

# **SECTION 1: KEY PROGRAMME DETAILS**

Highest Award  MSc Transport Engineering and Planning  Interim Award  PGCert Transport  Interim Award  PGDip Transport Engineering and Planning  Awarding Institution  UWE Bristol  Teaching Institution  UWE Bristol  Delivery Location  Frenchay Campus  Study Abroad / Exchange / Placement X
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Credit Recognition  Sandwich Year X  Credit Recognition X  Year Abroad X
Faculty Responsible For Programme Faculty of Environment & Technology
Department Responsible For Programme FET Dept of Geography & Envrnmental Mgmt
Professional Statutory or Regulatory Body (PSRB) Links  Chartered Institute of Logistics and Transport (CILT)
Professional Statutory or Regulatory Body (PSRB) Links  Joint Board of Moderators
Professional Statutory or Regulatory Body (PSRB) Links  Royal Town Planning Institute (RTPI)
Professional Statutory or Regulatory Body (PSRB) Links  Transport Planning Professional

Part-time

Apprenticeships

Mode of Delivery

ENTRY REQUIREMENTS	UCAS Tariff Points:	
	For the current entry requirements see the UWE public website.	
For Implementation From	1 Sep 2018	
ISIS Code/s	Programme Code K46D12-SEP-PT-FR-K46512	
	Other codes:  JACS Transport planning  HECoS 100000: Undefined	
	UCAS SLC	

# SECTION 2: PROGRAMME OVERVIEW, AIMS and LEARNING OUTCOMES

# PART A: PROGRAMME OVERVIEW, AIMS and LEARNING OUTCOMES

### 1. (Programme) Overview (c. 400 words)

The MSc Transport Engineering and Planning is a two to three year part time postgraduate master's programmes.

The MSc Transport Engineering and Planning is designed to suit graduate engineers or scientists, mathematicians or statisticians, geographers, planners and economists. Graduates in other disciplines may be considered if they are able to demonstrate they have studied subjects containing a good level of numeracy or have a good level of experience in the transport industry already.

Applications are in process for accreditation for the MSc Transport Engineering and Planning from the JBM and from the Transport Planning Society for the MSc Transport Engineering and Planning.

#### 2. Educational Aims (c. 4-6 aims)

The general aims of the programme are:

To provide a coherent programme of advanced study in transport, underpinned by staff research, consultancy and scholarship, in which all staff members are engaged.

To provide a programme related to the needs of professional practice, that enables students to become effective transport practitioners.

To provide a programme that is academically challenging and encourages students to develop the capacity for critical thought and action.

To offer varied study patterns in order to broaden access to the programme (flexible part-time study through the module gathering option);

### Specific Aims

To analyse the complex relationships between transport and society;

To apply the concept of sustainability to spatial development and transport planning;

# PART A: PROGRAMME OVERVIEW, AIMS and LEARNING OUTCOMES

To use techniques of analysis of transport systems at an advanced level, drawing on an understanding of demand management and the role of different modes of transport.

To identify and evaluate policy and funding mechanisms in the context of current and emerging transport issues in the UK, the European Union, and beyond;

To design and conduct rigorous research.

To develop additional transferable skills in communication, presentation and the management of learning.

To identify, classify and describe the performance of transport systems and components through the use of analytical methods and modelling techniques.

### 3. Programme and Stage Learning Outcomes (c. 6-8 outcomes)

### **Programme (Learning) Outcomes (POs)**

### **Knowledge and Understanding**

A1	The role and significance of transport in a modern economy and society.
A2	The nature and significance of problems and solutions which arise from the demand for movement by people and of goods.
A3	The concept of sustainability within a global, national and local context and its application to transport planning.
A4	The policy, political and practical constraints on the conduct of research in a transport context.
A5	The mechanisms and systems of spatial planning.
A6	Engineering principles as applied to the design of transport infrastructure.
A7	The principles of network management.

### Intellectual Skills

B1	Identify problems and to apply appropriate techniques in the investigation of problems, and to deal with complexity and with gaps and contradictions within the knowledge base.
B2	Plan strategies and tactics in response to unusual and unexpected situations.
B3	Synthesise information and create and evaluate new approaches in the resolution of complex problems.
B4	Apply theory to the practical resolution of complex problems.
B5	Reflect on own educational progress and professional practice.
B6	Design and implement a research proposal in response to complex problems.
B7	Apply appropriate quantitative methods to the analysis of complex transport planning or engineering problems.

### Subject/Professional Practice Skills

C1	Design solutions to complex transport planning problems on the basis of analysis
	and through the application of comparative study.
C2	Evaluate and justify alternative approaches to transport problems and to
	accurately assess and report on own/others work.
C3	Demonstrate an awareness of the ethical dilemmas likely to arise in research and
	professional practice.
C4	Apply modelling techniques in the analysis of transport problems.
O-T	Apply modeling techniques in the analysis of transport problems.

PART A: PROGRAMME OVERVIEW, AIMS and LEARNING OUTCOMES				
C5	Design, develop and write appropriate plans for a range of spatial scales in a range of sectors.			
C6	Use skills of negotiation, mediation, and advocacy in the planning process.			
C7	Design key elements of transport networks, used by different modes.			
C8	Design transport infrastructure.			
C9	Apply GIS to problems of transport design and planning.			
Transfera	ble Skills and other attributes			
D1	Engage in a full professional and academic communication with others in the transport and planning fields, and with non-specialist audiences, through presentations and writing.			
D2	Demonstrate authority in study and use of resources and make professional use of others in support of self-directed learning.			
D3	Work effectively as a member of a team.			
D4	Apply computing techniques to the creation of complex databases, to the analysis of data, and the application of quantitative models.			

# PART B: Programme Structure

# 1. Structure

### Year 1

# **Year 1 Compulsory Modules**

Code	Module Title	Credit	Type
UBGM8M-15-M	Transport Economics and Appraisal 2020-21	15	Compulsory
UBGM8N-15-M	Travel Demand Analysis 2020- 21	15	Compulsory

# Year 1 Optional Modules

Students choose 30 credits from the following modules:

Code	Module Title	Credit	Type
UBGMLK-15-M	Traffic Engineering 2020-21	15	Optional
UBGMFX-15-M	Transport Infrastructure Engineering 2020-21	15	Optional

### Year 2

# **Year 2 Compulsory Modules**

Code	Module Title	Credit	Type
UBGM8P-15-M	Changing Travel Behaviour 2021-22	15	Compulsory
UBGM8Q-15-M	Transport Policy and Finance 2021-22	15	Compulsory

# **Year 2 Compulsory Modules Option Choices**

The student must take 60 credits from the modules in Compulsory Modules Option Choices.

UBGMRK-60-M Master's Project (option, for students with a work placement)

Code	Module Title	Credit	Type
UBLLY7-60-M	Dissertation 2021-22	60	Optional
UBGMRK-60-M	Masters Project 2021-22	60	Optional

# **Year 2 Optional Modules**

Code	Module Title	Credit	Type
UBGMU4-15-M	Introduction to Applied Geographical Information Systems (GIS) 2021-22	15	Optional
UBGLWP-15-M	Sustainable Transport Management and Operations 2021-22	15	Optional

### PART C: Higher Education Achievement Record (HEAR) Synopsis

Graduates of MSc Transport are able to:

Analyse the complex relationships between transport and society, including the dimension of social justice.

Apply the concept of sustainability to spatial development and transport planning.

Analyse transport systems at an advanced level, drawing on an understanding of demand management and the role of different modes of transport.

Identify and evaluate policy and funding mechanisms in the context of current and emerging transport issues in the UK, the European Union, and beyond.

Demonstrate the potential to be effective transport planning practitioners.

### PART D: EXTERNAL REFERENCE POINTS AND BENCHMARKS

The existing programme is accredited by the Transport Planning Society (Transport Planning Professional), the Chartered Institute of Logistics and Transport and the Royal Town Planning Institute (RTPI).

The programme is designed to be consistent with the qualifications descriptors set out in the National Qualification Framework (August 2008) issued by the Quality Assurance Agency for Higher Education.

The programme responds, and will look to deliver in coming years, against the goals and priorities of the UWE vision and mission and the UWE strategic plan for the period 2007-2012. Particular attention is to be given in the short to medium term towards making the programme's curriculum more international in its outlook, and to enhancing the student experience.

Staff research and consultancy interests and expertise

The University of the West of England's Centre for Transport and Society (CTS) is recognized as one of the UK's leading transport research centres. It has continued to generate research income from government, European and research council sources, even through periods of recession. All of the teaching staff are research active, and they make a substantial contribution to the Faculty's input to the REF exercise.

Employer feedback Competitor Analysis and Market Research Overseas

A review of similar and related courses provided by other universities in the UK was undertaken in 2013, before the MSc Transport Engineering and Planning pathway was validated. We also conducted a survey of transport employers within the Southwest region, and a focus group in Ahmedabad, India. These indicated strong support and potential demand for the MSc Transport Engineering and Planning option. Indeed, applications have risen nearly threefold for the second intake on the programme in September 2015 as compared with its previous first year of operation. We have expanded the Industrial Advisory Board of the Civil Engineering Group to include two senior representatives from the regional transport industry to help us continue close collaboration in respect of our transport teaching.

#### **PART E: REGULATIONS**

Approved to variant University Academic Regulations and Procedures.

The following variant regulation for condoned credit (E4) applies to students on this award which has been accredited by a PSRB that comes under the auspices of Engineering Council UK.

The variant applied to the September 2020 intake onwards.

- The permitted maximum condoned credit is 30 credits for a Bachelors or Integrated Masters degree and a maximum of 20 credits in a Masters degree.
- The awarding of condoned credit may be considered for an overall module mark in the range 30% to 39%.

As a consequence Engineering Council UK regulations about the offer of excused credit for modules critical to the awarding of accreditation, excused credit will not be available on this award.