

TECHNOLOGY AND INFORMATION DESIGN MAJOR

Program Director: Tamara Clegg, Ph.D.

The B.A. in Technology and Information Design (InfoDesign) teaches students to frame important problems at the intersection of people and information; to design solutions for those problems; and to realize, deploy and iterate on those solutions. InfoDesign supports students in their efforts to use technology in the service of the greater good; to apply and expand their creativity; to develop a start-up mentality (in which they must try solutions and fail first in order to succeed); and to engage in rapid development and prototyping grounded by rapid evaluation and assessment. Students participate in hands-on studio and laboratory classes in user-centered design, technology development, problem-solving and cross-disciplinary communication. Graduates may become designers, planners, technology consultants, project managers, and entrepreneurs, in such wide-ranging fields as user experience, mobile development, healthcare, law, entertainment, policy, smart-city development, libraries and archives.

Restriction: Students are not permitted to double-major or double-degree with the Bachelor of Science in Information Science.

Program Learning Outcomes

1. Frame important problems at the intersection of people and information
2. Analyze the interplay of people, information, and technology at various scales (e.g., individuals or small groups, communities or organizations, regions or institutions)
3. Leverage a systems-thinking approach through modeling and simulation
4. Design solutions for these problems
5. Implement design thinking skills, including user research, ideation, prototyping, and participatory design
6. Communicate ideas to gather momentum and iterate through sketching, prototyping and data visualization
7. Iteratively assemble existing components to form new solutions within a supportive culture of critique
8. Attend to the ethical and equitable implications of their designs
9. Realize, deploy, and iterate on these solutions at appropriately selected scale(s)
10. Assess the scale of the problem and the appropriate deployment of potential solutions
11. Organize people to properly implement solutions through leadership and entrepreneurship skills
12. Evaluate success of a solution in a socially embedded setting, to include the employment of skills such as testing, evaluation, and auditing

REQUIREMENTS

Course	Title	Credits
Core Courses		
INST104	Design Across Campus	3
INST126	Introduction to Programming for Information Science	3

IDEA258	Special Topics in Innovation (IDEA258A Becoming a Design Thinker: Tools and Mindsets for Innovation)	1
INST201	Introduction to Information Science	3
SOCY105	Understanding Contemporary Social Problems - Frameworks for Critical Thinking and Strategies for Solutions	3
STAT100	Elementary Statistics and Probability	3
INST204	Designing Fair Systems	3
INST380	Technology and Information Design: Do Good Now	3
or PLCY380	Innovation and Social Change: Do Good Now	
INST367	Prototyping and Development Studio	3
INST406	Cross Disciplinary Communication Lab	3
INST454	(Modeling and Simulating Systemic Problems)	3
INST466	Technology, Culture, and Society	3
INST491	(Integrated Capstone for Technology and Information Design)	3
Major Electives		18
INST311	Information Organization	
INST352	Information User Needs and Assessment	
INST366	Privacy, Security and Ethics for Big Data	
INST401	Design and Human Disability and Aging	
INST402	Designing Patient-Centered Technologies	
INST404	(Youth Experience Design Studio)	
INST405	Game Design	
INST441	Information Ethics and Policy	
INST460	(Video Games as Emergent Experiences)	
INST463	Technology Socialpreneur (AI and Society)	
Additional elective courses may be added to this list upon approval by the Technology and Information Design program committee.		
Total Credits		55

Benchmark courses (16 credits)

Failure to complete both sets of benchmark courses within the timeline indicated below may result in dismissal from the program.

Course	Title	Credits
Benchmark I		
The below courses must be completed with a C- of higher within the first two semesters of the program:		
INST104	Design Across Campus	3
INST126	Introduction to Programming for Information Science	3
IDEA258	Special Topics in Innovation (IDEA258A Becoming a Design Thinker: Tools and Mindsets for Innovation)	1
Benchmark II		
The below courses must be completed with a C- of higher within the first three semesters of the program:		
INST201	Introduction to Information Science	3
SOCY105	Understanding Contemporary Social Problems - Frameworks for Critical Thinking and Strategies for Solutions	3
STAT100	Elementary Statistics and Probability	3

GRADUATION PLANS

Click here (<https://ischool.umd.edu/academics/student-services/undergraduate-college-park/four-year-plans/>) for roadmaps for graduation plans in the College of Information.

Additional information on developing a graduation plan can be found on the following pages:

- <http://4yearplans.umd.edu>
- the Student Academic Success-Degree Completion Policy (<https://academiccatalog.umd.edu/undergraduate/registration-academic-requirements-regulations/academic-advising/#success>) section of this catalog