

# ELE746 – Power Systems Analysis

- **Course Outline**

<http://www.ee.ryerson.ca/undergraduate/dcd/ele746.html>

- **Key Knowledge to Be Acquired**

Power Transformers, Generators, Transmission line parameters, per unit system of calculations, Power system network equations and solutions, load flow studies, symmetrical fault studies and sizing Circuit Breakers.

- **Key Skills to Be Mastered**

Use of ETAP (Electrical Transient Analyzer Program), which power industry use for analysis and design of power system. Students are given individual projects on load flow and short circuit analysis.

- **Potential Careers**

Electrical Engineering in power industry, manufacturing and mining.

- **Potential Employers**

Hydro One, OPG (Ontario Power Generation), Toronto Hydro, Ontario Power Authority, consulting companies, mining , all municipalities' Hydro, new Green energy (Solar power and Wind turbine) industries.

- **Graduate Studies**

Ryerson, Toronto, Waterloo, Western, McMaster etc., have strong graduate programs in Power Systems and power electronics.