



## MEMORANDUM

**To:** Executive Committee of Faculty Council

**From:** Dr. Graeme Norval  
Chair, Undergraduate Curriculum Committee

**Date:** November 4, 2013 for December 11, 2013 Faculty Council Meeting

**Re:** **Proposed Undergraduate Academic Certificate in Renewable Resources Engineering**

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## REPORT CLASSIFICATION

This is a major policy matter that will be considered by the Executive Committee for endorsing and forwarding to Faculty Council for vote as a regular motion (requiring a simple majority of members present and voting to carry).

## BACKGROUND

A Renewable Resources Engineering Certificate is being proposed. It will require considerable personal commitment equivalent to three courses, or half a minor. Successful completion of the certificate will appear on the student's academic record.

The Faculty of Applied Science and Engineering has developed a number of minor and certificate programs to enable their students to enhance the breadth and depth of their program of study.

The Faculty of Forestry has expertise in sustainable resource management, sustainable energy production and product manufacture and sustainable communities.

The Cross-Disciplinary Programs Office has been working with the Faculty of Forestry over the last two years to create a selection of interdisciplinary offerings for engineering students. These courses are organized and coordinated by the Faculty of Applied Science and Engineering. Funds for the courses are provided by the Provost as part of their support for graduate-only Faculties and Departments.

The courses below are also eligible electives for various Engineering minors (Sustainable Energy, Bioengineering, Environmental Engineering, Engineering Business). As with other minor/certificate course overlap, students will only be able to count any given course towards two credentials (i.e., degree and one minor or certificate).

## **STRUCTURE**

### **Certificate Requirements**

Students in the Renewable Resources Engineering Certificate must successfully complete a minimum of three (3) 1-semester courses from the list outlined below. All courses are currently available to Engineering students.

FOR308H	Discovering Wood & Its Role in Societal Development (Krigstin) (HSS)
FOR421H	Green Urban Infrastructure: Sustainable City Forests (Smith) (CS)
FOR424H	Innovation in Manufacturing of Sustainable Materials (Sain) (TE)
FOR425H	Bioenergy and Biorefinery Technologies (Krigstin) (TE)
CHE475H	Biocomposite Materials: Mechanical and Bio-Inspiration (Yan) (TE)

## **PROCESS AND CONSULTATION**

The Undergraduate Curriculum Committee is composed of representatives from each program; the Vice-Dean, Undergraduate Studies; the Chair, First Year; the Associate Dean, Cross-Disciplinary Programs; and the Registrar's Office. The Committee meets regularly, and reviews changes to the curriculum.

## **PROPOSAL/MOTION**

THAT the Undergraduate Academic Certificate in Renewable Resources Engineering be approved and introduced in the 2014-2015 academic year.