

Overview

Programme Code	35740
Programme Title	Civil Engineering
Awarding Institution	Liverpool John Moores University
Programme Type	Top-up
Language of Programme	All LJMU programmes are delivered and assessed in English
Programme Leader	
Link Tutor(s)	Tina Marolt Cebasek

Partner Name	Partnership Type
International College of Business and Technology	Franchised

Awards

Award Type	Award Description	Award Learning Outcomes
Target Award	Bachelor of Science with Honours - BSH	See Learning Outcomes Below

Alternate Award Names	
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External Benchmarks

Subject Benchmark Statement	UG-Engineering (2019)
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Programme Offering(s)

Mode of Study, Mode of Delivery	Intake Month	Teaching Institution	Programme Length
Full-Time, Face to Face	March	ICBT, Colombo	1 Years
Full-Time, Face to Face	September	ICBT, Colombo	1 Years
Full-Time, Face to Face	March	ICBT, Kandy	1 Years
Full-Time, Face to Face	September	ICBT, Kandy	1 Years
Full-Time, Face to Face	March	ICBT, Southern (Matara)	1 Years
Full-Time, Face to Face	September	ICBT, Southern (Matara)	1 Years

Aims and Outcomes

Educational Aims of the Programme

To provide a well-balanced education which allows the student to achieve his/her full academic potential at first degree level and in doing so to facilitate the development of independent logical thought and judgement. To enable the student to develop his/her intellectual, analytical and critical abilities in order that he/she might exercise those abilities within the disciplines that constitute Built Environment studies. To produce a basis for general professional and management experience and to encourage a consciousness of the professional, business and commercial environment. To facilitate the development of transferable and graduate employability skills and an awareness of the need to plan, develop and record life-long learning. To provide the framework within which students can achieve the level of attainment, appropriate to their abilities in the context of the programme of study that provides recognition of that level. To widen access to the programmes by recognising and allowing credits for prior certificated learning To develop skills to ensure that the graduate will operate within a sound Health and Safety framework as provided by the regulatory framework of the industry. To develop awareness of all aspects of sustainability to ensure that graduates operate responsibly within their chosen discipline, and make positive choices in this context. To provide a medium for Honours students to explore the potential of their acquired knowledge and to pursue those aspects which they find most stimulating. To ensure that Civil and Structural Engineering students develop their own identity. Civil and structural engineering graduates are concerned with the design of major construction projects, usually infrastructure work such as roads, tunnels and bridges and the structural design of all elements of residential and commercial buildings. Graduates may gain employment in a design office where they will apply high level numeracy skills to practical design projects. Alternatively, they may gain employment with a contractor and manage the construction process for these types of work. They need detailed knowledge of structures, hydraulics, geotechnics and materials used in construction and additionally need management skills and knowledge.

Learning Outcomes

Code	Description
PLO1	Demonstrate their knowledge and understanding of essential facts, concepts, theories and principles of Civil Engineering, and its underpinning science and mathematics
PLO2	Apply advanced problem solving skills, technical knowledge and understanding, to establish rigorous and creative solutions that are fit for purpose for all aspects of a problem

Code	Description
PLO3	Evaluate risk issues, including environmental and commercial risk
PLO4	Demonstrate an extensive knowledge and understanding of management and business practices, and their limitations, and how these may be applied appropriately to strategic and tactical issues
PLO5	Understand the requirement for engineering activities to promote sustainable development
PLO6	Demonstrate an awareness of the framework of relevant legal and quality requirements governing engineering activities, including personnel, health, safety, and risk (including environmental risk) issues
PLO7	Identify and classify the performance of systems, and apply a systems approach to solving problems
PLO8	Undertake and evaluate research and communicate the results of the research
PLO9	Use a range of land surveying equipment effectively for setting out engineering works and for collecting site data for the production of engineering plans
PLO10	Apply practical engineering skills acquired through, for example, work carried out in laboratories, to the design of civil engineering projects
PLO11	Work effectively within a group to design, analyse and evaluate civil engineering projects
PLO12	Demonstrate their knowledge and understanding of historical, current and future developments and technologies within Civil Engineering
PLO13	Demonstrate an understanding of current and developing civil engineering practice and some appreciation of likely new developments
PLO14	Apply knowledge and understanding of a range of engineering materials and components to civil engineering design
PLO15	Illustrate an understanding of client and user needs and the importance of considerations such as aesthetics
PLO16	Evaluate the sustainability of a civil engineering project, and design effectively within the constraints of the 'triple bottom line' (social, environmental and economic)
PLO17	Generate an innovative design for construction, products, systems, components or processes to fulfil new needs
PLO18	Demonstrate an understanding of the need for a high level of professional and ethical conduct in civil engineering and a knowledge of professional codes of conduct
PLO19	Demonstrate an ability to manage the design process and evaluate outcomes
PLO20	Apply their skills in problem solving, communication, and working with others, as well as the effective use of general IT facilities and information retrieval skills
PLO21	Demonstrate their understanding of the use of technical literature and other information sources
PLO22	Demonstrate entrepreneurial competencies to include creativity, personal influence, personal branding and negotiation
PLO23	Apply a range of mathematical and statistical methods in the solution of civil engineering problems and demonstrate an understanding of their limitations

Code	Description
PLO24	Exercise initiative and ethical personal responsibility both as a leader and as a team member
PLO25	Plan self-learning and improve performance, as the foundation for lifelong learning
PLO26	Demonstrate an ability to work with limited or contradictory information
PLO27	Communicate effectively through the media of the written word, engineering drawings, clear use of mathematical notation, orally and through the effective use of IT.
PLO28	Monitor and adjust a personal programme of work
PLO29	Demonstrate an understanding of concepts from a range of areas, and the ability to apply them effectively in civil engineering projects
PLO30	Demonstrate an understanding of relevant codes of practice and the regulatory framework
PLO31	Demonstrate an understanding of construction materials, including novel and innovative materials
PLO32	Demonstrate their understanding of the International nature of Civil Engineering and apply this to the design and evaluation of civil engineering projects
PLO33	Demonstrate an understanding of Building Information Management (BIM)
PLO34	Demonstrate their knowledge and understanding of risk assessment and risk management methods

Programme Structure

Programme Structure Description

The programme has been developed for students who have successfully completed the HND in Civil Engineering from ICBT within 5 years of application. These students will be awarded 120 level 4 credits and 120 Level 5 credits via RPL before commencing level 6. Entry to the programme is therefore at level 6 only for suitably qualified candidates. At Level 4 students should be able to: Demonstrate knowledge of the underlying concepts and principles associated with Civil Engineering and have an ability to evaluate and interpret these within the context of civil engineering and construction projects. Additionally, they should demonstrate a knowledge of mathematics, structures, materials, infrastructure, surveying, geotechnics, hydraulics and design, in order to develop suitable arguments and make sound engineering judgements. At level 5 student should be able to: Demonstrate knowledge and critical understanding of the higher principles of Civil Engineering and have the ability to apply these principles outside areas and contexts in which they were originally studied. Additionally, they should demonstrate the main methods of enquiry and investigation using materials, surveying, transport, mathematics, geotechnics, water engineering and structures skills to solve problems in the field of Civil Engineering. The full-time route will be a minimum of one year and a maximum of two years.

Programme Structure - 120 credit points	
Level 6 - 120 credit points	
Level 6 Core - 120 credit points	CORE
[MODULE] 6500CIVSL Advanced Civil Engineering Materials Approved 2022.02 - 20 credit points	
[MODULE] 6501CIVSL Infrastructure, Highways Design and Innovation Approved 2022.01 - 20 credit points	
[MODULE] 6502CIVSL Advanced Geotechnics and Design Approved 2022.01 - 20 credit points	
[MODULE] 6503CIVSL Structural Design and Risk Management Approved 2022.01 - 20 credit points	
[MODULE] 6505CIVSL Research Project Approved 2022.01 - 40 credit points	

Module specifications may be accessed at <https://proformas.ljmu.ac.uk/Default.aspx>

Teaching, Learning and Assessment

Lectures, tutorials, problem solving sessions, seminars, workshops, laboratory and computer sessions, off-site learning activities, participation in a group project. Unseen examinations, assignments, preparation of reports, design tasks, workshops, peer review, computer-based exercises. Lectures, tutorials, problem solving sessions, seminars, workshops, laboratory and computer sessions, off-site learning activities, participation in a group project. Unseen examinations, assignments, preparation of reports, design tasks, workshops, peer review, computer-based exercises. Lectures, tutorials, problem solving sessions, seminars, workshops, laboratory and computer sessions, off-site learning activities, participation in a group project and individual investigational/research project. Unseen examinations, assignments, preparation of reports, design tasks, workshops, peer review, computer-based exercises. Lectures, tutorials, problem solving sessions, seminars, workshops, laboratory and computer sessions, off-site learning activities, participation in a group project. Unseen examinations, assignments, preparation of reports, design tasks, workshops, peer review, computer-based exercises.

Opportunities for work related learning

The nature of this programme means that all assessments are based on real life case studies. ICBT will engage wherever possible with industry representatives to undertake visiting lectures to enhance the currency of the programme and to illustrate the relevancy of subjects in a Sri Lankan context. The significant amount of practical laboratory work is also an example of work related learning.

Entry Requirements

Type	Description
Alternative qualifications considered	In addition, students must have an IELTS score of at least 6 or equivalent. Students can achieve this equivalence if they have passed GCSE level English and successfully pass the English language interview which will take place before enrolment. Applicants that have studied an HND in Civil Engineering at other colleges in Sri Lanka will be allowed entry to the programme if their qualification is deemed to be equivalent and will be suitably mapped to Levels 4 and 5 of the BEng(Hons) Civil Engineering programme (35019) for the purposes of recognition and RPL claims. All students must also have a supportive reference from the programme leader for the HND Civil Engineering at ICBT.
NVQ	The standard entry requirement for students to enter the programme is that they have successfully completed the Higher National Diploma in Civil Engineering at ICBT which is validated by Cardiff Metropolitan University. For students that have taken a break from their studies, the progression opportunity for HND in Civil Engineering validated by Edexcel Pearson onto the BSc Civil Engineering delivered by either the Colombo or Kandy Campus is to be permitted. The ICBT HND in Civil Engineering will be suitably mapped to Levels 4 and 5 of the BEng(Hons) Civil Engineering programme (35019) for the purposes of recognition and RPL claims.

Extra Entry Requirements