Course Specification

Course Summary Information		
1	**Course Title**	BSc (Hons) Civil Engineering BSc (Hons) Civil Engineering with Foundation Year BSc (Hons) Civil Engineering with Professional Placement Year
2	**Course Code**	US1549
3	**Awarding Institution**	Birmingham City University
4	**Teaching Institution(s)** (if different from point 3)	N/A
5	**Professional Statutory or Regulatory Body (PSRB) accreditation** (if applicable)	N/A

6	**Course Description**
	Are you ready to shape the world around you, from essential infrastructure and transport systems to innovative buildings and public spaces? Our BSc (Hons) Civil Engineering degree offers a comprehensive and future-focused education that prepares you to design, build and maintain the structures and systems that keep society running. This course gives you a strong grounding in the core disciplines of civil engineering, including structural analysis, geotechnics, materials, and construction management, giving equal focus to infrastructure, transportation, and buildings. Whether you're interested in developing sustainable housing, designing efficient transport networks, or maintaining large-scale infrastructure, you'll gain the knowledge and skills to make a real impact. Throughout your studies, you'll apply theory to practice in our well-equipped labs, using the latest industry-standard tools such as CAD, BIM, and FEM software. You'll also explore how digital innovation, environmental responsibility, and climate resilience are transforming the future of civil engineering - and how you can contribute to the change. With a strong focus on project-based learning, you'll have opportunities to work on engineering problems based on real-life scenarios, from planning new motorways to designing sustainable buildings and managing construction sites. Site visits and guest lectures from practising engineers help bring your learning to life and connect you with current industry practice. You'll also develop vital professional skills, including problem solving, communication, teamwork, and project planning, that are highly valued by employers. Optional work placements or summer internships will allow you to gain industry experience and strengthen your CV before you graduate. Join us and start building a future where your ideas become the structures, systems, and spaces we all depend on!

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

8	Variation from the University Regulations
	This course has approved variations to the University's Academic Regulations. These can be accessed via the student contract page: https://www.bcu.ac.uk/student-info/student-contract

9	Delivery Patterns			
Mode(s) of Study		**Location(s) of Study**	**Duration of Study**	**Code(s)**
Full Time		City Centre	3 years	US1549
Sandwich		City Centre	4 years	US1550
Full time with FY		City Centre	4 years	US1549F

10	Entry Requirements	
	Home:	The admission requirements for this course are stated on the course page of the BCU website at https://www.bcu.ac.uk or may be found by searching for the course entry profile located on the UCAS website.
	International:	
	Access:	

11	Course Aims
	The aim of this course is to prepare future Civil Engineers, the professionals who are responsible for the planning, design, construction, maintenance, and decommission of the majority of the built environment and civil infrastructure, including buildings, transportation, water and waste management, and energy works. The course aims to provide the educational basis that will allow graduates to: • Be technically proficient in order to deliver solutions to Civil Engineering problems, including analysis, design, and development of associated documentation. • Manage tasks and contribute effectively to projects, liaising with multi-disciplinary teams and external stakeholders. • Apply a range of practical skills, including handing materials, equipment, and specialised engineering software. • Ensure compliance with relevant standards, including Health & Safety regulations and Risk Assessment Processes. • Practice sustainability principles, and comply with relevant environmental regulations.

	• Become an effective professional, able to carry continuing professional development, comply with ethical standards, and recognise their importance in the workplace and society.

12	**Course Learning Outcomes**
	Knowledge and Understanding
1	Apply knowledge of mathematics, science, and civil engineering principles, in order to reach substantiated conclusions for the solution of broadly defined problems.
2	Design solutions for broadly defined problems that meet a combination of societal, user, business and customer needs, including the application of an integrated or systems approach.
3	Evaluate the environmental and societal impact of civil engineering solutions, and make reasoned ethical choices informed by professional codes.
4	Use practical methods, including laboratory techniques, to investigate broadly defined problems, and demonstrate an effective understanding of risk assessment and health & safety.
	Skills and other attributes
5	Function effectively and ethically as an individual and as a member of a team, solving problems diligently and with attention to detail and accuracy.
6	Communicate solutions to complex engineering problems to both technical and non-technical audiences.
7	Adopt an inclusive and ethical approach to engineering practice, including promoting the importance of civil engineering solutions contributing to sustainable development and the United Nations' Sustainable Development Goals.
8	Demonstrate an effective approach to continuing professional development.

13	**Course Learning, Teaching and Assessment Strategy**
	The BSc (Hons) Civil Engineering course offers a wide range of Learning, Teaching, and Assessment strategies. Learning and Teaching encompasses lectures, seminars, workshops, laboratories, and fieldwork, making full use of Birmingham City University's laboratory facilities and equipment. Assessment includes coursework, exams, presentations, and field assessment. Feedback is delivered via a variety of mechanisms, including in-person informal feedback, formative feedback (oral or written), and formal written summative feedback and feedforward. This varied approach supports students' continuous learning throughout the course and culminates in the Individual Honours Project.

14	**Course Requirements**
14a	**Level 3 (for Foundation Year entry only):** ***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
ENG3015	Future Manufacturing and Design	30
ENG3016	Mechanical Engineering Application Toolkits	30
ENG3017	Automotive Engineering Practice	30
ENG3018	Electrical and Electronic Engineering Practice	30

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
BNV4104	Integrated Digital Design: Residential	20
BNV4125	Civil Engineering Design Project	20
BNV4126	Civil Engineering Principles 1	20
BNV4127	Civil Engineering Principles 2	20
BNV4128	Construction Site Management Practice	20
BNV4143	Mathematical Modelling 1	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
BNV5161	Highways Engineering	20
BNV5120	Integrated Digital Design for Complex Structures	20
BNV5121	Civil Engineering Applications	20
BNV5123	Soil Mechanics	20
BNV5125	Design Practice	20
BNV5132	Civil Engineering Materials	20

Professional Placement Year (for Professional Placement year only)

In order to qualify for the award of Bachelor of Science (Hons) with Civil Engineering with Professional Placement Year, a student must successfully complete all of the modules listed as well as the following Level 5 module:

Module Code	Module Name	Credit Value
PPY5011	Professional Placement	120

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
BNV6212	Integrated Design Project	20
BNV6213	Transport Modelling	20
BNV6120	Project Management	20
BNV6211	Professional Practice	20
BNV6200	Individual Honours Project	40

14b	Structure Diagram

Level 3

SEMESTER ONE	SEMESTER TWO
Future Manufacturing and Design (30 credits) Mechanical Engineering Application Toolkits (30 credits)	Automotive Engineering Practice (30 credits) Electrical and Electronic Engineering Practice (30 credits)

Level 4

SEMESTER ONE	SEMESTER TWO
Civil Engineering Principles 1 (20 credits) Mathematical Modelling 1 (20 credits) Civil Engineering Design Project (20 credits)	Civil Engineering Principles 2 (20 credits) Construction Site Management Practice (20 credits) Integrated Digital Design: Residential (20 credits)

Level 5

SEMESTER ONE	SEMESTER TWO
Design Practice (20 credits) Soil Mechanics (20 credits) Highways Engineering (20 credits)	Civil Engineering Materials (20 credits) Civil Engineering Applications (20 credits) Integrated Digital Design for Complex Structures (20 credits)

Professional Placement Year 3 (optional) Professional Placement Module 120 Credits

Level 6

SEMESTER ONE	SEMESTER TWO
Integrated Design Project (20 credits) Project Management (20 credits)	Transport Modelling (20 credits) Professional Practice (20 credits)
Individual Honours Project (40 credits)	

15	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 3

Workload

40% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	432
Directed Learning	168
Private Study	600
Total Hours	1200

Balance of Assessment

Assessment Mode	Percentage
Coursework	100%
Exam	0%
In-Person	0%

Level 4

Workload

26% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	312
Directed Learning	292
Private Study	596
Total Hours	1200

Balance of Assessment

Assessment Mode	Percentage
Coursework	63.3%
Exam	23.3%
In-Person	13.3%

Level 5

Workload

24% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	288
Directed Learning	238
Private Study	674
Total Hours	1200

Balance of Assessment

Assessment Mode	Percentage
Coursework	85%
Exam	8.3%
In-Person	6.7%

Level 6

Workload

22% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	264
Directed Learning	212
Private Study	724
Total Hours	1200

Balance of Assessment

Assessment Mode	Percentage
Coursework	78.3%
Exam	8.3%
In-Person	13.3%