



BACHELOR OF SCIENCE IN

Digital Narrative and Interactive Design

Undergraduate Degree Requirements | www.sci.pitt.edu

The Digital Narrative and Interactive Design (DNID) major harnesses the narrative, world-building, and media studies strengths of the English department and the coding, software development, and human computer interface strengths of the School of Computing and Information. Students will learn how to build interactive narrative systems such as games, interactive literature, virtual reality environments and other interactive media experiences in a variety of fields. This major is operated jointly by the Dietrich School of Arts and Sciences (DSAS) and the School of Computing and Information (SCI). It offers training that builds a solid foundation in English (Writing, Composition, Film and Media Studies, and Literature), Computer Science, and Information Science.

REQUIRED COURSES

GATEWAY - 3 CREDITS (*choose one course*)

ENGCOMP 0425 or HAA 0425 Digital Humanity
ENGLIT 0512 Narrative and Technology

CORE COURSES - 19 CREDITS

COMPOSITION (*one of the following*)

ENGCOMP 0610 Composing Digital Media
ENGLIT/ENGCOMP/CMPINF 1201 Digital Narrative and Interactive Design

PROGRAMMING BASIS (*one of the following*)

CS 0010 Introduction to Computing for Systems Engineers
CS 0011 Introduction to Computing for Scientists
CS 0012 Introduction to Computing for the Humanities
INFSCI 0419 Python for Data Management and Analytics

INTERMEDIATE PROGRAMMING (*one of the following*)

CS 0401 Intermediate Programming Using Java
INFSCI 0017 Fundamentals of Object-Oriented Programming

INTERACTION AND NARRATIVE (*one of the following*)

ENGLIT 0512 Narrative and Technology*
ENGLIT 0712 Introduction to Game Studies
ENGLIT 1001 Interactive Literature
ENGLIT 1002 Game, Story, Play

**if not used as Gateway*

MEDIA LITERACY (*one of the following*)

ENGFLM 0355 or FMST 0100 Visual Literacy
ENGFLM 0570 or FMST 0505 Intro to New Media
ENGFLM 1680 or FMST 1510 Animation

DATA LITERACY (*one of the following*)

CS 0445 Data Structures

INFSCI 1022 Database Management Concepts and Applications

ELECTIVES - 12 CREDITS (*6 credits in DSAS and 6 credits in SCI*)

Select courses from the list of approved electives or from one of the available tracks (see reverse side of page)

CAPSTONE SEQUENCE - 6 CREDITS

PROJECT 1 (*one of the following*)

ENGCOMP 1910 Bridge Seminar
ENGLIT 1900 Project Seminar
ENGLIT 1901 Independent Study (*by special arrangement only*)

PROJECT 2 (*one of the following*)

CMPINF 1981 Project Studio
CS 1902 Directed Study (*by special arrangement only*)

GRADE REQUIREMENTS

All Courses: A grade of C or better is required in each of the core and upper level courses that are to count toward the major. The elective courses for the major must also be completed with a grade of C or better. A minimum GPA of 2.0 in all departmental courses taken is required for graduation. If a C- or lower is earned in an elective course for the major but is not repeated, the course will be used to calculate the overall GPA but will not be counted toward the 40 credits required for the major.

Satisfactory/No Credit option: No DNID major courses may be taken on an S/NC basis.

CONTACT

Contact sciadmit@pitt.edu with any questions regarding this major or admissions to the School of Computing and Information.



Electives and Available Tracks

ALL ELECTIVES

ENGLISH/DSAS COURSES

ENGWRT 0520 Introduction to Fiction Writing
ENGWRT 1403 Topics in Electronic Media
ENGWRT 1501 Topics Creative Writing Audio Storytelling
ENGCOMP 0520 Integrating Writing and Design
ENGCOMP 1112 Professional Uses of Social Media
ENGCOMP 1130 Projects in Digital Composition
ENGCOMP 1200 Advanced Composing Digital Media
ENGFLM 0355 Visual Literacy
ENGFLM 0570 Introduction to New Media
ENGFLM 0590 Filmmaking: Production and Criticism
ENGLIT/ENGFLM/ENGCOMP 0712 Critical Making
ENGLIT 0520 Scan Culture
ENGLIT 0702 Introduction to Game Studies
ENGLIT/ENGFLM 0812 Media/Ecology
ENGLIT 1001 Interactive Literature
ENGLIT 1002 Game, Story, Play
ENGLIT 1355 Virtual Reality
ENGLIT 1377 Media Literacy
ENGLIT 1412 Secret Pittsburgh
GSWS 1210 Gender and the Digital

SCI COURSES

CS 0590 Social Implications of Computing Technology
CS 1501 Algorithm Implementation
CS 1520 Programming Languages for Web Applications
CS 1530 Software Engineering
CS 1566 Intro to Computer Graphics
CS 1567: Programming/Systems Design - Mobile Robot Platform
CS 1571: Intro to AI
CS 1632 Software Quality Assurance
CS 1635 Interface Design Methodologies (Mobile Apps)
CS 1666 Principles of Game Design and Implementation
CS 1674 Intro to Computer Vision
INFSCI 1014 Graphics
INFSCI 1017 Implementation of Information Systems
INFSCI 1024 Analysis of Information Systems
INFSCI 1044 Human Factors in System Design
INFSCI 1059: Web Programming
INFSCI 1061 Game Implementation
INFSCI 1068 Geographic Information Systems
INFSCI 1052 User-Centered Design
INFSCI 1060 Game Design

GAME DESIGN TRACK

The Game Design track focuses on situating game production, advertising, and playing into current and historical social and cultural contexts. Coursework analyzes and evaluates the relationship between narrative and gameplay, and articulates critical facets of game design such as gameplay mechanics, balance, fairness, narrative, pacing, character, and aesthetics. Students will analyze both the narrative and design implementation challenges of game design and propose strategies for meeting those challenges, particularly in the case of social, medical, environmental, and educational problems (serious games).

ENGLISH - 6 CREDITS (*choose two*)

ENGCOMP 1130 Projects in Digital Composition
ENGFLM 0570 or FMST 0505 Introduction to New Media
ENGFLM 0585 or FMST 0790 Technologies of the Body
ENGLIT/ENGFLM 0812 or FMST 0762 Media/Ecology
ENGFLM 1760 or FMST 1412 Cinema and Video Games
ENGLIT 0702 Introduction to Game Studies
ENGLIT 1001 Interactive Literature
ENGLIT 1002 Game, Story, Play
ENGLIT 1355 Virtual Reality
ENGWRT 0520 Introduction to Fiction Writing

SCI - 6 CREDITS (*choose two*)

CS 1566 Intro to Computer Graphics
CS 1666 Principles of Game Design and Implementation
CS 1674 Intro to Computer Vision
INFSCI 1014 Graphics
INFSCI 1044 Human Factors in System Design
INFSCI 1061 Game Implementation
INFSCI 1060 Game Design



CRITICAL MAKING TRACK

The Critical Making track focuses on understanding code as creative and expressive of social relationships. The coursework addresses human interfaces within cultural and social contexts, particularly the historical and contemporary relationship between social interaction and platform design. Students will innovate new forms of human-machine interaction, apply or develop new tools to analyze cultural works (texts, images, moving images, etc.), express code in the creation and functioning of material objects or assemblages (haptic feedback systems, robotics, etc.), and analyze ways that gender, race, and other social categories and assumptions are "hard-coded" into both hardware and software.

ENGLISH - 6 CREDITS *(choose two)*

ENGCOMP 0520 Integrating Writing and Design
ENGCOMP 1200 Advanced Composing Digital Media
ENGLIT/ENGFLM/ENGCOMP 0712 Critical Making
ENGFLM 0585 or FMST 0790 Technologies of the Body
ENGFLM 0590 FMST 0710 Filmmaking: Production and Criticism
ENGLIT/ENGFLM 0812 Media/Ecology
ENGLIT 0521 Scan Culture
ENGLIT 1355 Virtual Reality
ENGWRT 1501 Topics in Creative Writing - Audio Storytelling

SCI - 6 CREDITS *(choose two)*

CS 1520 Programming Languages for Web Applications
CS 1567 Programming/Systems Design - Mobile Robot Platform
CS 1571 Intro to AI
INFSCI 1044 Human Factors in System Design
INFSCI 1059 Web Programming

ONLINE MEDIA TRACK

The Online Media track skills will range from developing digital format narrative to communicate on behalf of organizations (for-profit or non-profit) and innovating online interactions to creating and critically analyzing content and data across the variety of specific digital formats. Students completing this track will be able to design distribution vectors for digital content, propose solutions to design and implementation challenges, and ultimately design media-rich web and mobile app content and implement their use.

ENGLISH - 6 CREDITS *(choose two)*

ENGCOMP 0520 Integrating Writing and Design
ENGCOMP 1112 Professional Uses of Social Media
ENGCOMP 1130 Projects in Digital Composition
ENGFLM 0570 or FMST 0505 Introduction to New Media
ENGLIT/ENGFLM 0812 or FMST 0762 Media/Ecology
ENGLIT 1001 Interactive Literature
ENGLIT 1412 Secret Pittsburgh
ENGWRT 1377 Media Literacy
ENGWRT 1403 Topics in Electronic Media
ENGWRT 1501 Topics Creative Writing
GSWS 1210 Gender and the Digital

SCI - 6 CREDITS *(choose two)*

CS 0590 Social Implications of Computing Technology
CS 1520 Programming Languages for Web Applications
INFSCI 1024 Analysis of Information Systems
INFSCI 1044 Human Factors in System Design
INFSCI 1052 User-Centered Design
INFSCI 1068 Geographic Information Systems