

Graduate Programme in Mathematics by Research (Ph.D.)

Graduation Requirements for students admitted from AY2009/10

1. Pass the [Ph.D. QE](#) by the 24th month of the candidature, and
 2. Pass MA5198 Graduate Seminar Module in Mathematics, and
 3. For those with a Master of Science (M.Sc.) in Mathematical Sciences from a reputable university (subject to departmental approval):
 - May apply to transfer credit of up to 2 modules (8 MCs) to their current candidature;
 - Pass six other MA modules at level 5000 or higher, with at least two from the Basic Module List and a minimum of 24 MCs;
- For those without M.Sc. qualification:
- Pass eight other MA modules at level 5000 or higher, with at least four from the Basic Module List and a minimum of 32 MCs; and
 4. Obtain satisfactory grade in Advanced English course, for a foreign student who is not exempted from it, and
 5. Obtain a minimum [Cumulated Average Point \(CAP\)](#) of 3.50 or an average grade of at least B, and
 6. Complete a thesis to the satisfaction of the examination panel.

BASIC MODULE LIST

- MA5203 Graduate Algebra I
- MA5204 Graduate Algebra IIA or MA5218 Graduate Algebra IIB
- MA5205 Graduate Analysis I
- MA5206 Graduate Analysis II or MA5217 Graduate Complex Analysis
- MA5209 Algebraic Topology
- MA5210 Differentiable Manifolds
- MA5213 Advanced Partial Differential Equations
- MA5232 Modelling and Numerical Simulations
- MA5233 Computational Mathematics
- MA5241 Computational Harmonic Analysis
- MA5243 Advanced Mathematical Programming
- MA5245 Advanced Financial Mathematics
- MA5248 Stochastic Analysis in Mathematical Finance
- MA5259 Probability I
- MA5260 Probability II
- MA5269 Optimal Stopping and Stochastic Control in Finance

NOTES FOR Ph.D. QE

- a) There are two components for the Ph.D. QE and a student has to pass both components to be considered to have passed the Ph.D. QE.
- b) A student must pass the comprehensive (written) examination, not later than week 2 of the fourth semester of the candidature, before he/she is allowed to sit for the qualifying (oral) examination.
- c) A student must pass the qualifying (oral) examination **by the fourth semester (24th month of the candidature)**.
- d) To be eligible to sit for the qualifying (oral) examination, a student must have
 - passed the comprehensive (written) examination, and
 - passed at least three of the modules mentioned in points 2 and 3 above, and
 - obtained a minimum CAP of 3.50 on at least two of the modules passed.
- e) A student who was admitted in and prior to AY2013/14 and who have not read MA5204 Graduate Algebra II, will be allowed to read MA5204 Graduate Algebra IIA and MA5218 Graduate Algebra IIB, and use one of them to count towards the 'Basic Module List'.

Continuation Requirement

A student will be issued a warning for any semester in which his/her CAP falls below 3.50.

If in the following semester, the student's CAP again falls below 3.50 but is above 3.00, he/she will be placed on probation.

The candidature of a student may be terminated if he/she obtains the following:

1. A CAP of less than 3.00 for two consecutive semesters;
2. A CAP of less than 3.50 for three consecutive semesters.

For research scholars who do not meet the continuation requirements, their monthly stipend or scholarship/fee waiver may be terminated without notice. Reinstatement will be reviewed after the scholar meets the continuation requirement.

CAP for continuation is computed based on all modules read (be it pass or fail), regardless of whether they are counted towards graduation later on.

Updated 30 June 2014

Updated 30 June 2016

Updated 11 May 2017

Updated 6 August 2018