

# PROGRAMME SPECIFICATION

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## Bachelor of Science with Honours in Computer Networks

<b>Awarding institution</b>	LJMU
<b>Teaching institution</b>	Auston College Myanmar, Yangon, Myanmar
<b>JACS Code</b>	
<b>Programme Duration</b>	Full-Time: 1 Year
<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>	Bachelor of Science with Honours in Computer Networks
<b>Link Tutor</b>	Silvester Czanner

## Educational aims of the programme

The two principal themes in the programme are the development of computer science skills relating to networked digital information systems (from here on 'Computer Networks'), and the associated software engineering, technology and analysis skills required to develop and maintain successful Computer Networks. The main aims are:

- To provide students with the technical skills required for the development of Computer Network software solutions.
- To enable the student to acquire the skills needed in the investigation of user requirements and the development of a suitable software design using the appropriate specifications and design methodologies.
- To prepare students with the technology management skills required to implement and maintain Computer Networks
- To provide students with the knowledge of the wider issues involved in the implementation of Computer Networks, such as legal, ethical and privacy requirements.
- To encourage students to engage with the development of employability skills by completing a self-awareness statement.
- To provide students with a comprehensive understanding, critical awareness and ability to conduct evaluation of current Computer Networks research issues.
- 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.

## Target award Learning Outcomes - Bachelor of Science with Honours

*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 critically aware of current and developing principles and practices of selected areas of computer network technologies.
2. Have widened and deepened conceptual and practical knowledge and skills in selected areas of computer networks, in a wide range of domains.
3. Have been exposed to and applied a range of tools and techniques used in the development of complex networks.

4. Have critically analysed a range of computer networks and application domains.
5. Have a clear understanding of how to effectively and creatively manage computer networks.
6. Use knowledge with originality and be innovative in solving computer network problems.
7. Demonstrate systematic and comprehensive knowledge and understanding of computer systems concepts, principles and theories.
8. Use such knowledge with originality in system modelling, requirements analysis and design of computer networks and applications in selected areas from a wide range of domains.
9. Perform critical evaluation and testing for computer systems in selected areas from a wide range of domains.
10. Deploy appropriate methods and tools creatively for the development of a complex computer network.
11. Develop and evaluate computer networks in selected areas from a wide range of domains.
12. Manage computer network projects.
13. Use a wide range of computing facilities effectively.
14. Work individually and/or as a team member.
15. Apply numerical skills to cases involving a quantitative dimension.
16. Communicate effectively by written or verbal means.
17. 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 acquired via lectures, tutorials, practical work, workshops and guided independent study. Independent study is used where appropriate resource material is available and increases as the programme progresses. Students are given feedback on all work produced.

Assessment methods are specified in each module specification. All learning outcomes in a module are assessed and the type of assessment specified for each outcome. Each module is assessed by examination and/or course work. The nature of the course work varies for each module.

Cognitive skills are developed throughout the programme via tutorial, group discussion, teamwork, coursework, projects and presentations. Assessment of cognitive skills is through written examinations, laboratory work, coursework reports, project work, reports and presentations.

Practical skills are developed throughout the programme. Coursework and projects are designed to provide practical opportunities for students to work independently or in groups.

Assessment of practical skills is normally by coursework and projects. 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. Key skills are assessed as part of coursework, projects, written examinations and presentations.

## Programme structure - programme rules and modules

Level 6	Potential Awards on completion	Bachelor of Science with Honours
Core	Option	Award Requirements
6500CSMM Project (40 credits) 6502CSMM Network Forensics (20 credits) 6510CSMM User Experience Design (20 credits) 6513CSMM Network Defence (20 credits) 6514CSMM Advanced Networks (20 credits)		120 core credits at level 6 0 option credits at level 6
Level 5	Potential Awards on completion	
Core	Option	Award Requirements
5502CSMM Database Systems (20		60 core credits at level 5

credits) 5513CSMM Information Systems Development (20 credits) 5530CSMM Mobile and Web Development (20 credits)		0 option credits at level 5
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## 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)

### Criteria for admission

#### Overseas qualifications

An Aston Higher Diploma in Infrastructure & Networks and the successful completion of a 0 credit bridging module, delivered by Aston College.

Alternative equivalent qualifications may be considered on a case by case basis.

### 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.*