

Guidance on UNENE Project Courses

A UNENE Project (UN0x00 number) can be an exciting and interesting option as part of the UNENE M.Eng. Here is some guidance, prepared in response to common questions.

- You may spend approximately four months (or longer as required) in an industrial laboratory or design organization carrying out an industry-oriented project under the supervision of a suitably qualified staff scientist.
- The industrial research project can only be undertaken after at least half the required UNENE courses have been taken *including all four core courses*.
- The industrial research project counts as two UNENE courses. Since the expected student workload for a UNENE course is ~120 hours / course, you should plan a project that will take you ~240 hours in total. Also you will pay double the normal UNENE course fee. You need to register at your home university (the one you applied to for UNENE).
- You will need to arrange a university co-supervisor from one of the UNENE universities, especially if the industrial scientist does not have a Ph.D. or academic standing.
- You should write a detailed project proposal. This has to be submitted to and approved by both your supervisors (at your university and your industry organization) *and* by the UNENE Programme Director. The proposal should include the objective of your project, methodology, required resources (e.g. computer codes, data), and a rough time-line with a few key milestones and expected outcomes.
- You can't use material from your employment, that you have been paid to do (i.e. no double-dipping). It's OK to do a project which is *related* to your normal work as long as the research is *additional* to your normal work.
- The principles of academic integrity (see <http://www.unene.ca/un-acad-integrity/index.htm>) apply to your research project as well as to UNENE courses. In fact since you are doing research, the scope is somewhat broader, and you should consult the policy of your university, as listed in the above link.
- You should write monthly progress reports and submit them to your supervisors and to the UNENE Programme Director.
- Many industrial research projects will involve use of proprietary data. UNENE has mechanisms to protect this data, and stores it in a secure place accessible only to the UNENE Administrator and the UNENE Programme Director. You must include data that you use for your project in your final report – it is not acceptable for UNENE to receive a report from which essential data or work relevant to or used in your project has been removed. In such a case you should label your report “Protected -Commercial” or equivalent.
- Your final report must reflect the fact that the project represents the equivalent work of two UNENE courses, so it should be substantial. Consider it a mini-thesis. While the contents will vary according to the project, the following Table of Contents (or a subset) would cover most

cases: Abstract, Introduction / Purpose, Review of Prior Work, Methodology, Assumptions, Experimental Setup (if applicable), Input Data, Measurements, Computer Codes and Applicability, Test Cases, Results, Sensitivity Analysis, Uncertainty Analysis, Limitations, Discussion, Conclusions, References, Acknowledgments.

- Your final report likewise must be approved by your supervisors and by the UNENE Programme Director, and the final copy submitted in electronic format for retention by UNENE.
- At the end of your project your academic supervisor should arrange for a presentation at the university. The UNENE Programme Director should be invited as a courtesy.

If you have any questions, please feel free to contact

Dr. V.G. Snell

UNENE Programme Director

Adjunct Professor, Engineering Physics

McMaster University

Email: snellv@mcmaster.ca or vgssolutions@rogers.com

Phone: (905) 525-9140 x20168

or for administrative matters,

Ms. Lori Cole

UNENE Administrator

McMaster University

Email: unene@mcmaster.ca

Phone: (905) 525-9140 x20168