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| 4200BEUG  Semester 1  *Built environment* | CONSTRUCTION TECHNOLOGY 1  (20c) | *Aim:*  To introduce the student to construction techniques associated with domestic dwellings including building regulations and building services.  To develop an understanding of the performance of buildings and the influence of materials and workmanship specification on performance. | *Learning activities:*  Lectures are used in order to identify and explain key concepts and theories and provide detailed information on particular subject areas within the module. They help to stimulate the student’s interest in the subject area. Lectures may also include guest industry speakers to add industry context to the material.  Workshops are used to engage students in more intensive discussion and activity on particular subject areas within the module. This helps shape the student’s own understanding and place the lecture material in context. | *Assessment:*  SENARIO BASED (50%) EXAMINATION - CLOSED BOOK (50%) |
| 4201BEUG  Semester 1  *Built environment* | COLLABORATIVE INTERDISCIPLINARY PROJECT 1  (10c) | *Aim:*  The aim of this module is to introduce students to their professional subject area whilst providing them with an early opportunity to engage in a collaborative environment with Level 4 students from Built Environment disciplines. It highlights the interdisciplinary nature of the construction and property markets and the roles each make at various stages of the project. | *Learning activities:*  Lectures, workshops, group work and presentations  The central theme of the module is the production of a suitable work derived project and it is supported by the other modules within the first year of the programme.  Group work is a key theme of the module; the intention being to simulate the experience of the work place and work place activity, endorsed and approved by the involvement of employers and stakeholders as relevant to the workplace generally.  Group presentations will be given to a panel comprising of academic staff and representatives from industry after which formative feedback will be provided. | *Assessment:*  PORTFOLIO (90%) SELF AWARENESS STATEMENT (10%) |
| 4203BEUG  Semester 1  *Built environment* | CONSTRUCTION AND PROPERTY ECONOMICS  (20c) | *Aim:*  To provide students with an introduction to economic theories and principles with particular reference to the built environment, property and society in general. | *Learning activities:*  Lectures are used in order to identify and explain key concepts and theories and provide detailed information on particular subject areas within the module. They help to stimulate the student’s interest in the subject area. Lectures may also include guest industry speakers to add industry context to the material.  Seminars are used for students to discuss with the module team about particular subject areas within the module. Workshops are used to engage students in more intensive discussion and activity on particular subject areas within the module. These activities help shape the student’s own understanding and place the lecture material in context. | *Assessment:*  ONLINE IN-CLASS ASSESSMENT (50%) ESSAY (50%) |
| 4205BEUG  Semester 1  *Built environment* | ACADEMIC AND DIGITAL LITERACY  (10c) | *Aim:*  To enable the student to develop the academic and digital literacy skills necessary to perform effectively in a Higher Education context. | *Learning activities:*  Lectures and workshops that include :  Active learning activities within a workshop context including various form of diagnostic tests for the students to undertake and obtain formative feedback. | *Assessment:*  ACADEMIC ESSAY (100%) |
| 4207BEUG  Semester 1  *Built environment* | BUILDING SURVEYING IN PRACTICE  (20c) | *Aim:*  To provide students with a practical introduction to building surveying and professional skills in a work based context.  To provide students with an introduction to the development and production of building surveying proposals, and their integration with projects | *Learning activities:*  Lectures are used in order to identify and explain key concepts and theories and provide detailed information on particular subject areas within the module. They help to stimulate the student’s interest in the subject area. Lectures may also include guest industry speakers to add industry context to the material.  Workshops are used to engage students in more intensive discussion and activity on particular subject areas within the module. They help shape the student’s own understanding and place the lecture material in context. | *Assessment:*  BUILDING SURVEYING PORTFOLIO (70%) BUILDING SURVEYING PRESENTATIO (30%) |
| 4210BEUG  Semester 1  *Built environment* | INTRODUCTION TO CONSTRUCTION TECHNOLOGY  (20c) | *Aim:*  To introduce the student to construction techniques associated with construction techniques associated with the production of high and low rise commercial and industrial framed buildings, both new build and refurbishment. | *Learning activities:*  Lectures are used in order to identify and explain key concepts and theories and provide detailed information on particular subject areas within the module. They help to stimulate the student’s interest in the subject area. Lectures may also include guest industry speakers to add industry context to the material.  Workshops are used to engage students in more intensive discussion and activity on particular subject areas within the module. This helps shape the student’s own understanding and place the lecture material in context. | *Assessment:*  REPORT (50%) EXAM (50%) |
| 4213BEUG  Semester 1  *Built environment* | ARCHITECTURAL GRAPHICS 1  (20c) | *Aim:*  To develop knowledge and understanding of the role and responsibilities of the architectural technologist  To develop knowledge and understanding of the range of drawings prepared by an architectural technologist  To develop fundamental skills in the preparation of architectural drawings | *Learning activities:*  Lectures  Workshop sessions in the Design Studio  Workshop sessions in an IT suite | *Assessment:*  ARCHITECTURAL DRAWINGS (80%) INTERIM PRESENTATION (20%) |
| 4222BEUG  Semester 1  *Built environment* | BUILT ENVIRONMENT PRACTICE  (20c) | *Aim:*  To develop an understanding and appreciation of the built environment sector and the different professional disciplines that constitute built environment practice. | *Learning activities:*  Lectures and tutorials. | *Assessment:*  1500 word report (50%) Closed-book (50%) |
| 4223BEUG  Semester 1  *Built environment* | CONSTRUCTION TECHNOLOGY AND MATERIALS  (20c) | *Aim:*  To provide an overview and develop understanding of techniques and materials associated with the construction of low-rise domestic dwellings. | *Learning activities:*  Lectures, tutorials and practical sessions. | *Assessment:*  Report (50%) Portfolio (50%) |
| 4224BEUG  Semester 1  *Built environment* | DESIGN AND ENVIRONMENTAL PROCEDURES  (20c) | *Aim:*  To develop understanding of design and environmental considerations for low-rise building construction and refurbishment.  To develop practical skills in producing simple building designs using appropriate software. | *Learning activities:*  Lectures, tutorials and workshops | *Assessment:*  Portfolio (100%) |
| 4227BEUG  Semester 1  *Built environment* | ENGINEERING MATHEMATICS  (20c) | *Aim:*  To develop knowledge and understanding of the mathematics underpinning engineering, and to apply these techniques within an engineering context. | *Learning activities:*  A combination of lectures, tutorials and computer laboratories. The laboratories will enable students to use and apply mathematical software to the solution of engineering mathematics problems. | *Assessment:*  In-class test (30%) Examination (70%) |
| 4232BEUG  Semester 1  *Built environment* | APPLIED MATHEMATICS FOR CONSTRUCTION  (20c) | *Aim:*  To develop knowledge and understanding of the mathematics underpinning engineering, and to apply these techniques within an engineering context. | *Learning activities:*  A combination of lectures, tutorials and computer laboratories. The laboratories will  enable students to use and apply mathematical software to the solution of  engineering mathematics problems. | *Assessment:*  IN-CLASS TEST (50%) MATHEMATICAL BASED REPORT (50%) |
| 5200BEUG  Semester 1  *Built environment* | CONSTRUCTION TECHNOLOGY 2  (20c) | *Aim:*  To explain and analyse the construction techniques of framed multi-storey buildings.  To enable students to evaluate the relative merits of the various construction forms in any given situation  To introduce the technology of building services installations for commercial and industrial buildings. | *Learning activities:*  Lectures are used in order to identify and explain key concepts and theories and provide detailed information on particular subject areas within the module. They help to stimulate the student’s interest in the subject area. Lectures may also include guest industry speakers to add industry context to the material.  Workshops are used to engage students in more intensive discussion and activity on particular subject areas within the module. This helps shape the student’s own understanding and place the lecture material in context. | *Assessment:*  SCENARIO BASED ASSIGNMENT (50%) TIMED OPEN BOOK TEST (50%) |
| 5202BEUG  Semester 1  *Built environment* | PROPERTY LAW  (20c) | *Aim:*  The module aims to provide students with knowledge and understanding of the fundamental legal principles and statutory rules relating to Landlord and Tenant law and Dilapidations | *Learning activities:*  The lectures will set out and examine the key principles of a certain part of the law. Lectures will be supported with workshops designed to help students reinforce these principles and apply them to given problems. | *Assessment:*  ESSAY (50%) EXAM (50%) |
| 5206BEUG  Semester 1  *Built environment* | PATHOLOGY AND INSPECTION  (20c) | *Aim:*  To undertake advanced building inspections through the systematic appraisal of building defects causing decay and deterioration, in order to propose remediation solutions for commercial buildings and organisations. | *Learning activities:*  Lectures are used in order to identify and explain key concepts and theories and provide detailed information on particular subject areas within the module. They help to stimulate the student’s interest in the subject area. Lectures may also include guest industry speakers to add industry context to the material.  A site visit will be organised for students' to undertake a building survey and inspection.  Workshops are used to engage students in more intensive discussion and activity on particular subject areas within the module. This helps shape the student’s own understanding and place the lecture material in context. | *Assessment:*  PORTFOLIO (100%) |
| 5207BEUG  Semester 1  *Built environment* | FACILITIES MANAGEMENT ESTATES  (20c) | *Aim:*  To understand how an estate's performance can be improved through innovative organisational management. | *Learning activities:*  Lectures are used in order to identify and explain key concepts and theories and provide detailed information on particular subject areas within the module. They help to stimulate the student’s interest in the subject area. Lectures may also include guest industry speakers to add industry context to the material.  Workshops are used to engage students in more intensive discussion and activity on particular subject areas within the module. This helps shape the student’s own understanding and place the lecture material in context. | *Assessment:*  PRESENTATION (30%) REPORT (70%) |
| 5208BEUG  Semester 1  *Built environment* | WORKSPACE MANAGEMENT  (20c) | *Aim:*  To provide an appreciation of the relationship between workspace design, layout and utilisation to an organisations workplace. | *Learning activities:*  Lectures are used in order to identify and explain key concepts and theories and provide detailed information on particular subject areas within the module. They help to stimulate the student’s interest in the subject area. Lectures may also include guest industry speakers to add industry context to the material.  Workshops are used to engage students in more intensive discussion and activity on particular subject areas within the module. This helps shape the student’s own understanding and place the lecture material in context. | *Assessment:*  PORTFOLIO (80%) REPORT (20%) |
| 5210BEUG  Semester 1  *Built environment* | CONSTRUCTION PROCUREMENT  (20c) | *Aim:*  To establish an awareness of the project stakeholders, the various procurement options and their associated contracts. Develop the ability to interpret the particular needs of different client groups to develop relevant procurement strategies and to apply techniques to support the implementation of those strategies ensuring that the project criteria are satisfactorily achieved. | *Learning activities:*  Structured Lectures, including industry guest lectures, and Tutorials which allow the students to reinforce, develop and apply their knowledge and understanding and obtain specific problem solving help and advice. The tutorials will also provide simulation of “live” situations requiring the student to analyse, critically appraise and solve problems. | *Assessment:*  PROCUREMENT REPORT (50%) EXAMINATION (50%) |
| 5214BEUG  Semester 1  *Built environment* | PROPERTY DEVELOPMENT  (20c) | *Aim:*  To develop understanding of the property development process including planning controls on development  To develop professional and personal skills associated with entrepreneurialism. | *Learning activities:*  Main learning activity for this module will be lectures.  Lectures will be supported by off-site activity (site visit) and workshops to develop concept scheme. | *Assessment:*  PROJECT REPORT (80%) POWERPOINT (20%) |
| 5215BEUG  Semester 1  *Built environment* | SUSTAINABLE ARCHITECTURAL TECHNOLOGY  (20c) | *Aim:*  To provide knowledge, awareness and application of building regulations, environmental standards and codes of practice appropriate to the discipline of architectural technology  To develop understanding of sustainable design, materials and emerging technology in contrasting environments  To evaluate the process of specifying materials and components using various sources of information and evaluating their implications with regard to performance, quality and sustainability.  To provide the student with appropriate skills to produce a specification to industry  standard practice. | *Learning activities:*  Lectures and tutorials  IT workshops using NBS software | *Assessment:*  Building Control & Analysis (40%) Design & Specification (60%) |
| 5216BEUG  Semester 1  *Built environment* | MECHANICAL ENGINEERING FOR BUILDINGS  (20c) | *Aim:*  To develop the student's understanding of the principles of heat transfer, thermodynamics and general engineering and the application of these principles to sustainable and energy efficient design and operation of building engineering systems, plant and equipment.  To enable students to utilise appropriate mathematical methods to solve mechanical engineering problems. | *Learning activities:*  Lectures, tutorials, workshops, occasional labs, occasional site visits. | *Assessment:*  TIME CONTROLLED OPEN BOOK TEST (50%) BUILDING THERMAL ANALYSIS (50%) |
| 5217BEUG  Semester 1  *Built environment* | ELECTRICAL ENGINEERING FOR BUILDINGS  (20c) | *Aim:*  To further develop an appreciation of electrical principles and relate them to the practical processes applied in the design of electrical engineering services in buildings.  To provide students with the skills and knowledge required to appreciate industry standard data and, by its application critically analyse the underpinning theoretical concepts which are incorporated in typical design techniques.  To provide students with the background knowledge so that they may complete electrical building engineering design.  To enable students to utilise appropriate mathematical methods to solve electrical engineering problems. | *Learning activities:*  Lectures, tutorials, workshops, occasional site visits | *Assessment:*  REPORT (50%) TIME CONTROLLED OPEN BOOK TEST (50%) |
| 5220BEUG  Semester 1  *Built environment* | SITE PRODUCTION MANAGEMENT  (20c) | *Aim:*  To develop the students construction management knowledge and skills in the construction production process. | *Learning activities:*  Mix of lectures, tutorials and workshops. The workshops will be practical in nature and can be based around the use of IT. Guest lectures and industry scenarios. | *Assessment:*  Scenario Based (50%) Closed Book (50%) |
| 5224BEUG  Semester 1  *Built environment* | APPLIED VALUATION  (20c) | *Aim:*  The module aims to consolidate and enhance students’ knowledge and understanding of principal valuation methodologies and develop competence in the application of valuation concepts and theories to practical scenarios within the commercial and residential property markets. | *Learning activities:*  Lectures, Workshops, Seminars | *Assessment:*  OPEN BOOK EXAMINATION (50%) 2500 WORD VALUATION REPORT (50%) |
| 5252BEUG  Semester 1  *Built environment* | CONSTRUCTION ENGINEERING TECHNOLOGY 2  (20c) | *Aim:*  To develop the students understanding of construction techniques associated with the production of high and low rise framed buildings, both new build and refurbishment. To enable students to evaluate the relative merits of the various construction methods in any given situation. To improve the students understanding of construction methods used for infrastructure projects such as roads, bridges, airports including earthworks, subsurface drainage systems, ground stabilisation and earth retaining walls. | *Learning activities:*  Lectures and workshops. Industry case studies will be used. | *Assessment:*  Technical Report (50%) Time Controlled Assessment (50%) |
| 6202BEUG  Semester 1  *Built environment* | REAL ESTATE AND ASSET STRATEGY  (20c) | *Aim:*  To understand how a property portfolio can be improved through strategic planning and management | *Learning activities:*  Lectures are used in order to identify and explain key concepts and theories and provide detailed information on particular subject areas within the module. They help to stimulate the student’s interest in the subject area. Lectures may also include guest industry speakers to add industry context to the material.  Workshops are used to engage students in more intensive discussion and activity on particular subject areas within the module. This helps shape the student’s own understanding and place the lecture material in context. | *Assessment:*  PORTFOLIO (100%) |
| 6204BEUG  Semester 1  *Built environment* | PRODUCTIVE WORKPLACES  (20c) | *Aim:*  To demonstrate an appreciation for the interaction between people, organisations and buildings in order to optimise their health, sustainability and productivity. | *Learning activities:*  Lectures are used in order to identify and explain key concepts and theories and provide detailed information on particular subject areas within the module. They help to stimulate the student’s interest in the subject area. Lectures may also include guest industry speakers to add industry context to the material.  Workshops are used to engage students in more intensive discussion and activity on particular subject areas within the module. This helps shape the student’s own understanding and place the lecture material in context. | *Assessment:*  PORTFOLIO (50%) REPORT (50%) |
| 6205BEUG  Semester 1  *Built environment* | PROFESSIONAL PRACTICE  (20c) | *Aim:*  To have a comprehensive understanding of professional practice through appreciating individual and organisational needs in the context of the internal and external environment | *Learning activities:*  Lectures are used in order to identify and explain key concepts and theories and provide detailed information on particular subject areas within the module. They help to stimulate the student’s interest in the subject area. Lectures may also include guest industry speakers to add industry context to the material.  Workshops are used to engage students in more intensive discussion and activity on particular subject areas within the module. This helps shape the student’s own understanding and place the lecture material in context. | *Assessment:*  EXAM (50%) REPORT (50%) |
| 6206BEUG  Semester 1  *Built environment* | SERVICE MANAGEMENT  (20c) | *Aim:*  To demonstrate an in-depth appreciation of the impact of facilities management services, including the delivery of services, producing productive relationships with stakeholders and providing quality customer experiences and service standards | *Learning activities:*  Lectures are used in order to identify and explain key concepts and theories and provide detailed information on particular subject areas within the module. They help to stimulate the student’s interest in the subject area. Lectures may also include guest industry speakers to add industry context to the material.  Workshops are used to engage students in more intensive discussion and activity on particular subject areas within the module. This helps shape the student’s own understanding and place the lecture material in context. | *Assessment:*  ESSAY (50%) REPORT (50%) |
| 6207BEUG  Semester 1  *Built environment* | STRATEGIC PLANNING IN FACILITIES MANAGEMENT  (20c) | *Aim:*  Critically apply understanding of how knowledge and information management can be used effectively within facilities management services | *Learning activities:*  Lectures are used in order to identify and explain key concepts and theories and provide detailed information on particular subject areas within the module. They help to stimulate the student’s interest in the subject area. Lectures may also include guest industry speakers to add industry context to the material.  Workshops are used to engage students in more intensive discussion and activity on particular subject areas within the module. This helps shape the student’s own understanding and place the lecture material in context. | *Assessment:*  TEST (50%) REPORT (50%) |
| 6208BEUG  Semester 1  *Built environment* | CONTRACT AND PROCUREMENT STRATEGIES  (20c) | *Aim:*  The aim of this module is to examine the development of strategies for the procurement of construction work within the legal and contractual frameworks operating in the construction industry. | *Learning activities:*  Lectures, seminars, workshops, tutorials, case studies and videos. | *Assessment:*  REPORT (50%) EXAMINATION (50%) |
| 6210BEUG  Semester 1  *Built environment* | PROJECT ECONOMICS AND MANAGEMENT  (20c) | *Aim:*  The aim of the module is to introduce project economics and management techniques used in client based pre-contract design management systems and contractor based post contract cost management systems in construction. | *Learning activities:*  • Lectures and tutorial workshops, supported where possible with site visits, guest lectures, videos and webinar.  • Students should supplement their lecture notes with background reading; journals, digests, trade literature and also use the material that is available through electronic databases and manufacturers.  • Formative assessment with ongoing feedback throughout the module. | *Assessment:*  REPORT (50%) EXAMINATION (50%) |
| 6211BEUG  Semester 1  *Built environment* | BUSINESS MANAGEMENT AND ENTREPRENEURSHIP  (20c) | *Aim:*  To enable the student to develop an advanced, factual and conceptual knowledge base in contemporary Business Management and Entrepreneurship theory. | *Learning activities:*  Lectures and Guided Workshop Activities | *Assessment:*  Entrepreneurship (20%) "Dragons Den" Scenario (80%) |
| 6212BEUG  Semester 1  *Built environment* | ADVANCED ARCHITECTURAL DESIGN  (30c) | *Aim:*  To enable the student to work on a complex project that enables the integration and development of a range of professional skills in the context of sustainable and inclusive building design.  To be able to produce advanced level graphical and written information to  communicate design ideas effectively. | *Learning activities:*  Lectures / tutorials  Workshop sessions in an IT room & design studio  A site visit(s) will be arranged subject to approval | *Assessment:*  Interim presentation (10%) Strategic report (40%) Architectural drawings (50%) |
| 6215BEUG  Semester 1  *Built environment* | ADVANCED VALUATION  (20c) | *Aim:*  The module aims to further develop students' knowledge and understanding of valuation methodologies and their application in advanced valuation scenarios. | *Learning activities:*  Lectures, Tutorials | *Assessment:*  2500 WORD REPORT (50%) EXAMINATION (CLOSED BOOK) (50%) |
| 6216BEUG  Semester 1  *Built environment* | REAL ESTATE IN PRACTICE  (20c) | *Aim:*  The module aims to provide a contextualised awareness and understanding of the professional and ethical standards required in practice and evaluate the roles and responsibilities of professionals within the property industry. | *Learning activities:*  The lectures will set out and examine key elements of professional practice. Lectures will be supported with workshops designed to help students reinforce these principles and apply them to given scenarios. | *Assessment:*  4500 WORD REPORT (100%) |
| 6217BEUG  Semester 1  *Built environment* | REAL ESTATE INVESTMENT  (20c) | *Aim:*  This module aims to introduce students to the principles of investment and develop their knowledge and understanding of real estate as an investment vehicle within the market-place and to evaluate its performance against other investment options. It also provides the opportunity to identify and analyse relevant market data and develop skills needed to advise on real estate investment decisions | *Learning activities:*  Lectures, Tutorials | *Assessment:*  Portfolio (100%) |
| 6220BEUG  Semester 1  *Built environment* | CONSTRUCTION SITE MANAGEMENT  (20c) | *Aim:*  This module develops the knowledge and skills further within the area of construction site management. In particular considering, Health, Safety and Welfare, site processes including planning, quality, risk and environmental considerations. The practical skills of using industry standard programming tools will be developed further including BIM. | *Learning activities:*  Mix of lectures, tutorials and workshops. Workshops will include practical exercise and use of IT. Guest lectures and industry scenarios. | *Assessment:*  Industry scenario based (50%) Closed Book Exam (50%) |
| 6221BEUG  Semester 1  *Built environment* | ENVIRONMENTAL ANALYSIS  (20c) | *Aim:*  To develop an understanding of the theory, principles and practices of building energy systems modelling and simulation techniques and to use analytical approaches to the appraisal of environments and design proposals. | *Learning activities:*  Lectures, tutorials, computer workshop. | *Assessment:*  BUILDING SIMULATION REPORT (50%) TIME CONTROLLED ASSIGNMENT (50%) |
| 6227BEUG  Semester 1  *Built environment* | BUSINESS MANAGEMENT  (20c) | *Aim:*  To enable the student to develop an advanced, factual and conceptual knowledge base in contemporary Business Management and Entrepreneurship theory. | *Learning activities:*  Lectures and Guided Workshop Activities | *Assessment:*  Industry Focused Activities (50%) Closed Book (50%) |
| 6251BEUG  Semester 1  *Built environment* | INFRASTRUCTURE ENGINEERING AND MANAGEMENT  (20c) | *Aim:*  This module will introduce you to the principles of design and construction of various types of transport infrastructure and highways and allow you to develop the ability to specify problems and analyse alternative engineering solutions for transport infrastructures. | *Learning activities:*  Lectures and workshops. Interaction will be encouraged and guest lectures/industry scenarios will be used within the delivery and assessment. | *Assessment:*  Technical Report (50%) Software Based (50%) |
| 7200BEUG  Semester 1  *Built environment* | ENERGY AND ENVIRONMENT  (20c) | *Aim:*  To evaluate how the concept of sustainable development is incorporated into practical design strategies for buildings.  To appreciate the role of sustainable energy management in the built environment, and to critically evaluate various methods of managing energy use for sustainable development. | *Learning activities:*  Lectures and tutorials | *Assessment:*  REPORT (50%) EXAMINATION (50%) |
| 7201BEUG  Semester 1  *Built environment* | COMMISSIONING, MAINTENANCE AND FACILITIES MANAGEMENT  (20c) | *Aim:*  To provide an in depth awareness of the key issues of commissioning of building engineering systems, maintenance of such systems and the integration of maintenance with the facilities management regime in buildings. | *Learning activities:*  Lectures and tutorials | *Assessment:*  REPORT (50%) EXAMINATION (50%) |
| 7202BEUG  Semester 1  *Built environment* | SENSORS, CONTROL AND APPLICATIONS  (20c) | *Aim:*  To provide the theoretical and practical skills required to design, develop and implement sensor systems in practical applications. | *Learning activities:*  Lectures, tutorials and demonstrations. | *Assessment:*  UNSEEN EXAMINATION (50%) PRACTICAL EXPERIMENT (50%) |
| 7203BEUG  Semester 1  *Built environment* | LEADERSHIP FOR A SUSTAINABLE ENVIRONMENT  (20c) | *Aim:*  To introduce the concepts of sustainability to enable an understanding of the importance of construction in the global environmental context.  To develop an understanding of the type of sustainability strategies that can be adopted by construction organisations, the barriers to their implementation.  To develop a critical approach to management style within organisations and identify approaches to develop leadership skills. | *Learning activities:*  Lectures, workshops and independent learning. | *Assessment:*  REPORT (100%) |
| 7400BEPG  Semester 1  *Built environment* | RESEARCH METHODS  (10c) | *Aim:*  To provide a critical understanding of the academic research process understanding the differing techniques, strategies and methods used to undertake research in the built environment. | *Learning activities:*  The module will be delivered via lectures. | *Assessment:*  REPORT (100%) |
| 7403BEPG  Semester 1  *Built environment* | PROJECT MANAGEMENT FUNDAMENTALS  (20c) | *Aim:*  1. To explore and promote contemporary project management principles and concepts.  2. To examine processes, tools and methodologies of project management | *Learning activities:*  The module is delivered in taught mode by lectures including discussions using case studies, interactive group work and directed self-study. | *Assessment:*  Portfolio Case Study Related (100%) |
| 7404BEPG  Semester 1  *Built environment* | PROJECT PLANNING, EXECUTING, CONTROLLING AND CLOSURE  (20c) | *Aim:*  To develop the requisite project management skills and knowledge necessary to manage the key processes of planning, executing, controlling and closing a project at appropriate stages in the project life cycle. | *Learning activities:*  The module is delivered in taught mode by lectures that include discussion around case studies, interactive group work and directed self-study. | *Assessment:*  Portfolio Case Study Related (100%) |
| 7406BEPG  Semester 1  *Built environment* | STRATEGIC PROJECT ENVIRONMENT  (20c) | *Aim:*  To develop an understanding of the project environment and how it impacts an all phases of a project. | *Learning activities:*  The module is delivered in taught mode by lectures and discussion using case studies, interactive group work and directed self-study. | *Assessment:*  Portfolio Case Study Related (100%) |
| 7420BEPG  Semester 1  *Built environment* | BUILDING MANAGEMENT  (20c) | *Aim:*  This module aims to enable students to understand, appraise and analyse the complexities of managing buildings from an asset management perspective, taking into account the impact of their pathological condition, maintenance and management of their operational functions. | *Learning activities:*  Lectures and workshops | *Assessment:*  PORTFOLIO (100%) |
| 7421BEPG  Semester 1  *Built environment* | DESIGN MANAGEMENT  (20c) | *Aim:*  This module aims to enable students to understand, appraise and analyse the complexities of designing and refurbishing buildings by exploring a project’s objectives and aspirations from the client’s perspective.  Students will gain a strategic appreciation and critical application of how to design, refurbish and specify building projects by consistently focusing on and aligning decisions to expected client outcomes and benefits. | *Learning activities:*  Lectures and workshops | *Assessment:*  PORTFOLIO (70%) PRESENTATION (30%) |
| 7424BEPG  Semester 1  *Built environment* | BUILDING TECHNOLOGY  (20c) | *Aim:*  This module aims to enable students to understand and evaluate the principles and techniques used in the construction of buildings.  Students will also gain a critical understanding and appreciation of the properties and performance of building materials required. | *Learning activities:*  Lectures and workshops | *Assessment:*  REPORT (50%) EXAM (50%) |
| 7427BEPG  Semester 1  *Built environment* | BUILDING TECHNOLOGY AND MANAGEMENT  (10c) | *Aim:*  This module aims to enable students to understand and evaluate the principles and techniques utilised in the construction of buildings and to appraise and analyse the complexities of managing buildings from an asset management perspective | *Learning activities:*  Lectures | *Assessment:*  Assignment (100%) |
| 7428BEPG  Semester 1  *Built environment* | VALUATION  (20c) | *Aim:*  To establish a comprehensive understanding and appraisal of the principal valuation theories and methodologies and evaluate their application in professional practice.  To understand the economic drivers and dynamics underpinning property markets and critically examine their impact on valuation practice.  To build competency in the practical application of valuation theory and techniques within a range of property market scenarios and conditions. | *Learning activities:*  Lectures and workshops | *Assessment:*  Assignment (50%) Exam (50%) |
| 7430BEPG  Semester 1  *Built environment* | PLANNING AND DEVELOPMENT  (20c) | *Aim:*  To develop students’ knowledge and critical understanding of planning law, policy and procedures with particular reference to the English planning system.  To develop students’ knowledge and critical understanding of the property development process in the built environment. | *Learning activities:*  Lectures and seminars; independent research and project work | *Assessment:*  Exam (60%) Assignment (40%) |
| 7431BEPG  Semester 1  *Built environment* | SUSTAINABLE PROCUREMENT  (20c) | *Aim:*  To examine existing procurement options and their effectiveness in meeting the client's requirements.  To examine sustainable construction and the development of procurement strategies which address sustainable construction principles. | *Learning activities:*  Lectures, workshops, case studies, videos. | *Assessment:*  WRITTEN ASSIGNMENT (50%) EXAM (50%) |
| 7432BEPG  Semester 1  *Built environment* | CONSTRUCTION CONTRACT STRATEGY  (20c) | *Aim:*  To develop a strategic knowledge and critical appreciation of construction contract law to enable the student to consider in detail the application of it to construction and engineering projects. | *Learning activities:*  Lectures and workshops. | *Assessment:*  REPORT (50%) EXAM (50%) |
| 7434BEPG  Semester 1  *Built environment* | FINANCIAL MANAGEMENT AND BIM  (20c) | *Aim:*  The aim of the module is to introduce financial management techniques used in construction in order to manage the lifecycle cost of built environment facilities. The module will also deliver the fundamental concepts that link financial management and BIM, such as the cash flow forecasts, cost plans, cost value reconciliation and whole life cycle management of construction facilities. | *Learning activities:*  Lectures and workshops | *Assessment:*  REPORT (50%) EXAM (50%) |
| 7435BEPG  Semester 1  *Built environment* | PRODUCTION MANAGEMENT AND BIM  (20c) | *Aim:*  This module will provide an in-depth understanding into the production management of modern, complex and fast paced construction projects. This module will also provide an appropriate awareness and expertise about key aspects of Building Information Modelling (BIM) within the Construction Management role. | *Learning activities:*  Lectures and workshops | *Assessment:*  Industry based scenario report (50%) Closed book exam (50%) |
| 7439BEPG  Semester 1  *Built environment* | SUSTAINABLE DESIGN  (20c) | *Aim:*  To evaluate the implications of design decisions on the environmental performance of buildings. | *Learning activities:*  The module will be delivered via a series of key-note lectures which are archived in the Wimba classroom, live seminars and a portfolio of project-based tasks. The learner will have an induction session where the approach will be introduced; typically four archived “lectures” will be followed by a live seminar. A workshop will be held at the University to act as a summative discussion on the learner’s assessment of their organisation. | *Assessment:*  PORTFOLIO (100%) |
| 7440BEPG  Semester 1  *Built environment* | INTEGRATED BIM THEORY  (20c) | *Aim:*  The aim of this module is to critically evaluate strategic issues in the management of integrated BIM centred projects. | *Learning activities:*  Key skills are developed through lectures, workshops and individual presentations | *Assessment:*  INDIVIDUAL PRESENTATION (50%) REPORT (50%) |
| 7442BEPG  Semester 1  *Built environment* | BUILDING DESIGN SUITE  (20c) | *Aim:*  1. To enable the student to analyse buildings from an architectural engineering perspective.  2. To develop awareness of the extent of building design software and its application to architectural engineering. | *Learning activities:*  Illustrated lectures, studio workshops and tutorials will be designed to develop students’ knowledge of building technology and apply this using design technology. | *Assessment:*  Portfolio of drawings & report (70%) Presentation of design (30%) |
| 5209BEUG  Semester 1 & Semester 2  *Built environment* | CONSTRUCTION CONTRACT LAW  (20c) | *Aim:*  To evaluate the apportionment of risk and responsibility are considered under various  construction contracts. | *Learning activities:*  Lectures and tutorial, supported where possible with site visits, guest lectures, videos and webinar.  Students should supplement their lecture notes with background reading; journals, digests, trade literature and also use the material that is available through electronic databases and manufacturers.  Formative assessment with ongoing feedback throughout the module. | *Assessment:*  EXAMINATION (50%) REPORT (50%) |
| 6200BEUG  Semester 1 & Semester 2  *Built environment* | RESEARCH PROJECT  (30c) | *Aim:*  To enable students to complete a substantial piece of individual work and build on their expertise in a selected area of study.  To develop students research, time management, presentation and written communication skills. | *Learning activities:*  Individual study and investigation, supported by nominated Supervisor; seminars tutorials and workshops | *Assessment:*  RESEARCH REPORT (100%) |
| 6203BEUG  Semester 1 & Semester 2  *Built environment* | PROJECT LIFECYCLE MANAGEMENT  (20c) | *Aim:*  To understand the whole life cycle of building projects beyond design and construction to consider operation, use and maintenance. | *Learning activities:*  Lectures are used in order to identify and explain key concepts and theories and provide detailed information on particular subject areas within the module. They help to stimulate the student’s interest in the subject area. Lectures may also include guest industry speakers to add industry context to the material.  Workshops are used to engage students in more intensive discussion and activity on particular subject areas within the module. This helps shape the student’s own understanding and place the lecture material in context. | *Assessment:*  PORTFOLIO (50%) EXAM (50%) |
| 6219BEUG  Semester 1 & Semester 2  *Built environment* | STRATEGIC CONSTRUCTION PROJECT MANAGEMENT  (20c) | *Aim:*  To enable students to work on realistic projects that enables the integration and development of a range of professional skills considering aspects of refurbishment and contractual arrangements. | *Learning activities:*  Lectures, Workshops, Case Studies, Industry Speakers, discussion through seminars | *Assessment:*  Scenario Based (60%) Based around Case Study (40%) |
| 4202BEUG  Semester 2  *Built environment* | INTRODUCTION TO LAW  (20c) | *Aim:*  This module will provide the students with a working knowledge of the English legal system and an introduction to the principles of the law including contract, tort and property law. | *Learning activities:*  Lectures and tutorials, supported where appropriate with site visits, guest lectures, videos and webinars.  Students should supplement their lecture notes with background reading including journals and digests, together with the material available through electronic databases.  Formative assessment with ongoing feedback throughout the module. | *Assessment:*  IN CLASS TEST (50%) EXAMINATION (50%) |
| 4204BEUG  Semester 2  *Built environment* | SCIENCE AND MATERIALS  (20c) | *Aim:*  To provide students with an appreciation of the common scientific principles associated with environmental conditions inside buildings, and the properties and behaviour of common building materials.  To enable students to apply appropriate scientific and analytical methods to investigate the internal environment in buildings and the performance and behaviour of common building materials. | *Learning activities:*  The module is based on a lecture programme including video and presentations together with a number of practical laboratory sessions.  Students are encouraged to develop competence using scientific equipment in an active learning approach.  Laboratory work will have an emphasis on the manipulation, interpretation and analysis of the data, which should allow reasoned conclusions and recommendations to be made.  Certain key mathematical skills will be integrated within the laboratory practical activities. | *Assessment:*  ONLINE MULTI CHOICE TEST (50%) LAB REPORT FOLIO (50%) |
| 4206BEUG  Semester 2  *Built environment* | DESIGN AND SPECIFICATION  (20c) | *Aim:*  To introduce fundamental concepts concerning the design of dwellings in respect of building form, function, historical precedent, building conservation, specification of materials and impact on the environment. | *Learning activities:*  Lectures are used in order to identify and explain key concepts and theories and provide detailed information on particular subject areas within the module. They help to stimulate the student’s interest in the subject area. Lectures may also include guest industry speakers to add industry context to the material.  Workshops are used to engage students in more intensive discussion and activity on particular subject areas within the module. This helps shape the student’s own understanding and place the lecture material in context.  A site visit will be arranged subject to approval. | *Assessment:*  REPORT (70%) PRESENTATION (30%) |
| 4209BEUG  Semester 2  *Built environment* | THE WORKPLACE ENVIRONMENT  (20c) | *Aim:*  To introduce the student to the practical challenges of managing the workplace | *Learning activities:*  Lectures are used in order to identify and explain key concepts and theories and provide detailed information on particular subject areas within the module. They help to stimulate the student’s interest in the subject area. Lectures may also include guest industry speakers to add industry context to the material.  Workshops are used to engage students in more intensive discussion and activity on particular subject areas within the module. This helps shape the student’s own understanding and place the lecture material in context. | *Assessment:*  PORTFOLIO (80%) PRESENTATION (20%) |
| 4211BEUG  Semester 2  *Built environment* | MANAGEMENT THEORY AND PRACTICE  (20c) | *Aim:*  To enable the student to develop a factual and conceptual knowledge base in current management theory | *Learning activities:*  Lecture and Workshops | *Assessment:*  ACADEMIC REFERENCED ESSAY (50%) EXAMINATION (50%) |
| 4212BEUG  Semester 2  *Built environment* | MEASUREMENT AND COSTING  (20c) | *Aim:*  To establish the principles and conventions for the quantification and costing of domestic construction works and associated infrastructure. | *Learning activities:*  • Lectures and tutorial workshops, supported where possible with site visits, guest lectures, videos and webinar.  • Students should supplement their lecture notes with background reading; journals, digests, trade literature and also use the material that is available through electronic databases and manufacturers.  • Formative assessment with ongoing feedback throughout the module. | *Assessment:*  TAKE OFF QUANTITIES (50%) REPORT (50%) |
| 4214BEUG  Semester 2  *Built environment* | ARCHITECTURAL GRAPHICS 2  (20c) | *Aim:*  To develop knowledge and understanding of using CAD applications to produce 2D and 3D architectural drawings  To develop model making skills using traditional methods and materials | *Learning activities:*  There will be a small number of introductory lectures  The main learning activity for this module is via workshop sessions and these will take place in either the Design Studio or an IT suite. Workshop sessions may also be scheduled in the model making laboratory.  A site visit will also be included subject to approval. | *Assessment:*  ARCH DRAWINGS + MODEL (70%) GRAPHICAL REPORT (30%) |
| 4215BEUG  Semester 2  *Built environment* | BUILDING SERVICES ENGINEERING PROJECT 1  (20c) | *Aim:*  To introduce the fundamental skills needed for the design process;  To equip the student with the fundamental tools, including the necessary IT skills necessary to carry out a building services engineering design project;  To develop and refine the student's written, verbal, graphical and presentation skills. | *Learning activities:*  Students will be introduced to the necessary basics of interpreting building drawings and industry standard design methods, including practice with relevant software packages. Students will be taught the theoretical aspects of energy efficient and sustainable engineering solutions for non-complex buildings and will be given the opportunity to apply these to a real building. | *Assessment:*  FEASIBILTY STUDY & DESIGN PROP (40%) DESIGN DOCUMENTATION & PRES (60%) |
| 4216BEUG  Semester 2  *Built environment* | ENGINEERING PRINCIPLES  (20c) | *Aim:*  This module introduces the fundamental concepts and principles of mechanical and electrical engineering, heat transfer, thermodynamics and fluid mechanics, and the application of these to engineering problems in the built environment. | *Learning activities:*  The main concepts will be introduced by means of lectures and tutorials, and these will be applied using laboratory work. | *Assessment:*  LAB REPORT FOLIO (50%) EXAMINATION - CLOSED BOOK (50%) |
| 4217BEUG  Semester 2  *Built environment* | ARCHITECTURAL ENGINEERING PROJECT 1  (20c) | *Aim:*  To introduce the fundamental skills needed for the design process;  To equip the student with the fundamental tools, including the necessary IT skills necessary to carry out an architectural engineering design project;  To develop and refine the student's written, verbal, graphical and presentation skills. | *Learning activities:*  Students will be introduced to the necessary basics of interpreting building drawings and industry standard design methods, including practice with relevant software packages. Students will be taught the theoretical aspects of energy efficient and sustainable engineering solutions for non-complex buildings, and will be given the opportunity to apply these to a real building in conjunction with the necessity for positive building aesthetics. | *Assessment:*  FEASIBILITY STUDY, DESIGN PROP (40%) DESIGN DOCUMENTATION & PRES (60%) |
| 4218BEUG  Semester 2  *Built environment* | VALUATION  (20c) | *Aim:*  To develop an understanding of the principal valuation theory and methodology  used in professional practice.  To build competency in the practical application of valuation theory and techniques. | *Learning activities:*  Lectures, workshops and seminars. | *Assessment:*  VALUATION REPORT (60%) IN CLASS ASSESSMENT (40%) |
| 4219BEUG  Semester 2  *Built environment* | INTRODUCTION TO PROPERTY APPRAISAL  (20c) | *Aim:*  The module aims to provide students with an introduction to real estate appraisal, in particular the survey and measurement of buildings, property ownership and the structure of the property markets. Students will also be provided with the opportunity to apply knowledge in a practical context. | *Learning activities:*  Lectures ,Workshops . | *Assessment:*  Portfolio Submission 4500 word (100%) |
| 4220BEUG  Semester 2  *Built environment* | CONSTRUCTION MANAGEMENT PRACTICE  (20c) | *Aim:*  To provide the students with an understanding of the role of a Construction Manager both in the workplace and within the Industry. | *Learning activities:*  Lectures, tutorials to support the calculations. Workshops for the practical IT and surveying aspects. | *Assessment:*  Industry Based Scenario (60%) Surveying Practical (40%) |
| 4221BEUG  Semester 2  *Built environment* | BUILDING ENGINEERING MATHEMATICS  (20c) | *Aim:*  To introduce the mathematics underpinning building services engineering and architectural engineering disciplines, and to apply these techniques within appropriate vocational contexts. | *Learning activities:*  A combination of lectures, tutorials and workshop sessions in an IT suite. The workshops will enable students to use and apply mathematical software to the solution of engineering mathematics problems. | *Assessment:*  REPORT (40%) EXAMINATION (60%) |
| 4225BEUG  Semester 2  *Built environment* | INTEGRATIVE PROJECT  (20c) | *Aim:*  To develop understanding of collaborative group work for a built environment project.  To develop understanding of the role of different professional disciplines in the built environment. | *Learning activities:*  Lectures and project workshop sessions. | *Assessment:*  Group Presentation (60%) Individual Report (40%) |
| 4226BEUG  Semester 2  *Built environment* | LAW AND HEALTH & SAFETY FOR THE BUILT ENVIRONMENT  (20c) | *Aim:*  To provide students with an appreciation of the basic principles of English law with particular reference to the built environment.  To develop an understanding of the principles of health & safety legislation with particular reference to the built environment. | *Learning activities:*  Lectures, tutorials and workshop sessions. | *Assessment:*  Exam (50%) Report (50%) |
| 4230BEUG  Semester 2  *Built environment* | CONSTRUCTION ENGINEERING PRACTICE  (20c) | *Aim:*  To provide the students with an understanding of the role of a Construction Engineer both in the workplace and within industry. | *Learning activities:*  Lectures, tutorials to support the calculations. Practicals will take place either outside using the surveying equipment or inside in an IT suite where the delivery will be practical based on the IT but in a workshop format. | *Assessment:*  Industry Based Scenario (60%) Surveying Practical (40%) |
| 4231BEUG  Semester 2  *Built environment* | STRUCTURES AND MATERIALS  (20c) | *Aim:*  To introduce students to the concepts of structural mechanics and provide an understanding of the basic techniques used to analyse and design structural elements.  To apply mathematical and geometrical calculations to the determination of structural properties of sections.  To examine and explore the behaviour of construction materials, the relationship between ultimate stress and working stress and the likely modes of failure. Provide a sound rationale for selection and use of materials in the construction of buildings. | *Learning activities:*  Lectures, tutorials and laboratory practicals. | *Assessment:*  LABORATORY BASED (50%) EXAMINATION (OPEN BOOK) (50%) |
| 4233BEUG  Semester 2  *Built environment* | ENVIRONMENTAL PRACTICE  (20c) | *Aim:*  To evaluate the impact of construction work on the environment and the contribution of the built environment to the three pillars of sustainability.  To introduce students to the global issue of sustainability and how standards and legislation have been introduced to reduce the impact of buildings on the environment.  To enable students to understand the scientific principles that are utilised in the design of the internal environment of buildings that ensure occupier comfort, including heating, sound and light.  To allow students to undertake laboratory work to attain results that can be used in the design of internal environments within buildings. | *Learning activities:*  Lectures, tutorials and environmental science practicals. Industry scenarios and case studies will be used. | *Assessment:*  Laboratory Report (50%) MCQ Online (50%) |
| 5201BEUG  Semester 2  *Built environment* | PROCUREMENT AND CONTRACTS  (20c) | *Aim:*  To provide an comprehensive understanding of contract management, administration and the influence of procuring suppliers and specialists to optimise contract performance. | *Learning activities:*  Lectures are used in order to identify and explain key concepts and theories and provide detailed information on particular subject areas within the module. They help to stimulate the student’s interest in the subject area. Lectures may also include guest industry speakers to add industry context to the material.  Workshops are used to engage students in more intensive discussion and activity on particular subject areas within the module. This helps shape the student’s own understanding and place the lecture material in context. | *Assessment:*  EXAMINATION (50%) REPORT (50%) |
| 5203BEUG  Semester 2  *Built environment* | RESEARCH METHODS  (10c) | *Aim:*  To understand the academic research process and the differing techniques, strategies and methods used to undertake research in the built environment  To develop a research proposal that can be taken forward to the final year research project | *Learning activities:*  Directed workshops are used to engage students in more intensive discussion and activity on particular subject areas within the module. This helps shape the student’s own understanding and place the syllabus material in context. Additional support is also provided by nominated supervisor. | *Assessment:*  RESEARCH PROPOSAL (100%) |
| 5204BEUG  Semester 2  *Built environment* | COLLABORATIVE INTERDISCIPLINARY PROJECT 2  (10c) | *Aim:*  This module aims to bring together different professions as represented by Level 5 students from the built environment disciplines and to enable them to work collaboratively on a BIM (Building Information Modelling) project. It highlights the interdisciplinary nature of the construction and property roles using industry standard software to support the decision making process in a sustainable environment. | *Learning activities:*  Lectures, workshops, group work and presentations | *Assessment:*  PORTFOLIO (100%) |
| 5205BEUG  Semester 2  *Built environment* | ASSET MANAGEMENT  (20c) | *Aim:*  To examine the effective acquisition, management and maintenance of property as an asset. | *Learning activities:*  Lectures are used in order to identify and explain key concepts and theories and provide detailed information on particular subject areas within the module. They help to stimulate the student’s interest in the subject area. Lectures may also include guest industry speakers to add industry context to the material.  Workshops are used to engage students in more intensive discussion and activity on particular subject areas within the module. This helps shape the student’s own understanding and place the lecture material in context. | *Assessment:*  PORTFOLIO (100%) |
| 5211BEUG  Semester 2  *Built environment* | CONSTRUCTION PROJECT MANAGEMENT  (20c) | *Aim:*  To introduce students to concepts, procedures and techniques used in the planning and control of construction projects. | *Learning activities:*  Lectures and workshops. | *Assessment:*  CASE STUDY REPORT (50%) EXAMINATION (50%) |
| 5212BEUG  Semester 2  *Built environment* | ADVANCED MEASUREMENT AND CONTRACT ADMINISTRATION  (20c) | *Aim:*  To refine and extend abilities in the measurement and quantification of complex buildings. To also demonstrate knowledge, understanding and implement construction contract administrative procedures. | *Learning activities:*  Structured Lectures and Workshops which allow the students to reinforce, develop and apply their knowledge and understanding and obtain specific problem solving help and advice. Assessment is 100% coursework. | *Assessment:*  MEASUREMENT TECHNOLOGY (50%) MEASUREMENT REPORT (50%) |
| 5213BEUG  Semester 2  *Built environment* | BUILDING REFURBISHMENT AND DESIGN  (20c) | *Aim:*  To demonstrate awareness of a range of factors affecting a building project and to produce detailed design documentation.  To further develop fundamental skills in the preparation and production of architectural drawings for a building refurbishment project. | *Learning activities:*  Lectures  Workshop sessions in Design Studio  Workshop sessions in an IT suite  Tutorials to review progress | *Assessment:*  GRAPHICAL REPORT (60%) VERBAL PRESENTATION (40%) |
| 5218BEUG  Semester 2  *Built environment* | BUILDING SERVICES ENGINEERING PROJECT 2  (30c) | *Aim:*  To provide students with the knowledge and skills necessary to interpret the mechanical and electrical building services needs and requirements of a range of simple and moderately complex buildings and develop practical schemes.  To develop and refine skills necessary for the development, management and successful completion of a significant project.  To develop and refine written, verbal, graphical and presentation skills. | *Learning activities:*  The module in delivered through a large multi-task project which requires the students to produce designs or propose commercial procedures, recommendations, solutions for tasks based on the engineering services needs of a moderately complex building. The specific tasks of the project are selected to reflect the particular aspects of engineering services in which the student specialises. Inter-disciplinary working is actively encouraged and facilitated. | *Assessment:*  FEASIBILITY REPORT (40%) DETAILED DESIGN FOLIO (60%) |
| 5219BEUG  Semester 2  *Built environment* | GEOMATICS  (20c) | *Aim:*  To introduce the principles and techniques involved in land surveying and setting out on site and demonstrate the use of Imaging and Unmanned Arial Systems for the surveying, inspection and monitoring of construction works including data output integration with digital terrain models and BIM. | *Learning activities:*  The module will be delivered through a mixture of lectures, workshops and practical work. | *Assessment:*  Scanario Based (60%) Surveying Practical (40%) |
| 5221BEUG  Semester 2  *Built environment* | BUILDING ENGINEERING COLLABORATIVE PROJECT 2  (20c) | *Aim:*  This module aims to bring together different professions as represented by Level 5 students from the built environment disciplines and to enable them to work collaboratively on a BIM (Building Information Modelling) project. It highlights the interdisciplinary nature of the construction and property roles using industry standard software to support the decision making process in a sustainable environment.  In addition this module provides a vehicle for Building Services and Architectural Engineering students to develop and refine the skills necessary for the management and successful completion of a significant project. This will include attention to building services systems, function, form and aesthetics of buildings. | *Learning activities:*  Lectures, workshops, group work and presentations.  There are two main themes addressed by this module:  1. The production of a suitable work derived project supported by the other modules within the second year of the programme. Group work is a key theme of the module; the intention being to simulate the experience of the work place and work place activity using a 3D model on a BIM enabled project, endorsed and approved by the involvement of employers and stakeholders as relevant to the workplace generally.  2. The specialist building engineering part of the module in delivered through a multi-task project which requires the students to produce designs or propose commercial procedures, recommendations, solutions for tasks based on the engineering services needs of a moderately complex building. | *Assessment:*  DESIGN PROJECT (50%) PROJECT MANAGEMENT FOLIO (50%) |
| 5222BEUG  Semester 2  *Built environment* | ARCHITECTURAL ENGINEERING PROJECT 2  (30c) | *Aim:*  To provide students with the knowledge and skills necessary to interpret the building engineering needs and requirements of a range of simple and moderately complex buildings and develop practical schemes. In this context building engineering refers to the building services systems, function, form and aesthetics of buildings.  To develop and refine skills necessary for the development, management and successful completion of a significant project.  To develop and refine written, verbal, graphical and presentation skills. | *Learning activities:*  The module in delivered through a large multi-task project which requires the students to produce designs or propose commercial procedures, recommendations, solutions for tasks based on the engineering services needs of a moderately complex building. The specific tasks of the project are selected to reflect the particular aspects of engineering services in which the student specialises. Inter-disciplinary working is actively encouraged and facilitated. | *Assessment:*  FEASILITY REPORT (40%) DETAILED DESIGN FOLIO (60%) |
| 5223BEUG  Semester 2  *Built environment* | BUILDING ENGINEERING RESEARCH METHODS  (10c) | *Aim:*  To understand the academic research process and the differing techniques, strategies and methods used to undertake engineering research in the built environment  To develop a research proposal that can be taken forward to the final year research project | *Learning activities:*  Workshops, supported by nominated Supervisor | *Assessment:*  REPORT (100%) |
| 5225BEUG  Semester 2  *Built environment* | PLANNING AND DEVELOPMENT  (20c) | *Aim:*  To develop students' knowledge and critical understanding of the planning framework including the agencies, mechanisms, law and policies, processes and procedures and its practical relationship with real estate.  To develop students' knowledge and critical understanding of the development process in the built environment. | *Learning activities:*  Lectures, Workshops | *Assessment:*  2500 WORD REPORT (50%) CLOSED BOOK EXAMINATION (50%) |
| 5226BEUG  Semester 2  *Built environment* | CONSTRUCTION CONTRACTS  (20c) | *Aim:*  To evaluate the apportionment of risk and responsibility are considered under various construction contracts. | *Learning activities:*  Lectures and tutorials, supported where possible with site visits, guest lectures, videos and webinar.  Students should supplement their lecture notes with background reading; journals, digests, trade literature and also use the material that is available through electronic databases and manufacturers.  Formative assessment with ongoing feedback throughout the module. | *Assessment:*  REPORT (50%) EXAMINATION (50%) |
| 5229BEUG  Semester 2  *Built environment* | WORK BASED PROJECT 2  (10c) | *Aim:*  This module aims to provide the student with the ability to reflect the knowledge skills and behaviours that are required by their appropriate professional routeway i.e. CIOB, RICS, CIBSE, CIAT etc through their workplace. | *Learning activities:*  Workshops and work place learning | *Assessment:*  PORTFOLIO (100%) |
| 5251BEUG  Semester 2  *Built environment* | STRUCTURAL DESIGN AND DETAILING  (20c) | *Aim:*  To introduce the use of Eurocodes in the design of timber, structural steel and reinforced concrete structures.  To design and detail structural elements in timber, reinforced concrete and structural steelwork using Eurocode 2, 3 and 5. | *Learning activities:*  Lectures, tutorials, problem-solving sessions within workshops and tutorials. use of specialist computer software in IT workshops. | *Assessment:*  EXAMINATION (50%) DESIGN & DETAILING REPORT (50%) |
| 6201BEUG  Semester 2  *Built environment* | COLLABORATIVE INTERDISCIPLINARY PROJECT 3  (10c) | *Aim:*  This module aims to bring together different professions as represented by Level 6 students on Built Environment programmes and to work collaboratively on a large scale development project. BIM (Building Information Modelling) techniques will be utilised within the project. It highlights the interdisciplinary nature of the construction and property industry using softwares to support the decision making process in a sustainable environment. | *Learning activities:*  Lectures, workshops, group work and presentations  The central theme of the module is the production of a suitable work derived project and it is supported by the other modules within the final year of the programme.  Group work is a key theme of the module; the intention being to simulate the experience of the work place and work place activity, endorsed and approved by the involvement of employers and stakeholders as relevant to the workplace generally.  Group presentations will be given to a panel comprising of academic staff and representatives from industry after which formative feedback will be provided. | *Assessment:*  Simulated Project (100%) |
| 6209BEUG  Semester 2  *Built environment* | ENGINEERING MEASUREMENT  (20c) | *Aim:*  This module consolidates and builds upon the student's learning to date in the fields of measurement and BIM technologies and processes. Students will examine the most effective quantification techniques for complex construction and engineering projects through analysis of and comparison between available measurement protocols. | *Learning activities:*  Lectures and workshops | *Assessment:*  MEASUREMENT REPORT (50%) IN-CLASS TEST (50%) |
| 6213BEUG  Semester 2  *Built environment* | DETAILED DESIGN AND PROJECT PRESENTATION  (30c) | *Aim:*  To apply and integrate core architectural technology skills to translate outline design  scheme into a detailed building design.  To present an end of year project using effective verbal, graphical and written  communication skills to a professional standard | *Learning activities:*  Lectures / tutorials  Workshop sessions in an IT room & design studio | *Assessment:*  Architectural drawings (40%) Technical Report (40%) Critical review (20%) |
| 6214BEUG  Semester 2  *Built environment* | ARCHITECTURAL TECHNOLOGY PROFESSIONAL PRACTICE  (20c) | *Aim:*  To develop an awareness of the context and factors that inform and influence the practice of architectural technology nationally and internationally.  To develop an awareness of current topics, practices and professional ethics which inform the discipline of architectural technology. | *Learning activities:*  Lectures and tutorials | *Assessment:*  Powerpoint presentation (40%) Critical reflection (60%) |
| 6218BEUG  Semester 2  *Built environment* | STRATEGIC REAL ESTATE MANAGEMENT  (20c) | *Aim:*  To develop students' knowledge and understanding of strategic real estate management theory and its practical application. | *Learning activities:*  Lectures, Workshops | *Assessment:*  4500 WORD REPORT (100%) |
| 6222BEUG  Semester 2  *Built environment* | BUILDINGS, ENERGY AND SUSTAINABILITY  (20c) | *Aim:*  To investigate the environmental consequences of energy use in buildings with particular reference to building engineering systems and services.  To critically evaluate the environmental and economic benefits which are consequent on the specification of various building engineering systems and appropriate low and near zero carbon technologies.  To examine processes for the assessment of building energy loads at feasibility and post construction stages. | *Learning activities:*  Lectures and tutorials, occasional site visits, | *Assessment:*  REPORT (50%) EXAMINATION (50%) |
| 6223BEUG  Semester 2  *Built environment* | BUILDING SERVICES ENGINEERING PROJECT 3  (20c) | *Aim:*  To enable the student to work both collaboratively and individually on realistic projects that facilitate the development and integration of a range technical and professional skills within the context of building services. | *Learning activities:*  Lectures, tutorials, seminars, and design studio sessions during which students will work in teams towards a project brief with a member of staff, who will act as client. | *Assessment:*  PORTFOLIO (65%) PRESENTATION (15%) REPORT (20%) |
| 6224BEUG  Semester 2  *Built environment* | ARCHITECTURAL ENGINEERING PROJECT 3  (20c) | *Aim:*  To enable the student to work both collaboratively and individually on realistic projects that facilitate the development and integration of a range technical and professional skills within the context of architectural engineering. | *Learning activities:*  Lectures, tutorials, seminars, and design studio sessions during which students will  work in teams towards a project brief with a member of staff, who will act as client. | *Assessment:*  PORTFOLIO (65%) PRESENTATION (15%) REPORT (20%) |
| 6230BEUG  Semester 2  *Built environment* | WORK BASED PROJECT 3  (10c) | *Aim:*  This module aims to critically evaluate and reflect on the knowledge, skills and behaviours that have been developed throughout the programme of study and the workplace via a project related case study. | *Learning activities:*  Workshops and work place learning | *Assessment:*  PORTFOLIO (100%) |
| 6254BEUG  Semester 2  *Built environment* | CONSTRUCTION ENGINEERING RESEARCH PROJECT  (40c) | *Aim:*  To enable students to complete a substantial piece of individual work and build on their expertise in a Construction Engineering subject.  To develop students’ research, time management, presentation and written communication skills. | *Learning activities:*  Lectures and tutorials supported by the nominated supervisor. The student is expected to carry out individual study and investigation. | *Assessment:*  Final dissertation report (90%) Presentation of proposal (10%) |
| 7402BEPG  Semester 2  *Built environment* | COLLABORATIVE BIM PROJECT  (20c) | *Aim:*  To allow students to follow BIM protocols and practice in a collaborative multidisciplinary project team to achieve project success. | *Learning activities:*  The central theme of the module is the production of a suitable work derived project  and it is supported by the other modules within the programme.  Group work is a key theme of the module; the intention being to simulate the  experience of the work place and work place activity, endorsed and approved by the  involvement of the various stakeholders as relevant to the workplace generally.  Key skills are developed through lectures,workshops, individual and group  Presentations. | *Assessment:*  Industry case study based (100%) |
| 7405BEPG  Semester 2  *Built environment* | ADVANCED OIL AND GAS MANAGEMENT  (20c) | *Aim:*  1. To examine the technical, economical, financial, commercial and contractual activities in the oil and gas industry.  2. To explore the main challenges facing the oil and gas sector, its responses to these challenges and future directions within the global market. | *Learning activities:*  The module is delivered in taught mode by lectures including discussions using case studies, interactive group work and directed self-study. | *Assessment:*  Portfolio Case Study Related (100%) |
| 7407BEPG  Semester 2  *Built environment* | LEADERSHIP FOR STRATEGIC EXECUTION  (20c) | *Aim:*  1. To explore and promote contemporary strategic project management principles.  2. To enable student to understand the importance of managing hard and soft issues. | *Learning activities:*  The module is delivered in taught mode by lectures involving discussions using case studies, interactive group work and directed self-study. | *Assessment:*  Portfolio Case Study Related (100%) |
| 7408BEPG  Semester 2  *Built environment* | ORGANISATIONAL CHANGE  (20c) | *Aim:*  To develop a coherent understanding of the issues relating to theory and practical applications of change management within organisations and the impact of cultural aspects on organisations and projects. | *Learning activities:*  The module is delivered in taught mode by lectures including discussions using case studies, interactive group work and directed self-study. | *Assessment:*  Portfolio Case Study Related (100%) |
| 7409BEPG  Semester 2  *Built environment* | INTEGRATED PROJECT  (10c) | *Aim:*  To allow students to apply the theory and concepts into a project scenario working with a collaborative approach to develop team skills. | *Learning activities:*  Seminars/workshops. Use of case studies, video’s and guest lecturers. | *Assessment:*  Presentation Group Based (30%) Portfolio Group and Individual (70%) |
| 7411BEPG  Semester 2  *Built environment* | PRINCE2®  (10c) | *Aim:*  To develop the requisite skills and knowledge needed in order to apply the PRINCE2® method to the management of different stages of the project life cycle. | *Learning activities:*  The module is delivered in a series of workshops that may, depending on the material to be covered, form mini lectures including discussion using case studies, interactive group work and directed self-study. | *Assessment:*  PRINCE2® Assessments (100%) |
| 7412BEPG  Semester 2  *Built environment* | SUSTAINABLE AND LEAN PRINCIPLES WITHIN CONSTRUCTION  (20c) | *Aim:*  To identify and critically appraise how environmental sustainability and lean principles can be incorporated into a more modern and innovative construction organisation and industry. | *Learning activities:*  Series of lectures and workshops using case studies and interactive group work. | *Assessment:*  Portfolio Case Study Based (100%) |
| 7422BEPG  Semester 2  *Built environment* | LAW AND CONTRACT  (20c) | *Aim:*  To develop knowledge and understanding of the legal principles governing ownership and occupation of real estate.  To develop a critical appreciation of the practical application and impact of the legal framework on land and property interests. | *Learning activities:*  Lectures and workshops | *Assessment:*  ESSAY (50%) EXAM (50%) |
| 7423BEPG  Semester 2  *Built environment* | DILAPIDATIONS  (10c) | *Aim:*  This module aims to enable students to develop a critical understanding and application of the Law of Dilapidations within the context of commercial property. | *Learning activities:*  Workshops only | *Assessment:*  PRESENTATION (100%) |
| 7425BEPG  Semester 2  *Built environment* | LAW  (20c) | *Aim:*  To develop knowledge and understanding of the legal principles governing ownership and occupation of real estate.  To develop a critical appreciation of the practical application and impact of the legal framework on land and property interests. | *Learning activities:*  Lectures and workshops | *Assessment:*  EXAM (50%) ESSAY (50%) |
| 7426BEPG  Semester 2  *Built environment* | REAL ESTATE MANAGEMENT  (20c) | *Aim:*  This module aims to develop students’ knowledge of strategic real estate management theory and examine its practical application. Students will also analyse operational real estate management strategies and their impact on overall performance. | *Learning activities:*  Lectures and workshops | *Assessment:*  Assignment (100%) |
| 7429BEPG  Semester 2  *Built environment* | REAL ESTATE INVESTMENT  (20c) | *Aim:*  This module aims to develop students’ knowledge and comprehension of real estate as an investment option within the market-place and to evaluate its performance against other investment vehicles.  Students will also gain a critical understanding of selection, pricing and performance measurement models and apply these within the context of strategic portfolio management. | *Learning activities:*  Lectures and workshops | *Assessment:*  Assignment (100%) |
| 7433BEPG  Semester 2  *Built environment* | QUANTITY SURVEYING PROFESSIONAL SKILLS  (20c) | *Aim:*  To allow students to apply the theory, concepts and procedures of quantity surveying professional skills using standard industry. | *Learning activities:*  The central theme of the module is to submerge the student into a “real-life” construction project exploring the many services of a QS throughout the project delivery phase. The module is delivered through a combination of lectures, webinars and workshops. | *Assessment:*  TEST (50%) TECHNOLOGY (50%) |
| 7441BEPG  Semester 2  *Built environment* | INTEGRATED BIM IN PRACTICE  (10c) | *Aim:*  To allow students to develop strategic plans for incorporating BIM in practice, by identifying the business benefits and challenges which surround the application of BIM across multiple disciplines in the construction industry. | *Learning activities:*  Fortnightly case study lectures delivered by industry experts, followed by fortnightly reflective workshops to discuss the pertinent aspects of the guest lecture in the previous week. | *Assessment:*  CASE STUDY (100%) |
| 7443BEPG  Semester 2  *Built environment* | BUILDING ENGINEERING AND DETAILING  (20c) | *Aim:*  To enable the student to apply knowledge and understanding from previous and concurrent modules to produce a comprehensive design solution for a large or complex building, that reflects the level of technical and professional expertise expected of a masters graduate in architectural engineering. | *Learning activities:*  This module will be based on the design of a complex live or simulated building project.  The following learning and teaching methods will be employed: site visits and key lectures as appropriate, supervised studio work, practical IT sessions, tutorials and individual critiques. site visits.  Key lectures, plus site visit if required, will provide briefing, background and appropriate information. This may involve guest lecturers or client representatives where necessary.  Some initial preparatory studies may be carried out in small groups depending on the nature of the project.  Students will be expected to maintain a learning journal throughout the module in the form of a portfolio document to record their design process and demonstrate their skills in critical analysis, synthesis, evaluation and reasoned decision making.  The reflective Design Journal will be largely graphical in content containing sketches and annotated drawings with supporting written commentary where appropriate.  The use of critiques as formative assessment will enable students to receive feedback on individual development and progress. | *Assessment:*  Illustrated Design Report (80%) Presentation (20%) |
| 6226BEUG  Yearlong  *Built environment* | BUILDING ENGINEERING RESEARCH PROJECT  (40c) | *Aim:*  To enable students to complete a substantial piece of individual work and build on their expertise in a Building Engineering subject.  To develop students’ research, time management, presentation and written communication skills. | *Learning activities:*  Individual study and investigation. Supported by nominated Supervisor; lectures; workshops. | *Assessment:*  Final dissertation report (90%) Presentation of proposal (10%) |
| 7100BEUG  Yearlong  *Built environment* | ASSET MANAGEMENT  (20c) | *Aim:*  The aim of this module is to examine the effective management and maintenance of operational property. The syllabus includes planned and responsive maintenance strategies, information management strategies for property management including whole life cost data sources and development of databases to assist in procurement of maintenance resources. Valuation of property assets and legal relationships between property stakeholders. Property acquisition and disposal. | *Learning activities:*  The module will be delivered via a series of key-note lectures which are archived in the Wimba classroom, live seminars and a portfolio of project-based tasks. The learner will have an induction session where the approach will be introduced; typically four archived “lectures” will be followed by a live seminar. A workshop will be held at the University to act as a summative discussion on the learner’s assessment of their organisation. | *Assessment:*  ESSAY (50%) EXAMINATION (50%) |