

SELF-GUIDED TOUR

West End District

Home to Thayer School of Engineering, the Department of Computer Science, Tuck School of Business, the Magnuson Family Center for Entrepreneurship, and the Arthur L. 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.

Begin your tour on the Ground Level (Level G) of the:

Engineering and Computer Science Center

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, E020)

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

Stuart Family Design Suite (E006-E042)

Serving as headquarters for the Design Initiative at Dartmouth, 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).

Head back to the atrium and go down the central staircase to:

LEVEL B

Couch Project Lab II and Studio Classroom (B008-B009)

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.

Materials Lab (B034) and Electron Microscope Center (B022-B032)

Research in both energy and biomedicine

including solar cells and wind and water turbines, scaffolds, grafts and artificial joints. The Electron Microscope Center supports research in materials science, chemistry, biological sciences, and medicine. Specially designed to be free from vibration and electromagnetic interference, the Center provides a suite of imaging instruments as well as training and support for students and faculty from across the institution.

Emerging Technologies Lab I (B007)

Both a classroom and a lab for student work at the boundary between technology and art including AR/VR development, 3D modeling and animation, UI/UX design, 3D fabrication, and more.

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

LEVEL 1

Biotechnology Labs (E135; E143)

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

Go across the atrium to:

Robotics & Theory Labs (E114)

Research at the intersection of computing and physical reality, including robotics, 3D fabrication, sensing, and augmented reality. Theory Lab topics include approximation and randomized algorithms, optimization, computational geometry and topology, algorithms for big data, distributed algorithms, and communication protocols.

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 up one flight to:

LEVEL 2

Lord Energy Technology Lab (E233)

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 Computation & 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 across the Opus Foundation Bridge to:

MacLean Engineering Sciences Center (ESC)

SECOND FLOOR

Rett's Room (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.)

LIINES (M232)

The Laboratory for Intelligent Integrated Networks of Engineering Systems (LIINES) devoted to

sustainability and resilience in intelligent multienergy engineering systems. Supports energy, water, transportation & industrial policy objectives.

Take stairs past M232 down one flight to:

FIRST FLOOR

Computing Services (M126)

Supports all computing and information technology (IT) needs of the Thayer community, including faculty, staff, graduate students, and undergraduates.

Admissions (M103)

(aka Academic and Student Affairs Office)
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

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.

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.

proper use of tools and materials.

Couch Project Lab I (M009)

One of two labs supporting Thayer's project-centered curriculum, with versatile work benches on wheels. Surrounding are electronics,

Instrument Room (M025)

An extensive equipment lending library with skilled staff to advise students on

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.

Turn left at the end of the Atrium and follow the hallway to the MShop.

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

Digital Electronics Design Lab (C011)

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

MShop (C025)

Supporting the "creating" side of engineering, MShop staff help students, researchers, and faculty safely use an array of specialized

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.

offering counseling, job fairs, interview coaching, and other special programs.

Career Services (C104)

A dedicated Engineering Career Services Office

Take stairs by C119 up one flight. Straight ahead down the hall is:

SECOND FLOOR

Systems and Analog Electronics 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.

Solid State Microengineering Lab (C223)

Amber light protects ultraviolet-sensitive materials used in this cleanroom. Research includes micromechanical and electromechanical systems (MEMS) and power electronics. (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:

Arthur L. Irving Institute for Energy and Society

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

Adjacent to the Irving Institute is:

Tuck School of Business

Dartmouth's top-ranked business school offers expertise in management, entrepreneurship, and technology transfer. Designed for intellectual and personal growth, Tuck's interconnected buildings provide an integrated living-and-learning environment. Tuck facilities include **Byrne Hall** — the heart of dining services in the West End, Byrne includes a servery, grab-and-go soups, salads and sandwiches, Pepsico Dining Hall, and specialty coffee shop.