

Master's Degrees Awarded by the Minor Field

In certain circumstances, a PhD candidate may earn a master's degree in the minor field instead of the major field. These degrees are not part of a special dual-degree program but are considered independent master's degrees as authorized by the Code of Legislation of the Graduate Faculty, May 2009 Edition, Sec. III.A.1. Such degrees are awarded for a level of work commensurate with that required for a non-thesis master's degree awarded by the minor field to its own PhD candidates upon admission to candidacy. They are awarded by the minor field by agreement with and in cooperation with the major field.

Cornell will award at most one master's degree to any student. Thus a student enrolled in a PhD or MS/PhD program who is awarded a master's degree in the minor field is not eligible for a master's degree in the major field.

Field Participation and Responsibilities

Only pairs of major/minor graduate fields approved by the Graduate School may participate in this program. New pairs of fields wishing to participate may apply jointly to the Graduate School for approval. The approved major/minor pairs as of July 1, 2009 are listed below.

The member of the student's special committee representing the minor field awarding the master's degree is primarily responsible for ensuring that all requirements for the degree are met.

Minor fields are expected to advertise the availability of this degree to eligible students.

Student Eligibility

A PhD candidate wishing to receive a master's degree from the minor field must apply formally to the Graduate School. The student must have obtained approval from all members of the special committee, including and especially those members representing the major field and the minor field awarding the master's degree. There is an application form available from the Graduate School for this purpose. The application must be submitted at the time of admission to candidacy (that is, at the time of the A-exam).

Formal registration in the minor field is not required.

Amendments

Amendments to the published requirements for master's degrees awarded under this program must be approved by a majority vote in the field awarding the degree and must be endorsed in writing or by email by the DGS of all major fields whose students are eligible to receive a degree in that minor field. Documentation of these approvals must be communicated to the Graduate School for ratification by the General Committee.

Minor amendments for a particular student, such as the substitution of one course for another, may be made on a case-by-case basis by the special committee. Such minor amendments should be approved by the DGS of the minor field but need not be communicated to the Graduate School.

General Requirements and Administration

To be eligible for a master's degree awarded by the minor field, the student must be enrolled in one of the designated PhD or MS/PhD programs at Cornell and must satisfy the following general requirements.

1. 4 residence units
2. a member of the minor field awarding the degree on the special committee
3. passing an A-exam in the student's major field of study.

In addition, there will be other field-specific requirements as determined by the field awarding the degree.

The member of the student's special committee representing the minor field awarding the master's degree is primarily responsible for supervising the content of the program of study as it pertains to that degree. That member must be present at the A-exam. It is expected that substantial progress toward fulfilling the requirements for the master's degree will have been made by the time of the A-exam, and a suitable demonstration of understanding at the A-exam will be expected. It is up to the special committee, especially the member representing the minor field awarding the degree, to interpret these statements, but a strict interpretation is recommended. It is not necessary for all requirements to have been met at the time of the A-exam, but the degree will not be awarded until all requirements are satisfied.

When all requirements have been satisfied, the approval form should be filled out, signed by all members of the special committee and DGS of the minor field awarding the degree, and a copy submitted to the graduate office of that minor field.

Special Circumstances

If the student should leave the PhD program or transfer to a different major field that is not one of the approved major fields for that minor field, the student may still receive the master's degree in the minor field if all other requirements have been met.

Financial Support

Financial support will still be the responsibility of the major field.

Master of Science (MS) in Mathematics

Eligibility

The student must be enrolled in the PhD or MS/PhD program in Computer Science at Cornell.

Requirements

1. 4 residence units
2. a member of the Graduate Field of Mathematics on the special committee
3. passing an A-exam in the student's major field of study
4. Four of the following six courses:
 - Analysis: Math 6110 (Real Analysis) and Math 6120 (Complex Analysis).
 - Algebra: Math 6310 and Math 6320.
 - Topology/geometry: Math 6510 (Algebraic Topology) and Math 6520 (Differentiable Manifolds).At least one course must be selected from each of the three areas analysis, algebra, and topology/geometry.
5. One other one-semester course in Mathematics numbered 6000 or above.

All courses taken in fulfillment of these requirements must be taken for grade credit, and grades of B- or better in all coursework are required.

Master of Science (MS) or Master of Arts in Teaching (MAT) in Education

Eligibility

The student must be enrolled in the PhD or MS/PhD program in Mathematics at Cornell.

Requirements

1. 4 residence units
2. a member of the Graduate Field of Education on the special committee
3. passing an A-exam in the Field of Mathematics and a Master's exam in the Field of Education
4. Course and thesis requirements that are at the time normally required of students enrolled in the Field of Education for the same degree (MS or MAT). A thesis used to satisfy the MS degree requirements cannot be substantially the same as a thesis used by the student in Mathematics or another field.
5. For the MAT in Education, the student must also satisfy requirements associated with teaching experience that are at the time normally required of students enrolled in the Field of Education for the same degree (MAT).

Master of Science (MS) in Computer Science

Eligibility

The student must be enrolled in a PhD or MS/PhD program in Mathematics, Applied Mathematics, or Information Science at Cornell.

Requirements

1. 4 residence units
2. a member of the Graduate Field of Computer Science on the special committee
3. passing an A-exam in the major field of study
4. knowledge of CS 2110, CS 3110 and CS 4410/4411
5. two of the following courses: CS 5410 or CS 6410 (not both), CS 6110, CS 6120, CS 6320, CS 6820
6. in addition to 4 and 5, any two CS courses numbered 4000 and above (lecture/practicum pairs such as CS 4120/4121, CS 4320/4321, CS 4620/4621, and CS 4700/4701 count as one course).

All courses taken in fulfillment of these requirements must be taken for grade credit, and grades of B- or better in all coursework are required.