Carnegie Mellon University
Dietrich College of Humanities and Social Sciences

Decision Science (BS)

Major Academic Advisors: Lizzy Stoyle (Last Names A-F, PH 208G) or Connie Angermeier (Last Names, G-Z, PH 208A); Faculty Director: Gretchen Chapman (PH 219F)

Carnegie Mellon is one of the leading centers for the study of Decision Science - and offers the only undergraduate major that integrates analytical and behavioral approaches to decision making. The interdisciplinary field of Decision Science seeks to understand and improve the judgment and decision making of individuals, groups, and organizations.

Decision Science is grounded in theories and methods drawn from psychology, economics, philosophy, statistics, and management science. Courses in the major cover the three aspects of decision science: (a) normative analysis, creating formal models of choice; (b) descriptive research, studying how cognitive, emotional, social, and institutional factors affect judgment and choice, and (c) prescriptive interventions, seeking to improve judgment and decision making.

Our faculty are involved in applying Decision Science in a wide variety of areas, allowing them to share practical experiences with students. These applications include medical decision making (e.g., conveying the costs and benefits of treatment options), legal decision making (e.g., reducing the effects of hindsight bias on attributions of responsibility for accidents), risk management (e.g., assessing and communicating the risks of climate change), marketing (e.g., understanding the effects of inter-temporal choice on purchasing decisions), and business (e.g., identifying unrecognized conflicts of interest).

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)	2nd semester (45 units)	3rd semester (45 units)	4th semester (45 units)
•36-200, Reasoning with Data •Complete 1: First-Year Writing (FYW) 79-104, Global Histories Freshman Seminar •99-101, C@CM •21-120, Diff. & Integral Calculus* •88-120, Reason, Passion & Cogn. •73-102: Principles of Micro.	•Complete 2: First-Year Writing (FYW) 79-104, Global Histories Freshman Seminar •36-202, Statistical Methods •xx-xxx, Elective** •xx-xxx, Elective**	•88-251, Empirical Res. Methods •88-302, Behavioral Decision making OR 85-211, Cognitive Psychology •xx-xxx, Elective** •xx-xxx, Elective** •xx-xxx, Elective**	•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.
***Courses that fulfill the Analytic Methods requirement.