

# **Course Specification**

Cou	Course Summary Information		
1	Course Title	BEng (Hons) Civil Engineering and Construction	
		Management	
2	Course Code	US1059	
3	Awarding Institution	Birmingham City University	
4	Teaching Institution(s)		
	(if different from point 3)		
5	Professional Statutory or		
	Regulatory Body (PSRB)		
	accreditation (if applicable)		

## 6 Course Description

Want to become a civil engineer with construction manager skills? Study our BEng (Hons) Civil Engineering and Construction Management at Birmingham City University.

The BEng (Hons) Civil Engineering and Construction Management course aims to develop graduates with a broad understanding of current technology and practice in civil engineering and construction management, covering the relevant aspects of civil infrastructure, systems, design, analysis, and construction management skills.

This experience, and our outstanding industry links, will give you a competitive edge, enabling you to progress to a successful career when you graduate. You will also develop the key transferable skills that modern employers require, such as problem solving, project planning, presentation and communication. Our strong links to industry enable you to apply your learning to problem-based scenarios, ensuring your intellectual and practical competencies are fully developed.

7	Course Awards		
7a	Name of Final Award	Level	Credits Awarded
	Bachelor of Engineering with Honours Civil Engineering and Construction Management	6	360
	Bachelor of Engineering with Honours Civil Engineering and Construction Management with Professional Placement	6	480
7b	Exit Awards and Credits Awarded		
	Certificate of Higher Education Civil Engineering and Construction Management	4	120
	Diploma of Higher Education Civil Engineering and Construction Management	5	240
	Bachelor of Engineering Civil Engineering and Construction Management	6	300



8	Derogations from the University Regulations
	Not applicable.

9 <b>Delivery Patterns</b>			
Mode(s) of Study	Location(s) of Study	Duration of Study	Code(s)
BEng (Hons) Full Time	City Centre	3 years	US1059
BEng (Hons) with Professional Placement	City Centre	4 years	US1060

10	Entry Requirements		
	Home/EU:	The admissions requirement are similar to the BEng (Hons) Civil Engineering and Construction degree.	
		112 UCAS tariff points from A Level with a minimum of 2 A Levels.	
		In addition you must attain at least a grade C in A Level Mathematics or equivalent.	
		At the point of application, you must have GCSE at Grade 4 (C) or above in English Language and Mathematics. Equivalent qualifications will be accepted. Plus, you must have achieved or be completing one of the following:	
		GCE A Level/ AS Level: BBC at A Level or 112 UCAS tariff points from A Level with a minimum of 2 A Levels and including A Level Maths at grade C or above.	
		Access to Higher Education Diploma: In Engineering - Pass overall with 60 credits, 45 at Level 3 and 15 at Level 2, including with a minimum of 12 credits at Merit or Distinction with 9 credits of these credits from Mathematics units and 3 credits in Science units.	
		BTEC Extended Diploma in a relevant subject/ Pearson BTEC Level 3 National Extended Diploma: DMM - 112 UCAS points.  A Distinction in Mathematics for Technicians unit or a Merit in Further Mathematics for Technicians unit, or a Merit in Further Mathematics in Construction and the Built Environment.	
	International:	IELTS	
		6.0 overall with 5.5 minimum in all bands If you do not meet the required IELTS score, you may be eligible for one of our pre-sessional English courses. Please note that you	



must have a Secure English Language Test (SELT) to study on the pre-sessional English course.

International Baccalaureate Diploma (or equivalent, including internationally accredited Foundation courses).

Overall 30 points with at least 15 points Higher level from 3 subjects.

Students must have grade 5 in Maths (Higher Level) Students must have one subject from Group 4 (excluding Biology) at the Higher Level and English Group A - Grade 4 or above or English Group B and Ab Initio - Grade 5.

For country specific requirement please visit: https://www.bcu.ac.uk/international/bcu-in-your-country

11	Course Learning Outcomes
	Knowledge and Understanding



1	Demonstrate a sound knowledge and understanding of the impact of civil engineering solutions in a global, economic, environmental, and societal context.
2	Apply analytical, numerical, and computational techniques used to model, simulate, design, and develop solutions to civil engineering problems.
3	Demonstrate the ability to design and conduct experiments, as well as to analyze and interpret data that are related to environmental, structural and transportation problems.
4	Argue rationally and draw independent conclusions based on rigorous, analytical, and critical approaches.
	Cognitive & Intellectual Skills
5	Apply technical economic and legal theories, concepts and principles.
6	Design and propose solutions to civil engineering problems critically appraising the output of analytical and/or numerical modelling.
7	To review and analyse procurement issues and seek to meet the needs of the project in terms of time, cost and quality.
	Practical, Professional and Key Transferrable skills
8	Apply industry Codes of Practice, including national and international standards, as well as the relevant Health and Safety regulations.
9	Exhibit an awareness of the key aspects of the process of construction project management, including customer and stakeholder care, the management of integrated teams and processes, a quality driven agenda and a commitment to people and the environment in a sustainable manner.
10	Participate effectively in group working activities, being able to undertake most of the technical functions within the group and managing the delivery of a plan under changing circumstances in a timely fashion.



# 12a Level 4:

In order to complete this course a student must successfully complete all the following CORE modules (totalling 120 credits):

Module Code	Module Name	Credit Value
ENG4091	Engineering Principles 1	20
ENG4094	Engineering Principles 2	20
ENG4124	Mathematical Modelling 1	20
ENG4125	Mathematical Modelling 2	20
BNV4106	Introduction to the Built Environment	20
BNV4104	Integrated Digital Design - Residential	20

#### Level 5:

In order to complete this course a student must successfully complete all the following CORE modules (totalling 120 credits):

Module Code	Module Name	Credit Value
BNV5124	Structures 1	20
BNV5123	Soil Mechanics	20
BNV5132	Civil Engineering Materials	20
BNV5120	Integrated Digital Design for Complex Structures	20
BNV5121	Civil Engineering Applications	20
BNV5137	Built Environment Commercial Technology and	20
	Management	

#### Level 6:

In order to complete this course a student must successfully complete all the following CORE modules (totalling 120 credits):

Module Code	Module Name	Credit Value
BNV6134	Advanced Analysis and Design Methods	20
BNV6135	Structures 2	20
BNV6200	Individual Honours Project	40
BNV6120	Project Management	20
BNV6125	Professionalism and Citizenship	20



# 12b Structure Diagram

### Level 4

SEMESTER ONE	SEMESTER TWO
Engineering Principles 1 (20 credits)	Engineering Principles 2 (20 credits)
Mathematical Modelling 1 (20 credits)	Mathematical Modelling 2 (20 credits)
Introduction to Built Environment (20 credits)	Integrated Digital Design - Residential (20 credits)

### Level 5

SEMESTER ONE	SEMESTER TWO
Structures 1 (20 credits)	Civil Engineering Materials (20 credits)
Soil Mechanics (20 credits)	Integrated Digital Design for Complex Structures
Built Environment Commercial Technology and Management (20 credits)	(20 credits)  Civil Engineering Applications (20 credits)

## Level 6

SEMESTER ONE	SEMESTER TWO
Structures 2 (20 credits) Project Management (20 credits)	Advanced Analysis and Design Methods (20 credits) Professionalism and Citizenship (20 credits)
Individual Honours Project (40 credits)	



#### 13 Overall Student Workload and Balance of Assessment

Overall student *workload* consists of class contact hours, independent learning and assessment activity, with each credit taken equating to a total study time of around 10 hours. While actual contact hours may depend on the optional modules selected, the following information gives an indication of how much time students will need to allocate to different activities at each level of the course.

- Scheduled Learning includes lectures, practical classes and workshops, contact time specified in timetable
- *Directed Learning* includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning
- Private Study includes preparation for exams

The *balance of assessment* by mode of assessment (e.g. coursework, exam and in-person) depends to some extent on the optional modules chosen by students. The approximate percentage of the course assessed by coursework, exam and in-person is shown below.

#### Level 4

#### Workload

#### 36% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	432
Directed Learning	0
Private Study	768
Total Hours	1200

#### **Balance of Assessment**

Assessment Mode	Percentage
Coursework	30%
Exam	47%
In-Person	23%

#### Level 5

#### **Workload**

#### 24% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	288
Directed Learning	214
Private Study	698
Total Hours	1200

#### **Balance of Assessment**

Assessment Mode	Percentage
Coursework	52%
Exam	45%
In-Person	3%



## Level 6

# **Workload**

# 27% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	324
Directed Learning	212
Private Study	664
Total Hours	1200

# **Balance of Assessment**

Assessment Mode	Percentage
Coursework	50%
Exam	50%
In-Person	0%