

## PROGRAMME SPECIFICATION

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### Bachelor of Science with Honours (SW) in Multimedia Computing

<b>Awarding institution</b>	Liverpool John Moores University
<b>Teaching institution</b>	Liverpool John Moores University
<b>JACS Code</b>	I150
<b>Programme Duration</b>	
<b>Language of Programme</b>	All LJMU programmes are delivered and assessed in English
<b>Subject benchmark statement</b>	Computing (2007)
<b>Programme accredited by</b>	
<b>Description of accreditation</b>	
<b>Validated target and alternative exit awards</b>	<p>Bachelor of Science with Honours in Multimedia Computing</p> <p>Bachelor of Science with Honours (SW) in Multimedia Computing</p> <p>Bachelor of Science in Multimedia Computing</p> <p>Bachelor of Science (SW) in Multimedia Computing</p> <p>Diploma of Higher Education in Multimedia Computing</p> <p>Certificate of Higher Education in Multimedia Computing</p>
<b>Programme Leader</b>	Andrew Laws

### Educational aims of the programme

BSc (Hons) 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 fully engage with the World of Work programme, including World of Work Skills Certificate and, as a first step towards this, to complete Bronze (Self Awareness) Statement.
- To facilitate students in the development of expertise in areas of direct and complementary relevance to gaining employment.

#### 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 including Human-Computer Interaction (HCI) principles. Discuss the technical challenges of social computing and investigate the ethical, commercial and economic issues within this field. Discuss a range of practical aspects of computing and apply the associated tools and techniques used in them. Discuss computer architecture at the hardware and software levels and basic security concepts. On the completion of Level 4 of the programme, the student will have a good understanding of the basics of the field of computing. They will understand the different approaches required to solve computer-based problems. They will 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:*

During Level 5 of the programme, the student will have more opportunity to practice the skills that they have learned in lectures. They will have a sound understanding of the principles of multimedia computing and will have applied these principles to their assessment. They will be able to evaluate the appropriateness of different approaches to problem solving.

## **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. Be aware of current and developing principles and practices within Multimedia Computing
2. Have widened and deepened their knowledge and skills in the area of multimedia computing, their applications and supporting technologies
3. Have been exposed to and applied a range of tools and techniques currently being used in the development multimedia computer systems
4. Have analysed and developed a major piece of work in the area
5. Be able to understand current issues in the relevant aspects of multimedia systems
6. Be able to study independently and have developed transferable skills
7. Be able to work more effectively as part of a team or as a team leader
8. Demonstrate knowledge and understanding of current issues, concepts, principles and theories related to multimedia computing
9. Utilise problem solving skills
10. Creatively deploy appropriate tools and techniques for the development of multimedia applications
11. Appraise various multimedia techniques and their range of applicability in different problems areas
12. Develop and evaluate applications for multimedia problematic domains
13. Deploy effective multimedia solutions
14. Use and develop supporting technologies for multimedia, such as application interoperability
15. Use a wide range of computing facilities effectively
16. Plan and manage projects
17. Use information technology, e.g. Software Development tools.
18. Apply numerical and formal methods skills to cases involving a quantitative dimension.
19. Communicate effectively by written or verbal means.
20. Plan and manage learning and development.

## **Teaching, Learning and Assessment**

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

Core knowledge and understanding is achieved through the use of a range of appropriate teaching methods.

These include lectures, tutorials, laboratory work, coursework (both individual and group coursework), projects, seminars and guided independent study.

Students are given feedback on all 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 Level 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

Skill 4 is developed through 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 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 networks based modules provide important exposure to industrial standards.

Skills 1, 2, 3, and 4 are developed through laboratory work, coursework and project work.

Skills 5 are 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.

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 programme is modular in construction. Modules are normally 12, 24 or 36 credits (equivalent to 120/240/360 hours of study). Students normally study 120 credits per level. There are core (compulsory) modules at each level, plus a number of optional modules at level 6. Students will normally undertake a professional placement year between levels 5 and 6. Students successfully completing the placement year are eligible for a Sandwich award.

At level 6 students must select one 24 credit option and one 12 credit option. The 24 credit option should be selected from the following:

6051COMP E-COMMERCE SYSTEMS

6056COMP IT MANAGEMENT

The 12 credit option should be selected from the following:

6037COMP COMPUTING IN EDUCATION

6038COMP WORK PLACEMENT EVALUATION

6046COMP CLOUD COMPUTING

6053COMP EMPLOYABILITY AND THE WORKPLACE

6055COMP GREEN AND SUSTAINABLE COMPUTING

6061COMP TECHNOLOGY ENTREPRENEURSHIP

6067COMP MAINFRAME COMPUTING

Level 6	Potential Awards on completion	Bachelor of Science with Honours (SW)
Core	Option	Award Requirements
6000PROJ PROJECT (36 credits) 6043COMP ADVANCED MULTIMEDIA DEVELOPMENT (24 credits) 6048COMP INNOVATIONS IN SOFTWARE DEVELOPMENT (24 credits)	6037COMP COMPUTING IN EDUCATION (12 credits) 6038COMP WORK PLACEMENT EVALUATION (12 credits) 6046COMP CLOUD COMPUTING (12 credits) 6051COMP E-COMMERCE SYSTEMS (24 credits) 6053COMP EMPLOYABILITY AND THE WORKPLACE (12 credits) 6055COMP GREEN AND SUSTAINABLE COMPUTING (12 credits) 6056COMP IT MANAGEMENT (24 credits) 6061COMP TECHNOLOGY ENTREPRENEURSHIP (12 credits) 6067COMP MAINFRAME COMPUTING (12 credits)	84 core credits at level 6 36 option credits at level 6
Level 5	Potential Awards on completion	
Core	Option	Award Requirements
5015COMP PROJECT MANAGEMENT (24 credits) 5019COMP DATABASE DESIGN, APPLICATIONS AND MANAGEMENT (24 credits) 5039COMP DIGITAL MULTIMEDIA SYSTEMS (24 credits) 5068COMP DIGITAL MEDIA PRODUCTION (24 credits) 5070COMP ADVANCED WEB DEVELOPMENT (24 credits)		120 core credits at level 5 0 option credits at level 5
Level 4	Potential Awards on completion	
Core	Option	Award Requirements
4000COMP WEB DESIGN AND HCI (24 credits) 4001COMP INTRODUCTION TO COMPUTER PROGRAMMING (24 credits) 4004COMP COMPUTING AND SOCIETY (24 credits) 4008COMP COMPUTER SYSTEMS (24 credits) 4014COMP FUNDAMENTALS OF MULTIMEDIA (24 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>

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

Industrial Placement - Students are encouraged to undertake a 12 month placement (including statutory holiday entitlement) in the programme-related area that is part of the Sandwich degree.

To pass the industrial placement:

- The University Tutor must award at least a pass grade (the mid-point on a five point scale)
- The Company Tutor must award at least a pass grade (the mid-point on a five point scale)
- The University Tutor must award at least a pass grade (the mid-point on a five point scale) to the Professional Placement Report written by the student
- The student must complete a period of no less than 12 continuous months (including statutory holiday entitlement) of approved professional training.

Level 6:- 6038COMP Computing in Education (Option) - Students who are interested in a career in teaching can apply for consideration at a position with a local school or college, attending one half day per week. This gives them first-hand experience of teaching computing in schools or colleges and allows them to develop their World of Work skills.

Level 6:- 6037COMP Work Placement Evaluation (Option) - This option module allows the student to reflect on their work placement in greater depth than their placement report, evaluate their development of graduate skills during the placement year, and plan their future learning requirements to enhance their employability.

Level 6:- 6053COMP Employability and the Workplace (Option) - LJMU's WoW initiative has been recognised as an innovative approach to improving the employability skills of graduates. This module operates in conjunction with a development programme at LJMU's Graduate Development Centre and enables students to critically evaluate their own employability skills and further improve on these via the GDC WoW certification process if desired.

Level 6:- 6061COMP Technology Entrepreneurship (Option) - This module prepares those students who wish to enter the world of self-employment upon graduation by examining the production of a business plan to support their own idea. With on-going support from the team at the University's Centre for Entrepreneurship, students will be guided in developing their idea through the initial stages of business development.

Level 6:- 6067COMP Mainframe Computing (Option) - This module prepares those students who wish to undertake possible future professional accreditation in the field of mainframe computing. Delivered in conjunction with IBM, this module provides hands-on theory and experience in using mainframe technologies and follows the IBM certificated curriculum.

Further information about Graduate Skills can be found at:

<http://www.ljmu.ac.uk/worldofwork/123832.htm> (The World of Work Careers Centre website)

<http://www.ljmu.ac.uk/eaqs/128262.htm> (Methods of Practice - Section 5 Work Related Learning and Additional Information)

## Criteria for admission

### **A/AS Level**

280 UCAS points to include 2 A-levels or Double Award

### **BTEC National Diploma**

280 UCAS points

### **AVCE**

280 UCAS points

### **Irish Leaving Certificate**

280 UCAS points

### **Scottish Higher**

280 UCAS points

### **International Baccalaureate**

25 points

### **Access**

Pass

### **Higher national diploma**

Pass

### **Other**

In addition to 280 UCAS points applicants should have five GCSEs at grade C or above including GCSE Mathematics grade C and English Language grade C

### **Mature entry**

Mature students the necessary qualifications but relevant experience are encouraged to apply and may be requested to attend an interview and aptitude test

#### **Overseas qualifications**

Offers will be based on individual qualifications and experience. All applicants should have achieved IELTS 6.0

## **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](http://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.*