Catalog of Postgraduate Programs and Curricula

Curriculum for MPhil(MATH) (For students admitted in 2010-11)

Program Requirements for Master of Philosophy (MPhil) Program in Mathematics

Credits

- 1. To complete **24 credits** in Mathematics or related fields, normally at least 18 credits of which are mathematics courses at PG level.
- 2. Students with a first degree in an area other than mathematics may be required to take additional courses.

Postgraduate Seminar

All full-time students are required to take and pass MATH 600 *Mathematics Seminar* in their first 4 semesters of studies. Maximum number of credits to be earned from this course is 4.

MPhil Thesis and Thesis Examination

- 1. To conduct research and enroll in MATH 699 MPhil Thesis Research; and
- 2. To defend the MPhil thesis successfully.

Concentration

In addition to the existing program requirements, students who opt for the **Scientific Computation concentration** are required to:

- Complete MATH 6915 (1-credit), which cannot be counted toward the credit requirements;
- Complete one computation related course from the list below as a part of the 24 credits of required coursework:

| MATH | 5311 | Advanced Numerical Methods I |
|------|------|---|
| MATH | 5312 | Advanced Numerical Methods II |
| MATH | 5350 | Computational Fluid Dynamics for Inviscid Flows |
| MATH | 5360 | Weather, Climate and Pollution |
| CHEM | 5210 | Computational Chemistry |
| PHYS | 5410 | Numerical Modeling in Physics |

- Conduct research in the area of scientific computation; and
- Give a one-hour seminar on the related research within their first four regular terms of study.