Decision Science (BS)

Major Academic Advisor: Connie Angermeier (PH 208A); Faculty Director: Linda Babcock (PH 319B)

Carnegie Mellon University is one of the leading centers in the world for the study of Decision Science. The interdisciplinary field of Decision Science seeks to understand and improve the judgment and decision making of individuals, groups, and organizations. Behavioral decision theories draw on insights from a diverse set of disciplines, including cognitive and social psychology, as well as economics, statistics, and philosophy.

Course content in the Decision Science major fosters an understanding of (a) the cognitive, emotional, social, and institutional factors that influence judgment and choice, (b) normative (formal) models of rational inference and choice, and (c) ways to improve how well judgments and decisions are made by individuals, businesses, and governments.

Research insights are being used in applications as diverse as medicine (e.g., providing better information to physician and patients), law (e.g., determining whether manufacturers have fulfilled a duty to inform), public policy (e.g., analyzing risks, setting environmental standards), marketing (e.g., simplifying choices), and management (e.g., improving expert judgment and teamwork).

This major prepares students for advanced study in academic fields and professional schools (e.g., law, medicine, public health), as well as careers in management, consulting, finance, government and research in the public, non-profit, and private sector. The major emphasizes basic skills and concepts that enhance students’ ability to understand and improve the decisions that they and others face.

This is a suggested schedule for the first 2 years for a Primary Major. It is also available as an Additional Major.

The remainder of the Major and GenEd can be completed in the junior and senior year.

1st semester (49 units)
- 36-201, Statistical Reasoning
- Complete 1:
  - 76-101, Interpretation & Argument
  - 79-104, Global Histories
  - Freshman Seminar
- 99-101 or 99-102, C@CM
- 21-120, Diff. & Integral Calculus*
- 88-120, Reason, Passion & Cogn.
- xx-xxx, Elective**

2nd semester (45 units)
- Complete 2:
  - 76-101, Interpretation & Argument
  - 79-104, Global Histories
  - Freshman Seminar
- 36-202, Statistical Methods
- xx-xxx, Elective**
- xx-xxx, Elective**

3rd semester (45 units)
- 88-220, Policy Analysis I***
- 88-251, Empirical Res. Methods
- 88-302, Behavioral Decision making OR 85-211, Cognitive Psychology
- xx-xxx, Elective**
- xx-xxx, Elective**

4th semester (45 units)
- 85-211, Cognitive Psychology
  OR 88-302, Behavioral Decision Making
- 88-252, Casual Inference in the Field or other Analytic Methods Prereq****
- xx-xxx, Elective**
- xx-xxx, Elective**
- xx-xxx, Elective**

*If required to start with 21-111, complete 21-112.
**Elective: This space can be used for a pre-requisite course, another GenEd course, major course, or for a course you are interested in.
***73-230 Intermediate Microeconomics is accepted as a substitute for 88-220.
****Courses that fulfill the Analytic Methods requirement.