UNIVERSITY OF ONTARIO INSTITUTE OF TECHNOLOGY

CURRICULUM AND PROGRAM REVIEW COMMITTEE
Report to Academic Council
at its meeting of January 17th, 2017

FOR ACTION

1. **Faculty of Engineering and Applied Science**

   a. **Bachelor of Engineering in Software Engineering – Major Program Modification**
   The Curriculum and Program Review Committee recommends:
   That Academic Council approve the new specialization Internet of Things in the Software Engineering program.

   Rationale
   The Internet of Things is an evolution of the Internet in which everyday objects have network connectivity. As this is a growing market with many IT and telecom companies investing and recruiting significantly in this area, CPRC recommends the introduction of a new specialization in Internet of Things, which will be available to Software Engineering students going into their fourth year starting Fall 2017. The specialization consists of twelve credit hours (four courses) with specialized courses in Internet of Things, Data Mining, and Cloud Services. Of the four courses, three have been offered in the Faculty as electives, and one is a new course.

2. **Faculty of Science**

   a. **Bachelor of Science - Major Program Modification**
   The Curriculum and Program Review Committee recommends:
   That Academic Council approve the new minor program in Astronomy.

   Rationale
   Astronomy is a popular subject, with high interest amongst Science students at UOIT. Four courses in astronomy and astrophysics are currently offered as part of the Astrophysics specialization within the B.Sc. in Physics: PHY 2900U Astronomy I, PHY 3900U Astronomy II, PHY 4910U Techniques of Modern Astrophysics, and PHY 4920U Cosmology. The first two of these courses have seen a large enrollment since their introduction. The majority of the students in these two courses are from outside of the Physics program; clearly interest in the field of astronomy is quite high. CPRC recommends the creation of a new Astronomy minor. The creation of a new minor in Astronomy will complement the existing physics specializations and minor by leveraging the already available courses within the field of astronomy.

FOR INFORMATION

1. **Faculty of Business and Information Technology**

   a. **Bachelor of Information Technology in Game Development and Entrepreneurship – Minor Program Adjustment**
   Through the program review in 2014-2015, external examiners noted that some courses, particularly apparent in the 'art' subjects, were too specific for the type of program offered. CPRC approved the removal of nine core courses and the introduction of five new core courses. The balance of the courses will be technical and open electives. These changes will address the concerns from the external review as

well as meeting requirements set by the changing game industry and re-focus the art-only courses into technical-art courses. The changes will allow greater flexibility for the students who need to repeat courses or take courses during the spring/summer semester. Moreover, it will enable the introduction of new minor programs.

b.   Bachelors of Commerce and Information Technology – Minor Program Adjustment

CPRC approved the addition of new course BUSI 4798U Incubator I and current elective course BUSI 4799U Incubator II as core courses offered as alternates to the fourth-year Capstone courses. Currently, if fourth-year students do not go on a formal internship they must take the Capstone courses to meet their final degree requirements. The incubator has been running for a few years, and the Faculty has been substituting the incubator in place of Capstone, informally. This change will make the incubator an official alternative to Capstone in the degree requirements. Changing the course from elective to core recognizes the experiential learning credit of the incubator as a suitable academic alternative to Capstone.

c.   Bachelor of Commerce – Minor Program Adjustment

CPRC approved the replacement of BUSI 3930U - Leadership, Negotiation, & Teamwork, an elective course in the Operations Management minor, with BUSI 3450U - Business Forecasting Techniques. BUSI 3930U is not focused for the subject area and the new course will better meet the needs of this program.

2. **Faculty of Engineering and Applied Science**

a.   Bachelor of Engineering in Nuclear Engineering – Minor Program Adjustment

In keeping with the practice established with the other engineering programs, the Faculty is migrating course codes with the ENGR prefix to a new subject-specific prefix course code unless they are common to many programs. CPRC approved four course code changes. ENGR 4994U and ENGR 4998U were changed to NUCL 4994U and NUCL 4998U. To avoid conflict with preexisting NUCL course codes, both ENGR 4520U and ENGR 4620U were changed to NUCL 4525U and NUCL 4625U.

3. **Faculty of Science**

a.   Bachelor of Science in Chemistry – Minor Program Adjustment

In January 2016 the Faculty proposed changes to the Chemistry program curriculum. At that time, there was an omission error, and two courses that are normally approved fourth-year electives were left out of the new course list. Prior to the change, CHEM 4040U and CHEM 4060U were suitable electives. CPRC approved corrections due to this typographical error and the reinsertion of these courses as suitable chemistry electives.

b.   Bachelor of Science in Forensic Science – Minor Program Adjustment

In the fourth year of the Forensic Science Program, students must take one of three 'capstone' courses, FSCI 4410/4420 (thesis project), FSCI 4430 (directed studies) or FSCI 4460 (mock crime scene practicum). The current academic calendar describes the FSCI 4430 and 4460 courses as being available in either the fall or winter term. However, these two courses have consistently been offered in the winter term only. Additionally, the current academic calendar description of the three 'capstone' courses inaccurately ranks the thesis project as more desirable. Moreover, the current description does not capture the term placement options for the capstone courses. CPRC approved changes to the Forensic Science capstone entry which serve to clarify the time of offering and the equal value of the three courses in the program requirements. These changes will align the academic calendar with the current and future provision of courses in the program and will encourage students to select the best option for them.

c.   Bachelor of Science – Minor Program Adjustment

Currently, the Minor program in Physics specifies a list of 3000- and 4000-level courses required to complete the program, in addition to two specific 2000-level courses. Limiting choice in the Minor is unnecessary and creates problems when courses change or are added. Furthermore, the Faculty wished to encourage more students to take the minor. CPRC approved modifications to the minor program

requirements to include any 3000- or 4000- level course as fulfilling the requirement for the six credit-hours of the minor. This change will allow students the option to select their own courses, based on their interests and program needs by including every third and fourth year course, including those in existing specializations, many of which might be of interest to non-physics students.

4. **Faculty of Social Science and Humanities**

   a. **Bachelor of Arts in Criminology and Justice – Minor Program Adjustment**
CPRC approved a course code prefix change for courses that are integral to the Criminology and Justice program.   This will allow for consistency across all Faculty programs. After consultation with the Registrar's Office, the course prefix for all Criminology and Justice course codes will change from SSCI to CRMN, which is more suitable for the subject area. This change will be reflected in all program maps where the courses are offered.