Welcome to the Seminar!

Overview of Seminar

Meet your Advising Group
Seminar Goals

Take advantage of MIT and what you are learning to design, build, and control interesting and fun devices and systems.

Choose two half-semester projects.

Offered both first and second halves:
- **Making with Technology** (laser cutting, 3D printing, µproc’s)
- **Autonomous Racecar Robotics** (driverless control)
- **FISHBOTS** (building robotic fish and other sea creatures)
- **Visualizing Music** (real-time visualizations for music)

First half only:
- **Bacterial Photography** (imaging with synthetic biology)

Second half only:
- **BioBots** (robot with light-activated, biosynthesized muscle)
- **Crowdsourcing Dirt** (antibiotic discovery in soil bacteria)
- **Independent Project** (proposal required)
Making with Technology

Laser cutting, 3D printing, and microprocessors.

Project leaders: Denny Freeman and Dawn Wendell
Autonomous Racecar Robotics

Machine learning for mini autonomous cars.

Project Leaders: Sertac Karaman and Andrew Fishberg
(limited to 30 students)
FISHBOTS

Building robotic fish and other sea creatures.

Inspiration

Design & Build

Project leader: Tom Consi (limited to 16 students)
Visualizing Music

Real-time time- and frequency-domain visualizations for music.

Project leaders: Adam Hartz/Joe Steinmeyer (15 student limit)
Bacterial Photography

Use synthetic biology to make pictures with bacteria. Learn how to engineer and grow bacterial cells.

Project leader: Steve Wasserman (1st half-term, 10 student limit)
BioBots

Build a robot with light-activated, biosynthesized muscle. Natural bio-inspired

Project leader: Steve Wasserman (2nd half-term, 8 student limit)
Crowdsourcing Dirt

Discover antibiotic-producing bacteria in soil. Join world-wide effort!

Project leader: Lourdes Aleman (2nd half-semester, 12 student limit)
Independent Project

Design, build, and debug a project of your choice.

Project leader: Dawn Wendell (second half-semester only)
Projects start September 9.

09/09  Project 1  Session 1
09/16  Project 1  Session 2
09/23  Project 1  Session 3
09/30  Project 1  Session 4
10/07  Project 1  Session 5
10/12  Project 1  Presentations
10/28  Project 2  Session 1
11/04  Project 2  Session 2
11/18  Project 2  Session 3
11/25  Project 2  Session 4
12/02  Project 2  Session 5
12/09  Project 2  Presentations

Weekly meetings (required): Mondays 3-5pm.
Outside preparation and homework: ~ 4 hours per week.
Mens et Manus

Please sign up for preferences at http://mit.edu/6.a01 (see email).