

Undergraduate Certificate in Logic and Formal Reasoning

The certificate in Logic and Formal Reasoning provides students with the opportunity to engage in a series of courses unified around the idea that logic and formal reasoning is a general skill, useful in a wide variety of academic contexts and applications. This certificate can be completed entirely within philosophy or with a more interdisciplinary course plan.

Students who complete the certificate will be well-versed in formal methods of reasoning.

Code	Title	Hours
Introductory Course - choose one of the following (or another by permission):		3
EECS 210	Discrete Structures	
MATH 450	Discrete Mathematics	
PHIL 148	Reason and Argument	
Symbolic Logic		3
PHIL 310	Introduction to Symbolic Logic	
Advanced Course - choose two of the following courses (or others by permission):		6
MATH 500	Intermediate Analysis	
MATH 558	Introductory Modern Algebra	
PHIL 610	Metalogic	
PHIL 666	Rational Choice Theory	
ECON 490	Game Theory	
Total Hours		12

At the completion of this program, students will be able to:

- evaluate the cogency of argumentative discourse, provide reasons for this evaluation, and express these reasons clearly to a variety of audiences.
- argue clearly and persuasively for a position, recognizing its weaknesses and developing its strengths.