Hertfordshire Higher Education Consortium

Construction Management

- HNC
- Foundation Degree
- BSc









Foundation Degree

What is a Foundation Degree?

Foundation Degrees are university level degree courses that offer an exciting work-based alternative to the traditional university route. They are:

- A stand-alone recognised qualification.
- Equivalent to studying the first two years of an honours degree programme.
- · Highly valued by employers.

How does this work?

Foundation Degrees in Hertfordshire are accessible through your local college, as part of the Hertfordshire Higher Education Consortium^{*}. On graduation you will be awarded a University of Hertfordshire validated degree, and depending on your chosen course you even get letters after your name... FdA, FdSc.

Benefits to studying a Foundation Degree

- real-life projects which enable you to gain valuable work experience whilst allowing you to apply your skills and knowledge.
- support that's available throughout your course from tutors and advisors in College and mentors in your place of work.
- **affordable** because you can choose from one of four colleges to study at you will never be far from home, saving you money on living costs.
- funding through student tuition fee loans will cover the cost of your programme – so there's nothing to pay up front.

Who can study a Foundation Degree?

Foundation Degrees are suitable for all kinds of candidates including:

- Those with Level 3 qualifications (eg A Levels, Advanced Apprenticeships, BTECs, Access to Higher Education or City & Guilds).
- Those looking for a change in career.
- Those already employed but wanting to gain a Higher Education qualification either to progress their career or other aspirations.

What can I do with my Foundation Degree?

That really is up to you! Your degree will ensure that you are well equipped to start your career path and research shows that those with a Higher Education qualification earn 25% more than those without! However, if you have a taste for learning you can 'top-up' your Foundation Degree to a BA or BSc honours degree.

How do Foundation Degrees fit with other qualifications?



Hertfordshire Higher Education Consortium*

The Hertfordshire Higher Education Consortium is a partnership between the University of Hertfordshire, Hertford Regional College, North Hertfordshire College, Oaklands College and West Herts College.

The consortium provides innovative, high quality courses that support vocational higher education. Students get the best of both worlds – the benefits and support of studying at college, and access to University facilities including the libraries (LRCs), athletic and student unions all social activities, careers support and much, much more.



Study route

Part-time 2 years (Edexcel HNC) plus Part-time 1 year (UH FD) plus Part-time 2 years (UH BSc Hons) (*in total 5 years for all 3 qualifications*)

This programme comprises three elements a Higher National Certificate (HNC) (2 Years), Foundation Degree (FdSc) (1 Year) and Bachelors of Science Degree (BSc Hons) (2 Years). Each element stands alone and can be undertaken provided the necessary pre-requisites are in place. Equally students can begin with the HNC and progress through each stage. This programme will help you build on your current employment, with highly relevant, specialised studies that will prepare you for a range of technical, professional and managerial careers in construction. You'll study a range of modules covering practical construction skills and underlying theoretical and scientific concepts, as well as developing skills in professional management and communication.

HNC Programme Structure

The HNC programme is divided into two Semesters. A which is September to January and B which is January to June.

Year One	Semester A	Design Principles L4 • 15 Credits	Applied Maths L4 • 15 Credits	Personal & Professional
	Semester B	Science & Materials L4 • 15 Credits	Site Surveying Procedures L4 • 15 Credits	Development L5 • 15 Credits
Year Two	Semester A	Health, Safety & Welfare L4 • 15 Credits	Measuring Tendering & Estimating L4 • 15 Credits	Group Project
	Semester B	Economics for Construction L5 • 15 Credits	Construction Methods & Design Solutions L5 • 15 Credits	L5 • 20 Credits

Foundation Degree Programme Structure

The Foundation Degree programme is divided into three Semesters, A which is September to January, B which is January to May and C which is May to August.

	Semester A	Legal Studies L5 • 15 Credits		Management Principles & Application L5 • 15 Credits	
Year One	Semester B	Construction Contract	Construction Science		Work Based Learning Project • I 5 • 30 Credits
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	Semester C	Work Based Learning Project L5 • 30 Credits			



BSc (Hons) Programme Structure

The BSc programme is divided into two Semesters, A which is September to January and B which is January to May.

Year One	Semester A	Contract Practice and Administration L6 • 15 Credits	Construction Technology 3 L6 • 15 Credits	
	Semester B	Project Management in Construction L6 • 15 Credits	Strategic Management L6 • 15 Credits	
Year Two	Semester A	Construction Management Practice L6 • 15 Credits	Dissertation L6 • 30 Credits	
	Semester B	Team Project L6 ● 15 Credits	Dissertation L6 • 30 Credits	

Entry requirements HNC

- 120 UCAS points, including two GCE A levels (or equivalent)
- 5 GCSEs (or equivalent) including Mathematics (higher paper), English and Science at grade C or above

Applicants should be in appropriate employment or have been in appropriate employment during the last 3 years.

Foundation Degree

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150 credits at Higher National Certificate in Construction Management or equivalent construction related HNC which will require a minimum merit overall. Applicants would normally be required to have a relevant formal L3 qualification, and will be expected to complete an application form and attend an interview.

BSc (Hons)

The normal entry requirement for entry to level 6 of the BSc Hons degree in Construction Management

will be for students to have successfully completed the Foundation Degree in Construction Management or equivalent construction related Foundation Degree (240 credits) and be in appropriate employment or have been in appropriate employment during the last 3 years.

Studying at Level 6, will be subject to the recommendation of the Programme Board of Examiners and will be based on a minimum of an average grade of 50% being achieved in 90 credits at level 5. In addition, students wishing to continue with their studies will be asked to complete a comprehensive application form and to attend an admissions interview.

How will I be assessed? HNC

The programme is assessed through a combination of coursework, presentations and projects. Students will need to achieve an overall merit for progression onto the Foundation Degree.

Foundation Degree / BSc (Hons)

The programme is assessed through a combination of coursework, presentations, projects and examinations



HNC

What I will learn?

This programme is designed to help build on current employment experience, with highly relevant, specialised studies that will prepare you for a range of technical, professional and managerial careers in construction. Students will study a range of modules covering practical construction skills and underlying theoretical and scientific concepts, as well as developing skills in professional management and communication.

Year 1 Semester A

Design Principles

This module enables students to demonstrate an understanding of design considerations and the design process. Students will develop their ability to evaluate the planning and design phases and consider the environmental impact of construction projects.

Applied Mathematics

This module provides students with an understanding of analytical techniques and the mathematical skills needed to solve construction and engineering problems. This module has been designed to enable students to use mathematical processes to solve construction, civil engineering and building services engineering problems.

Personal & Professional Development (Semester A & B)

This module is designed to enable students to assess and develop a range of professional and personal skills in order to promote their future personal and career development. It also aims to develop learners' ability to organise, manage and practise a range of approaches, in order to improve their performance as self-directed learners in preparation for work or further career development.

Year 1 Semester B

Science & Materials

This module introduces scientific principles relevant to the study of construction and the built environment and provides learners with a fundamental understanding of the properties and use of construction materials.

Site Surveying Procedures

This module is designed to develop students skills in using modern surveying equipment to carry out a range of typical site surveying procedures in the construction and built environment sector. Students will undertake setting-out and control of alignment of construction work. This module develops the understanding and skills required to perform surveying calculations.

Year 2 Semester A

Health, Safety & Welfare

On completion of this module, students will understand current health, safety and welfare legislation applicable to the construction and built environment sector. Students will understand the main requirements of an effective health and safety policy and its successful implementation in the workplace. Students will understand how to identify and record hazards, assess risks and select appropriate control measures to prevent or mitigate ill health and injuries on site.

Measuring Tendering & Estimating

The principles and techniques of estimating form an integral part of the tender process. The identification and selection of contractors and the available methodology are contrasted in terms of their appropriateness for construction procurement. Students will gain an understanding of the contract documentation required for the tender process along with the constraints on a tender both in the pre-stages and post-stages of procurement.

Group Project (Semester A & B)

This module will develop students skills in terms of the evaluation and resolution of realistic practical problems and the ability to work as part of a team. This module also enables the application of knowledge, understanding and skills developed in other units, and where possible experiences from work, to a major piece of work. This module is designed to bring together small groups of students into teams so that they can coordinate their individual skills and abilities.





Economics for Construction

This module provides students with an understanding of how the economic environment affects the construction and built environment sector. This module has been designed to enable students to examine, analyse and discuss the implications of economic theories on the construction and built environment sector.

Construction Methods & Design Solutions

This module provides students with an opportunity to explore current practices and issues in construction and gain an understanding of the modern methods of construction. This will enable students to develop skills in research and analysis to support the design process

Foundation Degree

What I will learn?

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, skills and other attributes in the following areas.

Semester A

Legal Studies

This module introduces the themes of civil and criminal law and the laws of tort; contract. The module includes the sources of English law, court system and their jurisdiction; use of precedence and case law. Then topics will include negligence, nuisance and occupiers liability within the law of tort.

Management Principles & Application

This module provides students with an understanding of organisational theory including themes of organisational structure; communication; culture; change and ethics. Management theory in construction introduces topics such as the functions and processes of management. The module will also comprise the study of leadership behaviour and attitude; power and control; motivation and morale; delegation; decision making; groups and teams; stress and communication theory.

Semester B

Construction Contract Law

This module examines the alternative methods of procurement and forms of building contract from the JCT & NEC contract families. Students will study the documents forming a building contract and sub-contract; and the obligations and liabilities of the parties within the contract. The module also includes the study of clauses from the conditions of contract related to time, cost, safety and quality. Contract formation which would typically include the parties of the contract and elements required to be present for the legal formation of a binding contract and the selection of appropriate procurement methods.

Construction Science

This module focuses on the effects of natural phenomena on construction materials such as chemical; electro-chemical; bio-chemical; radiation; heat and cold and wet and dry interaction and also the behaviour of materials under loads; tension, compression, shear, bending, torsion and deflection. The module examines the basics of construction science introducing topics such as thermal insulation; vapour condensation and the need for ventilation. This part of the module also includes topics such as natural and artificial lighting & ventilation; smoke; fire and sound insulation.

Semester B & C

Work Based Learning Project

The project that is to be carried out should be of need to the employer, and details of the project will be agreed between the employer, the student and the college. The project should be of significant benefit to the employer and will be assessed in terms of both the project process and the evaluation of the project outcomes.

BSc (Hons)

What I will learn?

The course is designed to prepare students for a range of technical, professional and managerial careers within construction by providing specialist studies which are directly relevant to current vocations and professions. Students will study a range of modules covering practical construction



skills together with the underlying theoretical and scientific concepts, as well as developing skills in professional management and communication.

Year 1 Semester A

Contract Practice & Administration

This module aims to provide students with an understanding of the operation of standard forms from the JCT & NEC contract families. This module will comprise the further study of clauses from the conditions of contract for operation and completion of the contract, including the opportunities for dispute resolution.

Construction Technology

The module aims to provide students with an understanding of stakeholders needs and perceptions in terms of facilities management; refurbishment; change of use; modifications and communication technology. Themes are included such as Lean construction; sustainable development; intelligent building; energy management; environmental impact and alternative energy sources such as photovoltaic and rainwater storage systems and Business Information Modelling (BIM).

Semester B

Project Management

This module provides students with the opportunity to develop their skills in property development from the earlier module studied in year two. Project finance and investment together with the phases of the project lifecycle will be reprised. This module examines the appointment of, abilities and functions of the project manager and the appointment of the development team. The module will comprise the study of project leadership skills and styles; effective group working and teambuilding; project communication. risk management and the management of project conflict. Students are introduced to specific project management requirements in the construction industry and will study factors influencing project organisational structures and project approaches such as the Linear Responsibility Chart and Work: Organisation and Cost Breakdown Structures.

Strategic Management

This module aims to provide students with an understanding of the main concepts of corporate strategy to be able to understand and assess the strategic position, strategic capabilities and strategic purpose of an organisation as well as relations between strategy and culture in industry, especially in construction industry. These concepts and relevant theories will allow students to use different strategic methods and evaluation techniques to assess and recommend different strategic options for construction companies in a complex and dynamic business environment.

Year 2 Semester A

Construction Management Practice

This module aims examines the operational management aspects of the construction managers function. The module focuses on the links between corporate and project strategies; effective site management and labour, plant and materials management, including the concepts of Quality Management and Continuous Improvement; Supply Chain Management; Lean Construction; Key Performance Indicators (KPI) & Business Information Modelling (BIM). Links between construction management and estimating and tendering practice will be explored such as pre-qualification and pricing strategy.

Dissertation (Semester A & B)

This module provides students with the opportunity to develop their skills in research methodologies gained on the Foundation Degree. The module includes topics such as the selection of a research topic; undertaking literature review; the formulation of research objectives and a hypothesis and the planning of a research project. Students will define a research project, identify, gather and analyse information needed to formulate an appropriate research method for their selected total and sample population.



Semester B

Team Project

This module provides students with the opportunity to develop their skills in project role definition; team selection; effective group dynamics; information handling; target setting; decision making; problem solving; giving feedback; analysis and monitoring subsequent action.

This module asks students to explore the previously studied topics of operational production planning and control.

Topics include procurement; risk management; methods of planning and programming; site establishment; resources management; health and safety; quality management; cost and value reconciliation, environmental management and Business Information Modelling (BIM).



For further information

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