

PROGRAMME SPECIFICATION

Bachelor of Science with Honours in Multimedia Computing

Awarding institution	Liverpool John Moores University
Teaching institution	YPC International College (Kolej Antarabangsa YPC)
JACS Code	
Programme Duration	Full-Time: 3 Years
Language of Programme	All LJMU programmes are delivered and assessed in English
Subject benchmark statement	Computing (2007)
Programme accredited by	
Description of accreditation	
Validated target and alternative exit awards	Bachelor of Science with Honours in Multimedia Computing Diploma of Higher Education in Multimedia Computing Certificate of Higher Education in Multimedia Computing
Link Tutor	Glyn Hughes

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.

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.

Target award Learning Outcomes - Bachelor of Science with Honours

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

Knowledge and understanding

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

- A1. Comprehend current and developing principles and practices within multimedia computing.
- A2. Have widened and deepened their knowledge and skills in the area of multimedia, their applications and supporting technologies.
- A3. Have been exposed to and applied a range of tools and techniques currently being used in the development of multimedia computer systems.
- A4. Have analysed and developed a major piece of work in the area.
- A5. Understand current issues in the relevant aspects of multimedia systems.
- A6. Study independently and have developed transferable skills.
- A7. Work more effectively as part of a team or as a team leader.
- A8. Independently investigate innovative technologies in multimedia development.
- A9. Critically analyse innovative multimedia computing technologies and implement those technologies efficiently and effectively as an individual or as part of a team.

Teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated

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.

Assessment

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.

Skills and other attributes

Intellectual Skills

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

- B1. Demonstrate knowledge and understanding of current issues, concepts, principles and theories related to multimedia use and development.
- B2. Utilise problem solving skills.
- B3. Creatively deploy appropriate tools and techniques for the development of multimedia applications.
- B4. Appraise multimedia techniques and their range of applicability in different problems areas.

Teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated

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 through coursework, projects and guided independent study.

Assessment

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).

Professional practical skills

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

- C1. Develop and evaluate applications for multimedia problematic domains.
- C2. Deploy effective multimedia solutions.
- C3. Use and develop supporting technologies for multimedia, such as application interoperability.
- C4. Use a wide range of computing facilities effectively.
- C5. Plan and manage projects.

Teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated

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.

Assessment

Practical skills are assessed via laboratory sessions, workshops, submission of reports, demonstration of systems and individual projects.

Personal Development opportunities are inherent within the programme.

Transferable / key skills

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

- D1. Use information technology, e.g. Software Development tools.
- D2. Apply numerical and formal methods skills to cases involving a quantitative dimension.
- D3. Communicate effectively by written or verbal means.
- D4. Plan and manage learning and development.

Teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated

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.

Assessment

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

Programme rules

Level 6	Potential Awards on completion	Bachelor of Science with Honours
Core	Option	Award Requirements
6600YPROJ PROJECT (40 credits)		120 core credits at level 6

6606YCOM MIXED REALITY TECHNOLOGIES (20 credits) 6612YCOM WEBSITE AND E-COMMERCE MANAGEMENT (20 credits) 6627YCOM ADVANCED MULTIMEDIA (20 credits) 6628YCOM INNOVATIONS IN SOFTWARE DEVELOPMENT (20 credits)		0 option credits at level 6
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Level 5	Potential Awards on completion	
Core	Option	Award Requirements
5600YCOM RESEARCH SKILLS (10 credits) 5601YCOM PROFESSIONAL ISSUES (10 credits) 5602YCOM DATABASE SYSTEMS (20 credits) 5612YCOM PROJECT MANAGEMENT (20 credits) 5614YCOM ADVANCED WEB DEVELOPMENT (20 credits) 5627YCOM DIGITAL MEDIA PRODUCTION (20 credits) 5628YCOM 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
4600YCOM INTRODUCTION TO PROGRAMMING (20 credits) 4601YCOM COMPUTER SYSTEMS (20 credits) 4602YCOM INTERNET AND WEB TECHNOLOGIES (20 credits) 4603YCOM PERSONAL AND PROFESSIONAL DEVELOPMENT (10 credits) 4604YCOM DATA MODELLING (10 credits) 4618YCOM PROBLEM SOLVING FOR MULTIMEDIA COMPUTING (20 credits) 4619YCOM 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>

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

Level 4: 4603YCOM 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: 5601YCOM 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 as part of their development.

Criteria for admission

Overseas qualifications

For admission to Level 4 of the programme. School/College leavers who have reached 17.5 years on admission would normally be required to have achieved the following:

STPM (Malaysian Higher School Certificate) - two (2) principal passes + two (2) subsidiary passes (equivalent to A-levels) in appropriate subjects.

OR

Foundation in Business & Information Technology from YPC International College.

Any qualification deemed equivalent by the Programme Team and Link Tutor as entry-level education.

To enrol directly to Level 5 of the programme a student would normally be required to have achieved the following:

SPM - 3 credits in English Language and other relevant subjects (equivalent to O-levels) plus a YPC International College Diploma in E-Business Technology - with a minimum 2.5 Cumulative Grade Point Average (CGPA) score.

OR

SPM - 3 credits in English Language and other relevant subjects (equivalent to O-levels) plus a MQA approved Diploma in an appropriate discipline - with a minimum 2.5 Cumulative Grade Point Average (CGPA) score.

In each case the YPC International College Programme Co-Ordinator will assess English Language capability (such as MUET Band 3 / IELTS 5.5) and if necessary, place students on an appropriate English Language programme.

The content of the MQA Approved Diploma will be subject to LJMU's RP(E)L process.

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.