

Programme Specification Document

Approved, 2022.02

Overview

Programme Code	35357
Programme Title	Civil Engineering
Awarding Institution	Liverpool John Moores University
Programme Type	Level 3/4/5 Qualification
Programme Leader	Edward Loffill
Link Tutor(s)	

Awards

Award Type	Award Description	Award Learning Outcomes
Target Award	Higher National Certificate - HNC	See Learning Outcomes Below

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External Benchmarks

Programme Offering(s)

Mode of Study, Mode of Delivery	Intake Month	Teaching Institution	Programme Length
Full-Time, Face to Face	September	LJMU Taught	1 Years

Aims and Outcomes

Educational Aims of the Programme

To provide a well-balanced education which allows the student to achieve their full academic potential at HNC level and in doing so to facilitate the development of independent logical thought and judgement. To enable the student to develop their intellectual, analytical and critical abilities in order that they might exercise those abilities within the disciplines which constitute Built Environment studies. To produce a basis for general professional experience and to encourage awareness 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 lifelong 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 provide a medium for students to explore the potential of their acquired knowledge and to pursue those aspects which they find most stimulating. To widen access to the programmes by recognising and allowing credits for credit transfer or the recognition of prior (experiential) learning - RP(E)L. Credit transfer or RPL is usually more straightforward providing the study maps against the learning outcomes of the modules / level of study.

Learning Outcomes

Code	Description
PLO1	Use appropriate mathematical methods.
PLO2	Apply codes of practice and the regulatory framework.
PLO3	Understand the requirements for safe operation.
PLO4	Demonstrate the ability to select and apply appropriate mathematical methods for modelling and analysing engineering problems.
PLO5	Use scientific principles in the development of proven engineering solutions to practical problems.
PLO6	Use scientific principles in the modelling and analysis of standard civil engineering structures, systems and processes.
PLO7	Demonstrate the ability to select and apply appropriate computer based methods for modelling and analysing civil engineering problems.
PLO8	Demonstrate the ability to undertake elements of commercial and technical risk evaluation.
PLO9	Demonstrate the ability to produce solutions to problems through the application of engineering knowledge and understanding.
PLO10	Use appropriate mathematical methods for modelling and analysing civil engineering problems.
PLO11	Use relevant test and measurement equipment.
PLO12	Apply science appropriate to civil engineering.
PLO13	Carry out experimental laboratory work.
PLO14	Use engineering IT tools.

Code	Description
PLO15	Demonstrate the design of civil engineering structures and systems.
PLO16	Research for information for the development and appraisal of ideas.
PLO17	Demonstrate the ability to operate in commerce and industry in a range of situations, individually and as part of a team.
PLO18	Undertake project management.
PLO19	Demonstrate the manipulation and sorting of data.
PLO20	Present data in a variety of ways.
PLO21	Use scientific evidence based methods in the solution of problems.
PLO22	Use general IT tools.
PLO23	Demonstrate principles of ITC relevant to civil engineering.
PLO24	Use creativity and innovation in problem solving.
PLO25	Work with limited or contradictory information.
PLO26	Demonstrate effective communication.
PLO27	Engage in life long learning.
PLO28	Use an engineering approach to the solution of problems.
PLO29	Demonstrate time and resource management.
PLO30	Engage in teamwork and demonstrate leadership.
PLO31	Have an awareness of climate change and the role Civil Engineers will play in mitigating it.
PLO32	Apply general principles of design.
PLO33	Demonstrate civil engineering design.
PLO34	Understand the characteristics of engineering materials and construction materials.
PLO35	Apply management and business practice.
PLO36	Recognise the moral and ethical issues of construction, sustainability, the environment, and scientific enquiry and experimentation.
PLO37	Demonstrate civil engineering practice.

Programme Structure

Programme Structure Description

The Higher National Certificate (HNC) is currently offered on a full-time basis. The full-time programme is normally of one year duration. On successful completion of the HNC students will be eligible to apply for entry at level 5 to one of the civil engineering degree programmes offered by LJMU.

Structure - 120 credit points	
Level 4 - 120 credit points	
Level 4 Core - 120 credit points	CORE
[MODULE] 4400CIVH Design Principles Approved 2022.01 - 20 credit points	
[MODULE] 4401CIVH Engineering Geology and Soil Mechanics Approved 2022.02 - 20 credit points	
[MODULE] 4402CIVH Hydraulics Group Project Approved 2022.03 - 20 credit points	
[MODULE] 4403CIVH Science Materials and Applied Mathematics Approved 2022.01 - 20 credit points	
[MODULE] 4404CIVH Site Surveying Procedures Approved 2022.01 - 20 credit points	
[MODULE] 4405CIVH Structural Analysis and Design Approved 2022.01 - 20 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 group projects and individual investigational work. Unseen examinations, assignments, preparation of reports, design tasks, oral presentations, workshops, peer review, computer-based exercises.

Opportunities for work related learning

The Hydraulics Group Project and Site Surveying Procedures modules will introduce students to work related learning activities in civil engineering. During the programme of study students will attend site visits and there will be off-site learning activities relevant for a career as a civil engineer.

Entry Requirements

Туре	Description
A levels	80 UCAS points.
BTECs	Diploma and Extended Diploma.
Other international requirements	Overseas student applicants must have the equivalent qualifications as UK students. In addition they must have achieved an IELTS score of at least 6.