

Module Specification

Module Summary Information

1	Module Title	Infrastructure Design Project
2	Module Credits	20
3	Module Level	7
4	Module Code	BNV7124

5	Module Overview
<p>In accordance with the programme philosophy and aims, the Infrastructure Design Project is a major piece of group work and allows you to build your level of understanding and expertise. It involves the use of appropriate design approaches and skills, challenges your abilities to conceptualise, and encourages you to make connections between theory and practice whilst solving the design problem. The Design Project promotes independent and reflective learning in order for you to demonstrate your ability to work at Master's level.</p> <p>The module follows the Civil Engineering programme philosophy of developing your intellectual and practical competence in technical, managerial, economic, theoretical and environmental aspects of civil engineering. Similarly the learning and teaching philosophy incorporates learning through formal lectures including presentations, seminars, tutorials, hands-on experience and problem based scenarios, backed up by guest speakers when appropriate. Learning is practice-based, knowledge applied, work related and is largely a project based activity with an international flavour.</p> <p>Learning activities will incorporate formative assessment including work-related learning and problem solving, in-class tasks, seminar work, peer assessment and learning sets. The assessment outline section below details assessment for this module by way of assignment projects.</p> <p>Practical work within this module includes seminars, computer laboratory and tutorial work, problem-based scenarios and group project work. You are encouraged to plan their own work schedules, manage their time and extend their presentational skills</p>	

6	Indicative Content
<p>This module is largely to enable you to apply the technology analysis of civil engineering projects by setting a development task and applying relevant calculation techniques to design a major aspect(s) of the project. It is absolutely essential that the key aspects of regulatory, environmental, sustainable, structural, economic and social agendas are considered when designing a civil engineering project. Finally, groups will present their design to convince panel of civil engineers that their solution is appropriate.</p>	

7	Module Learning Outcomes	
	On successful completion of the module, students will be able to:	
	1	Demonstrate an ability to organise a Group in critically evaluating and interpreting knowledge, concepts and ideas supported by a range of recognised research techniques and be able to justify the reliability of the information used.
	2	Be able to interpret and appraise client development requirements including health and safety and respond to them with a range of suitable solutions.
	3	Evaluate, reflect on and justify design solutions in the context of current and expected regulatory, environmental, sustainable, structural, economic and social agendas.
	4	Formulate and appraise a design solution using of a variety of forms of communication in order to present design work in a consistent and well-referenced form.

8	Module Assessment		
Learning Outcome			
	Coursework	Exam	In-Person
1-4	X		

9	Breakdown Learning and Teaching Activities	
Learning Activities		Hours
Scheduled Learning (SL) includes lectures, practical classes and workshops, peer group learning, Graduate+, as specified in timetable		48
Directed Learning (DL) includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning, as directed on VLE		32
Private Study (PS) includes preparation for exams		120
Total Study Hours:		200