

U N E N E

University Network of
Excellence in Nuclear
Engineering

UNENE Masters of Nuclear Engineering

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UNENE Masters of Engineering

- UNENE is an industry-university partnership which:
 - Supplies highly-qualified graduates
 - Supports nuclear research
 - Creates respected university-based experts



Members

- Atomic Energy of Canada Limited
- Bruce Power
- Ontario Power Generation
- Canadian Nuclear Safety Commission
- CANDU Owners Group
- AMEC-NSS
- CAMECO
- McMaster University
- Queen's University
- University of Ontario Institute of Technology
- University of Saskatchewan
- University of Toronto
- University of Waterloo
- University of Western Ontario
- Ecole Polytechnique
- University of New Brunswick
- Royal Military College
- University of Guelph

The UNENE M.Eng.

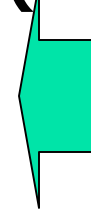


- Course based:
 - 10 courses OR
 - 8 courses plus a project
 - 3 of the 10 courses can be Business Courses from Advanced Design and Manufacturing Institute (ADMI)
- Accredited by Ontario Council of Graduate Studies
 - Courses are graduate level in content & expectations
- Offered by McMaster, Waterloo, UOIT, Western and Queen's
- Geared to the working professional
 - Topics are relevant to your work
 - Scheduling recognizes you have a day job

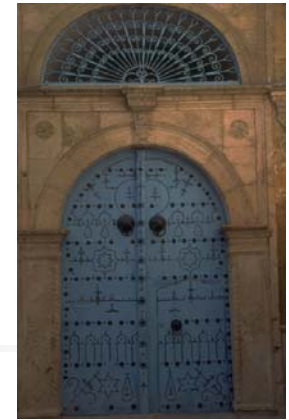
Typical Courses

- UN0802: Nuclear reactor analysis
- UN0801: Nuclear plant systems and operations
- UN0804: Nuclear reactor heat transport system design
- UN0803: Nuclear reactor safety design
- UN0603: Project management for nuclear engineering
- UN0901: Nuclear materials
- UN0805: Radiation health risks and benefits
- UN0702: Power plant thermodynamics
- UN0701: Engineering risk and reliability
- UN0601: Control, instrumentation and electrical systems in CANDU
- UN1001: Reactor chemistry and corrosion
- UN0902: Fuel management
- UN0602: Nuclear fuel waste management
- EP704: Nuclear Fuel Engineering

**You MUST
take the four
core courses
(in red)**

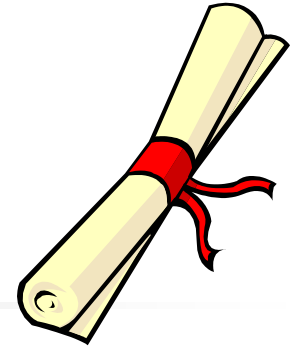


To Get In...



- Honours degree in engineering, science or mathematics
- Typically a B (75%) average depending on the admitting university
- Consideration of relevant work history and likelihood of success
- Takes at least a month

To Succeed...



- At least a B- (70%) for *each* course
- Must finish by 5 years
 - Some people do it in 2 years ... stressful
 - Don't take more than one course at a time
- Respect Academic Integrity
 - Else you will fail the course and may be ejected from the programme
- Money: \$2700 per course + incidental fees
 - Employer may pay, but get prior agreement
 - You may be on the hook if you fail

How much time does it take?

- Lecture time typically 40 hours per course
 - Done on 4 alternate weekends in Whitby
 - Distance Learning used for all courses for remote students
 - In real time; also recorded for later review
 - Reasonably successful
 - Your time: Double or triple that *in addition*
- Course Schedule:
<http://www.unene.ca/courses/schedule.htm>
- Free discipline refreshers before key topics



Can I Take Single Courses?

- You can take single courses
 - Admission requirements same
 - Cost is the same apart from the incidental fees
- Same for “official” auditing
- Informal auditing
 - Up to individual professor
 - Generally discouraged
- If you don't enroll in the M.Eng., your courses may or may not count if you try to transfer later

Why Do It?

- Your own professional development
 - Broaden your horizons
- Recognition by the company
- Formal degree
- Career enhancement
 - Better candidate for internal competitions
 - Mentor the new hires
 - Demonstrated capability for hard work, self-discipline, learning and self-motivation
 - Greater flexibility in job placement

What Do I Do Next?

- You need to submit your application
 - Transcripts (likely on critical path)
 - Letter
 - *Academic* References (if possible)
- Apply on-line at
<https://gradapplication.mcmaster.ca/account/instructions.asp>
or similar links at Queen's, Waterloo,
UOIT or Western

For More Information

- UNENE web site: www.unene.ca
- Questions?
 - UNENE: Victor Snell - vgssolutions@rogers.com
 - Administrative: Lori Cole - unene@mcmaster.ca
 - ADMI – David Heaslip - dheaslip@admicanada.com
 - McMaster Grad. Studies - <http://www.mcmaster.ca/graduate/applic.htm>
 - Engineering Physics: engphys.mcmaster.ca