

Master of Arts in Mathematical Philosophy

THE DEPARTMENT OF PHILOSOPHY at the University of Notre Dame offers a Master of Arts in Mathematical Philosophy degree (MAMP). The goal of this degree is to produce skilled and creative scholars who will be able to use advanced formal techniques in their professional activities and go beyond the non-philosophical paradigms in their particular areas of interest. The program does not offer financial support. It is intended for students who are already at Notre Dame pursuing a PhD. The degree requires coursework, plus a serious interdisciplinary project leading to a written thesis.

Admission to the Program

Admission is limited to students who are pre-approved. Before formally applying to the Graduate School, a student should find an adviser in the Philosophy Department who agrees to help the student prepare a plan of study and to supervise, or at least co-supervise, the interdisciplinary project or thesis. The plan of study also needs the approval of the student's advisor in their home department. Once the plan of study is ready, the DGS and the Graduate Studies Committee in the Philosophy Department decide whether to recommend the student to the Graduate School for admission. A student who has been recommended in this way applies formally.

Advisers

The student will receive input on the interdisciplinary project from two advisers, one in the Philosophy Department, and one in their home department. The Philosophy adviser helps the student choose appropriate courses and plan an interdisciplinary project that goes beyond what the student may be doing toward another degree.

Plan of Study

The plan of study should both expand the student's philosophical horizons and develop their expertise in the intended area of application. The Graduate Studies Committee in the Philosophy Department will evaluate each student's proposal in consultation with appropriate faculty members from the student's home Department. The student's plan of study includes courses in the Philosophy Department, courses in other departments relevant to the interdisciplinary project, and a briefly described proposal for the interdisciplinary project. The plan of study requires the approval of the DGS in the Department of Philosophy, the student's adviser, and

the DGS of the cooperating department. Once approved, the proposed plan of study goes to the Graduate School, where it is the official plan against which the student's progress is measured.

Degree Requirements

The program of study for the MAMP consists of a core philosophy component and an interdisciplinary component for a course requirement of 24 credit hours. Work toward the project or thesis makes up 6 credits, for a total of 30 credit hours.

The Philosophical Core Component

The core component is a solid requirement of philosophy from courses offered by the Department of Philosophy. It consists of 12 credit hours.

To ensure a background in formal methods of mathematical philosophy, the student is expected to either complete the Philosophy Department's Intermediate Logic course or demonstrate competence in its contents, and also complete at least one seminar in *advanced logic* (beyond the content of Intermediate Logic), *formal epistemology*, *evolutionary game theory*, *decision or social choice theory*, or *foundations of modern physics*. (Math students, or philosophy students who take the logic sequence in math, don't need to take the Philosophy Department's intermediate logic.)

The Interdisciplinary Component

The interdisciplinary component accounts for the additional 12 credit hours. These can be met by an appropriate selection of courses in any graduate discipline at Notre Dame that makes serious use of formal methods. At most nine credit hours can be double-counted (i.e., counted toward the PhD in another department).

Thesis or Project

The final requirement for the interdisciplinary degree in mathematical philosophy is the master's thesis. This is designed to connect the philosophical core to the other discipline that the student intends to pursue. For a student pursuing a PhD in another department, the master's project or thesis represents extra work, not a chapter in the PhD thesis.

The MAMP thesis is written and defended in accordance with the standard procedures of the Graduate School.

Further Information

For further information regarding the Master of Arts in Mathematical Philosophy,
please contact:

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