

NETWORK SCIENCE

PHD PROGRAM AT NORTHEASTERN

The **Network Science PhD at Northeastern** is an interdisciplinary doctoral degree program that provides the conceptual and mathematical tools needed to describe and predict networks in an ever-evolving field. Students learn a range of network-based approaches and are expected to become proficient in relational (graph-based), mathematical, and algorithmic techniques, as well as fundamental network theories that can be used to explain mechanisms and processes of networks across domains—in physical, technological, informational, and social systems.

The field draws on theories and methods from many disciplines, including graph theory from mathematics, statistical mechanics from physics, data mining and data visualization from computer science, inferential modeling from statistics, social structure from sociology, and information structure from informatics. Network science offers powerful theories and methods that integrate and extend advances from these fields to many real-world applications.

Current Network Science students explore diverse areas of research including:

- Disease, health and health care, biological function, and ecology
- Political and economic processes
- Social and technical infrastructures
- Team performance and group decision-making
- Evolution of knowledge acquisition and innovation

ADMISSIONS

The application deadline for Fall 2023 is **December 15, 2022**.

Historically, there has been a high number of applications for limited number of seats, and the admission committee was selective. The following material must be included as part of your application:

- **Personal Statement**
- **Transcripts from all institutions attended**
- **3 letters of recommendation**
- **GRE scores recommended but not required**
- **Proof of English proficiency**
(TOEFL exam, IELTS exam, Duolingo exam, or a degree earned at an institution where English is the medium of instruction)

FINANCIAL AID

The financial support typically involves a stipend, tuition waiver, and health insurance; for a total award of approximately \$63,000. This award amount is subject to change. Stipend responsibilities can include both teaching and/or research responsibilities.

CAREER PATH

Network Science is establishing itself as a major interdisciplinary research area with applications in data science and data analytics methodologies. Network scientists are employed in academia, government, and business. Applied network scientists work at Internet and social media companies.