Module Specification

Traffic Management and Safety

Version: 2021-22, v2.0, 20 Jul 2021

Contents

Part 1: Information

Module title: Traffic Management and Safety

Module code: UBGLXP-15-3

Level: Level 6

For implementation from: 2021-22

UWE credit rating: 15

ECTS credit rating: 7.5

Faculty: Faculty of Environment & Technology

Department: FET Dept of Geography & Envrnmental Mgmt

Partner institutions: None

Delivery locations: Frenchay Campus, Northshore College of Business and Technology

Field: Geography and Environmental Management

Module type: Standard

Pre-requisites: None

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: Module Entry requirements For those not already on the BEng, or for others, A level mathematics or equivalent

Features: Not applicable

Educational aims: See learning outcomes.

Outline syllabus: Determinants of travel demand

Surveys (measuring demand):

Road traffic volume and speed surveys;

Origin/destination surveys;

Analysis and presentation of survey data;

Junction design (catering for and managing demand):

Manual and/or computer analysis of priority, roundabout and signal controlled junctions;

Designing for public transport, walking and cycling (multi-modal design

Traffic signal operation and equipment and urban traffic control

Specific features for providing capacity and safety for public transport, walkers and cycle users (multi-modal design);

Safety:

Collision investigation methodology;

Sources of information used in collision investigation;

Collision prevention and remedial measures;

Monitoring, assessment and evaluation of improvement schemes.

Part 3: Teaching and learning methods

Teaching and learning methods: The module guide will provide a programme of activities for students on a week by week basis. This will include, for example, the programme of tutorial work that they should be keeping abreast with, the planned lectures and class tutorials, and the activities that they should be engaging with in order to complete the assignments. It will also include any reading which they should be doing linked with class activities. Guest lecturers will be used as appropriate.

Module Learning outcomes:

MO1 Explain how travel demand is generated and managed

MO2 Design transport surveys and analyse survey data

MO3 Evaluate and design multi-modal networks, streets and junctions considering the needs of all users

MO4 Explain strategic approaches to road danger reduction

MO5 Analyse and design measures to minimise road danger

Hours to be allocated: 150

Contact hours:

Independent study/self-guided study = 114 hours

Face-to-face learning = 36 hours

Total = 150

Reading list: The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link https://uwe.rl.talis.com/modules/ubglxp-15-3.html

Part 4: Assessment

Assessment strategy: Component A Transport Strategy Portfolio: Learning outcomes 1 to 3.

The Transport Strategy Portfolio will take the form of a strategic network audit,

comprising several discrete elements. designed to develop and assess students' understanding of, for example: (i) survey planning, analysis and interpretation, (ii) road safety investigation, (iii) wider area walking / cycle or public transport network evaluations and plans and (iv) written communication skills.

Component B1 Junction Design Portfolio Learning outcomes 3 to 5.

The junction design portfolio will be based on an open ended, real world junction design problem, and will similarly involve several discrete elements including: (i) problem evaluation, (ii) the development of design solutions, justified with reference to modelling, calculations and design guidance, and (iii) the production of diagrams. The task will assess student's understanding of junction design and analysis.

Assessment components:

Portfolio - Component A (First Sit)
Description: Portfolio 1 (2000 words)
Weighting: 50 %
Final assessment: No
Group work: No
Learning outcomes tested: MO1, MO2, MO3

Portfolio - Component B (First Sit)
Description: Portfolio 2 (2000 words)
Weighting: 50 %
Final assessment: Yes
Group work: No
Learning outcomes tested: MO3, MO4, MO5

Portfolio - Component A (Resit)
Description: Portfolio 1 (2000 words)
Weighting: 50 %
Final assessment: No
Group work: No

Learning outcomes tested: MO1, MO2, MO3

Portfolio - Component B (Resit)
Description: Portfolio 2 (2000 words)
Weighting: 50 %
Final assessment: No
Group work: No
Learning outcomes tested: MO3, MO4, MO5

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Civil and Environmental Engineering [Sep][FT][Frenchay][3yrs] BEng (Hons) 2019-20

Civil Engineering [Jan][FT][Northshore][4yrs] BEng (Hons) 2019-20

Civil Engineering [Jan][FT][Northshore][4yrs] MEng 2019-20

Civil and Environmental Engineering [Sep][FT][Frenchay][4yrs] MEng 2019-20

Civil and Environmental Engineering [Sep][SW][Frenchay][4yrs] BEng (Hons) 2018-19

Civil and Environmental Engineering {Foundation} [Sep][FT][Frenchay][4yrs] BEng (Hons) 2018-19

Civil and Environmental Engineering [Sep][SW][Frenchay][5yrs] MEng 2018-19