

SELF-GUIDED TOUR

West End District

Home to Thayer School of Engineering, the Department of Computer Science, Tuck School of Business, the Magnuson Center for Entrepreneurship, and the Irving Institute for Energy and Society, Dartmouth's West End District is the epicenter of technological and entrepreneurial innovation on campus. This tour is just a sampling of our facilities. Feel free to ask questions of students, faculty, and staff along the way.

From Thayer Reception, walk past TV monitors and continue straight to exit MacLean and enter the Ground Level (Level G) of the:

Class of 1982 Engineering & Computer Science Center (ECSC)

LEVEL G

Magnuson Center for Entrepreneurship (E001) & Digital Applied Learning and Innovation (DALI) Lab (E002)

Supports students, faculty and alumni on the path to entrepreneurship with education and experiences, start-up funding, and networking support. Housed within Magnuson, DALI Lab helps students design and build mobile applications, websites, virtual and augmented reality, digital installations, and more.

Harold Edward Cable Makerspace (E003)

Where students can take an idea and leverage tools and technology for the design-and-build process.

HealthX Lab (E004)

Research on implantable and wearable devices to advance our understanding of people, behaviors, health, and security.

Stuart Family Design Commons (E006-E042)

Serving as headquarters for the Design Initiative at Dartmouth (DIAD), this wing houses a design research lab (E006), the Design Loft (E007), a tech-enabled active learning classroom (E008), and a design teaching classroom (E042).

From the atrium, go down the central staircase to:

LEVEL B

Couch Project Lab II and Studio Classroom (EB08-EB09)

Spaces designed for project-centered and team-based learning. Features work benches on wheels for countless configurations. Students may store and access projects 24/7.

Electron Microscopy Suite (EB23)

Supporting research in materials science, chemistry, biological sciences, and medicine, this suite is specially designed to be free from vibration and electromagnetic interference. The facility features a series of imaging instruments as well as training and support for students and faculty from across the institution.

Class of 1971 Emerging Technologies Labs (EB07-EB37)

Recognizing the students who devoted countless hours to coding BASIC and DTSS, this wing includes research labs for nanoelectronics and quantum computing, as well as the digital arts lab where students and faculty work at the intersection of art, design, and technology in fields such as virtual reality, animation, and robotics.

Continue to the north end of the atrium and turn right to:

Go back up the central atrium staircase and continue up the "green glass" stairs to:

LEVEL 1

Biotechnology Labs (E135-E146)

Where biological and chemical engineering faculty collaborate on a wide range of research from bio-inspired systems to cancer therapeutics and vaccine design.

Reality & Robotics Lab (E114)

Research at the intersection of computing and physical reality, including robotics, 3D fabrication, sensing, and augmented reality.

Theory Lab (E115)

Topics include approximation and randomized algorithms, optimization, computational geometry and topology, algorithms for big data, distributed algorithms, and communication protocols.

Reynolds Family Learning Lab (TEAL) Classroom (E116)

The 80-seat technology-enhanced active learning (TEAL) classroom features smart technology and flexible room configurations, and is ideal for the "flipped classroom" approach and other active learning strategies that optimize the in-class experience.

Go across the atrium to:

Go up one flight to:

LEVEL 2

Lord Family Energy Technology Lab Suite (E233-E236)

Both wet and dry labs for research in renewable energy including The Lynd Lab—engaged in a range of activities unified by the goal of cost-effective production of cellulosic biofuels that benefit people and the environment.

Security & Trust Lab (E214)

Research on building trustworthy systems and topics ranging from hardware and operating systems to machine learning, ethnography and human behavior, in application domains including finance, healthcare, and energy.

Visual Computing & Machine Learning Lab (E206)

Developing models to imitate and enhance intelligent human behavior, learning from various data sources and domains, including music, text, images, and networks.

Go past the Engles Biotech Lab (E237) and across the Opus Foundation Bridge to:

MacLean Engineering Sciences Center (ESC)

SECOND FLOOR

Rett's Room & Roof (M201)

A flexible, interactive classroom with a rooftop deck for study breaks and gatherings.

Computer Classroom (M210)

For both presentations and workstations preloaded with engineering application software such as SolidWorks, Cadence, and MATLAB. (Available to students 24/7, except when scheduled for course workshops.)

Computer Engineering Lab (M232)

A shared space for ongoing work in information systems, artificial intelligence, and data-driven materials science.

Take stairs past M232 down one flight to:

FIRST FLOOR

Thayer Computing Services (M126)

Supports all computing and information technology (IT) needs of faculty, staff, and students.

Thayer Career Services (M113)

A dedicated engineering career services staff, just for Thayer students and alumni, offer counseling, networking, job fairs, interview coaching, and other tools and resources.

Thayer Academic & Student Affairs (M103)

Graduate admissions and financial aid, course registration, programming for the undergraduate engineering sciences major, and coordination of special student programs.

Take stairs outside M103 down one flight to:

GROUND FLOOR

Fahey Advanced Design Lab (M003)

Typically reserved for BE capstone projects, other project groups and courses may also request space. In contrast to the Couch Labs, project work may be left out for extended periods.

Reception Desk & GlycoFi Atrium

Designed to welcome visitors and reveal the inner workings of the labs, spark collaborations, and show the creative process of innovation.

Couch Project Lab I (M009)

One of two labs supporting Thayer's project-based curriculum, with versatile work benches on wheels. Surrounding are electronics, diffractometer, microscopy, materials-processing, and high-vent labs including a paint spray booth and fume hoods for safe handling of hazardous materials. Students may store and access projects here anytime.

Instrument Room (M025)

An extensive equipment lending library with skilled staff to advise students on proper use of tools and materials.

Allyn Large Frame Lab (M030)

For building large projects such as electric vehicles, robots, and turbines, and is home to the Dartmouth Formula Racing team.

Walk back to the far side of GlycoFi Atrium to:

Cummings Hall

GROUND FLOOR

Computer-Aided Design (CAD) Lab (C013)

Students use SolidWorks and other CAD software for the design phase of their project work.

Electronics Project Lab (C011)

Students design, build, and test circuits, aided by a full-time professional engineer.

Turn left at the end of the Atrium and follow the hallway to:

MShop (C025)

Supporting the "creating" side of engineering, MShop staff help students, researchers, and faculty model, make, and materialize their

ideas with an array of specialized machines. Students have 24/7 access to the "EZFab" section with select easy-to-master, nonhazardous equipment.

Go back toward the Atrium, and take the staircase to your right up to:

FIRST FLOOR

The Great Hall

An event hall, study area, and popular place for student teams to meet and work.

Spanos Auditorium (C100)

Thayer's largest classroom and venue for our popular public lectures.

Walk around the brick windowed wall and past the timeline. Take stairs by Jackson Conference Room up one flight to:

SECOND FLOOR

The Wall of Patents

Patents for original work conducted at Thayer are displayed here. The three colors represent three different categories awarded to: faculty, students, and faculty-student teams.

Follow the hallway past the Dean's Suite and around several corners. At Rm 200, turn right. Straight ahead down the hall is:

Systems Instruction Labs (C221–C222)

Assisted by two full-time professional engineers, students can experiment with a variety of systems across engineering disciplines to gain a deeper understanding of the fundamentals.

Microengineering Lab (C223)

Amber light protects ultraviolet-sensitive materials in this cleanroom for research and teaching in the field of solid state nanofabrication. (The world's smallest untethered robot—1/10th the thickness of a human hair—was made here.)

Take the "MEM" bridge to:

Murdough Center

Murdough Center provides facilities for both Thayer School of Engineering and Tuck School of Business, including the Master of Engineering Management (MEM) Program, Feldberg Business & Engineering Library, and the 358-seat Cook Auditorium.

Murdough is attached and looks directly onto:

Irving Institute for Energy and Society

Established to help prepare future energy leaders, the Institute is situated between Thayer School of Engineering and Tuck School of Business, creating a place of convergence for faculty and students engaged in issues related to energy and society. The building is home to energy engineering research labs focused on climate change mitigation and adaptation, as well as Tuck's Revers Center for Energy, Sustainability, and Innovation, and Dartmouth's Sustainability Office.

Adjacent to Irving Institute is:

Tuck School of Business

Dartmouth's top-ranked business school offers expertise in management, entrepreneurship, and technology transfer. Tuck's interconnected buildings provide an integrated living-and-learning environment. Facilities include **Byrne Hall**—the heart of food services in the West End.