DESIGN TECHNOLOGY: STUDIO (MS)

Graduate School

Program Website (https://designtech.cornell.edu/academics/designtech/master-science-design-technology/)

CIP: 04.0902 | **HEGIS:** 0299.00 | **NYSED:** 43062

Graduate Field

Architecture (https://catalog.cornell.edu/graduate-school/architecture/)

Program Description

The Design Technology program is a two-year research and project degree offered jointly by the College of Architecture, Art, and Planning and Cornell Tech which culminates in a master of science (M.S. DT). Core faculty bring expertise from AAP, the Ann S. Bowers College of Computing and Information Science (Bowers CIS), Cornell Human Ecology (CHE), Cornell Engineering, and Cornell Tech. Students with an undergraduate or graduate degree in architecture, design disciplines, engineering, biological or materials science, or computer science are likely candidates for the Design Tech program.

Students pursue research in areas that bridge disciplines and domains with the aim of generating innovations across science and design for applications spanning digital tools, products, responsive materials, and the built environment. All students spend the first year in Ithaca; the second year is spent at either the Ithaca or Cornell Tech campus, depending on the student's track.

In an era when we are witnessing one of the most significant paradigm shifts in the conceptualization and creation of our environments, objects, and interfaces, the M.S. DT program, co-directed by Jenny Sabin (https://designtech.cornell.edu/people/jenny-sabin/) and Wendy Ju (https://tech.cornell.edu/people/wendy-ju/), catalyzes multidisciplinary expertise, exploration, innovation, and collaboration in several emerging technology areas, including design + interaction, design + materials, design + media, and design + environments. This synergistic and cross-disciplinary approach will pioneer new modes, methods, and applications, and redefine existing practices in the advancement of experimental design and technology.

All students in the M.S. DT program will spend their first year in Ithaca taking foundational studios and courses and electives. In the second year of the program, students will pursue one of two tracks, a thesis-centered research track (Ithaca-based) or a studio professional track (Cornell Tech-based). Students in the studio professional track at Cornell Tech will take the studio sequence, which includes Product Studio in the fall and either Startup, BigCo, or PiTech studio in the spring. In this track, students will develop a collaborative specialization project in teams.

Students in both tracks work closely with their special committee, take electives in support of their research during the fall term as necessary, and complete a capstone project in the spring semester.

Program Information

- Instruction Mode: In Person
- Location: Ithaca, NY and New York City, NY
- Minimum Credits for Degree: 104

Program Requirements

- Minimum Semesters for Degree: 4

Graduate School Milestones

- Responsible Conduct of Research Training: Required
- Open Researcher and Contributor ID (ORCID): Required
- Masters Exam (M Exam): Spring of fourth year
- Thesis: Spring of fourth year

Course Requirements

Additional course requirements may be set by the student's Special Committee. Program specific requirements that apply to all students are included below.

Year 1 (Fall)

- DESIGN 6151 Design and Making Across Disciplines I
- DESIGN 6297 Coding for Design I
- DESIGN 6397 Design for Physical Interaction I

Year 1 (Spring)

- DESIGN 6152 Design and Making Across Disciplines II
- DESIGN 6298 Coding for Design II
- DESIGN 6398 Design for Physical Interaction II

Year 2 (Fall)

- DESIGN 8131 Specialization Project I
- TECH 5900 Product Studio

Year 2 (Spring)

- DESIGN 8935 Specialization Project II
- TECH 5930 PiTech Impact Studio

University Graduation Requirements
Requirements for All Students

In order to receive a Cornell degree, a student must satisfy academic and non-academic requirements.

Academic Requirements

A student's college determines degree requirements such as residency, number of credits, distribution of credits, and grade averages. It is the student's responsibility to be aware of the specific major, degree, distribution, college, and graduation requirements for completing their chosen program of study. See the individual requirements listed by each college or school or contact the college registrar's office (https://registrar.cornell.edu/service-resources/college-registrar-directory/) for more information.

Non-academic Requirements

Conduct Matters. Students must satisfy any outstanding sanctions, penalties or remedies imposed or agreed to under the Student Code of Conduct (Code) or Policy 6.4. Where a formal complaint under the

Code or Policy 6.4 is pending, the University will withhold awarding a degree otherwise earned until the adjudication process set forth in those procedures is complete, including the satisfaction of any sanctions, penalties or remedies imposed.

Financial Obligations. Outstanding financial obligations will not impact the awarding of a degree otherwise earned or a student's ability to access their official transcript. However, the University may withhold issuing a diploma until any outstanding financial obligations owing to the University are satisfied.

Learning Outcomes

- Afford students from diverse disciplinary backgrounds opportunities to expand their creative design potential by increasing their knowledge and understanding of material and computational design, digital fabrication, and emerging materials and technologies at the nexus of biology, materials science, and design.
- Bridge disciplines and domains with the aim of generating innovations across science and design for applications spanning digital tools, products, responsive materials, and the built environment.
- Promote a culture of multidisciplinary and multicollege teaching and training across departments and colleges in Ithaca and New York City, including co-mentoring students in project-based design learning to expand offerings in emerging technology areas critical to enhance the university's impact on this growing field.
- Foster transdisciplinary collaboration and hybrid thinking in design to prepare students for emerging careers in both the academy and in practice and industry with a strong focus on engagement.
- Train cross-disciplinary leaders to engage and develop hybrid creative synthetic thinking in design through generative processes, digital fabrication, emerging technologies, and applications across disciplines.