

# DIGITAL MEDIA DESIGN, MINOR

The DMD minor is a programming-intensive exploration into interactive computer graphics. The interested student is encouraged but not required to take Design courses (in the SEAS SSH category, for example) to gain the artistic knowledge and skills that would augment the DMD technology emphasis. Suggested relevant Design courses include DSGN 1020 Art of the web: Interactive Concepts for Art & Design and DSGN 1030 3-D Computer Modeling. The DMD minor also encourages exploration of the connections of computer graphics programming with human cognition and interactive experiences. Students undertake a capstone project to integrate their DMD minor with their major.

**For more information:** <http://cg.cis.upenn.edu/dmd-minor.html>

## SEAS Second Major or Minor Option

Students interested in declaring a second major (College students only) or minor with SEAS should check the website of the department overseeing the major/minor for the requirements. Students are encouraged to reach out to the department staff if they have any questions or would like to discuss the requirements and/or their plan of completion. Students then must submit the Declare/Update Field of Study PATH form (<https://sfs.upenn.edu/registrar/studentforms/>), which will go through multiple approval steps before the major/minor is added to the student's record.

**For more information:** <http://www.seas.upenn.edu/undergraduate/degrees/minors.php>

## Digital Media Design Minor

Code	Title	Course Units
CIS 1400	Introduction to Cognitive Science	1
CIS 1100	Introduction to Computer Programming <sup>1</sup>	1
CIS 1200	Programming Languages and Techniques I	1
CIS 1210	Programming Languages and Techniques II	1
CIS 1600	Mathematical Foundations of Computer Science	1
CIS 4600 or CIS 5600	Interactive Computer Graphics	1
CIS 3500	Software Design/Engineering <sup>2</sup>	1
or CIS 4610	Advanced Rendering	
or CIS 5610	Advanced Computer Graphics	
or CIS 4620	Computer Animation	
or CIS 5620	Computer Animation	
EAS 4990	Senior Capstone Project	1
<b>Total Course Units</b>		<b>8</b>

The DMD minor is not open to students pursuing a CSCI, CMPE, DMD, NETS or ASCS major. A student may not minor in both DMD and CSCI.

<sup>1</sup> CIS 1100 Introduction to Computer Programming can only be taken prior to CIS 1200 Programming Languages and Techniques I. If a student takes CIS 1200 Programming Languages and Techniques I without taking CIS 1100 Introduction to Computer Programming, no extra course needs to be substituted - the DMD minor requires only 7 CUs in this case.

<sup>2</sup> Program approval is required for exceptions.

The degree and major requirements displayed are intended as a guide for students entering in the Fall of 2025 and later. Students should consult with their academic program regarding final certifications and requirements for graduation.