

Course Specification

Published Date:	17-Nov-2020
Produced By:	Oliver Jones
Status:	Validated

Core Information

Awarding Body / Institution:	University of Wolverhampton		
School / Institute:	School of Architecture and Built Environment		
Course Code(s):	CV020P01UV	Full-time	18 Months
Course Title:	MSc Civil and Structural Engineering with Professional Practice Placement		
Hierarchy of Awards:	Master of Science Civil and Structural Engineering with Professional Practice Placement Postgraduate Diploma Civil and Structural Engineering Postgraduate Certificate Civil and Structural Engineering University Statement of Credit University Statement of Credit		
Language of Study:	English		
Date of DAG approval:	10/Sep/2020		
Last Review:	2018/9		
Course Specification valid from:	2019/0		
Course Specification valid to:	2025/6		

Academic Staff

Course Leader:	Shashank Gupta
Head of Department:	Mr Peter Mills

Course Information

Location of Delivery:	University of Wolverhampton
Category of Partnership:	Not delivered in partnership
Teaching Institution:	University of Wolverhampton
Open / Closed Course:	This course is open to all suitably qualified candidates.

Entry Requirements:

Entry requirements are subject to regular review. The entry requirements applicable to a particular academic year will be published on the University website (and externally as appropriate e.g. UCAS)

A minimum of a 2:2 classification from a Civil Engineering degree course. Preferably one that has IEng accreditation. International students with a cognate degree and applicants with relevant work experience will be considered on a case by case basis.

Distinctive Features of the Course:

This course is designed to provide the additional technical education for graduates who are already in possession of an IEng accredited degree, for them to step up to CEng standard. The course is delivered by a blend of active and respected academics as well as Chartered Engineers in the fields of structures and civil engineering. The modules provide opportunities for individual research as well as group based activities, where students will tackle industrially relevant challenges, requiring innovative and creative solutions which recognise the wider implications of engineering activities.

For the Professional practice award, students will be provided with an opportunity to secure a work placement, giving students an experience of the workplace environment to put their learning into practice. Students will be required to complete an additional module '7CN031: Professional Practice Placement' and produce a reflective learning portfolio to demonstrate tasks undertaken, experience and professional competencies gained during the placement.

NOTE: Placements are offered on a competitive basis, as determined by the employers, but are not guaranteed. Placements may be paid or unpaid and enhance the students' employability.

Educational Aims of the Course:

The main aim of this MSc is to provide the technically recognised educational base for graduates to become Chartered Civil Engineers. In order to achieve this the course has been designed in accordance with the requirements set out in the document *JBM Guidelines for MScs and Programmes of CEng Further Learning*, which is available at http://jbm.org.uk/uploads/FLJBM9_Guidelines_forMScs_TechnicalNon-TechnicalOct17.pdf As such the course has a very technically oriented focus, particularly in the fields of structures and geotechnical engineering.

Intakes:

September
January

Major Source of Funding:

OTHER FUNDING

Tuition Fees:

Tuition fees are reviewed on an annual basis. The fees applicable to a particular academic year will be published on the University website.

Year	Status	Mode	Amount
2020/1	H	Full Time	£7112.00
2020/1	Overseas	Full Time	£14834.00

PSRB:

None

Course Structure:

January (Full-time)

Year 1

Module	Title	Credits	Period	Type
7CV015	Foundation Engineering	20	IN YR	Core
7CV018	Structural Engineering Project	20	IN YR	Core
7CN018	Financial Management of Projects	20	IN YR	Core
7CN031	Professional Practice Placement	20	IN YR	Core
7CV013	Civil & Structural Engineering Dissertation	60	IN YR	Core
7AT003	Building Information Modelling (Theory and Application)	20	SEM1	Core
7CV014	Advanced Structural Analysis	20	SEM1	Core
7CV016	Advanced Geotechnical Applications	20	SEM1	Core

September (Full-time)

Year 1

Module	Title	Credits	Period	Type
7AT003	Building Information Modelling (Theory and Application)	20	SEM1	Core
7CV014	Advanced Structural Analysis	20	SEM1	Core
7CV016	Advanced Geotechnical Applications	20	SEM1	Core
7CV015	Foundation Engineering	20	SEM2	Core
7CV018	Structural Engineering Project	20	SEM2	Core
7CN018	Financial Management of Projects	20	SEM2	Core
7CN031	Professional Practice Placement	20	SEM3	Core
7CV013	Civil & Structural Engineering Dissertation	60	SEM3	Core

Please note: Optional modules might not run every year, the course team will decide on an annual basis which options will be running, based on student demand and academic factors, to create the best learning experience.

Learning, Teaching and Assessment

Academic Regulations Exemption:

Section 3.4.2 - Exemption to extend the maximum period of registration to three years, with a normal duration of 18 months (or three semesters), in full-time mode of study.

Section 5.1.1 - Exemption to exceed the standard credit requirements for a Master's Degree, increasing to a minimum of 200 credits, in order to include a 20 credit placement module.

Section 5.6.1 - Exemption to exclude placement modules from the criteria for classification of a Master's Degree.

Effective date: September 2020.

APPROVED (by Chair's Action on 26/6/2020).

Reference Points:

Quality Code - [Part A: Setting and Maintaining Academic Standards](#). Including :

[Qualifications Frameworks](#)

[Characteristics Statements](#)

[Credit Frameworks](#)

[Subject Benchmark Statements](#)

Quality Code - [Part B: Assuring and Enhancing Academic Quality](#)

[University Policies and Regulations](#)

Equality Act (2010)

Accreditation of Higher Education Programmes, [AHEP3] (3rd Edition), Engineering Council, 2014

JBM Guidelines for MScs and Programmes of CEng Further Learning, Version 1, Rev 2, 17 October 2017.

http://jbm.org.uk/uploads/FLJBM9_Guidelines_forMScs_TechnicalNon-TechnicalOct17.pdf

Learning Outcomes:

PGCert Course Learning Outcome 1 (PGCCL01)

Demonstrate a systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of your academic discipline, field of study or area of professional practice with a conceptual understanding that enables the student: (a) to evaluate critically current research and advanced scholarship in the discipline (b) to evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.

PGCert Course Learning Outcome 2 (PGCCL02)

Demonstrate a comprehensive understanding of techniques applicable to your own research or advanced scholarship and ability to continue to advance your knowledge and understanding, and to develop new skills to a high level.

PGCert Course Learning Outcome 3 (PGCCL03)

Demonstrate originality in the application of knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline.

PGCert Course Learning Outcome 4 (PGCCL04)

Ability to deal with complex issues both systematically and creatively, make sound judgements in the absence of complete data, and communicate your conclusions clearly to specialist and non-specialist audiences.

PGCert Course Learning Outcome 5 (PGCCL05)

Demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level.

PGCert Course Learning Outcome 6 (PGCCL06)

Demonstrate the qualities and transferable skills necessary for employment requiring: (a) the exercise of initiative and personal responsibility (b) decision-making in complex and unpredictable situations (c) the independent learning ability required for continuing professional development.

PGDip Course Learning Outcome 1 (PGDCL01)

Demonstrate a systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of your academic discipline, field of study or area of professional practice with a conceptual understanding that enables the student: (a) to evaluate critically current research and advanced scholarship in the discipline (b) to evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.

PGDip Course Learning Outcome 2 (PGDCL02)

Demonstrate a comprehensive understanding of techniques applicable to your own research or advanced scholarship and ability to continue to advance your knowledge and understanding, and to develop new skills to a high level.

PGDip Course Learning Outcome 3 (PGDCL03)

Demonstrate originality in the application of knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline.

PGDip Course Learning Outcome 4 (PGDCLO4)

Ability to deal with complex issues both systematically and creatively, make sound judgements in the absence of complete data, and communicate your conclusions clearly to specialist and non-specialist audiences.

PGDip Course Learning Outcome 5 (PGDCLO5)

Demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level.

PGDip Course Learning Outcome 6 (PGDCLO6)

Demonstrate the qualities and transferable skills necessary for employment requiring: (a) the exercise of initiative and personal responsibility (b) decision-making in complex and unpredictable situations (c) the independent learning ability required for continuing professional development.

Masters Course Learning Outcome 1 (MACLO1)

Evaluate a comprehensive set of knowledge, understanding and ability in science and mathematics that underpin civil engineering.

Masters Course Learning Outcome 2 (MACLO2)

The ability to synthesise engineering concepts and tools to the solution of complex engineering problems (engineering analysis).

Masters Course Learning Outcome 3 (MACLO3)

Integrate engineering understanding, knowledge and skills to the design of creative solutions for real and complex problems.

Masters Course Learning Outcome 4 (MACLO4)

Manage complex civil engineering activities, demonstrating leadership skills whilst appraising the legal, ethical, environmental and economic impacts such activities can have on society.

Masters Course Learning Outcome 5 (MACLO5)

Undertake the practical application of advanced engineering skills, combining theory and experience, and use of other relevant knowledge and skills.

Masters Course Learning Outcome 6 (MACLO6)

Formulate plans for lifelong learning, that will include the development of transferable skills and be of value in a wide range of situations.

Overview of Assessment:

Module	Title	Course Learning Outcomes
7AT003	Building Information Modelling (Theory and Application)	MACLO3, MACLO5, PGCCLO1, PGDCLO1
7CN018	Financial Management of Projects	MACLO4, MACLO6, PGCCLO4, PGCCLO6, PGDCLO4, PGDCLO6
7CN031	Professional Practice Placement	MACLO1, MACLO2, MACLO3, MACLO4, MACLO5, MACLO6
7CV013	Civil & Structural Engineering Dissertation	MACLO2, MACLO5, MACLO6
7CV014	Advanced Structural Analysis	MACLO1, MACLO2, PGCCLO2, PGCCLO5, PGDCLO2, PGDCLO5
7CV015	Foundation Engineering	MACLO2, MACLO3, PGCCLO1, PGCCLO3, PGDCLO1, PGDCLO3
7CV016	Advanced Geotechnical Applications	MACLO1, PGCCLO2, PGCCLO5, PGDCLO2, PGDCLO5
7CV018	Structural Engineering Project	MACLO3, MACLO4, MACLO5, PGCCLO3, PGCCLO4, PGCCLO6, PGDCLO3, PGDCLO4, PGDCLO6

Teaching, Learning and Assessment:

All of the existing university support structures for students will be in place such as applications for extensions within the Student Centre and all the counselling and advice available within the Student Enabling Centre.

Learning activities will be a mixture of formal lectures with associated tutorial sessions, in-class discussions, laboratory activities, self-learning, online blog forums. Assessments will vary according to the module concerned but due to the technical nature of the course and the PSRB requirement then at least 50% of the taught modules will have an examination as part of the summative assessment.

Support for learning will predominantly take the form of easy access to the lecturing staff, as is currently the case within the Department of Civil Engineering. Formal appointments will be available via the SAMS system.

Assessment Methods:

At the University of Wolverhampton, a variety of modes of assessment will be used to support and test your learning and progress and to help you develop capabilities that are valued beyond your University studies and into your working life. Your course may include a variety of assessment activities:

Written examinations (including online examinations, open and closed book examinations and quizzes)
 Coursework (for example, essays, reports, portfolios, project proposals and briefs, CVs, poster presentation)
 Practical (for example, oral and video presentations, laboratory work, performances, practical skills assessment)

In the final year of your undergraduate degree, and at the end of your postgraduate degree, you are likely to be expected to write an extended piece of work or research, such as a dissertation or a practice-based piece of research.

Student Support:

General University support:

[University Learning Centres](#) are the key source of academic information for students. Learning Centres provide physical library resources (books, journal, DVDs etc.) and offer a range of study areas to allow students to study in the environment that suit them best: Social areas, quiet and silent areas. Learning Centres also provide access to wide range of online information sources, including eBooks, e-Journals and subject databases.

Learning Centres also provide students with academic skills support via the [Skills for Learning programme](#).

Students on campus can attend workshops or ask for one-to-one help on a range of skills such as academic writing and referencing. Students can access a range of online skills material at: www.wlv.ac.uk/lib/skills

The [University Student Support website](#) offers advice on a variety of matters (careers, counselling, student union advice, etc.) Students can also access these services by booking appointment with the SU, careers, counselling services, etc.

Course Specific Support

Every student will have an appointed personal tutor who they will be able to use as a point of contact for any issue whether academic or personal. Personal tutors will schedule meetings with their tutees at least once every semester.

Employability in the Curriculum:

This course has been specifically designed to meet the educational base to become a Chartered Civil Engineer. As such it has been mapped to meet the PSRB requirements. A separate AHEP3 mapping document has been produced. In addition, within the dissertation, students will be required to produce a Professional Development Plan which will cover the Chartered Engineer Attributes.

The relevant professional bodies are: the Institution of Civil Engineers (ICE); the Institution of Structural Engineers (IStructE); the Chartered Institution of Highways and Transportation (CHIT); the Institute of Highway Engineers (IHE); Permanent Way Institution (PWI).

For the Professional Practice placement award, students will be provided with an opportunity to secure a work placement, giving students an experience of the workplace environment to put their learning into practice. Students will be required to complete an additional module '7CN031' Professional Practice Placement and produce a reflective learning portfolio to demonstrate tasks undertaken, experience and professional competencies gained during the placement.

NOTE: Placements are offered on a competitive basis, as determined by the employers, but are not guaranteed. Placements may be paid or unpaid and enhance the student's employability.

