

## 2006-2007 Graduate Calendar

The information published in this Graduate Calendar outlines the rules, regulations, curricula, programs and fees for the 2006-2007 academic years, including the Summer Semester 2006, the Fall Semester 2006, the Winter Semester 2007 and the Summer 2007.

For your convenience the Graduate Calendar is available in PDF format.

If you wish to link to the Graduate Calendar please refer to the [Linking Guidelines](#).

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- The Association of Universities and Colleges of Canada

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## **Disclaimer**

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The Office of Graduate Program Services has attempted to ensure the accuracy of this on-line Graduate Calendar. However, the publication of information in this document does not bind the university to the provision of courses, programs, schedules of studies, fees, or facilities as listed herein.

## **Limitations**

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The University of Guelph reserves the right to change without notice any information contained in this calendar, including any rule or regulation pertaining to the standards for admission to, the requirements for the continuation of study in, and the requirements for the granting of degrees or diplomas in any or all of its programs.

The university will not be liable for any interruption in, or cancellation of, any academic activities as set forth in this calendar and related information where such interruption is caused by fire, strike, lock-out, inability to procure materials or trades, restrictive laws or governmental regulations, actions taken by the faculty, staff or students of the university or by others, civil unrest or disobedience, or any other cause of any kind beyond the reasonable control of the university.

The University of Guelph reaffirms section 1 of the Ontario Human Rights Code, 1981, which prohibits discrimination on the grounds of race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, sex, sexual orientation, handicap, age, marital status or family status.

The university encourages applications from women, aboriginal peoples, visible minorities, persons with disabilities, and members of other under-represented groups.

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## Resource and Environmental Economics

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### PhD Program

The PhD in Resource and Environmental Economics is offered collaboratively by the Departments of Economics, and Food, Agricultural and Resource Economics. Students apply to and enroll in one of these departments and the degree is awarded in the subject area of that department.

The objective of the PhD program is to provide opportunities for advanced study in this specialized area of economics. The theoretical and practical issues that are addressed in this field demand the attention of highly trained professionals who are competent in a wide range of skills, have an understanding of the relevant economic theory, quantitative methods and institutions, and are familiar with the biological and ecological aspects of environmental and natural resource management.

### Admission Requirements

Applicants to the PhD program should have a master's degree in economics or agricultural economics with a minimum average of 80% ('A-') in their postgraduate studies. Applicants without a master's degree but with an outstanding record at the baccalaureate level may be admitted initially to the MA program in economics or MSc program in agricultural economics. For students who achieve a superior record and show an aptitude for research, the Board of Graduate Studies, on the recommendation of the department, may authorize transfer to the PhD program without requiring the student to complete a master's degree.

### Degree Requirements

The PhD requires the completion of a minimum of 12 courses (see below). Students with an MA or MSc typically will have completed some of the required courses (or their equivalents) already and, when appropriate, these may be accepted in lieu of required courses. The minimum duration for the PhD is nine semesters of full-time study (or the equivalent).

Two of the required courses satisfy the quantitative methods requirement, one satisfies an interdisciplinary requirement, and the remaining courses prepare the student for the qualifying examinations. These take place in core economic theory and in two fields of specialization. The first field is natural resource and environmental economics and the second is selected by the student from the field offerings of the two departments. The first phase of the qualifying exams covers microeconomic and macroeconomic theory and is written at the end of the first year, normally before the beginning of classes in the fall semester. The second phase covers the fields of specialization and includes an oral defense

of a thesis prospectus. This phase of the exam is taken during the seventh semester of the program. Upon satisfactory completion of the qualifying exams, the student becomes a candidate for the PhD degree. The following summarizes the program requirements:

### Economic Theory

All students must satisfy the economic theory requirement by successfully completing the following four courses and by successfully completing the qualifying examination in economic theory.

|           |                         |
|-----------|-------------------------|
| ECON 6000 | Microeconomic Theory I  |
| ECON 6010 | Microeconomic Theory II |
| ECON 6020 | Macroeconomic Theory I  |

### Resource and Environmental Economics

All students must satisfy the field requirement in natural resource and environmental economics by successfully completing the following four courses.

|           |                                     |
|-----------|-------------------------------------|
| AGEC 6610 | Economics of Renewable Resources    |
| AGEC 6700 | Advanced Resource Economics         |
| ECON 6800 | Environmental Economics             |
| ECON 6810 | Economics of Nonrenewable Resources |

### Economic Research Methods:

All students must satisfy the economics research methods requirement by successfully completing a minimum of the following courses:

|              |                              |
|--------------|------------------------------|
| AGEC 6100    | The Methodology of Economics |
| ECON 6140    | Econometrics I               |
| Plus ONE of: |                              |
| AGEC 6360    | Mathematical Programming     |
| ECON 6160    | Econometrics II              |

### Additional course requirements:

All students must successfully complete a further TWO graduate courses as approved by the advisory committee and Graduate Coordinator in the department in which the student is enrolled. At least one of these courses must be from among the offerings of the Departments of Economics and of Food, Agricultural and Resource Economics. Please consult the course listings for these departments in this calendar.

### Thesis Proposal:

By the end of a student's fifth semester and only after the microeconomic theory comprehensive examination has been passed, they must prepare and submit a written proposal of their thesis and defend this in an oral examination.

### Research Paper:

By the end of a student's sixth semester and only after the microeconomic theory comprehensive examination has been passed, they must prepare a research paper of an acceptable PhD standard under the supervision of at least one faculty member from either the Departments of Economics or of Food, Agricultural and Resource Economics.

When a student is deemed to have satisfied all of the above requirements, they will have passed the "Qualifying Examination" requirement as set out by the Faculty of Graduate Studies. At this point, the student becomes a "candidate" for the PhD.

### Thesis

Submission and defense of an acceptable thesis on a topic approved by the student's advisory committee completes the requirements for the PhD. The thesis is expected to be a significant and original contribution to knowledge in its field and must demonstrate scholarship and critical judgment on the part of the candidate. Theses must be submitted within 24 months of completing the minimum duration.

### Courses

Please consult the Food, Agricultural and Resource Economics and Economics listings for descriptions of the courses available to students in the shared PhD program in resource and environmental economics.