Welcome Back!

Dr. Lihong Zhang
Professor and Acting Head

Dept. of Electrical and Computer Engineering

Agenda

- Introduction
- Labs and Lab Safety
- Professionalism and Academic Integrity
- CEAB - GA and CI

Departmental contacts

Acting Head: Lihong Zhang, lzhang@mun.ca
864-4638, CSF-1204

- Faculty, staff and students, inter-departmental management, outreach and external relations

Acting Head: Vlastimil Masek, masek@mun.ca
864-4638, CSF-1204

- Student advising, academic appeals and credit transfer, scholarships and awards, and room access administration

Secretaries: Martina Krskova and Lisa Rumsey
864-2707/8177, CSF-1204

https://www.mun.ca/engineering/ece/about-us/contact-us/

Courses

The purpose is that *you* learn.

Lectures are a main opportunity for you to get some value - you should attend.

Pay attention to deadlines and don't leave work to the last minute.

Stay on top of the material - review early so that you can clear up confusion before it is too late.

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Labs

Often attendance in labs is required.
Take them seriously.
Don’t copy.
Ask questions. You are here to learn, so be sure to get your $ worth.

Pay attention to lab safety

Safety glasses are required. You need to have your own.
Make sure it isn't live before you touch it.
Be careful about hot components - if incorrectly connected they can burn
Make sure it is connected correctly before you turn it on.
Think before you act. Double check.
Ask questions. Understand procedures.

Lab Safety (cont'd)

Familiarize yourself with

- Locations of emergency equipment (emergency shut off, first aid, fire extinguisher, phone)
- Emergency exit route and muster stations
- Lab procedures
- Emergency procedures

No food/drink when working on lab equipment/circuits

Jr. Design Lab (CSF-2103)

You are granted after hours access as a privilege - please don't abuse it.

Treat it as a workplace (not your rec room)

- Behave as you would in a workplace.
- Treat others with respect.
- Keep it tidy.

Keep safety in mind.

Don't work on equipment alone.

(You need to sign the sheet today to get access.)

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Professionalism

A profession is built on ethical behaviour and the utmost regard to the safety of the public.

As a professional engineer, your career success will depend on your level of professionalism. (see PEGNL code of ethics).

As students in a professional program, you are expected to behave in a professional manner.

University regulations give penalties and procedures for violations of academic rules.

Academic Integrity

There are lots of resources available to you, use them with integrity:

- Copying work from others is not acceptable, unless explicitly allowed.
- Allowing others to copy your work is not allowed.
- Discussing assignments/labs with your classmates is generally ok, but working in teams is not, unless stated.
- Violations of academic integrity are reported to the Dept. Head and tracked.

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Graduate Attributes (GA) – defined by CEAB (Canadian Engineering accreditation Board)

1. Knowledge Base for Engineering	Demonstrated competence in university level mathematics, natural sciences, engineering fundamentals, and specialized engineering knowledge appropriate to the program.
2. Problem Analysis	An ability to use appropriate knowledge and skills to identify, formulate, analyze, and solve complex engineering problems in order to reach substantiated conclusions.
3. Investigation	An ability to conduct investigations of complex problems by methods that include appropriate experiments, analysis and interpretation of data, and synthesis of information in order to reach valid conclusions
4. Design	An ability to design solutions for complex, open-ended engineering problems and to design systems, components or processes that meet specified needs with appropriate attention to health and safety risks, applicable standards, and economic, environmental, cultural and societal considerations.
5. Use of Engineering Tools	An ability to create, select, apply, adapt, and extend appropriate techniques, resources, and modern engineering tools to a range of engineering activities, from simple to complex, with an understanding of the associated limitations.
6. Individual and Team Work	An ability to work effectively as a member and leader in teams, preferably in a multi-disciplinary setting.
7. Communication	An ability to communicate complex engineering concepts within the profession and with society at large. Such ability includes reading, writing, speaking and listening, and the ability to comprehend and write effective reports and design documentation, and to give and effectively respond to clear instructions.
8. Professionalism	An understanding of the roles and responsibilities of the professional engineer in society, especially the primary role of protection of the public and the public interest.
9. Impacts of Engineering on Society and the Environment	An ability to analyze social and environmental aspects of engineering activities. Such ability includes an understanding of the interactions that engineering has with the economic, social, health, safety, legal, and cultural aspects of society, the uncertainties in the prediction of such interactions; and the concepts of sustainable design and development and environmental stewardship.
10. Ethics and Equity	An ability to apply professional ethics, accountability, and equity.
11. Economics and Project Management	An ability to appropriately incorporate economics and business practices including project, risk, and change management into the practice of engineering and to understand their limitations.
12. Lifelong Learning	An ability to identify and to address their own educational needs in a changing world in ways sufficient to maintain their competence and to allow them to contribute to the advancement of knowledge

Graduate Attribute (GA) /Continual Improvement (CI) Process

Key groups/individuals:

ECE Department Head (and CI Champions)

- responsible for each program and is accountable for managing the review process and ensuring that continuous improvement occurs where appropriate

ECE Curriculum Committee

- main body that oversees the GA/CI process for the EE and CE programs
  - collection of assessment data for all ECE courses
  - review and interpretation of all assessment data (including from Core courses and Co-op work terms)
  - consideration/initiation of program or CI process improvements based on GA data (or other mechanisms)
  - meets at least twice per semester

FEAS Continuous Improvement Committee (FEAS CIC)

- Faculty-wide committee chaired by Associate Dean (UGS), comprising the “CI Champions” for each program and Coop, and the Director of First Year Engineering
  - coordinates GA data collection for common elements of the curriculum (Core courses and Coop)
  - coordinates faculty-wide program or CI process improvements (e.g., the current review of indicator list)
  - meets at least twice per semester

ECE Instructors

- Provide GA assessment data as well as feedback on data, suitability of assessment tools, etc.

Graduate Attribute (GA) /Continual Improvement (CI) Process

Stakeholder engagement is important!

- Students (the most important stakeholders!)
- Faculty
- ECE Curriculum Committee
- Engineering leadership
- Other departments
- Core and Engineering One
- Coop
- Employers
- EASAC and IAB
- CUGS
- PEGNL