

## Section 1: Basic Data

Awarding institution/body: **UWE**

Teaching institution: **UWE**

Faculty responsible for programme: **FBE**

Programme accredited by: **Chartered Institute of Logistics and Transport**

Highest award title: **MSc Transport Planning**

Default award title: **None**

Interim award title: **Postgraduate Certificate Transport Planning  
Postgraduate Diploma Transport Planning**

Modular scheme title: **Postgraduate Modular Scheme, Faculty of the Built Environment.**

UCAS codes:

QAA subject benchmarking group(s):

Valid until:

Valid from: **2005**

Authorised by: **PG Modular Scheme Director** Date:

Version code: **2**

Version year: **2005**

## Section 2: Educational aims of the programme

### General Aims

The general aims of the programme are:

- . to provide a coherent programme of advanced study in transport planning, firmly underpinned by staff research, consultancy and scholarship;
- . to provide a programme that is firmly related to the needs of professional practice, and that enables students to become effective transport planning practitioners;
- . to develop, over time, a programme that offers variety, with flexible patterns of study that are well suited to students and their employers;
- . to provide a programme that is academically challenging and encourages students to develop the capacity for critical thought and action.

### Specific Aims

The Faculty provides programmes in most of the disciplines related to the built environment including planning, architecture, surveying, housing, building construction and environmental management. The philosophy underpinning teaching and research on all these programmes is that of sustainability and the creation of sustainable settlements. Bringing together learning to address the requirements identified in the recent national surveys of skills shortages, and drawing on the strengths of the Faculty, the objective is to provide an academically challenging and professionally relevant masters programme built around the following subject aims, to enable students:

- . to analyse the complex relationships between transport and society, including the dimension of social justice;
- . 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;
- . to design and conduct rigorous research;
- . to develop additional transferable skills in communication, presentation and the management of learning.

It is an aim throughout the programme to stress the importance of academic rigour in relation to all work undertaken based, in particular, on methodological approaches established in the research-based module culminating in the dissertation.

## Section 3: Learning outcomes of the programme

### A: Knowledge and understanding

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| <p><b>By the end of the programme, the student should be able:</b></p> <p>to demonstrate knowledgable understanding of:</p> <ol style="list-style-type: none"><li>1. The role and significance of transport in a modern economy and dynamic social context.</li><li>2. The nature and significance of problems and solutions which arise from the demand for movement by people and of goods.</li><li>3. The concept of sustainability within a global, national and local context.</li><li>4. The policy, political and practical constraints on the conduct of research with specific reference to transport.</li></ol> | <p><b>Teaching/learning methods and strategies</b></p> <p>Acquisition of (1) is through teaching and seminars on the following modules:</p> <ul style="list-style-type: none"><li>. Transport Economics and Appraisal</li><li>. Transport and Society</li><li>. Transport Policy and Finance</li></ul> <p>Acquisition of (2) is through teaching and seminars, and through the completion of practical exercises and investigative tasks on the following modules:</p> <ul style="list-style-type: none"><li>. Changing Travel Behaviour</li><li>. Traffic Management and the Environment</li><li>. Transport Policy and Finance</li><li>. Travel Demand Analysis</li></ul> <p>Acquisition of (3) is through teaching on the following modules:</p> <ul style="list-style-type: none"><li>. Strategic Planning and Policy Making</li><li>. Transport Economics and Appraisal</li><li>. Transport Policy and Finance</li></ul> <p>Acquisition of 4 is through teaching and research related to the following modules:</p> <ul style="list-style-type: none"><li>. Research for Policy and Practice</li><li>. Dissertation</li></ul> <p>Throughout, the learner is encouraged to undertake independent reading both to supplement and consolidate what is being taught/learnt, and to broaden his/her individual knowledge and understanding of the subject.</p> <p><b>Assessment</b></p> <p>Testing of knowledge and understanding is through assessed coursework (literature review, reports and essays), examinations, oral presentations; each requiring independent research.</p> <p>The knowledge base will be developed through assessment related to work on projects and investigative tasks which are debated in group discussions and in individual tutorials and group presentations.</p> |
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## B: Intellectual skills

### By the end of the programme, the student should be able:

1. To 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. To plan strategies and tactics in response to unusual and unexpected situations;
3. To synthesise information and create and evaluate new approaches in the resolution of complex problems;
4. To apply theory to the practical resolution of complex problems;
5. To design and implement a research proposal in response to complex problems;
6. To reflect on own educational progress and professional practice.

### Teaching/learning methods and strategies

Intellectual skills are particularly developed through teaching on the research-based module and the application of that learning to projects, investigative tasks and the dissertation. Hence, these skills are most closely associated with:

- . Research for Policy and Practice
- . Strategic Planning and Policy Making
- . Transport Policy and Finance
- . Traffic Management and the Environment
- . Travel Demand Analysis
- . Changing Travel Behaviour

All include the development of skills 1-4, and 6. The modules which, in particular, require the development and evaluation of options to problems are:

- . Traffic Management and the Environment
- . Transport and Society
- . Transport Economics and Appraisal

The culmination of the development of intellectual skills is the preparation of the :

- . Dissertation (skill 5)

### Assessment

A variety of assessment methods is employed. The learner's acquisition of intellectual skills is assessed through:

- . the literature review submitted in respect of the module Transport & Society
- . essays requiring independent research/reading;
- . reports following projects and investigative tasks;
- . presentations
- . examination (skills 1,3 and 4)
- . the dissertation

## C: Subject, Professional and Practical Skills

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| <p><b>By the end of the programme, the student should be able:</b></p> <ol style="list-style-type: none"><li>1. To apply modelling techniques in the analysis of transport problems.</li><li>2. On the basis of analysis and through the application of comparative study, design solutions to complex transport planning problems.</li><li>3. To evaluate and justify alternative approaches to transport problems and to accurately assess and report on own/others work.</li><li>4. To demonstrate an awareness of the ethical dilemmas likely to arise in research and professional practice.</li></ol> | <p><b>Teaching/learning methods and strategies</b></p> <p>The skills (1-3) are developed through teaching and the conduct of projects and investigative tasks which require the learner to apply intellectual reasoning and a practical use of technical skills such as modelling. These skills are acquired in the following modules:</p> <ul style="list-style-type: none"><li>. Travel Demand Analysis</li><li>. Transport Economics and Appraisal</li><li>. Traffic Management and the Environment</li><li>. Changing Travel Behaviour</li></ul> <p>Skill (4) is developed through teaching and learning of the following module:</p> <ul style="list-style-type: none"><li>. Research for Policy and Practice</li></ul> <p>Skill (4) may be developed further during the preparation of the Dissertation.</p> <p><b>Assessment</b></p> <p>Subject, professional and practical skills (1-3) are assessed through essays and through reports on projects and other investigative tasks.</p> <p>Skill (4) is developed and assessed formatively in group discussions and presentations during the workshops on the Research for Policy and Practice module. Depending upon the nature of the dissertation, such issues may arise in the course of its preparation, and will then be assessed as part of the dissertation.</p> |
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## D: Transferable skills and other attributes

### By the end of the programme, the student should be able:

1. Communication and presentations - to be able to engage in a full professional and academic communication with others in the transport and planning fields, and with non-specialist audiences.
2. Planning and management of learning - demonstrate authority in study and use of resources and make professional use of others in support of self-directed learning.
3. IT Skills - to be able to apply computing techniques to the creation of complex databases, to the analysis of data, and for the application of quantitative models.
4. Team working - to be able to work effectively as a member of a team

### Teaching/learning methods and strategies

Skill (1) is developed through formative groupwork and seminars, and summative presentations during a range of modules and during the process of preparing the dissertation. The specific modules on which this skill group is acquired are:

- . Strategic Planning and Policy Making
- . Transport Economics and Appraisal
- . Transport Policy and Finance
- . Transport and Society
- . Dissertation (including seminar presentation of research to tutors and fellow students)

Skill (2) is acquired through managing workloads towards common hand-in dates for all taught modules and through the research-based modules:

- . Research for Policy and Practice
- . Dissertation

Skill (2) is also developed on the modules which require independent inquiry and where there is group work, notably:

- . Strategic Planning and Policy Making
- . Travel Demand Analysis
- . Traffic Management and the Environment
- . Dissertation

Skill (3) is taught and applied on the following modules:

- . Travel Demand Analysis
- . Traffic Management and the Environment
- . Transport Economics and Appraisal
- . Changing Travel Behaviour

Depending on the nature of the learner's independent learning programme, skill (3) may also be applied in the:

- . Dissertation

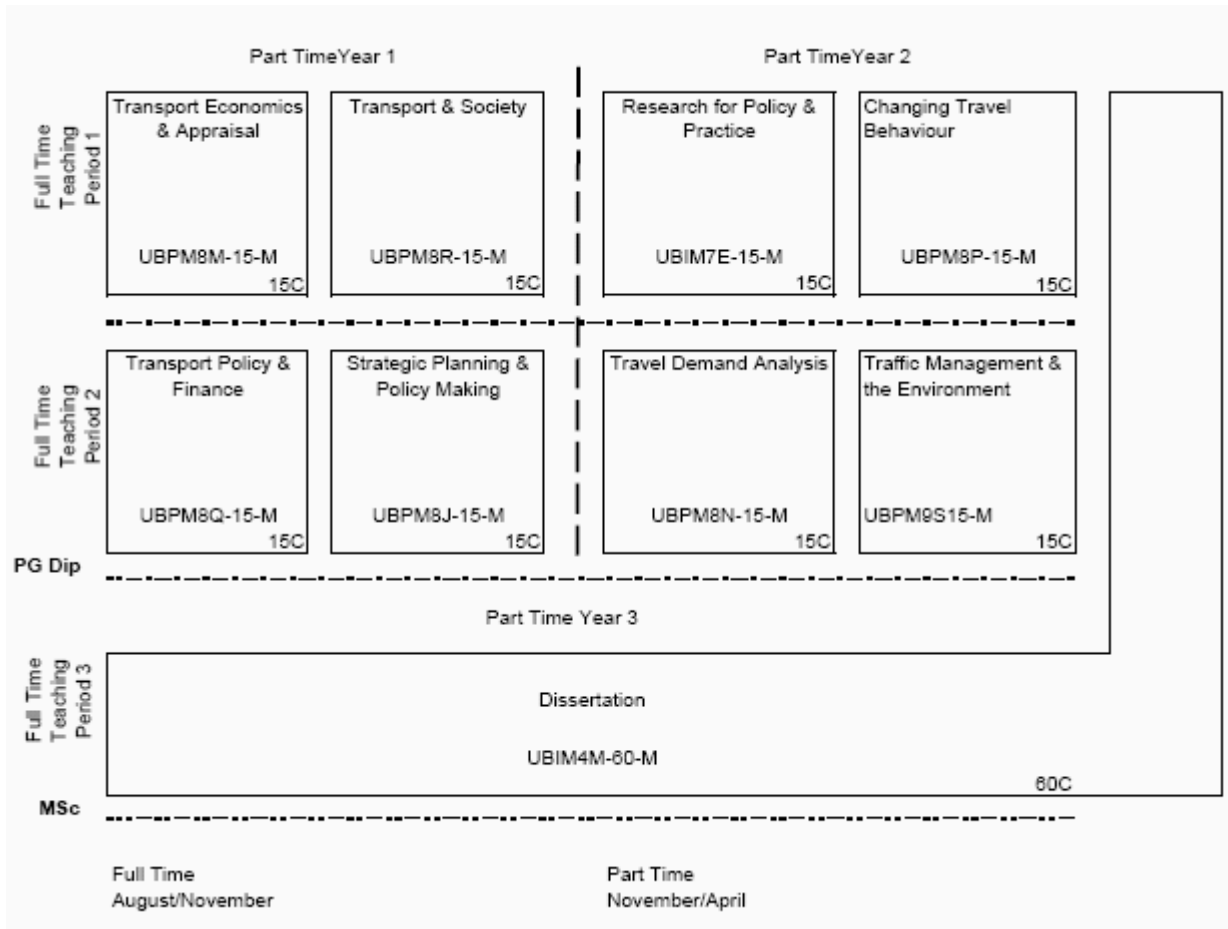
### Assessment

Skill (1) is assessed in the group presentations (Strategic Planning and Policy Making, Transport Economics and Appraisal, Transport Policy and Finance), through reports on tasks requiring investigation, and through the dissertation.

Skill (2) is assessed through essays and reports on projects and investigative tasks and through the dissertation.

Skill (3) is assessed through the reports on the technical tasks set on the projects.

## Section 4: Programme structure



All modules are at 'M' level.

The programme is offered on a full-time and part-time basis but may be developed for distance learning in the future.

The modules are delivered on a day-release basis; where possible on two consecutive days per fortnight for part-time students, i.e. six sessions of two days in Teaching Period 1 and six in Teaching Period 2. Full-time students attend both year one and year two part-time sessions.

## Core modules

| Level M  |
|--|
| UBPM8P-15-M: Changing Travel Behaviour (15)              |
| UBIM4M-60-M: Dissertation (60)                           |
| UBIM7E-15-M: Research for Policy and Practice (15)       |
| UBPM8J-15-M: Strategic Planning and Policy Making (15)   |
| UBPM9S-15-M: Traffic Management and the Environment (15) |
| UBPM8R-15-M: Transport & Society (15)                    |
| UBPM8M-15-M: Transport Economics and Appraisal (15)      |
| UBPM8Q-15-M: Transport Policy and Finance (15)           |
| UBPM8N-15-M: Travel Demand Analysis (15)                 |

## Target Award

### MSc Transport Planning

180 credits at level M, comprising the PG Diploma plus the Dissertation

## Default Award

None

## Interim Awards

Postgraduate Diploma Transport Planning

120 credits at level M comprising Research for Policy and Practice, plus 105 credits of core and optional modules as specified (excluding the Dissertation)

Postgraduate Certificate Transport Planning

60 credits at level M (excluding the Dissertation)

## Section 5: Entry requirements

Entrants to the Programme should ideally hold an honours degree and have some professional or other relevant experience. Students with backgrounds in a broad range of disciplines will be eligible: for example, geography, planning, engineering, economics, mathematics, and environmental sciences. Appropriate equivalent academic or professional qualifications and experience will, however, also be evaluated for the extent to which they meet the entry requirements. Hence, mature students who do not meet the ideal requirements but who have relevant professional experience at the appropriate level and satisfy the programme leader (by interview, portfolio and/or submission of a piece of prepared work) of their potential ability to cope with the programme of study will be eligible.

## Section 6: Assessment Regulations

This programme is assessed under the current version of the Modular Assessment Regulations

## Section 7: Student learning: distinctive features and support

### Content

The particular value of this course is that it puts transport and travel - the complex socio-economic-psychological set of relations that lead to the mobility of people and movement of goods into the broader environmental and planning context. The Faculty covers most of the built environment disciplines and students from across these disciplines all study the research-based modules: Research for Policy and Practice and the Dissertation. The students from this programme will be taught together with students on the MA programme in Town and Country Planning on the modules Strategic Planning and Policy Making and Traffic Management and the Environment. They will also undertake a week-long field course together. This interaction of disciplines is a particular strength of the Faculty. The need for this breadth of knowledge and understanding was highlighted in the Rees Jeffreys report "Transport Skills for the New Millennium". In the section on the skills and qualifications required by transport planners the report states "... what is increasingly required is a blend of knowledge and skills from the other disciplines (i.e., planning and economics). It cannot be sufficiently emphasised that transport policy and planning today requires a multi-disciplinary approach".

### The European Dimensions

A particular characteristic of the Faculty is the knowledge and understanding of European problems and solutions in the built environment. Much of the research carried out by the Research Centres in the Faculty has been at the European scale, funded by the European Union and a number of major research projects have been undertaken on European Spatial Planning and in European practice in urban transport. The general interest in European issues in the built environment, and in particular, the output of the research projects, has influenced the content of the programme. European issues are hence a cross-cutting theme, although particularly addressed in Transport Economics and Appraisal and Transport Policy and Finance.

### Interactions between Transport and Spatial Planning

Particular emphasis is placed upon the inter-relationship between travel behaviour and pressures for spatial development. This aspect is developed by virtue of the scope of the programme (e.g., by incorporating spatial planning in transport modules such as Transport and Society) and through sharing modules such as Strategic Planning and Policy Making, which contains the field course, with postgraduate students from other disciplines, in particular Town and Country Planning.

### Travel Behaviour

Travel behaviour arising from the choices of individuals is perhaps the most significant determinant of effectiveness of national governments' transport policies. Issues of travel behaviour are highly relevant to transport planning, policy and practice. The concepts of travel behaviour are developed using a wide range of theories, understandings and issues relating to behavioural sciences and their applications in transport planning (mainly within the module Changing Travel Behaviour).

### IT Modelling Procedures

The award is characterised by a strong emphasis on the application of modelling techniques to traffic and transport issues and problems. Modelling techniques will be employed at the urban level, to forecast the demand for travel.

Modelling techniques are also applied in the design of junctions and traffic systems, including traffic lights (module on Traffic Management and the Environment).

### Professional Contacts



Finally, the programme is characterised by its strong links with external practitioners including the leading transportation consultancies and local authorities within the region and beyond. Demand from local authorities and consultancies for graduates with key skills in transport planning contributed to the origins of this programme. The content of the programme has been determined, to some extent, by the requirements of these external bodies. Input to the delivery of individual modules from specialist practitioners is also a key feature of most of the taught modules.

## **Section 8: Reference points/benchmarks**

The following reference points and subject benchmark statements have been drawn upon in the design of the programme.

### **CONTEXT**

Transport issues are a major challenge within our society. We take almost unrestricted mobility for granted and benefit materially from industry being able to move goods rapidly and cheaply to meet our needs. These many freedoms and demands have led to problems of congestion and environmental consequence that have become intolerable, particularly within urban areas and at the global environmental level. There is a need to educate those who will be tackling the issues, not just in the techniques of managing traffic, but in the broader aspirations of people and communities. The demand for suitably qualified people has been recognised at the national and regional levels.

#### **National perspective**

In September 2000 the Rees Jeffreys Road Fund published a report on research into the demand for transport skills at national level (Transport Skills for the New Millennium B Billington and H Wenban-Smith, Landor Publishing, September 2000). This report concludes that there is a clear danger that the supply of skilled (transport) professionals will not keep pace with rising demand. Specifically in relation to Transport Planning and Policy the research identified a strong increase in the need for professional input. The report concluded that this demand will be led by the public sector but will also affect the private sector. Particular skills requirements include modelling and economic, environmental and financial appraisal. Having reviewed established postgraduate courses the report concludes that there is scope for broadening content to include more on environmental issues, transport and planning and the development of interpersonal skills.

#### **Regional perspective**

The origins of the masters programme lie in an approach by a number of external bodies, notably Bristol City Council, the Ove Arup Foundation and the First Group Ltd, who between them were seeking:

- a source of supply within the region of graduates and postgraduates with understanding and skills in transport planning;
- the availability of a transport course at postgraduate level for the training of existing staff;
- a centre for research into transport issues, located within the region.

As well as support for the new Research Centre for Transport and Society, the three named bodies helped the Faculty to establish a Chair in Transport.

The swift development of collaborations since the establishment of the Centre for Transport and Society with transport organisations and bodies in the South West region such as the Chartered Institute of Transport and Logistics, the SW Regional Assembly, the local authorities, consultancies, and First Group has confirmed the need for both postgraduate education in transport within the South West and the research and consultancy skills with which it is underpinned.

#### **Subject Benchmark Statement**

The subject benchmark group to which transport planning is attached has been the subject of past debate within the QAA. The key skills required in transport planning span both engineering and town and country planning. Although transport planning is included within the engineering subject benchmark domain, the engineering subject benchmark statement relates to undergraduate programmes only. QAA has confirmed that there is no subject benchmark statement for engineering at postgraduate level.

#### **NATIONAL REVIEW OF TRANSPORT SKILLS**

A key reference point already referred to is the report commissioned by the Rees Jeffreys Road Fund "Transport skills for the New Millennium" by Billington and Wenban-Smith, September 2000. This document has been influential on the content of the course and its method of delivery.

The report concludes that whilst there is a variety of full-time masters level courses available, the previous close connection with engineering studies is becoming weaker and courses are attracting students from a wide range of other disciplines, but there is scope for some further broadening of content to include more on environmental issues,

transport and planning and the development of personal skills.

#### REQUIREMENTS OF PROFESSIONAL AND STATUTORY BODIES

The programme is accredited by the Chartered Institute of Logistics and Transport and gives access to full membership of the Institute following a period of relevant work experience.

Consideration will be given to whether further accreditation arrangements with bodies such as the Institution of Highways and Transportation (IHT) can and should be developed.