

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