TECHNOLOGY AND INFORMATION DESIGN MAJOR

Notice of Addendum: The description and requirements for this program were updated effective Spring 2024 and have been published on ADDENDA TO THIS CATALOG (https://academiccatalog.umd.edu/undergraduate/addenda/#technology-information-design-major).

Program Director: Dr. Tamara Clegg

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, 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.

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

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Course Core Courses Title Credits
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
STAC100 Elementary Statistics and Probability 3
INST204 Designing Fair Systems 3
PLCY380 Innovation and Social Change: Do Good Now 3
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 Socialprenuer (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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>INST104</td>
<td>Design Across Campus</td>
<td>3</td>
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<tr>
<td>INST126</td>
<td>Introduction to Programming for Information Science</td>
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<tr>
<td>IDEA258</td>
<td>Special Topics in Innovation (IDEA258A Becoming a Design Thinker: Tools and Mindsets for Innovation)</td>
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</table>

Benchmark II

The below courses must be completed with a C- of higher within the first three semesters of the program:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>INST201</td>
<td>Introduction to Information Science</td>
<td>3</td>
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Technology and Information Design Major

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>SOCY105</td>
<td>Introduction to Contemporary Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>STAT100</td>
<td>Elementary Statistics and Probability</td>
<td>3</td>
</tr>
</tbody>
</table>

**FOUR-YEAR PLAN**

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

Additional information on developing a four-year academic 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