

GAME DESIGN MINOR

Bowers College of Computing and Information Science, College of Engineering

Program Website (<https://www.cs.cornell.edu/undergrad/minors/game-design-minor/>)

Program Description

The Game Design Minor is available for students with a strong interest in Game Design as an extension of their major studies and future academic and professional careers.

The Game Design Minor is available to all Cornell undergraduate students.

Academic standards

- at least a letter grade of C (not a C-) is required for each course in the minor.

Minor Requirements

The core of this minor is:

Code	Title	Hours
CS 3152	Introduction to Computer Game Architecture	4
or INFO 3152	Introduction to Computer Game Design	
CS 4152	Advanced Topics in Computer Game Architecture	3
or INFO 4152	Advanced Topics in Computer Game Design	

Four additional courses that can range from Graphics and Art, the Psychology of Gaming, and Human-Computer Interaction.

At least six (6) courses (18-credit minimum) chosen as follows:

Required Courses

Code	Title	Hours
CS 3152	Introduction to Computer Game Architecture	4
or INFO 3152	Introduction to Computer Game Design	
CS 4152	Advanced Topics in Computer Game Architecture	3
or INFO 4152	Advanced Topics in Computer Game Design	
Total Hours		7

Additional Courses

Choose four courses (outside of your major department) from the following lists:

Art

All art classes below the 4000 level may be used for this requirement.

Computer Science

Any CS course 2000 or above that is immediately relevant to the production of computer games may count towards this requirement. This includes but is not limited to:

Code	Title	Hours
CS 2110	Object-Oriented Programming and Data Structures (crosslisted)	4
CS 3700	Foundations of AI Reasoning and Decision-Making	3
CS 3780	Introduction to Machine Learning	4

CS 4450	Introduction to Computer Networks	3
CS 4620	Introduction to Computer Graphics	3
CS 4740	Natural Language Processing (crosslisted)	4
CS 5414	Distributed Computing Principles	4
CS 5625	Interactive Computer Graphics	4

Information Science

Any INFO course 2000 above that addresses digital cultures, the ethics of technology, or human-computer interaction may count towards the requirement. This includes but is not limited to:

Code	Title	Hours
INFO 2450	Communication and Technology	3
INFO 3140	Computational Psychology	3
INFO 3200	Technology, Behavior and Society	3
INFO 3450	Human-Computer Interaction Design	3
INFO 3561	Computing Cultures	4
INFO 3660	History and Theory of Digital Art	3
INFO 4240	Designing Technology for Social Impact	4
INFO 4275		
INFO 4301	Ethics in New Media, Technology, and Communication	3
INFO 4320	Introduction to Rapid Prototyping and Physical Computing	4
INFO 4400	Qualitative User Research and Design Methods	3

Music

Any music class that is not classified as a performance class may be used for this requirement.

Performing and Media Arts

Any PMA course that trains students in the techniques applicable to video or digital media production may be used for this requirement. This includes but is not limited to:

Code	Title	Hours
PMA 3531	Screenwriting	3
PMA 3533	Screen and Story: Script Analysis	3
PMA 3614	Creative Character Design	3
PMA 3631		4
PMA 3631		4
PMA 3680	Sound Design	4
PMA 3880	Fundamentals of Directing I	4

Psychology

Any psychology course 2000 or above that is classified as perception, cognition and development (PCD) may be used for this requirement. For a list of acceptable courses, see the Psychology Major (<https://psychology.cornell.edu/major/>) website.

Other Departments

Other departments may offer courses that are directly relevant to game design. Because of the transient and/or scattered nature of these courses, those courses are typically accepted for the minor on a petition basis. Examples of classes that fall in this category are:

Code	Title	Hours
ARTH 3650	History and Theory of Digital Art	3
ASIAN 3315	Game Studies and Japan	3
DEA 3510	Human Factors and Inclusive Design	3

Graduation Requirements for Engineering Minor Degree Programs

Requirements

Students may pursue minors in any department in any college that offers them, subject to limitations placed by the department offering the minor or by the students' major. Completed minors will appear on the student's transcript. Not all departments offer minors. Additional information on specific minors can be found above, in the *Engineering Undergraduate Handbook*, in the undergraduate major office of the department or school offering the minor, and in Engineering Advising.

An engineering minor recognizes formal study of a particular subject area in engineering normally outside the major. Students undertaking a minor are expected to complete the requirements during the time of their continuous undergraduate enrollment at Cornell. Completing the requirements for an engineering minor (along with a major) may require more than the traditional eight semesters at Cornell. However, courses that fulfill minor requirements may also satisfy other degree requirements (e.g., distribution courses, advisor-approved, or major-approved electives), and completion within eight semesters is possible.

An engineering minor requires:

- successful completion of all requirements for an undergraduate degree.
- enrollment in a major that approves participation in the minor.
- satisfactory completion of six courses (at least 18 credits) in a college-approved minor.

Students may apply for certification of a minor at any time after the required course work has been completed in accordance with published standards. An official notation of certification of a minor appears on the Cornell transcript following graduation.