GRADUATE PROGRAMS
IN
Game Science and Design
Games is an emerging and rapidly-expanding discipline that combines technology, art, design, engineering, science, and business into an exciting new inter- and multidisciplinary field of study. The Game Science and Design graduate program at Northeastern is led by faculty from the College of Arts, Media and Design with participation from the College of Computer and Information Science, who are top researchers, innovators, and educators in the field. The program takes a unique player-centered approach, applying established methods from human computer interaction and game studies to game research and design.

Certificate in Game Analytics

Students entering this degree are required to have an undergraduate or graduate course in introductory statistics.

PROGRAM OVERVIEW
Northeastern’s one-of-a-kind certificate program helps students build knowledge for a career as an analyst in the game industry.

The one-year, 20-credit hour curriculum for the Graduate Certificate in Game Analytics is as follows:

Data Science Courses
- DA 5020 Collecting, Storing and Retrieving Data 04
- DA 5030 Introduction to Data Mining /Machine Learning 04
- PPUA 5302 Information Design and Visual Analytics 04

Game Science and Design Courses
- GSND 5110 Game Design and Analysis 04
- GSND 6350 Game Analytics 04

ADDITIONAL INFORMATION
northeastern.edu/camd/gamecertificate

Game Design faculty and students conduct research across the fields of health science, psychology, engineering, computer science, and network science. In a recent collaboration, an interdisciplinary team developed an interactive visualization system to investigate group and individual differences in game play strategies and decision-making over time.

This graph shows all paths that players took in a game. Nodes are states in the game and the links are transitions between states. The red nodes are end states. The blue node is the start state.
Program Overview

The Master of Science (MS) in Game Science and Design gives students a comprehensive understanding of how successful game products are created. Focusing on the science of game development, students learn the design and technological skills needed to build a game while developing a deep understanding of playability and analytics. The program gives students a choice of three concentrations: Game Analytics, Game User Research, and Game Design and Development. The Game Analytics concentration focuses on analyzing large game telemetry data sets; the Game User Research concentration focuses on studying players with a variety of methods; and the Game Design and Development concentration focuses on the creation of games.

The MS in Game Science and Design is a two-year, 34-credit hour degree consisting of the following requirements:

Core Courses 14 credit hours

- GSND 5110 Game Design and Analysis 04
- GSND 5111 Game Critique Seminar 01
- GSND 5122 Business Models in the Game Industry 01
- GSND 7990 Master Thesis 04

Choice of:
- GSND 5130 Usability & Empirical User Research 04
- PPUA 5301 Introduction to Computational Statistics 04

Concentrations 12 credit hours

3 courses* from one concentration:

Game Analytics
- GSND 6350 Game Analytics 04
- DA 5020 Collecting, Storing and Retrieving Data 04
- DA 5030 Introduction to Data Mining/Machine Learning 04
- PPUA 5302 Information Design and Visual Analytics 04

Game User Research
- GSND 6320 Psychology of Play 04
- GSND 6330 Game User Research 04
- GSND 6340 Advanced Game User Research 04
- CS 5340 Computer Human Interaction 04

Game Design and Development
- CS 5150 Game Artificial Intelligence 04
- CS 5850 Building Game Engines 04
- GSND 6240 Exploratory Concept Design 04
- GSND 6250 Spatial and Temporal Design 04

*Students may enroll in one related course on campus with Director approval.

Electives 16 credit hours

2 courses from any concentration above.

Additional Information

northeastern.edu/camd/gamescience
Scholarships + Financial Support

Northeastern University and the College of Arts, Media and Design offer students a range of financial resources including competitively awarded scholarships and assistantships.

FIND ADDITIONAL INFORMATION AND FINANCIAL RESOURCES AT northeastern.edu/camd/graduate/tuition

Apply

ADMISSIONS REQUIREMENTS AND DEADLINES
northeastern.edu/camd/graduate/admissions

FALL DEADLINES

<table>
<thead>
<tr>
<th>FEB 01</th>
<th>Priority deadline for scholarship consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAY 01</td>
<td>All international applicants</td>
</tr>
<tr>
<td>AUG 01</td>
<td>All domestic applicants</td>
</tr>
</tbody>
</table>

SPRING DEADLINES

| OCT 01 | All international applicants                   |
| NOV 01 | All domestic applicants                        |

Northeastern University
College of Arts, Media and Design

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