively deploy appropriate tools and techniques for the development of multimedia applications.

13. Appraise multimedia techniques and their range of applicability in different problems areas.

14. Develop and evaluate applications for multimedia problematic domains.

15. Deploy effective multimedia solutions.

16. Use and develop supporting technologies for multimedia, such as application interoperability.

17. Use a wide range of computing facilities effectively.

18. Plan and manage projects.

19. Use information technology, e.g. Software Development tools.

20. Apply numerical and formal methods skills to cases involving a quantitative dimension.

21. Communicate effectively by written or verbal means.

22. Plan and manage learning and development.

Alternative target awards

A student who is eligible for the following awards will be able to:

Bachelor of Science with Honours in Multimedia Computing -

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.

Teaching, Learning and Assessment

The methods used to enable outcomes to be achieved and demonstrated are as follows:

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).

Programme structure - programme rules and modules

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.

Level 6	Potential Awards on completion	Bachelor of Science with Honours (SW)
Core	Option	Award Requirements
6100COMP PROJECT (40 credits) 6106COMP MIXED REALITY TECHNOLOGIES (20 credits) 6112COMP WEBSITE AND E-COMMERCE MANAGEMENT (20 credits) 6127COMP ADVANCED MULTIMEDIA (20 credits) 6128COMP INNOVATIONS IN SOFTWARE DEVELOPMENT (20 credits)		120 core credits at level 6 0 option credits at level 6

Level 5	Potential Awards on completion	
Core	Option	Award Requirements
5100COMP RESEARCH SKILLS (10 credits) 5101COMP PROFESSIONAL ISSUES (10 credits) 5102COMP DATABASE SYSTEMS (20 credits) 5112COMP PROJECT MANAGEMENT (20 credits) 5114COMP ADVANCED WEB DEVELOPMENT (20 credits) 5127COMP DIGITAL MEDIA PRODUCTION (20 credits) 5128COMP INTERACTIVE MULTIMEDIA SYSTEMS (20 credits)		120 core credits at level 5 0 option credits at level 5

Level 4	Potential Awards on completion	
Core	Option	Award Requirements
4100COMP INTRODUCTION TO PROGRAMMING (20 credits) 4101COMP COMPUTER SYSTEMS (20 credits) 4102COMP INTERNET AND WEB TECHNOLOGIES (20 credits) 4103COMP PERSONAL AND PROFESSIONAL DEVELOPMENT (10 credits) 4104COMP DATA MODELLING (10 credits) 4118COMP PROBLEM SOLVING FOR MULTIMEDIA COMPUTING (20 credits) 4119COMP FUNDAMENTALS OF MULTIMEDIA (20 credits)		120 core credits at level 4 0 option credits at level 4

Information about assessment regulations

All programmes leading to LJMU awards operate within the University's Academic Framework. https://www.ljmu.ac.uk/about-us/public-information/academic-quality-and-regulations/academic-framework

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

Opportunities for work-related learning (location and nature of activities)

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.

Criteria for admission

A/AS Level
Applicants should have or expect to obtain a total of 112 UCAS points with a maximum of 20 points from AS level qualifications.

BTEC National Diploma
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.

Irish Leaving Certificate
Applicants should have or expect to obtain a total of 112 UCAS points overall.

Scottish Higher
Applicants should have or expect to obtain a total of 112 UCAS points overall.

International Baccalaureate
Applicants should have or expect to obtain a total of 112 UCAS points overall.

Other
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.

Mature entry
Mature applicants will be considered on a case-by-case basis. The admissions team will be particularly concerned with the length of time since any relevant academic study and relevant background from work experience or 'Access' courses.

Overseas qualifications
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.

External Quality Benchmarks

All programmes leading to LJMU awards have been designed and approved in accordance with the UK Quality Code for Higher Education, including the Framework for Higher Education Qualifications in the UK (FHEQ) and subject benchmark statements where applicable.

The University is subject to periodic review of its quality and standards by the Quality Assurance Agency (QAA) Published review reports are available on the QAA website at www.qaa.ac.uk

Programmes which are professionally accredited are reviewed by professional, statutory and regulatory bodies (PSRBs) and such programmes must meet the competencies/standards of those PSRBs.

Support for students and their learning

The University aims to provide students with access to appropriate and timely information, support and guidance to ensure that they are able to benefit fully from their time at LJMU. All students are assigned a Personal Tutor to provide academic support and when necessary signpost students to the appropriate University support services.

Students are able to access a range of professional services including:

- Advice on practical aspects of study and how to use these opportunities to support and enhance their personal and academic development. This includes support for placements and careers guidance.

- Student Advice and Wellbeing Services provide students with advice, support and information, particularly in the areas of: student funding and financial matters, disability, advice and support to international students, study support, accommodation, health, wellbeing and counselling.

- Students studying for an LJMU award at a partner organisation will have access to local support services

Methods for evaluating and improving the quality and standards of teaching and learning

Student Feedback and Evaluation

The University uses the results of student feedback from internal and external student surveys (such as module evaluations, the NSS and PTES), module evaluation questionnaires and meetings with student representatives to improve the quality of programmes.

Staff development

The quality of teaching is assured through staff review and staff development in learning, teaching and assessment.

Internal Review

All programmes are reviewed annually and periodically, informed by a range of data and feedback, to ensure quality and standards of programmes and to make improvements to programmes.

External Examining

External examiners are appointed to programmes to assess whether:

- the University is maintaining the threshold academic standards set for awards in accordance with the FHEQ and applicable subject benchmark statements

- the assessment process measures student achievement rigorously and fairly against the intended outcomes of the programme(s) and is conducted in line with University policies and regulations

- the academic standards are comparable with those in other UK higher education institutions of which external examiners have experience

- the achievement of students are comparable with those in other UK higher education institutions of which the external examiners have experience

and to provide informative comment and recommendations on:

- good practice and innovation relating to learning, teaching and assessment observed by external examiners

- opportunities to enhance the quality of the learning opportunities provided to students

Please note:

This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content, teaching, learning and assessment methods of each module can be found in module and programme guides.