

Programme Specification

Programme Title: HNC Civil Engineering

Awarding Institution: University of Bolton

Teaching Institution: University of Bolton

Faculty: Faculty of Advanced Engineering & Sciences

Programme Approved by: Edexcel (Licence Agreement).

Professional body	Professional body URL	Status of graduates
The Institution of Civil Engineers (ICE)	www.ice.org.uk	EngTech Membership
The Institution of Structural Engineers (IStructE)	www.istructe.org	EngTech Membership
The Institute of Highway Engineers (IHE)	www.theihe.org	EngTech Membership
The Chartered Institution of Highways & Transportation (CIHT)	www.ciht.org.uk	Associate Membership

- The HNC Civil Engineering will partially satisfy the educational base for an Incorporated Engineer (IEng). A programme of accredited Further Learning will be required to complete the educational base for IEng; see www.jbm.org.uk for further information and details of Further Learning programmes for IEng.
- The HNC Civil Engineering will fully satisfy the educational base for an Engineering Technician (EngTech). See www.ice.org.uk for further information.
HNC graduates may apply for Engineering Technician (EngTech) professional status immediately on completion of the HNC programme, as part of the ICE / IStructE / IHE Embedded Technician scheme, or Associate Member of the CIHT.

Final award(s):	HNC
Interim award(s)	None
Exit or Fallback award(s)	None
Programme title(s)	Civil Engineering
UCAS Code	H200
JACS Code	H200
University Course Code(s)	Part time – CIE5003
QAA Benchmark Statement(s)	Engineering
Other internal and external reference points	QAA Academic Infrastructure, including the Framework for Higher Education Qualifications and the Code of Practice. UK Quality Code for Higher Education University of Bolton awards framework
Language of study	English
Mode of study and normal period of study	Part Time Day Release – 2 years Evening Only (subject to Demand) – 2 to 4 years (with exemptions for prior learning at Level HE4)

Admissions criteria

Part-Time Only

- Four GCSEs at grade C or above (or equivalent) including English, mathematics and science **and**
- A Levels (or equivalent) with the minimum number of UCAS points currently specified by our *Recruitment and Admissions* department. The total may include points from AS Levels, **or**
- EDEXCEL (BTEC) Qualifications – Subsidiary Diploma (formerly National Award), equivalent to the minimum number of UCAS points currently specified by our *Recruitment and Admissions* department **or**
- EDEXCEL (BTEC) Qualifications – Diploma (formerly National Certificate), equivalent to the minimum number of UCAS points currently specified by our *Recruitment and Admissions* department **or**
- EDEXCEL (BTEC) Qualifications – Extended Diploma (formerly National Diploma), equivalent to the minimum number of UCAS points currently specified by our *Recruitment and Admissions* department **or**

- NVQ - Pass NVQ Level 3, equivalent to the minimum number of UCAS points currently specified by our *Recruitment and Admissions* department

Non Standard Entry

- Cases dealt with by admissions tutor on individual basis
- Applicants may be invited for interview as part of the selection process.
- If English is not the first language – the minimum IELTS score for overseas students is at least 6.0 (or equivalent).

Additional admissions matters

- Applicants must be employed within the civil engineering / construction industry.

Fitness to practise declaration

None

Aims of the programme

The principal aims of the programme are:

- To educate, train and stimulate students to become competent senior civil engineering technicians.
- To develop in students, a knowledge and understanding of the well-established principles in their field of study and the way those principles have developed.
- To enable students, as exponents of technology, to apply underlying concepts and principles outside the context in which they were first studied, and the application of these principles in a work context.
- To inform students of the reasonably foreseeable social, cultural and environmental effects of activities generally, having regard to the need for sustainability and the prevention of dangers to the public.
- To establish in students the importance of undertaking and managing CPD activities sufficient to maintain and extend their competence.
- To provide the appropriate educational base and inspire an ethos for the pursuit of professional membership.
- To encourage a commitment to lifelong learning and Continuing Professional Development.

Distinctive features of the programme

- The programme is **approved** by the Institutions of Civil Engineers, Structural Engineers, the Institute of Highway Engineers and the Chartered Institution of Highways & Transportation, as fully satisfying the educational base for an Engineering Technician (**EngTech**). It is also approved as partially satisfying the educational base for an Incorporated Engineer (IEng). A programme of accredited Further Learning will be required to complete the educational base for IEng.
- Dependent upon performance in the successful completion of the HNC programme from June 2014 (i.e. >60% in core modules), students may progress to the second level of the Faculty's **BEng (Hons) in Civil Engineering** from September 2014. The BEng (Hons) programme is approved as fully satisfying the educational base for an Incorporated Engineer (IEng) and also approved as partially satisfying the educational base for a Chartered Engineer (CEng). A programme of accredited further learning will be required to complete the educational base for CEng.
- The HNC programme includes a **Professional Development** (employer work-based) module that has formal links with the Institution of Civil Engineers (ICE), the Institution of Structural Engineers (IStructE) and the Chartered Institution of Highways and Transportation (CIHT).
- The programme provides an opportunity to achieve early professional recognition from the professional Institutions' at Technician level e.g. TMICE, TIStructE or Associate level e.g. AMCIHT, immediately following completion of the HNC studies (providing the potential for registration with the Engineering Council as an Engineering Technician - EngTech).
- Opportunity to participate in the Queen's Jubilee (QUEST) Technician Scholarship established by the Institution of Civil Engineers – North West Region, designed to help students who are completing a programme which may lead to professional qualification as an Engineering Technician. QUEST Scholarships are associated with excellence in qualities such as leadership potential, aptitude for teamwork, ambition, mature attitude and approach, initiative and determination and demonstrating commitment to civil engineering.
- The HNC programme makes extensive use of laboratory and field-based work to underpin theoretical concepts.
- A current and vocational programme with an established excellent local and regional reputation in the civil engineering/construction industry.
- The programme makes use of local site visits (and more recently to larger profile projects such as the Olympics construction site in London). Guest speakers from industry provide specialist lectures.

- All students qualify for free student membership with the ICE and IStructE.
- The programme curricula and design benefits from consultation with the Industrial Advisory Board (IAB), comprising representatives from Consulting Engineers, Contractors, Local Government, Government Agencies and Professional Bodies. The IAB meet a minimum of twice per year.

K. Knowledge and understanding of:

1. The scientific principles underpinning relevant current technologies, and their evolution.
2. Mathematics necessary to support application of key engineering principles.
3. Commercial and economic context of engineering processes.
4. Management techniques which may be used to achieve engineering objectives within that context.
5. The requirement for Civil Engineering activities to promote sustainable development and the impact on life and the environment.
6. ICT, fieldwork and laboratory practice.
7. Contexts in which Civil Engineering knowledge can be applied (e.g. operations & management, application & development of technology etc).
8. The principles of managing engineering processes.

C. Cognitive, intellectual or thinking skills

Ability to:-

1. Apply quantitative methods and computer software relevant to Civil Engineering design and technology.
2. Apply critical reasoning and analysis.
3. Use the results of analysis to solve engineering problems, apply technology and implement engineering processes.
4. Apply a systems approach to engineering problems through know-how of the application of the relevant technologies.
5. Define a problem and identify constraints.
6. Use and apply information from technical literature.
Use appropriate codes of practice and industry / European standards.

P. Practical, professional or subject-specific skills

Be able to:-

1. Produce or adapt design solutions according to customer and user needs.
2. Ensure fitness for purpose (including operation, maintenance, reliability etc).
3. Be aware of the framework of relevant legal requirements governing Civil Engineering activities, including personnel, health, safety, and risk (including environment risk) issues.
4. Understand the need for a high level of professional and ethical conduct in civil engineering.

5. Understand and have the ability to use relevant materials, equipment, processes, etc.
6. Be aware of quality issues and their application to continuous improvement.

T. Transferable, key or personal skills

1. Capacity to research, investigate, work with contradictory information and to learn.
2. Communicate effectively, orally, through calculations in writing and through drawings.
3. Numerical, manipulative and quantitative skills appropriate to engineering.
4. Competent in the use of information technology tools.
5. Ability to manage resources and time, to lead and to work within a team.
6. Social and political awareness.
7. Capacity to plan and monitor continuous personal development (PDP).

Programme Structure

Module Code	Module title	Core/ Option/ Elective (C/O/E)	Credits	Length (1, 2 or 3 periods)
CIE4001	Engineering Mathematics & Structural Analysis	C	20	2
CIE4002	Construction & Materials Technology	C	20	2
CIE5001	Professional Development (Years 1 & 2)	C	20	4
CIE4003	Site Surveying & Management Practice	C	20	2
CIE4004	Ground & Water Studies	C	20	2
CIE4005	Transport & Water Engineering	E	20	2
CIE4006	Structural Design & Further Mathematics	E	20	2

TOTAL CREDITS AT COMPLETION OF PROGRAMME **120**

CIE4001, CIE4002 & CIE5001 (partial) Year 1
CIE4003, CIE4004, CIE5001 (complete) & either **CIE4005** or **CIE4006** Year 2

CIE5001 is only half complete at the end of the first year and fully complete at the end of the second (and final) year.

CIE4006 must be successfully completed (>60% as previously discussed under “Distinctive Features” earlier), for advanced entry onto the second level of the BEng (Hons) Civil Engineering.

Learning and teaching strategies

Learning and Teaching Methods

The diverse nature of the civil engineering programme necessitates the deployment of a variety of teaching and learning methods in order to ensure the acquisition and development of the appropriate concepts, knowledge and skills. Many of these will be

experienced during formally timetabled classes whilst others will be appropriate to student centred learning.

Whilst there are significant opportunities to spend time with the tutors and technicians during timetabled classes, practical work and tutorials, there is an expectation that students will devote an equivalent amount of time to personal study. This personal study time might be spent, for example, engaging in general background reading, revisiting practical work, attending technical meetings and lectures provided by the professional bodies, preparing for seminar activities, working on assignments or revising for examinations. During the early stages of studies, guidance will be provided on how students can make the best use of their personal study time. However, as students progress through the programme, this guidance will become less structured and prescriptive.

The learning and teaching methods described below are those most commonly adopted by the programme during the formally timetabled sessions. However, individual module tutors are free to introduce techniques that they view as especially suitable in aiding learning in their specialist area. (Each Module Guide will identify specific teaching and learning strategies)

Lectures: Lectures play an important part throughout the course and will feature in all modules of the programme. They involve the dissemination of theoretical and empirical information by a lecturer and provide a basic framework that students can build upon through their reading and through other classroom activities. Guest Lectures by specialists from industry, the professional bodies and other academic institutions, enhance the learning experience.

Practical Sessions: Tutor-led practical sessions which can take place in laboratories, be field based or located in computer suites or studios, are a key aspect of this programme. These may comprise demonstrations by staff members, hands-on practical activities or project work. These activities help develop subject specific practical skills; specifically, the ability to:

- effectively deploy the methods and tools used in the development of a product
- solve practical problems by making and testing prototypes
- make effective use of specialist software.

During practical sessions, there is also an opportunity to develop time management and communications skills as well as the ability to work as part of a team.

Site Visits: Site visits are an important aspect of the programme as they provide the opportunity for students to view state-of-the-art projects. Such events also help to promote a synthesis between academic and professional based activities.

Seminars: Seminars involve groups of students who meet with a tutor to discuss further reading, issues and problems arising from lecture material, or to undertake case studies or problem-solving exercises. It is common for further reading on a particular topic to be assigned, and one student may be required to present an oral synopsis to provide a basis for discussion. Seminars play an important part in encouraging students to think critically about the subject, to analyse theory and

information in a systematic fashion, and to enhance understanding of conceptual issues.

Workshops: Workshops are also employed in some modules and may involve the development of skills, e.g. research methods, the application of statistics, presentations etc, as well as problem solving through the evaluation of case-study material. Assistance with assignment work may be offered in workshops, and they play an important part in increasing students' confidence in dealing with the subject matter.

Tutorials: These are usually individually based but may be shared with students who are studying a similar area/issue. Students should prepare for tutorials, which are usually associated with an assignment, by bringing any plans for discussion.

A key feature of this programme is the 2-year Professional Development module at level HE5, as discussed previously. This incorporates workshops, tutorials, self awareness, commercial awareness and practice interviews.

Informal Group Study Sessions: Laptops can be booked out from the library issue desk and used for group work in the Social Learning Zone. Furthermore, there are a number of group study rooms in the library which can also be booked for meetings and/or presentation practice.

Learning activities (KIS entry)

	Year 1	Year 2
Scheduled learning and teaching activities	44%**	42%**
Guided independent study	56%	58%
Placement/study abroad	0%	0%

**The Professional Development module is a scheduled, employer work-based learning module crossing both years of the HNC programme. Students undertaking the 'joint' HNC/Professional Body training as part of the "Embedded Technician Scheme" must have the support of their Employer in the capacity of a Mentor (and/or through a Professional Body training agreement).

Employers, together with the University, Student employees and the appropriate Professional Body, enter into an agreement to undertake their prescribed duties in this regard and therefore the scheduled contact time is divided between both years of the HNC programme.

Assessment strategy

Assessment Methods

The assessment strategy for the programme is designed to ensure that students achieve the overall aims and learning outcomes of the programme, as well as the learning outcomes for individual modules; they may take the form of assessment of individual performance during practical work, time constrained examinations, essays, making presentations, writing up of laboratory work, analytical or design assignments, research assignments, design submissions, personal development plans, dissertation.

Assessment serves several functions. The obvious and primary function is to evaluate student achievement. However, assessment also serves to help students to organise and develop their learning. Feedback from assessment serves an important educational function and can help develop skills and understanding of personal strengths and weaknesses. To this end, several modules will adopt “formative” assessment methods in the early stages which will result in qualitative feedback and does not contribute to the mark for the module; this enables students to gain understanding and development of knowledge, skills and abilities that can then be applied to the “summative” assessment to provide the definitive mark for the module.

The various assessment methods deployed by the programme are described below.

Essay: For a number of modules, students will be required to produce a coursework essay or essays. Essays assess understanding of the thrust of the question set, whether students have introduced and appreciate the relevance of appropriate material to the topic in hand and understand its implications, whether they can analyse and evaluate information and whether they can communicate ideas clearly. Coursework essays are typically set to assess the learning outcomes related to understanding key concepts, demonstrating critical evaluations, and demonstrating the capacity to think independently. The required length of coursework essays can vary depending upon the purpose of the assignment for which the work is assessed. Students will be given guidance by the teaching staff on any specific requirements.

Reports: A number of modules require the student to write reports, which are sometimes based on a given case-study. These reports identify published background research and rationale for their study, the way in which the study was carried out, and the results and analysis of information. Usually, a standard format is used to aid clear, precise and unambiguous expression. Students are given explicit guidance on the format required for the report.

Presentations: Students are required to make oral presentations (e.g. from notes or from an essay, using presentational aids where appropriate) in a number of modules. Some modules may specify such a presentation as part of their assessment, whilst seminar presentations in other modules may not be part of the formal assessment. To augment the tutor’s assessment; some modules will also make use of “peer review” where fellow students assess their peers against pre-determined assessment guidelines.

Project Work: Many modules make use of project work for assessment. Project work may be undertaken by individuals or groups of students working together. Project briefs

may be set by the tutor, an external company or by students themselves, depending on the requirements of the module.

Practical Work: Individual performance is assessed during field-based practical work. Assessment guidelines are issued at the start of a module and these can include the assessment of motivational skills, theoretical knowledge, the ability to work in a group, communication skills as well as practical skills associated with carrying out a particular task. There is also an emphasis on the assessment of ability to perform the work safely in accordance with the appropriate risk assessment

The assessment methods for each module are identified in the Module Guides given out at the beginning of the teaching period. Furthermore, the Programme Handbook provides information on assignment submission dates in the “Assessment Timing Matrix” and this allows students to plan their work load effectively.

Assessment methods (KIS entry)

	Year 1	Year 2
Written exams	16%	16%
Coursework	84%	68%
Practical assessments	0%	16%

Assessment regulations

The programme uses the Assessment Regulations for the Undergraduate Modular Framework.

The overall pass mark for all modules is 40 percent. The mark awarded will be made up, where specified, of the weighted average of the examination and coursework assessment marks.

Normally, students will be expected to have achieved an overall module mark of 40 percent, with no item defined in the assessment pattern for the module having a mark below 35 percent, in order to be awarded the credit for a module.

For the full and current version of the Assessment Regulations, refer to the document “*Assessment Regulations for Undergraduate Modular Programmes (Main Document)*” at the following university intranet site:

<http://www.bolton.ac.uk/Quality/QAECContents/APPR/Home.aspx>

Module Grade bands and classifications

Students are usually awarded both a mark and a grade for assessed work. Grades correspond to the following module mark ranges.

<u>Grade</u>	<u>Mark Range (%)</u>	<u>Description</u>
<i>Distinction</i>	70 +	Work of exceptional quality
<i>Merit</i>	60 – 69.9	Work of very good quality
<i>Pass</i>	40 – 59.9	Work of good quality
<i>Fail</i>	0 – 39.9	Unsatisfactory performance

HNC Civil Engineering Qualification Grade bands and classifications

Students are awarded a qualification grade based on the overall average of marks at the level of the award. Qualification grades correspond to the following overall average mark ranges.

<u>Grade</u>	<u>Overall Average Mark Range (%)</u>
<i>Distinction</i>	70 +
<i>Merit</i>	60 – 69.9
<i>Pass</i>	40 – 59.9
<i>Fail</i>	0 – 39.9

Role of external examiners

External examiners are appointed for all programmes of study. They oversee the assessment process and their duties include: approving assessment tasks, reviewing assessment marks, attending assessment boards and reporting to the University on the assessment process.

Support for student learning

- The programme is managed by a programme leader
- Induction programme introduces the student to the University and their programme
- Each student has a personal tutor, responsible for support and guidance
- Personal Development Planning (PDP) integrated into all programmes
- Feedback on formative and summative assessments
- A Student Centre providing a one-stop shop for information and advice
- University support services include housing, counselling, financial advice, careers

- and a disability
- A Chaplaincy
 - Excellent library and IT services
 - Student Liaison Officers attached to each Faculty
 - The Students' Union advice services
 - Faculty and Programme Handbooks which provide information about the programme and University regulations
 - The opportunity to develop skills for employment
 - Specialist teaching facilities/resources
 - Support for placement learning including mentors
 - Support from professional bodies

Methods for evaluating and enhancing the quality of learning opportunities

- Programme committees with student representation
- Module evaluations by students.
- Students surveys, e.g. National Student Survey (NSS), Postgraduate Taught Experience Survey (PTES)
- Annual quality monitoring and action planning through Programme Quality Enhancement Plans (PQEPs), Data Analysis Report (DARs) Subject Annual Self Evaluation Report (SASERs), Faculty Quality Enhancement Plans (FQEPs), University Quality Enhancement Plan (UQEP)
- Peer review/observation of teaching
- Professional development programme for staff
- External examiner reports
- Industrial Advisory Board
- Professional body reports

Other sources of information

Student portal

<http://www.bolton.ac.uk/Students/Home.aspx>

Students Union

<http://www.ubsu.org.uk/>

Faculty Handbook (available via the following webpage)

<http://www.bolton.ac.uk/Students/Home.aspx>

Programme Handbook

<http://data.bolton.ac.uk/staff/md2/HNC%20Civils/Course%20Information/0708/A1/First%20Year%20Students.html#Handbook>

Student Entitlement Statement (available via the following webpage)

<http://www.bolton.ac.uk/Students/AdviceAndSupport/StudentServices/>

Module database

<http://data.bolton.ac.uk/academicaffairs/index.html>

External examiners reports

<http://www.bolton.ac.uk/Quality/QAECContents/ExternalExaminersReports/Home.aspx>

Document control

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Approved by:

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PROGRAMME LEARNING OUTCOMES
(HNC Civil Engineering)

Key

a = assessed
d = developed
t = taught

		Level HE4				HE5	Level HE4	
		CIE4001 – Engineering Mathematics & Structural Analysis (Core)	CIE4002 – Construction & Materials Technology (Core).	CIE4003 – Site Surveying & Management Practice (Core)	CIE4004 – Ground & Water Studies (Core)	CIE5001 – Professional Development Module (Core).	CIE4005 – Transport & Water Engineering (Option).	CIE4006 – Structural Design & Further Mathematics (Option)
K - Knowledge & Understanding	1. The scientific principles underpinning relevant current technologies, and their evolution.	tda	td	td	td	-	td	td
	2. Mathematics necessary to support application of key engineering principles.	tda	d	td	td	d	d	td
	3. Commercial and economic context of engineering processes	-	d	tda	-	d	-	d
	4. Management techniques which may be used to achieve engineering objectives within that context	-	d	tda	-	-	d	-
	5. The requirement for Civil Engineering activities to promote sustainable development and the impact on life and the environment	-	td	-	td	da	td	d
	6. ICT, fieldwork and laboratory practice (Fieldwork in CIE4003; Laboratory work in CIE4004)	td	td	tda	tda	d	td	-
	7. Contexts in which Civil Engineering knowledge can be applied (e.g. operations & management, application & development of technology etc)	-	d	td	d	a	d	td
	8. The principles of managing engineering processes	-	td	td	-	d	da	-
C - Cognitive, Intellectual or Thinking Skills	1. Apply quantitative methods and computer software relevant to Civil Engineering design and technology	td	-	td	td	d	td	tda
	2. Apply critical reasoning and analysis	d	d	td	d	d	da	td
	3. Use the results of analysis to solve engineering problems, apply technology and implement engineering processes	d	d	td	tda	d	td	d
	4. Apply a systems approach to engineering problems through know-how of the application of the relevant technologies	-	-	d	d	d	tda	-
	5. Define a problem and identify constraints	td	-	d	d	d	-	da
	6. Use and apply information from technical literature	-	da	-	d	d	-	td
	7. Use appropriate codes of practice and industry / European standards	-	d	-	td	d	d	tda
P - Practical, Professional or Subject-Specific Skills	1. Produce or adapt design solutions according to customer and user needs	-	-	d	d	d	d	dta
	2. Ensure fitness for purpose (including operation, maintenance, reliability etc).	-	td	-	d	d	d	da
	3. Be aware of the framework of relevant legal requirements governing Civil Engineering activities, including personnel, health, safety, and risk (including environment risk) issues	-	d	tda	d	d	td	td
	4. Understand the need for a high level of professional and ethical conduct in civil engineering	-	-	td	-	da	d	-
	5. Understand and have the ability to use relevant materials, equipment, processes (Materials in CIE4002 & Equipment / Processes in CIE4004)	-	tda	td	da	d	d	td
	6. Be aware of quality issues and their application to continuous improvement.	-	td	d	-	da	-	-
T - Transferable, Key or Personal Skills	1. Capacity to research, investigate, work with contradictory information and to learn.	d	d	-	d	d	tda	td
	2. Communicate effectively, orally, through calculations in writing and through drawings (Oral / Visual in CIE4002 & Written in CIE4004)	td	da	td	da	d	d	td
	3. Numerical, manipulative and quantitative skills appropriate to engineering	tda	td	td	td	d	d	td
	4. Competent in the use of information technology tools	d	da	d	d	d	d	-
	5. Ability to manage resources and time, to lead and to work within a team	-	d	da	d	d	d	-
	6. Social and political awareness	-	d	d	-	d	-	-
	7. Capacity to plan and monitor continuous personal development (PDP)	-	d	-	-	da	-	-

Module Listing

Module title	Mod Code	New? ✓	Level	Credits	Type	Core/Option C/O	Pre-requisite module	Assessment 1		Assessment 2		Assessment 3	
								Assessment type	Assessment %	Assessment type	Assessment %	Assessment type	Assessment %
Engineering Mathematics & Structural Analysis	CIE4001	✓	HE4	20	CORE	C	None	CWK	50	EXAM	50	-	-
Construction & Materials Technology	CIE4002	✓	HE4	20	CORE	C	None	CWK	50	PRES	50	-	-
Site Surveying & Management Practice	CIE4003	✓	HE4	20	CORE	C	None	CWK	40	PRAC	60	-	-
Ground & Water Studies	CIE4004	✓	HE4	20	CORE	C	None	CWK	50	CWK	50	-	-
Professional Development Module	CIE5001	✓	HE5	20	CORE	C	None	CWK	50	CWK	50	-	-
Transport & Water Engineering	CIE4005	✓	HE4	20	OTHR	O	None	CWK	50	EXAM	50	-	-
Structural Design & Further Mathematics	CIE4006	✓	HE4	20	OTHR	O	CIE4001*	CWK	50	EXAM	50	-	-

* or equivalent

Bolton Key Core Curriculum requirements

Module Title	Module Code	C/O	Employability											Bolton Values		
			PDP	Communication	Team work	Organisation & Planning	Numeracy	Problem solving	Flexibility & adaptability	Action planning	Self awareness	Initiative	Personal impact & confidence	Inter-nationalisation	Environmental sustainability	Social, public and ethical responsibility
Engineering Mathematics & Structural Analysis	CIE4001	C		dta	d	dta	dta	dta	d	d	d	d	d	dta	d	d
Construction & Materials Technology	CIE4002	C		da	da	dta	dta	dta	da	da	da	da	d		dta	d
Site Surveying & Management Practice	CIE4003	C		da	da	da	dta	dta	da	da	da	da	da		dt	d
Ground & Water Studies	CIE4004	C		dta	dta	dta	dta	dta					d			
Professional Development Module	CIE5001	C	da	da	d	d	d	d	d	d	d	da	da	d	da	da
Transport & Water Engineering	CIE4005	O		dta	d	d	dta	dta	d	d		d	d			d
Structural Design & Further Mathematics	CIE4006	O		dta		dta	dta	dta	dta	d		d	d	dta	d	d

(Developed = d, Taught = t, Assessed = a)