

# PROGRAMME SPECIFICATION

## Certificate of Professional Development in Pre Masters Programme (PMP) Engineering and Computing

<b>Awarding institution</b>	Liverpool John Moores University
<b>Teaching institution</b>	Study Group
<b>JACS Code</b>	H100, I100
<b>Programme Duration</b>	Other Full Time: 14 Weeks
<b>Language of Programme</b>	All LJMU programmes are delivered and assessed in English
<b>Subject benchmark statement</b>	Engineering 2010
<b>Programme accredited by</b>	
<b>Description of accreditation</b>	
<b>Validated target and alternative exit awards</b>	Certificate of Professional Development in Pre Masters Programme (PMP) Engineering and Computing
<b>Link Tutor</b>	Michael Shaw

## Educational aims of the programme

To prepare students for the demands of a postgraduate taught course by building on the knowledge gained and academic skills acquired in earlier studies in their home countries.

To further develop the students' English language, maths, computing, research and other study skills appropriate to study at postgraduate level.

To introduce the student to UK higher education teaching styles and to provide students with opportunities to acquire, through the teaching medium of English, a sound and appropriate knowledge base in their chosen discipline.

To develop the students' intellectual appreciation of issues relevant to their chosen pathway and related subjects at postgraduate level and to assist the students in acquiring the skills in the collection, analysis, interpretation and understanding of appropriate data and information in preparation for a postgraduate taught degree.

To develop relevant study and personal skills so that students progressively take responsibility for their learning, becoming independent learners, while receiving appropriate tutoring and support.

To equip students with a range of transferable skills and attributes in the use of computers, software packages, team working, communication, time management and problem solving methodology which will enable them to undertake responsible roles in industry and commerce.

To enable international students to progress to one of the following postgraduate programmes at Liverpool John Moores University:

MSc Electrical Power & Control Engineering

MSc Microelectronic Systems Design

MSc Telecommunications Engineering

MSc Civil Engineering

MSc Architectural Engineering

MSc Mechanical Engineering

MSc Manufacturing Engineering

MSc Marine and Offshore Engineering

MSc Computer Science

MSc Software Engineering

MSc Computer Network Security

MSc Computing and Information Systems

MSc Computer Forensics

## Target award Learning Outcomes - Certificate of Professional

## Development

*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. Demonstrate level 6 knowledge of advanced concepts within Engineering, Mathematics and Computing.
- A2. Use appropriate research methods and critically evaluate the results.
- A3. Apply and analyse mathematical and computer models relevant to the postgraduate progression pathway, and have an understanding of their limitations.
- A4. Explore developing and emerging technologies relating to Engineering and Computing.
- A5. Extract data pertinent to a problem and apply a solution using computer-based applications.
- A6. Appreciate the social, environmental, ethical, economic and commercial considerations affecting the exercise of their judgment

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

Acquisition of knowledge and understanding will be achieved via a combination of lectures, workshops, group discussions, seminars, software applications, individual tutorials and independent and directed research and study.

### **Assessment**

A range of assessment methods to include exams, reports, essays, projects, computing applications, presentations, listening tests and reading and writing tests.

## Skills and other attributes

### **Intellectual Skills**

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

- B1. Critically apply theory to practical contexts.
- B2. Solve problems by evaluating and assessing a range of options.
- B3. Explore new and unfamiliar situations and draw appropriate conclusions and recommendations.
- B4. Utilise methods of acquiring, interpreting and analysing complex information.

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

Intellectual skills will be further developed via data analysis, critical reading and literature reviews, lectures, group work and case studies.

### **Assessment**

A range of assessment methods to include exams, reports, essays, projects, computing applications and presentations.

## Professional practical skills

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

- C1. Demonstrate reading, writing, speaking and listening skills in English at equivalent of IELTS 6.5.
- C2. Present work orally and in writing in a suitable format and to a professional standard.
- C3. Demonstrate inter-personal skills which would be recognised, required and valued by professionals.
- C4. Apply an innovative, creative and self-critical approach to work.
- C5. Apply professional skills which include discipline awareness, identification and implementation of sources of information, data analysis, presentation methods, and effective team work.
- C6. Demonstrate an appropriate level of English academic skills.

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

## **demonstrated**

Professional and practical skill teaching and learning will comprise lectures, workshops, group discussions and seminars, software applications, individual tutorials and independent and directed research and study.

## **Assessment**

A range of assessment methods to include exams, reports, essays, projects, computing applications, presentations, listening tests, and reading and writing tests.

## **Transferable / key skills**

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

D1. Communicate with a high standard of second language skill.

D2. Develop effective team skills.

D3. Independently solve complex problems.

D4. Manage workloads and meet deadlines.

D5. Make informed decisions.

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

Transferable skills are incorporated within modules and related to assessments. Developing and acquiring transferable skills is intrinsic to the programme's curriculum design.

## **Assessment**

A range of assessment methods to include exams, reports, essays, projects, computing applications, presentations, listening tests, and reading and writing tests.

## **Programme structure - programme rules and modules**

### **Programme rules**

The Pre Masters Programme will be offered as a full-time programme with start dates in June and September. Students will need to successfully complete 60 credits at level 6.

Level 6	Potential Awards on completion	Certificate of Professional Development
Core	Option	Award Requirements
6600PMBML Academic English and Research Skills (AERS) (20 credits) 6600PMEC Pre Masters Computing (20 credits) 6601PMEC Pre Masters Maths (20 credits)		60 core credits at level 6 0 option credits at level 6

## **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)**

Students will be using work-related scenarios and case studies as part of the teaching, learning and assessment strategy.

## **Criteria for admission**

### **Other**

Students will need to hold a Secure English Language Test (SELT) at an equivalence of IELTS 5.5 with no less

than 5.0 in each sub-skill.

Pre Masters Programme Business, Management and Law - students may hold a degree that is not necessarily related to the programmes students are aiming to progress to.

Pre Masters Programme Engineering and Computing - students will need to hold a degree that is in a related area and has Maths content.

UK degrees Third class honours and above

### **Overseas qualifications**

Students from non-listed countries will be expected to hold a minimum 3rd Class honours equivalency as below:

AFRICA See below for guidelines

Ghana Recognised first degree or 4 year HND in related subject area

Nigeria Recognised first degree or 4 year HND in related subject area

BANGLADESH Recognised first degree (3 years undergraduate - honours 45%+ )

CHINA Recognised first degree or 3 year Junior College Diploma(60%) in a related subject including for Business

HONG KONG Recognised first degree (honours/ordinary)

INDIA Recognised first degree - 3 year undergraduate BA (hons) at 40% or above, 4 year B Comms

INDONESIA Recognised first degree or a D4/D3 Diploma

JAPAN Recognised first degree with 50%

KAZAKHSTAN Recognised first degree, Bakalavar, Specialist Diploma or Kazakh Diploma (4-5 years)

KOREA Recognised first degree with 60%

MACAU Recognised first degree (Hons/Ordinary) GPA2.0

MALAYSIA Recognised first degree

PAKISTAN Recognised first degree - 3 year undergraduate (hons) at 45% or 4 year B Comms.

RUSSIA Recognised first degree, Bakalavar, Specialist Diploma or Kazakh Diploma (4-5 years)

SAUDI ARABIA Recognised first degree

TAIWAN 5 year Junior College Diploma holders

THAILAND Recognised first degree

TURKEY Lisans Diplomasi or Muhendis Diplomasi - CGPA2.0+

UKRAINE Recognised first degree, Bakalavar, Specialist Diploma or Kazakh Diploma (4-5 years)

VIETNAM Recognised first degree with GPA 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.*