



LIVERPOOL
JOHN MOORES
UNIVERSITY

POSTGRADUATE STUDY AND RESEARCH

Built Environment



The School of the Built Environment delivers an exciting range of professionally-accredited postgraduate programmes. Courses are designed to develop innovative and creative professionals equipped to react to the challenges of the modern global built environment.

Our portfolio of programmes includes courses for experienced practitioners who want to enhance or refocus their skills to secure promotion or enter a new area within this fascinating profession. We also run courses specifically designed to equip aspiring entrants to the sector with the skills and competencies they need to succeed.

Whatever your ambitions for the future, our postgraduate qualifications will ensure you enjoy excellent career prospects, both in the UK and internationally, and enable you to provide 'real world' solutions to the challenges of sustainable global development.

World-class research

The School of the Built Environment is recognised as one of the UK's leading research departments for built environment and sustainability research and we are ranked in the top 15 higher education institutions working in this field.

83% of research from LJMU's School of the Built Environment submitted to the REF 2014 was considered as being of international importance or recognised internationally. This work, combined with our extensive links with professional bodies and employers, ensures that all of our postgraduate degrees are industry focused, globally relevant and at the forefront of knowledge development in this field.

In recent years, BEST has secured more than £7million of research funding, published close to 600 research papers, books and industry reports and enabled 40 research students to complete their PhDs.

BEST works collaboratively with leading international universities and research centres across the EU, the Middle East, the Far East, US, Norway and New Zealand. It is also supported internationally by the EU, UK and USA Ministry of Defence, Carbon Trust, Technology Strategy Board and has secured funding to develop a range of innovative projects from industrial partners such as United Utilities, Ministry of Defence, NHS, Tarmac and Taylor Woodrow.

Internationally recognised expertise

Our academic team consists of industry professionals working alongside nationally and internationally acclaimed research active academics, who collectively deliver a broad-based and professionally relevant learning experience.

Our academics also help shape the direction of industry standards by regularly sitting on expert committees for professional bodies, such as The Royal Institution of Chartered Surveyors (RICS) and British Institute of Facilities Management (BIFM).

Working in partnership

Thanks to our close partnerships with industry, you can be confident that all of our courses are responsive to the changing needs of industry, government, local communities and professional practice. Partners work with us to provide real life industrial projects for assessments, as well as delivering guest lectures and facilitating site visits.

Our annual international sustainable construction materials and pavement engineering conference also attracts speakers and delegates from across the UK, Europe, the Middle East, USA, South America, Australia and the Far East.

Specialist facilities

We offer postgraduate students and researchers access to world-class facilities plus support and guidance from our expert academics and dedicated team of outstanding technicians. Facilities include:

- advanced microwave sources and diagnostic equipment
- advanced renewable energy laboratory
- biological science/chemistry laboratory
- chemical engineering laboratory
- concrete and materials testing laboratory
- environmental testing chamber
- geotechnics laboratory
- hydraulics laboratory
- industrial (large scale) laboratory
- materials science laboratory
- pavement engineering laboratory
- sensors (wired and wireless) laboratory

City centre facilities

The School of the Built Environment is located at the Byrom Street complex in LJMU's City Campus, in the heart of Liverpool city centre. In addition to School-specific facilities and resources, Byrom Street has a large Starbucks café, social spaces plus high quality meeting and seminar rooms and lecture theatres. The Avril Roberts Library, open 24/7 during semesters, is also located just minutes away on Tithebarn Street.



Taught postgraduate programmes

Smart Technologies for Infrastructure and Buildings

MSc/PgDip/PgCert

- Full time (1 year), part time (2 years), flexible distance learning

This unique, flexible and forward thinking programme provides a multi-disciplinary range of skills and knowledge, essential for the future of technology innovation within the built environment. Smart technologies not only breathe life into the built environment but also bear responsibility for lifetime performance and operational energy efficiency. Energy 'decarbonisation' is still many years away.

There is more need than ever for professionals involved in developing the built environment to take a lead in reducing the energy dependence of buildings, while maintaining lifelong performance and delivering buildings that are truly fit for purpose. This course will enable you to do just that by giving you access to the latest practice and research plus insights on current and future developments from across the world. The programme is delivered by an expert team of research-active staff and industry practitioners via lectures, tutorials, demonstrations and practical, hands-on experience.

Applied Facilities Management

MSc/PgDip/PgCert, CPD

- Full time (1 year), part time (2 years), flexible distance learning
- LJMU is a recognised Centre of the British Institute of Facilities Management (BIFM)
- Dual award available
- Accredited by Royal Institution of Chartered Surveyors (RICS)

Facilities management (FM) is a diverse and exciting discipline that enables you to appreciate how the provision of space and facilities services can operate across a range of business sectors, building premises and people. On completion of this course you will be able to lead, champion and develop FM practices through the application of multi-disciplinary skills and knowledge.

This market-leading distance learning programme will equip you with a multi-disciplinary portfolio of skills, endorsed by the FM industry as being essential to succeed in this profession. As a Recognised Centre of the British Institute of Facilities Management (BIFM) delivering the Level 7 portfolio of qualifications, this programme offers an optional dual award so you could graduate with a Masters degree plus an additional professional qualification.

Commercial Building Surveying MSc

- Full time (1 year), part time (2 years)
- Accredited by the Royal Institution of Chartered Surveyors
- Graduates can enrol on the Assessment of Professional Competence to become Chartered Surveyors

Through the application of innovative teaching and cutting-edge research, this programme is designed to produce graduates equipped with the skills and knowledge to become industry leaders in their field.

Ensuring that a building's optimum performance is achieved throughout its entire lifecycle is at the heart of this commercially-driven programme. The curriculum is focused around the whole life performance of buildings and facilities and is recognised by employers as providing reflective practitioners, who can make a valuable contribution to the strategic management of organisations, based on sound understanding of the technical aspects of building performance. Graduates are highly functioning professionals, equipped to work for regional, national and global corporate organisations.

Commercial Property Management MSc

- Full time (1 year), part time (2 years)
- Accredited by the Royal Institution of Chartered Surveyors
- Graduates can enrol on the Assessment of Professional Competence to become Chartered Surveyors

This programme focuses on the context of property as a market and business asset and deals with the acquisition, management and commercial operation of a wide range of property types. Dealing with the financial and legal frameworks surrounding the commercial property sector, the course will give you the knowledge and skills required for a career in surveying, valuation, property development and marketing.

“The course provides the opportunity to advance and flourish in a new and exciting profession that is strongly inspired to challenge the status quo and seek innovation, efficiencies and added value.”

James Murphy, Facilities Management Consultant

Construction Project Management MSc

- Full time (1 year), part time (2 years)
- Accredited by the Royal Institution of Chartered Surveyors
- Graduates can enrol on the Assessment of Professional Competence to become Chartered Surveyors
- Accredited by Chartered Institute of Building (CIOB)

This programme is ideal for both, applicants hoping to secure a career in the area of construction project management, as well as, professionals already working in the sector who want to enhance or formalise their skills and knowledge. The course curriculum is informed by ongoing research, allowing you to benefit from leading edge knowledge development; this supports the commercial and sustainable management of the processes around modern construction projects. The course covers both UK and international practice.

Quantity Surveying and Commercial Management MSc

- Full time (1 year), part time (2 years)
- Accredited by the Royal Institution of Chartered Surveyors
- Graduates can enrol on the Assessment of Professional Competence to become Chartered Surveyors

This degree will develop your knowledge and practical skills so that you can undertake a variety of quantity surveying and commercial management roles in the construction sector. The sustainable procurement and delivery of increasingly complex construction and infrastructure projects relies on a thorough understanding of legal, financial, managerial and technical issues. This programme will enable you to develop knowledge and skills in these areas, which can be blended to create the unique skills set required by modern construction professionals in this field. You can expect to work in a wide range of organisations in the UK and worldwide.

Water, Energy and the Environment MSc/PgDip/PgCert

- Full time (1 year), part time (2 years)
- LJMU is an accredited centre for the Chartered Institution of Water and Environmental Management (CIWEM)
- Subject to specific criteria, you may be eligible for CIWEM certificate and diploma qualifications

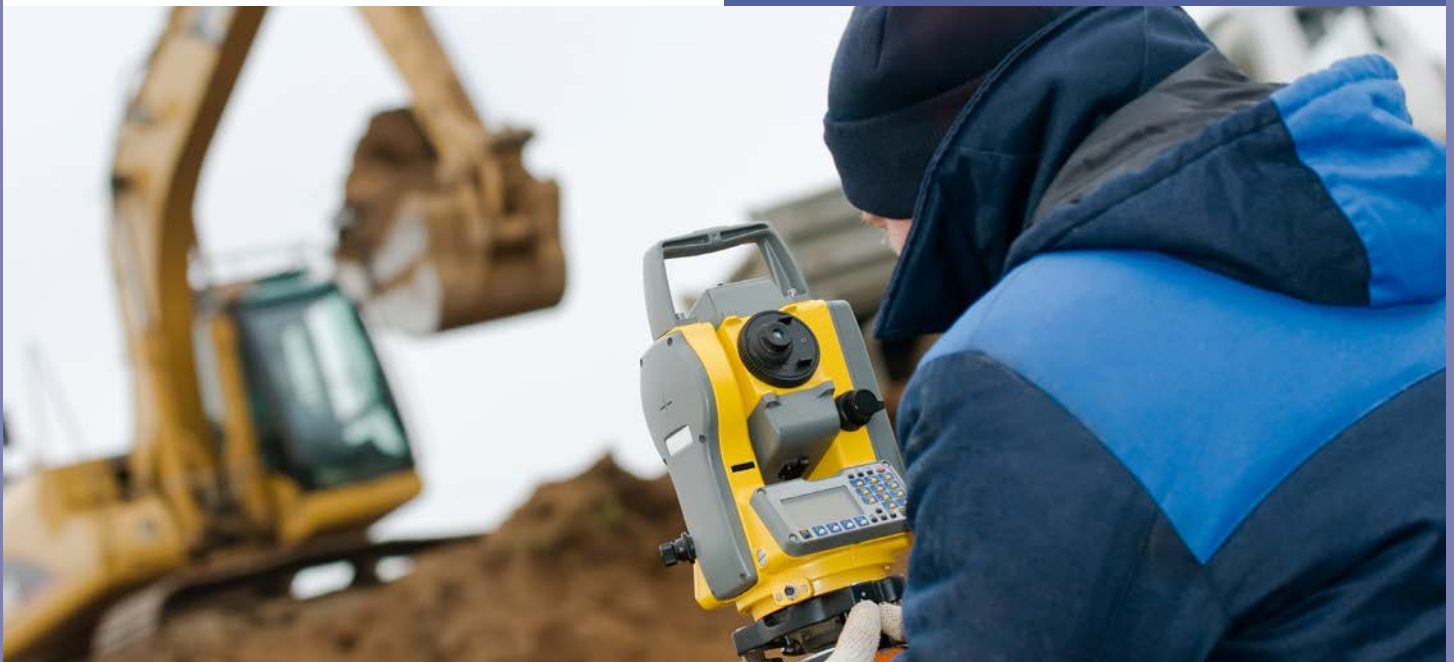
This programme is aimed at professionals looking to develop their careers in engineering, construction and business with a focus on environmental issues. This is one of the UK's most established courses in this area and has a strong reputation with employers in the utilities and environmental sectors. The programme is strongly connected with industry and reflects the emerging needs of the economy in terms of water and environmental management.

In addition to CIWEM accreditation, LJMU is in the process of securing accreditation for Further Learning for a Chartered Engineer (CEng), for candidates who already have an accredited CEng (partial) BEng (Hons) undergraduate first degree.

Part-time students who successfully complete Year 1 are entitled to a CIWEM Certificate and those who complete Year 2 are entitled to obtain the CIWEM Diploma. Diploma holders who undertake the Research Methods and Dissertation modules graduate with a full MSc in Water, Energy and the Environment.

“The course tuition and content were expertly delivered, and encouraged me to challenge my existing way of thinking in order to develop myself as a construction professional. As a part time student, it was also very flexible, which was very important for me. I'd recommend the course without hesitation.”

Frederick Slater, Principal Quantity Surveyor





Architectural Engineering MSc

- Full time (1 year)
- On-campus sessions plus distance learning modules

This specialist Masters course is ideal for graduates with a degree in Architectural Technology, Architecture, Building Surveying and Building Services Engineering. The programme emphasises sustainable building design and performance and will build upon your existing qualifications and experience. You will gain advanced knowledge of current and emerging sustainable technology and practices for architectural engineering, plus enhanced analytical, critical and problem solving skills appropriate to evaluating and improving building performance. Topics studied will typically include building design, sustainable design, advanced building engineering and detailing leadership for sustainable environment, energy and environmental management, and augmented realities. You will also complete a dissertation.

Civil Engineering MSc

- Full time (1 year), part time (2 years)

This degree is designed to provide the Masters level educational qualification required by the Engineering Council for Chartered Engineer status and is the ideal course for BEng (Hons) Civil Engineering graduates. You will build on the knowledge gained in your undergraduate degree, developing higher level skills, including critical evaluation and innovation, so that you can advance to the highest levels within the civil engineering profession. LJMU is currently seeking accreditation by the Civil Engineering Institutions for this degree.

Project Management MSc

- Full time (1 year), part time (2 years), flexible distance learning
- Accredited by Royal Institution of Chartered Surveyors (RICS) (dependent on modules completed)

This is one of very few programmes to position the general discipline of project management within a construction project management context. During the degree, you will consider the expanding international marketplaces of construction, energy and infrastructure plus a wide range of project management topics. This qualification allows progression from several undergraduate programmes within the built environment, such as Construction Management, Quantity Surveying and Civil Engineering. Applicants from other disciplines are also welcome to apply. This qualification will help you secure careers in the UK and overseas in a variety of industrial sectors including, but not restricted to, the built environment, infrastructure and engineering.

Integrated Building Information Management MSc

(SUBJECT TO VALIDATION)

- Full time (1 year) Part time (2 years), flexible distance learning
- Informed by internationally-recognised research
- Gain the knowledge and skills required to work in the field of BIM Management in the UK and overseas.
- Uses the latest in computer aided design (CAD) and information management software
- Opportunity to complete an integrated BIM project

This programme is aimed at built environment construction and civil engineering professionals working in all areas of design, construction and maintenance. Building Information Management (BIM) has become increasingly important as all public procured projects need to be BIM compliant by 2016. BIM is about people, process and technology, using digital and non-digital information to provide optimum construction solutions throughout the lifecycle of a project. It involves the effective collaboration of the construction team from inception to design, procurement, construction, operation and maintenance and ultimately demolition. BIM has the capability to support the integration of the supply chain, develop sustainable low carbon buildings and infrastructure, model energy use in an intelligent manner and support lean construction.

This programme offers you the opportunity to become proficient in BIM and will give provides you a critical awareness of contemporary issues, informed by technology, research and organisational and management skills.

The programme uses the latest in computer aided design (CAD) and information management software. You will also benefit from LJMU's specialist knowledge in the areas of design, procurement and management.

The project element of the course includes completing an integrated BIM project and working collaboratively with colleagues from other disciplines.

Research opportunities (MPhil/PhD)

- Full time or part time MPhil (minimum 12 months, maximum 48 months duration)
- Full time or part time PhD (minimum 24 months, maximum 84 months duration)
- An opportunity to conduct research in a highly-rated and supportive research environment
- Dedicated facilities for research students
- Vibrant research community includes 40+ PhD students
- Fully funded study, bursaries and scholarships available

If you are considering embarking on an MPhil/PhD, we can offer you expert supervision plus the opportunity to join a thriving and supportive environment where students are viewed as a valued and integral part of the Built Environment and Sustainable Technologies (BEST) Research Institute. Plus you will be able to access the Institute's high quality research laboratories, research student 'hub', project rooms and social space.

BEST research focuses heavily on applied research, closely linked to industry requirements but also includes significant areas of theoretical 'blue-skies' work aimed at addressing longer-term global needs. 83% of research from LJMU's School of the Built Environment submitted to the REF 2014 was considered as being of international importance or recognised internationally and we are rightly proud of our growing research base and reputation. Plus we are securing increasing research income and have a long-standing history of national and international collaborations with other academic institutions and industry partners.

Recent research projects have focused on:

- Producing energy from waste using advanced technologies
- Efficient recycling systems
- Low/zero carbon buildings
- Sustainable construction management, procurement and facilities management
- Sustainable communities and real estate
- Facilities and building performance
- Unique wireless sensors for real time monitoring
- Water, wastewater, oil and gas
- Material characterisation
- Food quality
- Building health monitoring
- Healthcare and patient wellbeing
- Security

Expert supervision is offered in the following areas:

- Sustainable technologies
- Planning and development
- Construction and facilities management
- Renewable energies and recycling
- Economics and sustainability



For more information, go to: www.ljmu.ac.uk/blt/best

Tuition Fees

The following 2015/2016 full and part-time annual tuition fees should only be used as a guide. You are advised to contact LJMU for 2015/2016 course fees. Further information is also available online at: ljmu.ac.uk/courses/postgraduate or ljmu.ac.uk/international for international applicants.

	Home/EU applicants	International applicants
English for Postgraduate Studies courses		30 week course: £9,000 20 week course: £6,000 12 week course: £3,600 6 week course: £1,800
Taught postgraduate programmes (PgCert, PgDip, LLM, MA, MSc, MRes) <i>Fees vary depending on whether you are studying a class or lab-based programme.</i>	Full time: £5,500 Part time: £30.50 per credit <i>(Masters programmes consist of 180 credits)</i>	£12,000
Research degrees MPhil/PhD	Full time: £3,845 Part time: £1,923 Writing up: £360	£11,000 - £12,000

Taught Masters Scholarships

Over 100 new scholarships worth £10,000 each will be available to eligible students starting taught Masters programmes at LJMU in the 2015/2016 academic year, as part of the government match-funded Postgraduate Support Scheme. The funding offers graduates a fantastic opportunity to secure a Masters qualification in any discipline without added financial worry.

To qualify for the Postgraduate Support Scheme you must be resident in the UK/EU and have paid the higher undergraduate tuition fee since 2012. Further eligibility criteria will apply. To register your interest for the new scholarships and request further details, including full eligibility criteria and how to apply, please complete our online registration form: ljmu.ac.uk/postgraduate

Alumni Award

Final year undergraduates and alumni of the University are eligible to apply for a 15% reduction in their postgraduate tuition fees if they choose to progress to a higher degree programme at LJMU. Both home and international LJMU students and alumni can apply for the Award (subject to eligibility criteria). Go to: ljmu.ac.uk/postgraduate for more details.

PhD Scholarships

Support for full-time three year studentships is available via our LJMU PhD Scholarship scheme. Studentships are available for applicants in all disciplines where excellent research is being performed.

- **Fully-funded three year PhD Scholarships** comprise: annual fees (currently £3,845 per year), a contribution towards running costs (£1,500 per year) plus an annual stipend (£13,863 per year, normally awarded tax free).
- **Fees-only Scholarships** are also available.

All applications for PhD Scholarships must be submitted via your future Director of Studies. The number of Scholarships available is limited.

For more details on eligibility criteria and how to apply, please contact the Graduate School: ljmu.ac.uk/rgso

Please note: international, part-time and MPhil students plus those completing Professional Doctorates are not eligible for support under these schemes.

International Scholarships

LJMU offers a range of scholarships for international applicants accepted onto taught masters programmes (excluding distance learning programmes) and research degrees. These scholarships take the form of tuition fee waivers. Current LJMU international students and alumni interested in pursuing postgraduate study and research at the University are eligible to apply for these scholarships along with new applicants. For full eligibility criteria and details on how to apply, go to: ljmu.ac.uk/international

English for Postgraduate Studies Bursary

A Bursary is also available for international students who must complete the six week English for Postgraduate Studies course to improve their IELTS score by 0.5 prior to enrolling on their postgraduate course or research programme at the University. This course is run by LJMU's International Study Centre: ljmuisc.com

This Bursary is worth £700 and takes the form of a tuition fee waiver, which will be deducted from your tuition fee when you progress onto your Masters degree or research programme. You do not need to complete the online scholarship application form to receive this Bursary.

Please note: If you are awarded this Bursary you are not eligible to apply for an international scholarship.

Contact for further information

Faculty of Technology and Environment Admissions Team
tel: +44 (0)151 231 2777 email: tadmissions@ljmu.ac.uk
Visit: ljmu.ac.uk/blt or connect with us on Twitter @ljmu