

ACADEMIC COUNCIL REPORT

ACTION REQUESTED:

Recommendation
Decision
Discussion/Direction
Information

DATE: 22 June 2021

FROM: Graduate Studies Committee

SUBJECT: Program Review 18-Month Follow-up Report – Master of Engineering in Nuclear Engineering, Graduate Diploma in Nuclear Design Engineering, and Graduate Diplomas in Nuclear Technology

COMMITTEE MANDATE:

In accordance with Article 11 of the Ontario Tech University Institutional Quality Assurance Process (IQAP) Cyclical Program Review Procedures, eighteen months following the completion of a program review the Dean will prepare a brief follow up report and “A summary of the progress report will be approved by the appropriate standing committee of Academic Council”. This summary report will be reported to Academic Council for information and subsequently posted to the Ontario Tech corporate website.

BACKGROUND/CONTEXT & RATIONALE:

Eighteen months after the completion of a program review the Faculty is asked to report on the progress to date in implementing the agreed upon plans for improvement. The report is sent to the Academic Resource Committee for review. If outstanding items remain from the implementation plan at the time of the eighteen-month report, the Resource Committee will review these outstanding items with the Dean. The Committee may recommend further monitoring of these items on a case-by-case basis.

RESOURCES REQUIRED:

The Faculty’s plans to address any remaining resource needs are outlined in the 18-Month report. Information and support will be required from various areas of the University in order to implement the plan as originally agreed.

COMPLIANCE WITH POLICY/LEGISLATION:

The Ontario Universities Council on Quality Assurance (Quality Council), established by the Council of Ontario Universities in July 2010, is responsible for oversight of the

Quality Assurance Framework processes for Ontario Universities. The Council operates at arm's length from both Ontario's publicly assisted universities and Ontario's government. Under the Quality Assurance Framework, academic programs must undergo a cyclical review at least every eight years following their implementation. The purpose of the cyclical program review is to critically examine the components of a program with the assistance of outside reviewers with the goal of continuous improvement. A program review's purpose is not solely to demonstrate the positive aspects of the program, but also to outline opportunities that will lead to improvements for the future.

NEXT STEPS:

- Following the presentation of the 18-Month FAR to Academic Council it will be posted to the University's website

SUPPORTING REFERENCE MATERIALS:

- 18-Month Summary



Eighteen Month Follow-Up Report – Graduate Program Review

Faculty of Energy Systems and Nuclear Science

Master of Engineering in Nuclear Engineering, Graduate Diploma in Nuclear Design Engineering, and Graduate Diplomas in Nuclear Technology

Date: 22 December, 2020

This program review was completed in 10 February, 2020. The chart below outlines the agreed upon plan for improvement following the review. The progress that has been made on the action items is provided in the 18-month follow-up comments column on the right.

The completed report and the status of its action items will be reviewed by the appropriate standing committee(s). Please provide as much detail and rationale as possible.

Status Legend:

Complete: Accomplished action item; no further steps required.

Continuous: Initial action item complete but requires ongoing monitoring and/or enhancement.

In Progress: Progress on action item has been initiated but is not complete at this time. Outline all steps taken in the comment's column.

On Hold: Unable to complete due to other dependent factor(s).

Cancelled: Item no longer relevant or resources unavailable.

<u>Action Items</u>	<u>Timeline</u>	<u>Status</u>	<u>18 Month Follow-Up Comments</u>
Prepare degree-level expectations for courses	October 2020	Complete	Several courses under review
Define core courses for each field	October 2020	Complete	Fields may shift with more in online program offerings
Revise admission processes for the MEng and GDip programs	September 2020	Complete	This is an ongoing process and subject to industry input and responses to the COVID-19 pandemic
Recommend fee-per-credit tuition for MEng and GDip offered by FESNS	September 2020	Complete	Recommendation made to Graduate Studies
Develop entrance exams for non- traditional GDip applicants	September 2020	Continuous	Practice of exam preparation and issuance agreed by Faculty:
Submit a Notice of Intent (NOI) to develop a Master of Nuclear Technology program	October 2020	Complete	An NOI submitted (as part of GDip in Energy Systems)
Eliminate graduate courses that have not met enrollment expectations	October 2020	Continuous	Where agreed enrollment expectations defined courses eliminated
Remove inactive names from the list of graduate faculty associated with FESNS	October 2020	Complete	
Reduce the number of specialties offered in the GDip NT program	October 2020	Continuous	
Recommend to Grad Studies to have institutional management of student feedback for grad courses with six or more students	October 2020	Complete	We applaud Graduate Studies plans to issue student feedback surveys to graduate courses
Seek to provide more industry project topics	November 2020	Continuous	Relevant industry topics added by Dr. Markus Piro (with CNL); more expected
Add project topics and courses in Isotope-related topics	November 2020	Continuous	

Implement an advertising strategy to increase awareness of the programs	November 2020	Continuous	
Make more effective use of projects and project rooms to allow students to interact with each other	November 2020	Complete	Review completed, however under revision as some courses may shift with post-pandemic teaching format (more online courses) and OPG's plans to move their HQ to the Darlington Energy Complex

Additional comments:

The emergence of COVID-19 and off-campus working since March 2020 has certainly impacted this improvement plan (and the overall program). However key meetings were held with Graduate Studies and progress made. Following are initial comments on how we are working to shift course-based Nuclear Engineering and Technology Graduate Programs (MEng and GDip) to a 'post-pandemic' teaching environment:

Anchor new initiatives in the long-standing GDip practice of (largely) online learning environment

Provide a list of graduate courses that will now be provided online and through a hybrid approach beginning Fall 2021 (transition year) and 2022 and beyond ('post pandemic teaching environment'), e.g. the graduate course 'The Future Role of Nuclear Power' went from the typical 4 students with on-campus provision to 20 students through online only. Each course instructor has been asked to suggest how their course will be taught in Fall 2021 and then 2022 and beyond.