

UNIVERSITY COLLEGE DUBLIN

NATIONAL UNIVERSITY OF IRELAND, DUBLIN

REGIONAL AND URBAN PLANNING

SESSION 2000/2001

University College Dublin

Regional and Urban Planning

CONTENTS

	Page
Introduction: The Department of Regional and Urban Planning	4
Degree of Master of Regional and Urban Planning (MRUP)	
Admission Requirements and Procedures	7
Examinations	7
MRUP Course Curriculum	8
MRUP Course Structure	9
First Year Course Syllabus	10
Second Year Course Syllabus	14
Degree of Master of Science (Planning) by Thesis	18
Degree of Master of Science (Urban Design)	19
Degree of Doctor of Philosophy	20

INTRODUCTION: THE DEPARTMENT OF REGIONAL AND URBAN PLANNING

The Department of Regional and Urban Planning is one of more than ninety departments which make up University College Dublin. Regional and Urban Planning is one of the constituent departments within the Faculty of Engineering and Architecture. Because of the eclectic nature of planning, the Department also maintains close links with a wide range of other departments, courses and specialisms within the University. The Department is located at Richview, Clonskeagh which adjoins the Belfield campus.

The welfare of societies, economies and the environment is increasingly dependent upon the unique perspective which members of the planning profession can bring to bear upon global and regional problems. Regional and Urban Planning is a profession engaged in guiding the development of the physical environment, 'natural' and man-made, in response to the needs of society. As environmental problems increase in complexity and the rate of change of societies accelerates, the need for planning becomes ever greater. The profession embraces a wide variety of disciplines, including the social and behavioural sciences and the design professions, in order to understand and analyse the relationships between man and the environment (see diagram on page 6).

Within this broad framework, the primary goal of the Department of Regional and Urban Planning is to serve Irish society through the development of the art and science of planning. Because it is the only planning school in the Republic of Ireland, its approach to that goal is broad-based, involving a wide variety of socio-economic and land use issues ranging from the detail of a local action area plan to the broader strategies of metropolitan and regional development. Reflecting the needs of the country, the course places special emphasis on the positive promotion of development in a planned and orderly fashion. This national interest is reflected in the course structure and the Department's educational and research endeavours.

Stemming from this philosophy, the major objectives of the Department are:

- to provide planners with knowledge, planning skills and the ability to adapt these to changing circumstances and the needs of society;
- to foster an awareness of the social dimension of planning and development and to
 ensure that planning policies and practices promote equality of opportunity so as to avoid
 or eliminate discrimination against any group in society;
- to add to planning knowledge and to improve practice and planning procedures through the promotion and publication of research;

Regional and Urban Planning

- to advance planning education through the continuing revision of the programme and the adoption of new and more effective methods of teaching and learning;
- a practical commitment to public service in the areas of development and the environment and the development of links with the community through applied research;
- to further planning and development education and Continuing Professional Development through public lectures, seminars and workshops and to cooperate with professional institutes, other educational organisations, public and private bodies and community groups in the provision of such educational services;
- to strengthen links with other planning schools and institutes through continued participation in exchange programmes, membership of international planning organisations and committees and participation in international programmes.

The philosophy of the Department is one of service, based on concepts of social justice, economic efficiency and the effective delivery of public service. The Department seeks to continually improve the quality of the educational inputs through staff development programmes. In turn this leads to a continuing enhancement of graduate knowledge, skills and values which transmit to planning practice and increases acceptability of graduates by employers. In addition, the Department is increasingly linked into developments at European Union level, and the implications of EU policies and directives are integrated into all the Department's teaching and research activities where appropriate.

The Department's goals and objectives are realised through a range of programmes described in this booklet.

University College Dublin

DEGREE OF MASTER OF REGIONAL AND URBAN PLANNING

The Master of Regional and Urban Planning is a full-time postgraduate course extending over four semesters. This course is intended to give planners the necessary understanding of the processes of planning and to develop in them the capacity to co-operate with professionals in related disciplines. It provides an understanding of the physical, social and economic aspects of the human environment, and of the systems of government and organisations of society which affect its condition. Emphasis is placed on the development of professional skills for identifying, analysing and solving a variety of planning problems.

The course content is subject to continuous review to facilitate response to changing academic and professional requirements at the national, European and international scales.

The programme leads to a professional qualification which is recognised for planning practice in Ireland, Great Britain and internationally. The course is also recognised by the Planning and Development Divisions of the Surveying institutions in Ireland and Great Britain.

ADMISSION REQUIREMENTS AND PROCEDURES

Candidates for admission to the programme, leading to the Degree of Master of Regional and Urban Planning, must have obtained a degree in Architecture or in Engineering, or at least a Second Class Honours degree in Economics, Geography or Sociology/Social Policy and Social Work, or some other qualification approved by the Faculty. The number of places is limited

Candidates seeking admission should obtain an application form from the Department of Regional and Urban Planning, University College Dublin, Richview, Clonskeagh, Dublin 14 (Telephone: +353-1-7062711; Fax: +353-1-7062788; e-mail: planning@ucd.ie). Applicants will be required to satisfy an interview board as to their suitability and their interest in planning before being allowed to enter on the course. They must also supply the names of academic referees and confirm the results of their undergraduate studies.

EXAMINATIONS

There are two examinations, the First Examination and the Degree Examination. Examinations may be held either at the end of each semester or at the end of each year. Candidates will be required to complete a thesis in the fourth semester. Candidates who fail to submit theses before the end of the course will normally be required to resit the Degree Examination.

MRUP COURSE CURRICULUM

The course covered during the first year of the MRUP programmes (semesters 1 and 2) includes:

History of Development and Planning

Social Structure and Organisation (including Planning for Minorities)

Economics and Land Use Planning

Design and the Urban and Rural Environment

Conservation and Landscape Planning:

- (a) Conservation and Landscape
- (b) Environmental Impact Assessment and the Landscape

Development and Infrastructure

Transportation

Policy Analysis and Decision-making

Social Surveys and Research Methods

Planning Administration

Studio Planning Projects Study Tour

The course content of the second year (semesters 3 and 4) is:

Regional Planning and Settlement Systems

Planning Practice

Planning Philosophy and Theory

Planning Law

Demography Analysis and Forecasting Models and Techniques

Rural Development and Management

The Practice and Techniques of Development

Comparative Spatial Planning Experience

Specialised Studies

Thesis

Students may be allowed an element of choice in the selection of courses, outside the core subject areas.

MRUP COURSE STRUCTURE

The programme is undertaken through a series of lectures, seminars, tutorials, workshops, planning exercises (projects), specialised studies and the preparation of a thesis.

The major focus of study throughout the course is on the planning of change in the physical environment to meet the needs of society, and all other subjects are considered in relation to this central theme. In each field of knowledge, a balance is sought between the theoretical and the practical to ensure a broadly-based education which is directly related to professional practice.

There are three major components within the course of studies - knowledge, skills and values/attitudes. Within this framework, the objectives for each year may be summarised as follows:

YEAR 1 (Semesters 1 and 2)

- To provide an understanding of the built environment, its design, construction and servicing.
- To provide an understanding of the social and economic systems which interact to influence the nature of the environment.
- To provide detailed knowledge of planning administration and of the wider political and administrative systems within which it must operate.
- To provide students with a knowledge of planning techniques and their application.
- To introduce students to the planning policy tools and incentives necessary for promoting, implementing and controlling development.
- To introduce students to concepts of social equality and to promote an awareness of the needs of various sections of the community.

YEAR 2 (Semesters 3 and 4)

- To develop a greater understanding of the theoretical basis of planning and its implementation.
- To examine the means and extent of community participation in the planning process.
- To provide an understanding of planning legislation and its application in practice.
- To undertake in-depth studies in areas of planning concern within the framework of the specialised courses and options.
- To enable students to select an area for concentrated thesis research which allows each candidate both to specialise and to develop particular interests.

Exercises are conducted, where possible, in real situations, in co-operation with planning authorities or interest groups.

FIRST YEAR COURSES (Semesters 1 and 2)

RUPP001 History of Development and Planning

This introductory course, offered over one semester, has the following objectives:

- to develop in students an awareness and an appreciation of the continuing relevance of many historical events and the importance of an historical perspective to the understanding and evolution of contemporary problems;
- (ii) to generate an understanding of the principal forces which have been responsible for the evolution of the landscape in its present form;
- (iii) to enable students to identify and understand the significance of the legacy of historical objects in the rural and urban environment; and
- (iv) to trace the genesis and development of a Modern Town Planning movement and to assess its contribution to environmental improvement during this century.

The course deals with the evolution of settlement patterns, the growth of urban pressures on the landscape and the evidence of planned approaches to manage change in an orderly manner. A second component of the course examines the growth and achievements of a planning movement during this century and seeks to assess the achievements of this movement.

The course has a strong Irish focus which is firmly rooted in international theories and experiences.

RUPP002 Social Structure and Organisation (including Planning for Minorities)

This course, offered over one and a half semesters, provides a critical overview and introduction to selected themes within urban sociology, placing the subject within a broader sociological discourse. Urban sociology is depicted as both an analytic perspective and as an object of study. Some of the major themes of sociological endeavour which are of interest to urban and rural life are explored, namely class, race and gender. The component of the course relating to planning for minorities deals with questions of equal opportunities, social justice and diversity of cultures.

The format of the course consists of a mix of lectures and discussions.

RUPP003 Economics and Land Use Planning

This foundation course focuses upon the important relationships between economics and land use planning and management. The objective of the course is to provide an understanding of the manner in which economic forces interact at national, urban and regional level influencing the allocation of resources and land use patterns. The course introduces students to relevant macro and micro economic theories and concepts as well as to concepts of economic measurement, means of government intervention and the fundamentals of micro-economic policy formulation in the context of their spatial implications. The course runs for one semester.

RUPP004 Design and the Urban and Rural Environment

The purpose of this course, offered over two semesters, is to develop the prospective planner's abilities to critically understand, organise and manage the urban, spatial and physical environment, and to appreciate its influence on the daily experience of its inhabitants.

Amongst the objectives of the course are:

- the development of students' design capabilities;
- the stimulation of students' powers of observation and analysis;
- the engendering of an awareness of the importance of design and its influence on the lives of people;
- the provision of an understanding of how change occurs in the physical environment and the constraints imposed by the existing physical fabric on the design process.

RUPP005 Conservation and Landscape Planning

This course consists of two complementary elements. In the first, the fundamental principles of environmental conservation are examined. Students' attention is focused on the nature of the environment, its different physical/biological components and their limited assimilative and carrying capacity. The course focuses on the dependence of man on the resources of air, soil, water, plant and animal life and on the promotion of the wise use of these resources. Measures aimed at controlling pollution and the abatement of nuisances, the adoption of preventive rather than curative actions and environmental protection policy and instruments are also examined. This course also involves a field study.

The second part of the course deals with Environmental Impact Assessment and the Landscape. This part of the course describes the legislation and methodology for carrying out an E.I.S. in compliance with S.I.349 of 1990 and S.I.25 of 1990 with special reference to landscape change in Ireland.

RUPP006 Development and Infrastructure

This course consists of two principal elements. The first deals with infrastructure in relation to planning. It offers an introduction to the main physical infrastructure elements: water supply, sewerage systems and other forms of waste disposal, energy and telecommunications. The course also covers new approaches in relation to sustainable water and waste management, implications of ITC infrastructure for development at local, regional and national levels, and issues of infrastructure management and finance.

The second part provides students with an introduction to Irish construction technologies, to the building processes and to building control and regulation in Ireland. A final element of the course provides for an introduction to minimum standards in relation to noise, light etc.

RUPP007 Transportation

The course introduces the students to the evolution of the role of land use planning in relation to transportation. The basic concepts and stages of the traditional traffic model (trip generation, trip distribution, modal split and assignment) are discussed, including relevant survey and projection techniques. The course deals with traffic engineering aspects that are closely related to the practice of land use planning, such as traffic management, traffic calming, car parking, and the basic principles of geometric design including housing layout and road junction design.

The course also focuses on aspects of transportation policy relating to the environment and the contribution of planning to a reduction in the need to travel. Particular attention is paid to the components of transportation policy - public and private - at the spatial level, ranging from local to national and EU, and having particular regard to the most recent policy guidelines for planners. The contribution of transport infrastructure to local and regional development is examined. The implications of information technology and telecommunications are discussed in a regional strategic planning context. The course also illustrates the basic approach of cost-benefit appraisal in major transportation projects, including environmental impact assessment. The theoretical and technical elements of the course will be complemented by a series of lectures and seminars focusing on current transportation and urban planning issues in practice.

RUPP009 Policy Analysis and Decision-making

The module on Policy Analysis for planners focuses upon the rationale for policy intervention, the forms of intervention, criteria for policy evaluation, the means of achieving policy change and the role of the planner in these processes. This part of the course also addresses the need for an international and, in particular, European dimension to Policy Analysis.

The second part of this course deals with Management and Decision-making, including consideration of decision techniques. These techniques are used to organise and to generate information to aid in decision-making. The course will involve a number of case-studies on how planning decisions are reached, the techniques used to assist the decision-making process and the consultations involved.

The overall aim of the course is to enable students to develop a more rigorous basis for decision-making under conditions of uncertainty.

RUPP010 Social Surveys and Research Methods

Advances in planning knowledge rest heavily upon a continuing improvement in the understanding planners have of the methods of scientific inquiry. The increasing social awareness of the population, together with the uniqueness of problems, call for ever more refined research skills. Collection of the proper data requires skills in problem identification. The formulation of hypotheses, the choice of empirical techniques and interpretation of data are also covered. Part of the course is taught using an array of computer analysis techniques.

RUPP011 Planning Administration

This course aims to give a broad introduction to the institutional landscape of public administration in Ireland, the framework within which planning is carried out. It is based on the premise that planning is a political act which has a technical, a legal and an administrative content. Much of the course is devoted to an analysis of how the administrative content relates to the technical and legal aspects and how all of these are contained within the political envelope. The course provides students with an understanding of the institutional context of both central and local government and a comparative insight into the British and Northern Irish administrative systems.

RUPP012 Studio Planning Projects

This course is conducted throughout the first year of study (semesters 1 and 2). A sequence of projects are undertaken to develop the skills and problem-solving abilities needed in town planning practice. In the initial projects, emphasis is placed on learning to observe and make records of the formal and spatial environment, and on developing skills of graphic expression. Surveys and analyses of existing areas are done prior to preparing a plan for a residential area layout. The aim of these projects is to understand the inter-relationship of land uses and to develop the ability to understand and manage land use change.

Study Tour

Each year the study tour is related to aspects of UK and EU planning problems and practice.

SECOND YEAR COURSES (Semesters 3 and 4)

RUPP013 Regional Planning and Settlement Systems

This course, offered over one semester, is offered for three principal reasons:

- (i) To demonstrate the need for a national-regional planning structure and to show the inadequacy of local planning proposals devised without reference to such a framework.
- (ii) To show that within the Republic of Ireland there has been a lengthy search for a rational and optimum settlement framework to accommodate future development having regard to the economic and social goals set out in government policy. Such development frameworks have been envisaged within an integrated planning system incorporating national, regional and local planning activities.
- (iii) To assess the success or failure of regional planning as an interventionist tool in the spatial investment processes.

The course deals with the fundamentals of regional policy theory and practice in respect of both Ireland and developments within the European Union. These developments in regional policy are related to the availability of regional planning structures and instruments.

RUPP014 Planning Practice

The purpose of this course is to examine the practice of town planning in Ireland. The making of development plans, the control of development, urban design, urban renewal and conservation, together with the related financial problems are discussed. The course content is continuously brought up to date through a constant supply of new problems, new methods, new solutions, new procedures and so on, within the overall specification laid out for the course. Again, as an example to illustrate this point, students have been able to gain some insights into how the Dublin City Development Plan is prepared and implemented.

RUPP015 Planning Philosophy and Theory

Introduction to the philosophical concepts that underpin physical planning, including the common good, values, value systems and rationality against the backdrop of developing notions of science and the new emphasis on environment and sustainability. The course offers an introduction to, and critical appraisal of, the rational-comprehensive model as applied in planning practice. The course also deals with resolution of conflicts in the various roles of the practising planner. The interventionist function of planning in a mixed or market economy as an example of the pursuit of the common good is explored.

RUPP016 Planning Law

This course is related to and builds on Administration (RUPP011) by studying the legal structures involved in the implementation of the planning process.

The objectives of the course are to introduce the principles of the Irish legal system, to explain the law relating to administration (with particular emphasis on local government) and to provide a clear working knowledge of the Planning Acts and Regulations.

RUPP017 Demography Analysis and Forecasting

This course embraces two elements. The first element imparts an understanding of statistical demography, since planners, in common with other social scientists, share a need to comprehend population movements which are so often the determinants of social change. For a proper understanding of population changes and their interrelationships with changes in social attitudes/values, some elementary knowledge of demographic methods is essential.

The second strand of the course focuses on forecasting. The objective here is:

- (1) to familiarise the planner with the strengths and weaknesses of the various techniques of forecasting;
- (2) to develop reasonable competence in their use;
- (3) to develop the capacity to prepare and/or to critically review population forecasts and projections.

RUPP025 Models and Techniques

The aim of this course is to familiarize the student with a number of quantitative techniques and underlying theories that find frequent application in urban and regional planning. The first component of the course deals with theories and techniques frequently used in retail planning (such as central place theory and the gravity model), principles and examples of planning models, and methods of regional economic analysis (e.g. economic base theory and input-output analysis). The second component deals with techniques in the areas of plan generation and plan evaluation. A central feature in the course is the application of such techniques by the student using standard computer software packages, in particular spreadsheets.

RUPP019 Rural Development and Management

The objectives of this course are to provide participants with an understanding of:

- the dynamics of rural economies, how they work and where planning fits in;
- how to develop area-based planning strategies, with particular reference to identifying and achieving consensus;
- achieving implementation of an area based strategy;
- funding mechanisms for rural planning and development;
- rural settlement management;
- environmental management issues;
- role of the planner in local area development.

RUPP019 Rural Development and Management (Contd.)

This course focuses on contemporary rural planning and development issues within the Republic of Ireland. The development element of the course will examine opportunities for rural development, the role of state, semi-state and EU initiatives, bottom up development and the funding of development. The management element of the course will focus on the role of development plans as management tools, the conservation of the rural environment and the management of rural tourism and of housing in the countryside. Experience of rural planning issues is also covered through the rural field trip which includes relevant related topics.

RUPP020 The Practice and Techniques of Development

The objectives of this course seek to provide the planning students with a clear and detailed appreciation of the interrelationship between planning, development, the property development markets and the building and property industries, cost and valuation relationships, trends in property development incentives and tax related issues. The course also offers an introduction to the roles of financial institutions in the commercial property funding market.

The course also deals with the definition of development objectives, the means of forecasting land use demands and the requirements of occupiers of land and property. The course introduces students to the various forms of economic and financial analysis in both public and private sector developments as well as to the agencies and organisations operating in the development process. Methods of controlling project costs and programmes are discussed as is the relationship between initial costs and user costs. Later sections of the course deal with development proposals in practice by means of site visits and case studies. It also includes an assessment of the social and environmental implications of various developments, having due regard to market forces, political and financial constraints and the need to interrelate projects in space and time. The course also covers the principles and practice of project management.

RUPP021 Comparative Spatial Planning Experience

Within the framework of the European Spatial Planning Programme, this course is designed to give students an understanding of comparative planning practice in other relevant European countries. The course will pay particular attention to the development of E.D.S.P. and other EU planning material and their adoption and implementation within various Member States.

RUPP022 Specialised Studies

The Department offers two parallel fields of Specialised Studies to final year students. These afford students an opportunity to study in greater depth particular themes of importance to planning practice. The two themes of Specialised Study are:

- (i) Form and Design in Local Planning;
- (ii) Regional Planning and Policy.

Each Specialised Study comprises a mix of project work, targeted lectures and seminars, supported by appropriate application of IT based techniques.

RUPP024 Thesis

In the final year, the programmes are so arranged as to permit maximum possible time for reading and research towards the completion of a dissertation. Each student is required to submit, at an interview, an outline of a proposed thesis topic for approval by the department. Choice of thesis topics is related to the chosen specialised study area (see RUPP022 above). The thesis programme is underpinned by a series of lectures and seminars on research methods (particularly course RUPP010), presentation techniques and the orderly development of themes.

Regulations

Candidates for the Degree Examination must submit their theses by the required date in the academic year in which they sit for their final written examination. Candidates who fail to meet this requirement will normally be required to re-sit the entire Degree Examination. Where a re-submission of thesis is required, the submission must be made at the beginning of the second semester. The presentation of a thesis must conform with Department and University regulations.

Student Requirements

Students will be expected, at their own expense, to provide drawing materials and equipment, typed papers, and to participate in all organised study tours.

Planning Internship

Students are expected to spend the vacation at the end of the first year in employment with an approved planning agency.

DEGREE OF MASTER OF SCIENCE (PLANNING) (MSc)

This degree is offered in the Department of Regional and Urban Planning to address the needs of both the planning profession and society which require a greater focus on planning research. This degree parallels the existing professional MRUP programme and it complements a PhD programme. In addition, this research degree may be viewed as a means of career development for professionals and a practical response to available research funding in specific circumstances.

Public policy and practice at the levels of Local Authority, Regions, National Government and the EU, require the enrichment and understanding available through high quality, well-run research into all facets of planning, and the MSc (Planning) provides a means to address these challenges.

The MSc (Planning) is a one year, full-time research degree. In certain circumstances completion may be allowed over a two-year period on a part-time basis but with no extension of time limits beyond two academic years. The degree will be awarded on the completion of a thesis based on a topic agreed by the Department, supervised by approved staff. Where specific topics require external skills, it is envisaged that these would be brought in on a tutorial basis in consultation with the research thesis supervisor and with the approval of the Head of Department.

Entry Requirements for MSc (Planning)

Normally, candidates will hold an honours level basic degree and the DipTP (UCD), the MRUP degree or an equivalent qualification. Exceptionally, graduates from cognate fields with a good planning based topic may be considered.

DEGREE OF MASTER OF SCIENCE (URBAN DESIGN) MSc (Urban Design)

The degree is offered on an inter-departmental basis by the School of Architecture and the Department of Regional and Urban Planning. The degree is administered and supervised by a Joint Academic Board for MSc (Urban Design) drawn from both Departments.

Candidates for the Degree of Master of Science (Urban Design) must obtain the permission of the Faculty before entering the course. The course is open to architects, planners and landscape architects with a professional degree, normally at honours level. Civil engineers and chartered surveyors may be admitted subject to examination.

The degree is offered as a one year, full-time (46 weeks) programme which may be taken as a part-time programme divided over two years to facilitate secondment from employment.

Mode 1

A candidate must carry out a research project, or a series of research projects under the direction of the Supervisor recommended by the Joint Academic Board for MSc (Urban Design) and approved by the Faculty. The thesis presented by the candidate is to embody the results of this or these research projects. A candidate may be required to pass an oral examination on the subject matter of the thesis if the examiners so decide. The Board may require that candidates should attend specified available courses in the School of Architecture and the Department of Regional and Urban Planning.

Mode 2

The Mode 2 programme has a significant research orientation, with a coherent sequence of studio projects and an Irish- or European-based research assignment, leading to the production of a thesis. It is underpinned by a core lecture programme. Options are available from courses in the School of Architecture and the Department of Regional and Urban Planning, to ensure that candidates have an adequate inter-disciplinary background for research. Each candidate must carry out the programme under the direction of the supervisor(s) recommended by the Joint Academic Board for MSc (Urban Design). The course will be subject to prerequisite specified course requirements which will be assessed according to the candidates' professional and academic background; for example, architectural candidates may be required to take predominantly planning-oriented optional subjects, whilst candidates from a planning background may be required to take design-based prerequisites. Core and optional courses will be examined, and studio and placement activities will be assessed and will contribute to the marking of the degree. The structure is based on a twelve-month programme of studies as follows: Core Courses; Optional Courses; Urban Design Studio; Research Assignment and Thesis.

Applications to the course must be received by the end of July.

DEGREE OF DOCTOR OF PHILOSOPHY (PhD)

Candidates for this degree are required to be admitted by the Faculty on the recommendation of the Professor; their admission must then be confirmed by the Academic Council. Candidates who have not graduated in this University may be admitted if suitably qualified.

No candidate can be allowed to enter on a course of study and research for the Degree of PhD unless he/she has reached a high Honours standard at the examination for the primary degree or presented such other evidence as will satisfy the Professor and the Faculty of his/her fitness.

The degree is normally taken six semesters after the MRUP or an equivalent qualification.

Candidates for the PhD Degree will be allowed six years from the date of registration in which to complete their degree. If they have not done so within that period, they must reapply for registration.

The thesis must normally be prepared under the supervision of the Professor, but the Faculty may, on the recommendation of the Professor, assign another member of the staff to supervise the candidate's research, under the Professor's general direction. The thesis must be prepared in the University, unless permission is given to the candidate to work elsewhere under the Professor's general direction. Such permission will only be given to candidates who have attended courses in the University for twelve terms before admission to the course for the PhD.

Candidates may be required to take an oral examination on the subject matter of their thesis.

This degree will not be awarded unless the examiners report that the work is worthy of publication, as a whole or in part, as a work of serious scholarship.

For details regarding presentation and examination of PhD theses, please see the *UCD Postgraduate Prospectus*.