

## Master of Philosophy (MPhil) and Doctor of Philosophy (PhD) Programs in Electronic and Computer Engineering

### *Curriculum for Master of Philosophy (MPhil) Program in Electronic and Computer Engineering*

The Master of Philosophy (MPhil) program is designed for students who are interested in pursuing a career in research and development in industry or academia. It is also an excellent preparation for those interested in pursuing a PhD degree.

Besides completing an approved PG course sequence, an MPhil student must complete, under the supervision of a research advisor, a research project leading to a master's thesis and pass an oral thesis defense. To be eligible for an MPhil degree, a student must:

- Complete at least 15 credits of approved coursework (excluding ELEC 6900 Independent Study, and LANG 5001 Postgraduate English for Academic Purposes), of which at least 9 in the area of Electronic and Computer Engineering;
- Pass LANG 5001 Postgraduate English for Academic Purposes, except those who register in part-time mode. Students can be exempted from taking LANG 5001 with the agreement of the Department Head and PG Coordinator;
- ELEC 6990 MPhil Thesis Research; and
- Presentation and oral defense of the MPhil thesis.

### Nanotechnology Concentration

In addition to the program requirements specified above, students who opt for the Nanotechnology concentration are required to:

- Take one NANO course \*;
- Complete NANO 6010 Advanced Topics in Nano Science and Technology for one term; and
- Conduct research in nano area.

*\* NANO 5450 can be counted as ELEC elective course in partial fulfillment of the 15-credit program requirement.*

### Energy Technology Concentration

In addition to the program requirements specified above, students who opt for the Energy Technology concentration are required to:

- Take one ENEG course;
- Complete ENEG 6010 Advanced Topics in Energy Technology for one term; and
- Conduct research in energy area.

***Curriculum for Doctor of Philosophy (PhD) Program in Electronic and Computer Engineering***

The Doctor of Philosophy (PhD) program caters for students who wish to pursue a career in advanced industrial research and development, or university research and teaching. It emphasizes training in original thinking and independent research. To be eligible for the PhD degree, a student must:

- Complete at least 15 credits of approved PG coursework (excluding ELEC 6900 Independent Study, and LANG 5001 Postgraduate English for Academic Purposes), of which at least 9 in the area of Electronic and Computer Engineering;
- Enroll for ELEC 6950 Departmental Seminar, except those who register in part-time mode;
- Pass LANG 5001 Postgraduate English for Academic Purposes, except those who register in part-time mode. Students can be exempted from taking LANG 5001 with the agreement of the Department Head and PG Coordinator;
- Pass the qualifying examination within two years after admission, with a maximum of two attempts;
- Pass the thesis proposal before the final thesis defense;
- ELEC 7990 Doctoral Thesis Research; and
- Present and oral defend the PhD thesis.

Nanotechnology Concentration

In addition to the program requirements specified above, students who opt for the Nanotechnology concentration are required to:

- Take one NANO course\*;
- Complete NANO 6010 Advanced Topics in Nano Science and Technology for one term; and
- Conduct research in nano area.

*\* NANO 5450 can be counted as ELEC elective course in partial fulfillment of the 15-credit program requirement.*

Energy Technology Concentration

In addition to the program requirements specified above, students who opt for the Energy Technology concentration are required to:

- Take one ENEG course;
- Complete ENEG 6010 Advanced Topics in Energy Technology for one term; and
- Conduct research in energy area.