



University of the West of England

ACADEMIC SERVICES

PROGRAMME SPECIFICATION

Part 1: Basic Data			
Awarding Institution	University of the West of England		
Teaching Institution	University of the West of England		
Delivery Location	Frenchay campus, University of the West of England		
Faculty responsible for programme	Environment and Technology		
Department responsible for programme	Geography and Environmental Management		
Modular Scheme Title	FET Postgraduate Modular Scheme		
Professional Statutory or Regulatory Body Links	Transport Planning Society [MSc Transport Planning, MSc Transport Engineering and Planning] Chartered Institute of Logistics and Transport [MSc Transport Planning, MSc Transport Engineering and Planning] Royal Town Planning Institute [MSc Transport Planning] Joint Board of Moderators [MSc Transport Planning, MSc Transport Engineering and Planning]		
Highest Award Title	MSc Transport umbrella programme which leads to the award of: - MSc Transport Planning - MSc Transport Engineering and Planning - MSc Transport (for students mixing modules across the two pathways)		
Default Award Title			
Interim Award Titles	Postgraduate Certificate Transport; Postgraduate Diploma Transport Planning; Postgraduate Diploma Transport Engineering and Planning;		
UWE Progression Route			
Mode(s) of Delivery	Full time or part time, and CPD 'module gathering'		
Codes	UCAS: ISIS2: K46512 K4NA12 (MSc Transport) K4N912 (Transport Planning); K46D12 (MSc Transport Engineering and Planning)	JACS: K460, H230 HESA:	
Relevant QAA Subject Benchmark Statements	QAA Master's Degree Characteristics 2010		
First CAP Approval Date	June 2013 v1	Valid from	September 2013 v1
Revision CAP Approval Date	Feb 2014 v1.1 November 2015 v1.2	Revised with effect from	September 2014 v1.1 September 2016 v1.2
Version	1.2		
Review Date			

Part 2: Educational Aims of the Programme

The MSc Transport umbrella programme is designed to provide a home for two linked programmes which share modules – MSc Transport Planning and MSc Transport Engineering and Planning. It offers pathways designed to appeal to slightly different domestic and international students in a competitive marketplace.

The MSc Transport Planning and the MSc Transport Engineering and Planning are both one year full time/two to three year part time postgraduate master's programmes. The MSc Transport Planning is suitable for graduates from any academic background but particularly social sciences, geography and planning. 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.

The MSc Transport Planning is accredited by the Transport Planning Society, the Chartered Institute of Logistics and Transport and the Royal Town Planning Institute as a specialist planning programme. 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.

The third pathway is the MSc Transport, which allows students to mix taught modules across both pathways. The university will not pursue accreditation for this programme.

Both pathways offer a year-long master's programme, with a two to three year part-time route and a flexible 'module gathering' option. It prepares students for, or supports students already working in, transport planning and/or engineering in a wide range of jobs including in local or central government, private and third sectors both in the UK and internationally.

The programme is designed to maximise sharing with other programmes, and to the recently-expanding CPD market. These two factors have necessitated the retention of 15 credit modules.

The 60 credit dissertation module will include an option for a work placement.

General 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 students a choice of two pathways: one related to transport and spatial planning, the other related to transport engineering and planning. Each of these pathways will open relevant career opportunities to students.
- 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;
- 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;

Part 3: Learning Outcomes of the Programme

design of transport infrastructure												
7. The principles of network management									√			P
(B) Intellectual Skills												
By the end of the programme the student should be able to:												
1. 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;	√	√	√	√	√	√	√	√	√	√	√	√
2. plan strategies and tactics in response to unusual and unexpected situations;	√	√	√	√	√	√	√	√	√	√	√	√
3. synthesise information and create and evaluate new approaches in the resolution of complex problems;	√	√	√	√	√	√	√	√	√	√	√	√
4. apply theory to the practical resolution of complex problems;	√	√	√	√	√	√	√	√	√	√	√	√
5. reflect on own educational progress and professional practice.	√	√	√	√	√	√	√	√	√	√	√	√
6. design and implement a research proposal in response to complex problems;				√	√	√	√		√			√
7. apply appropriate quantitative methods to the analysis of complex transport planning or engineering problems.	√	√						√		√	√	P
(C) Subject/Professional/Practical Skills												
By the end of the programme the student should be able to:												
1. design solutions to complex transport planning problems on the basis of analysis and through the application of comparative study.	√	√	√	√	√	√	√	√	√	√	√	√
2. evaluate and justify alternative approaches to transport problems and to accurately assess and report on own/others work.	√	√	√	√	√	√	√	√	√	√	√	√
3. demonstrate an awareness of the ethical dilemmas likely to arise in research and professional practice.	√	√	√	√	√	√	√	√	√	√	√	√
4. apply modelling techniques in the analysis of transport problems.	√	√		√						√		P
5. design, develop and write appropriate plans for a range of spatial scales in a range of sectors					√	√						

Part 3: Learning Outcomes of the Programme

6. use skills of negotiation, mediation, and advocacy in the planning process			√		√	√							
7. design key elements of transport networks, used by different modes									√				
8. design transport infrastructure											√		
9. apply GIS to problems of transport design and planning								√					
(D) Transferable skills and other attributes													
By the end of the programme the student should be able to:													
1. 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.	√	√	√	√	√	√	√	√	√	√	√	√	√
2. demonstrate authority in study and use of resources and make professional use of others in support of self-directed learning.	√	√	√	√	√	√	√	√	√	√	√	√	√
3. work effectively as a member of a team	√	√	√	√	√	√	√	√	√	√	√	√	
4. apply computing techniques to the creation of complex databases, to the analysis of data, and the application of quantitative models.		√						√		√	√		P

P= possible – depending on the subject chosen for the dissertation: students will be encouraged to choose subjects relating to their chosen pathway i.e. planning or engineering oriented.

Part 4: Student Learning and Student Support

Teaching and learning strategies to enable learning outcomes to be achieved and demonstrated

The Centre for Transport and Society has a well-established track record of teaching underpinned by the well-recognised research conducted by all its teaching staff. It is able to draw on good facilities, with much of the teaching carried out in an award-winning studio building which has recently been expanded to provide a variety of teaching and communal space.

Scheduled Learning

The emphasis for the student is on learning by discussion, debate and, with projects in particular, by experiential learning. A range of learning methods are involved, including formal lectures, tutorials, workshops, seminar presentations, work in the field and guided independent study. Quantitative skills will be particularly important in the engineering and planning pathway, although they will also be required in two of the core modules (Transport Economic and Appraisal and Travel demand analysis). A certain level of IT literacy is essential to all master's level study. More specific skills will be developed

through: Travel Demand Analysis, Introduction to Applied GIS, Traffic Engineering and Transport infrastructure engineering.

Alongside the formal requirements of attendance, students are encouraged to attend a number of additional sessions as per the following:

- Skills seminars run in the first semester by the programme leader;
- Departmental research seminars run by departmental staff;
- Postgraduate research skills training run by the Faculty; and
- Monthly seminars and annual conferences run by CTS, open to external participants from practice and other academic institutions.

Independent Learning

The scheduled learning is intended to provide a framework for the students to pursue their own independent learning: a guideline of expectations in terms of hours of independent study is set out on each of the module specifications. Every module will include recommended reading, and most will also require some independent investigations: for assessments and to prepare for some of the scheduled sessions. As well as academic sources, students will be encouraged to read professional publications such as Local Transport Today and to take advantage of the resources offered by the various professional bodies.

Employment opportunities

The MSc programme has a good record of graduates finding professional employment – even during the recession – with many of its alumni now holding key positions in local authorities and transport consultancies across the region. In addition, the Centre has a wide range of other connections with employers across the region through its research and consultancy work. Some of these connections have led to the recent influx of ‘module gatherers’ and these connections will be used to set up placements for those students who choose that option for the dissertation. Employment prospects in the sector are now improving, with CTS receiving regular vacancy announcements from our network of employers, some of which have recently led to the employment of last year’s graduates.

Field trips and exchange opportunities

CTS plays an active role in the programme of field trips run by the Department. A UK based and European based visit to a major city is arranged each year and offered to students. Visits take place to a range of locally significant transport sites in the region as part of ‘Sustainable Transport Management and Operations’. Field visits to the subject of assessments take place as part of ‘Plan Making’ and ‘Implementation and Design Quality’. Field work takes place as part of ‘Traffic Engineering’. The Department has well-developed Erasmus links with a number of universities in Europe. Furthermore, staff teaching on the MSc have direct links with a number of other European and international universities through research collaboration. All of these links are exploited in the MSc for teaching and research purposes. CTS receives many visiting academics and most of these will present at a CTS seminar, and some may also provide guest lectures to students.

Student Support

While students are offered support through the teaching and learning strategies of individual module leaders, the programme also provides direct support to students through the programme leader who arranges direct meetings with them during the year. The programme leader will work with the student advisors to provide appropriate support to any students with disabilities.

Description of any Distinctive Features

Students will have the option of undertaking the dissertation option called ‘Masters Project’, which carries with it the need to undertake a work placement. This appears to be a unique

feature in comparison with other similar masters programme. Placements would take place over the Summer period.

Part 5: Assessment											
Delete one of the following statements as appropriate											
A: Approved to University Regulations and Procedures											
Assessment Strategy and Map											
The programme encompasses a range of assessment methods including; essays, presentations, design projects and seminars. These are detailed in the following assessment map:											
Assessment Map for MSc Transport											
		Unseen Written Exam	Open Book Written Exam	In-class Written Test	Practical Exam	Practical Skills Assessment	Oral assessment and/or presentation	Written Assignment	Report / Project	Dissertation	Portfolio
Core Modules ¹	Transport Economics and Appraisal	A1 (50)						B1 (50)			
	Travel Demand Analysis	A1 (50)							B1 (50)		
	Transport Policy and Finance						A1 (30)	B1 (70)			
	Changing Travel Behaviour	A1 (30)							B1 (70)		
Options	Dissertation						A1(10)	A2 (10)		B1 (80)	
	Masters Project						A1(10)	A2 (10)		B1 (80)	
Transport Planning Modules	Plan Making ²						A1 (25)	B1 (30)	B2 (45)		
	Implementation and Design Quality						A2 (10)		A1 (40)		B1 (50)
Transport Planning and Transport Engineering and Planning modules	Introduction to Applied GIS ²	A1 (50)						B2 (15)	B1 (35)		
	Sustainable Transport Management and Operations ²						A1 (20)		A2 (80)		
Transport Engineering & Planning Modules	Traffic Engineering	A1 (50)							B1 (50)		
	Transport Infrastructure Engineering	A1 (50)							B1 (50)		
Note 1: Core modules relate to the MSc Transport Planning and the MSc Transport Engineering and Planning pathways. There are no core modules for the MSc Transport: they are all options. Note 2: 'Plan Making' may be chosen as an option by Transport Planning students, or, instead both of 'Sustainable Transport Management and Operations' and 'Introduction to Applied GIS'.											

Part 6: Programme Structure
This structure diagram demonstrates the student journey from Entry through to Graduation for a typical full time student , including: level and credit requirements interim award requirements module diet, including compulsory and optional modules

	Compulsory Modules	Transport Planning Pathway	Transport Engineering and Planning Pathway	Interim Awards
Year 1	UBGM8M-15-M Transport Economics & Appraisal UBGM8N-15-M Travel Demand Analysis UBGM8Q-15-M Transport Policy and Finance UBGM8P-15-M Changing Travel Behaviour UBLLY7-60-M Dissertation (option) Or UBGMRK-60-M Master's Project (option, for students with a work placement)	UBGMP3-30-M Implementation and Design Quality UBGMN3-30-M Plan Making (option) Or both of the following: UBGLWP-15-M Sustainable transport management and operations (option) UBGMU4-15-M Introduction to Applied Geographical Information Systems (option)	UBGMLK-15-M Traffic Engineering UBGAFX-15-M Transport Infrastructure Engineering UBGLWP-15-M Sustainable transport management and operations UBGMU4-15-M Introduction to Applied Geographical Information Systems	After completion of 60 credits not including the dissertation Postgraduate Certificate in Transport After completion of 120 credits, not including the dissertation: PG Diploma Transport Planning for those on Transport Planning pathway or PG Diploma in Transport Engineering and Planning for those on Transport Engineering and Planning Pathway or PG Diploma in Transport for those mixing modules cross both pathways.

GRADUATION

This structure diagram demonstrates the student journey from Entry through to graduation for *part time* students (NB This is indicative and may vary depending on timetable issues):

Year 1	Compulsory Modules	Transport Planning Pathway	Transport Engineering and Planning Pathway	Interim Awards
	UBGM8M-15-M Transport Economics & Appraisal UBPM8N-15-M Travel Demand Analysis	UBGMP3-30-M Implementation and Design Quality	UBGMLK-15-M Traffic Engineering UBGMFX-15-M Transport Infrastructure Engineering	After completion of 60 credits not including the dissertation Postgraduate Certificate in Transport
Year 2	Compulsory Modules	Transport Planning Pathway	Transport Engineering and Planning Pathway	Interim Awards
	UBGM8P-15-M Changing Travel Behaviour UBGM8Q-15-M Transport Policy and Finance UBLLY7-60-M Dissertation (option) Or UBGMRK-60-M Master's Project (option, for students with a work placement)	UBGMN3-30-M Plan Making (option) Or both of the following: UBGLWP-15-M Sustainable transport management and operations (option) UBGMU4-15-M Introduction to Applied Geographical Information Systems (option)	UBGLWP-15-M Sustainable transport management and operations UBGMU4-15-M Introduction to Applied Geographical Information Systems	After completion of 120 credits, not including the dissertation: PG Diploma Transport Planning for those on Transport Planning pathway or PG Diploma in Transport Engineering and Planning for those on Transport Engineering and Planning Pathway or PG Diploma in Transport for those mixing modules cross both pathways. Highest award: MSc (as above) (180 M level credits)

GRADUATION

Part 7: Entry Requirements

The University's Standard Entry Requirements apply with the possibility of discretion where a candidate is judged to have significant relevant professional experience. This judgement will be exercised by the programme leader with input from one other member of the lecturing staff.

Part 8: 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 Transport Engineering and Planning Pathway has been offered for accreditation by the Joint Board of Moderators and by the Transport Planning Society.

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.

This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of individual modules can be found in module specifications, available on the [University's website](#).