FOR APPROVAL

TO: Arts & Science Council

SPONSOR: Joshua Barker, Vice-Dean, Graduate Education

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DATE: April 12, 2017 for April 19, 2017

AGENDA ITEM: 6

ITEM OF BUSINESS:
Approval of new Master’s Collaborative Specialization: Psychology and Engineering (Major Modification)

JURISDICTIONAL INFORMATION:
Arts & Science Council has delegated authority to approve modifications to existing degree programs that are defined in the University of Toronto Quality Assurance Process (UTQAP) as major modifications, such as the creation of a collaborative specialization.

GOVERNANCE PATH:
1. Graduate Curriculum Committee – (approval)
2. Arts & Science Council – April 19, 2017 (final approval)
3. Committee on Academic Policy & Programs – (reported for information by the Office of the Vice-Provost, Academic Programs) – May 9, 2017

The Office of the Vice-Provost, Academic Programs will also report this major modification to the Ontario Universities Council on Quality Assurance in the Summer of 2017.

HIGHLIGHTS:
This proposal would see the creation of a Collaborative Master’s Specialization in Psychology and Engineering, drawing on the Department of Mechanical and Industrial Engineering, in the Faculty of Applied Science & Engineering, and the Department of Psychology in the Faculty of Arts & Science. The specialization would be led by Engineering.

This specialization would harness many different areas of research where psychology and engineering intersect. Such areas include: how the human mind and behavior play out in design preferences and adoption; how human being drive design by prior precedent; how objects engineered to be used within the social arena may be improved; how artificial intelligence and cognitive psychology interplay; and how operations research may reveal aspects of human behavior. These
rich areas of opportunity will benefit graduate students and faculty and establish a robust community of research and learning, heightening ties between the two faculties.

This would translate directly to benefits both for engineering graduate students, given an opportunity to apply psychology to their work, and to psychology graduate students to explore engineering applications, methods and tools. The specialization would produce graduate students with a unique expertise and mix of competencies that would play out in myriad fields, and establish the students in several fruitful career paths. Expected enrolment would be a modest 10 students split between those from engineering and Psychology, a sustainable number that should be fillable with high-quality candidates due to the increased prominence of this area of research both already in the programs and in US engineering programs. There is no current specialization at the University of Toronto, or in Canada, with this interest in psychology and engineering.

The core faculty for this specialization will be available as home program advisors/supervisors, and contribute to the specialization through teaching elective courses, and in participating in the delivery of seminars. The specialization will have a Director and a Collaborative Specialization Committee to manage admissions and to ensure adequate supervision of candidates. This is not expected to add significantly to any faculty member’s supervisory load.

**MOTION:**

THAT the proposed new collaborative Master’s specialization in Psychology and Engineering, as described in the attached proposal, be approved with an anticipated start date of September 2017.