

# Network Science, Minor

The goal of the network science minor is to introduce students to the theories, tools, methods, and topics within the emerging and growing field of network science. Network science is defined as the measurement, modeling, prediction, and visualization of meaningful interactions and interconnectivity of social, physical, and technological systems. Network science skills are in increasing demand across industries including business, biology, life sciences, engineering, and science. For example, network science is used in business and sociology to study social networks such as friendship networks or networks of interlocking boards of directors. In biology, network science is used to study networks of gene expressions. Network science skills are in high demand for analysts, scientists, and managers who are tasked with analyzing and modeling network data. The study and skills required for network science are inherently interdisciplinary, including topics related to math, computer science, and contextual applications of network methods (in fields such as communications, economics, and epidemiology, among others).

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Network Science Core

Code	Title	Hours
Complete three of the following:		12
COMM 2105	Social Networks	
MATH 3545	Introduction to Graph Theory	
PHYS 1125	Introduction to Network Science: From the Human Cell to Facebook	
PHYS 5116	Network Science 1	

### Data and Computational Methods

Code	Title	Hours
Complete one of the following:		4-5
CS 2000 and CS 2001	Introduction to Program Design and Implementation and Lab for CS 2000	
CS 2100 and CS 2101	Program Design and Implementation 1 and Lab for CS 2100	

### Applied Topics

Code	Title	Hours
Complete one of the following:		4
COMM 2105	Social Networks (if not taken as a core course)	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
INSH 5304	Social Network Analysis	
MGMT 3435	Social Networks and Organizations (if COMM 2105 not taken)	
PHYS 5116	Network Science 1 (if not taken as a core course)	

### GPA Requirement

Minimum 2.000 GPA required in all minor courses

### Credit Requirement

20 hours required