



University of Toronto

OFFICE OF THE VICE-PRESIDENT AND PROVOST

TO: Committee on Academic Policy and Programs

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DATE: January 9, 2006

AGENDA ITEM: 5(b)

ITEM IDENTIFICATION:

Faculty of Applied Science and Engineering: Proposal for a Minor Program in Bioengineering

JURISDICTIONAL INFORMATION:

The Committee has authority to approve changes to curriculum within established degree programs that can be accomplished with existing resources and are not major.

PREVIOUS ACTION TAKEN:

HIGHLIGHTS:

The establishment of the Bioengineering Minor will be an important step for the Faculty of Applied Science and Engineering (APSC) and arises directly from the Faculty's recent academic planning process. As outlined in the attached letter from the Faculty's Vice-Dean of Undergraduate Studies, Bioengineering has been identified as one of the four strategic directions that the Faculty is pursuing. Creation of minors was one of the mechanisms the Faculty identified so as to add more flexibility, breadth, and inter-departmental or inter-Faculty teaching to the curriculum.

The interdisciplinary program will build on the excellence of the professors in the Faculties of Applied Science & Engineering, Medicine and Arts and Science at the University of Toronto. Students will be taught by leading-edge faculty from across the University of Toronto and encouraged to participate in interdisciplinary research collaborations in fourth year thesis and design projects and during the summer prior to fourth year studies. The Bioengineering Minor will be collaborative across the Faculty and open to Engineering students interested in learning more about how biology interfaces with engineering. Initially, students in Chemical Engineering, Mechanical & Industrial Engineering, Electrical and Computer Engineering, Materials Science and Engineering, and Civil Engineering will be permitted to participate in the program. The Minor program will be separate from the Engineering Science biomedical engineering option.

The goals of the minor will be to develop students' skills in engineering in the context of bioengineering. Pedagogical and academic issues, including the educational outcomes of the Minor, projected student demand, consistency with objectives, mission and academic plans of the Faculty, and faculty involvement are outlined in the attached documentation.

The structure of the proposed Minor in Bioengineering is aligned with the structure proposed by the Faculty for all minors in APSC. The Minor was thoroughly reviewed by the Faculty's Curriculum Committee that includes representatives from each undergraduate Program and approved by Executive Committee on November 9 and Faculty Council on November 23, 2005.

FINANCIAL AND/OR PLANNING IMPLICATIONS:

Creation of the Bioengineering Minor will be possible through existing resources within the Faculty, funding awarded by the Provost to the Faculty from the Academic Initiative Fund in particular.

RECOMMENDATION:

The Committee on Academic Policy and Programs approves:

THAT the Faculty of Applied Science and Engineering establish a Minor Program in Bioengineering, as described in the proposal dated January 9, 2006, effective September 2006.