



# Explore

*one of the most innovative  
learning environments  
in the world*

## Self-Guided Tours

Open Monday-Friday 8:30am-4:30pm  
Groups of 10 or more must call to schedule a visit



University of Colorado  
Boulder

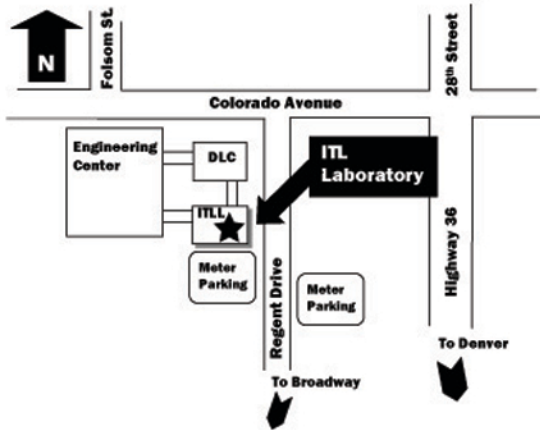
### *Integrated Teaching & Learning Program and Laboratory*

Drescher Undergraduate Engineering  
1045 Regent Drive, 522 UCB  
Boulder, CO 80309-0522  
Phone: 303.492.7222 Fax: 303.492.8825

[itll.colorado.edu](http://itll.colorado.edu)  
@ITLProgram



## Integrated Teaching & Learning Laboratory



### Driving Directions from Denver

- Take Highway 36 to Boulder
- Stay on 36 as it curves north and becomes 28th Street
- Turn left (west) onto Colorado Avenue (first stoplight)
- Turn left (south) onto Regent Drive
- Park in meter parking lots or along Regent Drive



**Integrated Teaching & Learning  
Program and Laboratory**  
University of Colorado **Boulder**

## Self-Guided Tour



# Welcome

The unique ITL Laboratory is a shared learning environment for all departments of the College of Engineering and Applied Science at CU-Boulder. Here, hands-on engineering prepares students for the working world by emphasizing open-ended problem-solving, interdisciplinary teamwork, and creative discovery.

The ITL Laboratory is a "living laboratory" with exposed and visible building systems. Be sure to look for the 11 signs throughout to guide you as you discover our many interactive exhibits and kinetic sculptures.

Our two large, open Lab Plazas provide students with high-tech data acquisition and analysis capabilities to support modern engineering exploration.

At the far west end of the bridge, students boost their electronics and circuitry expertise in our Electronics Center.

Downstairs, in the Manufacturing Center students use both conventional and computer-controlled equipment to create what they dream.

Be sure to come back and join us for the bi-annual Design Expo every April and December! Check our web site [itll.colorado.edu](http://itll.colorado.edu) for more details.



Check out the captivating "Slice of Wind" sculpture at our northeast entrance.

# Discover

how CU engineering students create everyday solutions to shape the future

# Upstairs

## Explore these Interactive Exhibits

Pythagorean Fantasy

Square Wheels

Tectonic Basin

Steam Engines

Conduction

Light Bulbs

Catenary Arch

## Find These Signs

It Takes More than Concrete

Are You Standing on Solid Ground?

Why is that Duct so Large?

Measuring the Load

A Slice of Wall

Layers of Air

No Secrets Here



## Look for...

two First-Year Engineering projects rooms where students design, build, and test real-world engineering products that are exhibited at the semi-annual Design Expo.

a clear pipe that carries storm water from the roof.  
(Hint: Look up high)



# Street Level

## Learn from these Kinetic Sculptures

Taylor Cells

Stress Analyzer Bench

Fountain of Instability

Pendulum Table

Chaotic Pendulum

Ferrofluid

## Find This Sign

One Way to Get Vertical

## Look for...

a window that lets you look inside the elevator shaft.

the vibrating wire strain gauges on the large yellow truss that measure the load on the building's steel structure.



# Downstairs

## Find These Signs

A Ramp to the Information Superhighway

One of These is a Dummy

All Windows are Not Alike

## Look for...

an array of color-coded building systems in the Mechanical Equipment Room.

a window into the electrical room to see the equipment that controls all of the building's electrical power.