Welcome to UBC Engineering!

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What's so different about Engineering?

You will be trained to solve problems analytically,

experimentally,

computationally and

through design and fabrication.

You will be the best problem-solvers on campus.

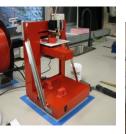
What is a Professor/ Instructor?

- •What is a professor? What do they do?
- •How do professors get their job?
- •Does a professor have a boss?
- How do you address your Professors? (Dr? Professor? Their first name?)

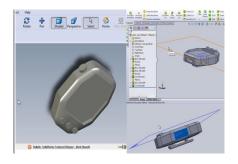
What's an Instructor? Isn't everyone a Prof?

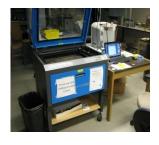
About Me

- Lab Director / Instructor for Engineering Physics program. (~ 8 years)
- I teach the capstone project courses for senior EngPhys students (~50 projects/year)
- I oversee prototyping equipment and courses for engineers (+MBA students +architects...)
- I assist students on their student teams, and profs on their courses and research







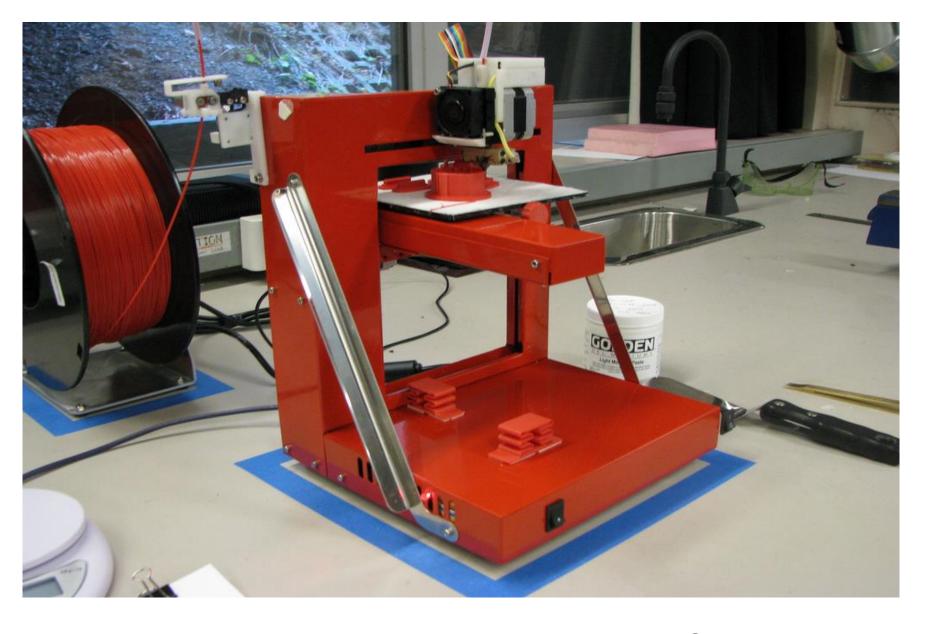


List of Projects

c. List of Projects

- 1. [%] Optical fiber polishing station with real-time microscopy
- 2. Solar Blind Extreme Ultraviolet (XUV) Detectors (Jones)
- 3. [&] Magnetic Resonance Imaging Field Stabilizer (Michal)
- 4. Circular Saw Vibration Frequency and Mode Shape Indicat
- Accurate drug dosing in children (AnserminoDumontLarso)
- 6. Five projects from Zaber (Zaber Technologies)
- 7. [&] Pan & Tilt Drop Camera (Dennison/HarveyClark)
- 8. Bidirectional Single Cable Power and Signal to ROV (Denr
- ROV (Dennison/HarveyClark)
- Inkjet micropatterning process for nanostructured field emi
- 11. Acoustic Imaging (Waltham)
- 12. [&] Field Test and Modify Plumbing Endoscope for Seawa
- 13. Development of an electric bike mapping, performance and
- Building acoustical-environment monitoring system (Hodgs
- [&] Robotic Origami (Olson)
- construction of an instrument for 2D conductive

Use the tools to solve problems – e.g. a list of 80 projects from Faculty & Industry for senior EngPhys students for Sept 2012



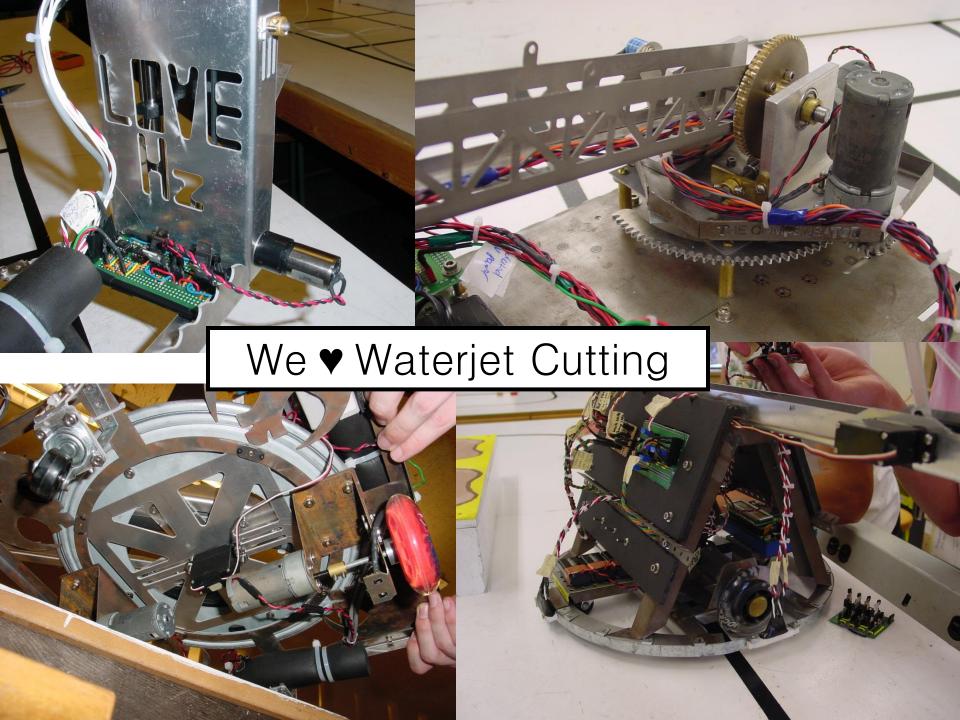
3D Printer – makes physical models from ABS plastic



Laser Cutter/Engraver – can cut cardboard, wood, some plastics.



WaterJet cutter Our most versatile prototyping machine. Cuts everything



MUGs to the front of the room! Q&A about daily life as an Engineering Student

•Classes!

- Student Teams
- Student Leadership experiences
- Design projects

Clubs, Sports, Jobs

You are a part of the UBC community.

Everything you do from now on is as a representative of the UBC community.

Please represent us well.

What are some habits of successful students?

- Keeps track of all assignments, labs, and exam times.
 - Use a calendar!
- Finishes a task before moving onto the next item.
 - Close your laptop to focus!
- Takes short breaks during the day (even every hour) then focusing back on work.
 - Open your laptop! Then close your laptop!
- Finds help when you need it (course instructors, friends, tutorials, office hours...)
 - Try it once early in the term to meet your instructors!

Learn to take **appropriate risks** in order to grow and get better. (No risk, no reward) (Too much risk, no reward.)



Give every department a fair chance chance,

Attend every open house, guest talk, and free event you can, to find out about every department.

Give yourself the chance to be surprised.

Departments and Schools:

Chemical & Biological Engineering

Civil Engineering

Electrical & Computer Engineering

Materials Engineering

Mechanical Engineering

Mining Engineering

UBC Okanagan Engineering

Non-department Programs

Biomedical Engineering

Engineering Physics

Environmental Engineering

Geological Engineering

Integrated Engineering

Final thoughts/Questions?

Google "EngPhys Imagine" for this talk.

Thanks!