# FST FACULTY OFFICE

## *MPhil/PhD in Environmental Studies*

**Introduction**

The Faculty offers the interdisciplinary degree in Environmental Studies which can be supervised by members of any department.

**Entry Requirements**

MPhil Candidates require at least an Upper Second Class Honours degree with a strong background in the area in which they wish to undertake their research. All research students are normally expected to register initially for the MPhil degree but may later, with suitable progress, be upgraded to register for the PhD degree. In cases where the candidate already has an MPhil degree (or equivalent), direct entry to the PhD is possible.

**Availability of Expertise and Resources**

Admission is contingent upon whether candidates have a thesis proposal compatible with the expertise and resources available in any department within the Faculty.

**Areas of Study**

Major research interests of staff members in the Faculty are: -

- Environmental Pollution
- Energy and the Environment
  - Renewable Energy Resource Assessment
  - Clean Energy Technologies (including: Solar PV, Solar Thermal, Wind Energy, Marine Energy, Bioenergy, Energy Efficiency, Energy Storage, Integrated Energy Systems)
  - Sectoral Energy Use (Transport, Residential, Construction, Commercial, Tourism, Water, Utilities)
  - Social and Environmental Impact of Energy Sector
  - Long-range Alternative Energy Planning
  - Energy Economics
  - Energy Policy

**Course of study**

Students in the MPhil and PhD degree programmes are required to successfully:

1. Complete a minimum of six credits of coursework for MPhil/nine credits of coursework for PhD,
2. Present seminars (2 for MPhil/3 for PhD), and
3. Submit a thesis.

**Courses**

Content courses in this programme are available through the MSc programmes available in any department of the Faculty. Students should discuss with their supervisor suitable courses which would satisfy the credit requirements. Courses should be completed in the first year.

**Compulsory Seminar Presentations**

For each seminar, candidates are required to write and present a paper to be photocopied and distributed beforehand on a topic arising out of their research, as well as to field questions put to them afterwards.

**Thesis**

Candidates are required to present and defend a thesis of acceptable scope and quality for the degree. The thesis must follow the guidelines set out in the University's Thesis guide.

**Award of the Degree**

The successful completion of the required coursework, the compulsory Seminar presentations and the Thesis will lead to the award of the Degree.

## LIST OF COURSES

**Compulsory for All Students**

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| FPAS 6000 | Scientific Literature Review |

**Available to All Students as necessary**

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| FPAS 6010 | Basic Statistics for Graduates |
| FPAS 6020 | Writing a Scientific Paper |
| FPAS 6030 | Research Methods |

**Compulsory for All Students depending on their Programme**

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|---|---|
| GRSM 6001 | MPhil Research Seminar 1 |
| GRSM 6002 | MPhil Research Seminar 2 |
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| GRSM 8001 | PhD Research Seminar 1 |
| GRSM 8002 | PhD Research Seminar 2 |
| GRSM 8003 | PhD Research Seminar 3 |
| | |
| ENVT 6990 | MPhil Environmental Studies |
| ENVT 8000 | PhD Environmental Studies |

Research Students may also be permitted (with the approval of their Supervisor) to take courses from other offerings within the Faculty.

# COURSE DESCRIPTIONS

**Courses are listed here in alphanumeric order by Course Code – i.e. Subject Code followed by Course Number. Descriptions for all Subject codes are given in the next section.**

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**COURSE CODE: FPAS 6000**
**TITLE: Scientific Literature Review**
**CREDITS: 3**

**Description**
The course will formally teach MPhil and PhD students how to prepare an extensive review of the literature pertaining to a scientific topic. This will guide students on how to study and evaluate the literature on a given topic and write a comprehensive essay on it. The course will also demonstrate the use of pertinent search engines, discipline-specific traditional reference sources, as well as software for managing reference lists and creating bibliographies.

**Assessment**
Pass/Fail based on satisfactory attendance at the lectures and computer laboratory classes and on the adequacy of the written literature review and research proposal.

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**COURSE CODE: FPAS 6010**
**TITLE: Basic Statistics for Graduates**
**CREDITS: 3**

**Description**
This course will acquaint postgraduate students that have not majored in Mathematics or Statistics with the fundamental ideas of modern applied statistic and provide an opportunity for the students to use a computer language in the study of this subject.

This course will be one of the course options for the postgraduate research students in the Faculty of Science and Technology. Students in Science and Technology outside BSc in Mathematics are not required to take Statistics courses in their undergraduate studies. This course then provides these students with basic statistical knowledge/skills needed for their research which they would not have had previous knowledge of.

**Assessment**
50% Coursework; 50% Final Examination

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**COURSE CODE: FPAS 6020**
**TITLE: Writing a Scientific Paper**
**CREDITS: 3**

**Description**

This course is a "How to" type. It will equip MPhil and PhD postgraduate students with the knowledge, skills and experience to enable them to write a scientific paper from their own results. More importantly, this course is a guide to the steps in the process of writing clear and effective scientific papers. The evaluation is based on the scientific paper produced at the end of the course.

This course is one of the course options for the postgraduate students in the Faculty of Science and Technology and is available to all **research** postgraduates. The Scientific Literature Review course focuses on developing the literature review needed for the thesis. This course will support and equip the postgraduate students with the knowledge, skills and practical experience to enable them to write a complete scientific article that can be potentially submitted to a refereed journal for publication. If students do not have results/data at the time of enrollment of the course, raw data can be provided for them by their individual supervisor.

**Assessment**

100% Coursework

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**COURSE CODE: FPAS 6030**
**TITLE: Research Methods**
**CREDITS: 3**

**Description**

This course introduces postgraduate students to the basic ideas about conduction research. Students will learn methods for reading technical papers, selecting research topics, devising research questions, planning research, project management and ethics. The evaluation is based on the assignments throughout the course and a final project report and presentation.

This course is available to all **research** postgraduates in the Faculty of Science & Technology. These courses help to provide the students with the knowledge, skills and practical experience to develop and manage their research. Conceptualizing and implementing novel research can be an overwhelming task. Postgraduate students are more often just injected into current research interest of their supervisor. The student is unaware of what was involved in getting the project started from conceptualizing idea, designing the research question, designing the experiments to best answer the questions, ethical research standards, and project management.

**Assessment**

100% Coursework

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**COURSE CODE: GRSM 6001 (common to all MPhil students)**
**TITLE: MPhil Research Seminar 1**
**CREDITS: 0**
**Description**

This is the first of two research seminars to be presented by the MPhil student.

**Assessment**

Pass/Fail

**COURSE CODE: GRSM 6002 (common to all MPhil students)**
**TITLE: MPhil Research Seminar 2**
**CREDITS: 0**

**Description**
This is the second of two research seminars to be presented by the MPhil student.

**Assessment**
Pass/Fail

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**COURSE CODE: GRSM 8001 (common to all PhD students)**
**TITLE: PhD Research Seminar 1**
**CREDITS: 0**

**Description**
This course is the first of three research seminars to be presented by the PhD student.

**Assessment**
Pass/Fail

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**COURSE CODE: GRSM 8002 (common to all PhD students)**
**TITLE: PhD Research Seminar 2**
**CREDITS: 0**

**Description**
This is the second of three research seminars to be presented by the PhD student.

**Assessment**
Pass/Fail

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**COURSE CODE: GRSM 8003 (common to all PhD students)**
**TITLE: PhD Research Seminar 3**
**CREDITS: 0**

**Description**
This is the last of three research seminars to be presented by the PhD student.
**Assessment**
Pass/Fail

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**COURSE CODE: ENVT 6990**
**TITLE: MPhil Environmental Studies**
**CREDITS: 0**

**Description**
Students are required to register for this section every semester and are expected to produce a thesis of approximately 50,000 words under the supervision of a member of Faculty.

**Assessment**
Pass/Fail

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**COURSE CODE: ENVT 8000**
**TITLE: PhD Environmental Studies**
**CREDITS: 0**

**Description**
Students are required to register for this section every semester and are expected to produce a thesis of approximately 80,000 words under the supervision of a member of Faculty.

**Assessment**
Pass/Fail