

## Report on Minor Modifications 2017-18

*This list of minor modifications to programs is routinely provided to the shared-service offices to ensure they remain abreast of minor changes that affect for-credit academic programs.*

Faculty	Program(s)	Unit (if applicable)	Degree Designation	Type of Modification	Brief Description of Modification	Date of Institutional Approval (MM/DD/YYYY)	Date Effective (MM/DD/YYYY)
Applied Science & Engineering	Chemical Engineering & Applied Chemistry; Civil Engineering; Materials Science & Engineering	Chemical Engineering & Applied Chemistry; Civil & Mineral Engineering; Materials Science & Engineering	M.Eng.	Renaming Graduate Emphasis	Renaming emphasis “Advanced Water Technologies and Process Design” to “Advanced Water Technologies” to reflect current curricular offerings, which focus on the fundamentals of leading-edge water technologies, and less on design.	10/25/2017	01/01/2018
Applied Science & Engineering	Chemical Engineering & Applied Chemistry; Civil Engineering; Electrical & Computer Engineering; Mechanical & Industrial Engineering	Chemical Engineering & Applied Chemistry; Civil & Mineral Engineering; Electrical & Computer Engineering; Mechanical & Industrial Engineering	M.Eng.	New Graduate Emphasis	A new graduate emphasis “Analytics” examines analytical methodologies within a variety of sectors including: technology; energy; healthcare; transportation; logistics; manufacturing; marketing; public policy; sports, etc. With interest in analytics growing, and subsequently career opportunities on the rise, this emphasis is seen to help meet the growing demand for individuals with specialized knowledge in analytics.	11/13/2017	01/01/2018
Applied Science & Engineering	Electrical & Computer Engineering	Electrical & Computer Engineering	M.Eng.	New Graduate Emphasis	A new graduate emphasis “Biomedical Engineering” provides students an opportunity to study medical imaging, electronic biomedical devices, sensory communication and similar biomedical applications of electrical and computer engineering concepts.	01/24/2018	05/01/2018

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Applied Science & Engineering	Electrical & Computer Engineering	Electrical & Computer Engineering	M.Eng.	New Graduate Emphasis	A new graduate emphasis "Communications" allows students to study the fundamentals of information theory, networking, and signal processing and their applications to wireless communications systems, packet networks, machine learning, and cyberphysical systems.	01/24/2018	05/01/2018
Applied Science & Engineering	Electrical & Computer Engineering	Electrical & Computer Engineering	M.Eng.	New Graduate Emphasis	A new graduate emphasis "Computer Engineering" covers the design of computer hardware and software, giving students advanced knowledge in topics such as digital system design, computer architecture, computer security, parallel programming, reconfigurable hardware architectures, cloud computing, and advanced operating systems concepts.	01/24/2018	05/01/2018
Applied Science & Engineering	Electrical & Computer Engineering	Electrical & Computer Engineering	M.Eng.	New Graduate Emphasis	A new graduate emphasis "Electromagnetics" gives students the opportunity to advance their knowledge of electromagnetic theory and computational methods and their applications in the design of antenna systems and microwave circuits.	01/24/2018	05/01/2018
Applied Science & Engineering	Electrical & Computer Engineering	Electrical & Computer Engineering	M.Eng.	New Graduate Emphasis	A new graduate emphasis "Electronics" covers topics ranging from semiconductor physics and the design and fabrication of microelectronic circuits and devices, to analog and digital circuit designs for applications in power systems, computers, and telecommunications. Students can take courses in the design of very large-scale integrated circuits and are exposed to state-of-the-art computer-aided microchip design tools.	01/24/2018	05/01/2018

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Applied Science & Engineering	Electrical & Computer Engineering	Electrical & Computer Engineering	M.Eng.	New Graduate Emphasis	A new graduate emphasis "Energy Systems" allows students to obtain advanced knowledge in power-supply design, energy-conversion systems including photovoltaic, as well as in the design of large- and medium-scale energy transmission networks, including emerging smart-grids.	01/24/2018	05/01/2018
Applied Science & Engineering	Electrical & Computer Engineering	Electrical & Computer Engineering	M.Eng.	New Graduate Emphasis	A new graduate emphasis "Photonics" covers topics related to the generation, transmission and processing of light. Students can elect to study active and passive photonic devices, including lasers, optical interconnects, and detectors, as well as applications in communications, manufacturing, medicine, and solar energy capture.	01/24/2018	05/01/2018
Applied Science & Engineering	Electrical & Computer Engineering	Electrical & Computer Engineering	M.Eng.	New Graduate Emphasis	A new graduate emphasis "Systems Control" covers the mathematical foundations of feedback control systems and their applications to the control and stabilization of linear and nonlinear dynamical systems.	01/24/2018	05/01/2018
Applied Science & Engineering	Civil Engineering	Civil & Mineral Engineering	M.Eng.	New Graduate Emphasis	A new graduate emphasis "Building Science" provides students with instruction in core areas related to building science and the design of sustainable building enclosures and internal systems (heating, ventilation, air conditioning), including aspects of indoor air quality, that may be expanded with several electives.	03/05/2018	09/01/2018

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Applied Science & Engineering	Civil Engineering	Civil & Mineral Engineering	M.Eng.	New Graduate Emphasis	A new graduate emphasis “Concrete” gives students exposure to the latest developments in concrete technology and research, including non-destructive testing for concrete and microscopy for building and geomaterials, and modelling methods to enhance construction.	03/05/2018	09/01/2018
Applied Science & Engineering	Civil Engineering	Civil & Mineral Engineering	M.Eng.	New Graduate Emphasis	A new graduate emphasis “Construction Management” is for students who are in the construction field and are looking for the latest resources to enhance their efficiency through improved knowledge on topics including the management of documents and assets, scheduling, human resources, life cycle assessment, informatics and logistics in engineering applications.	03/05/2018	09/01/2018
Applied Science & Engineering	Civil Engineering	Civil & Mineral Engineering	M.Eng.	New Graduate Emphasis	A new graduate emphasis “Geomechanics” covers numerous topics related to rock engineering, mining, rock fracture dynamics, soil properties and behaviour, seismicity and earthquake engineering	03/05/2018	09/01/2018
Applied Science & Engineering	Civil Engineering	Civil & Mineral Engineering	M.Eng.	New Graduate Emphasis	A new graduate emphasis “Environmental Engineering” allows students to choose from a wide range of environmentally-related courses to enhance their knowledge on the relationships and interactions between natural and engineered systems.	03/05/2018	09/01/2018

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Applied Science & Engineering	Civil Engineering	Civil & Mineral Engineering	M.Eng.	New Graduate Emphasis	A new graduate emphasis “Sustainable Urban Systems” provides students interested in various aspects of the built environment (buildings, transportation, water resources, energy) with courses to help them improve or optimize their designs for longer-term sustainability.	03/05/2018	09/01/2018
Applied Science & Engineering	Civil Engineering	Civil & Mineral Engineering	M.Eng.	New Graduate Emphasis	A new graduate emphasis “Structural Engineering” allows students to gain advanced knowledge on several topics in the design and modeling of structures and the materials used to make them. Areas of study include advanced courses in solid mechanics, structural analysis, concrete and steel, bridge engineering, earthquake engineering and advanced building design.	03/05/2018	09/01/2018
Applied Science & Engineering	Civil Engineering	Civil & Mineral Engineering	M.Eng.	New Graduate Emphasis	A new graduate emphasis “Transportation Engineering and Planning” provides several courses that give students state-of-the-art tools to optimize the movement of materials and people in today’s society. Included are considerations for elements of sustainability and environmental impact, as well as transport-focused planning and demand courses, and courses on intelligent transportation systems.	03/05/2018	09/01/2018

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Arts & Science	Global Affairs	Munk School for Global Affairs	M.G.A.	New Graduate Emphasis	A new graduate emphasis “Development” allows students to develop their expertise around particular sub-fields of development policy including, conflict and post-conflict reconstruction, management of foreign aid, social development and participatory development.	10/30/2017	09/01/2018
Arts & Science	Global Affairs	Munk School for Global Affairs	M.G.A.	New Graduate Emphasis	A new graduate emphasis “Innovation Policy” allows students to develop their global affairs expertise around particular sub-fields of interest in innovation policy, including globalization of innovation-based industries, and the impact and consequences of innovation policy.	10/30/2017	09/01/2018
Arts & Science	Global Affairs	Munk School for Global Affairs	M.G.A.	New Graduate Emphasis	A new graduate emphasis “Justice” allows students to develop their expertise around particular sub-fields of justice including, indicators of crime, safety, and justice, and policies that advance the rule of law.	10/30/2017	09/01/2018
Arts & Science	Global Affairs	Munk School for Global Affairs	M.G.A.	New Graduate Emphasis	A new graduate emphasis “Markets” allows students to develop their expertise around issues in global economic policy, risk and financial markets, and market-government interactions.	10/30/2017	09/01/2018
Arts & Science	Global Affairs	Munk School for Global Affairs	M.G.A.	New Graduate Emphasis	A new graduate emphasis “Security” allows students to develop their expertise around particular subfields of security policy, including Grand Strategy, Anti-Terrorism, and non-traditional policy areas.	10/30/2017	09/01/2018

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Arts & Science	8 program Minors	Slavic Languages & Literatures	N/A	Restructuring of program Minors	<p>Eight existing program Minor have been renamed and combined to create six program Minors. The changes are as follows:</p> <p>renaming “Russian Literature in Translation Minor” as “Slavic Languages and Cultures Minor: Russian Literature in Translation”; combining “Russian Language and Literature Minor” and “Russian Language Minor” to create “Slavic Languages and Cultures Minor”; renaming “South Slavic Studies Minor” as “Slavic Languages and Cultures Minor: South Slavic”; renaming “Czech and Slovak Studies Minor” as “Slavic Languages and Cultures Minor: Czech and Slovak”; renaming “Ukrainian Language and Literature Minor” as “Slavic Languages and Cultures Minor: Ukrainian”; combining “Polish Studies Minor” and “Polish Language and Literature Minor” to create “Slavic Languages and Cultures: Polish”.</p>	02/14/2018	03/01/2018
Information	Information Studies	N/A	Ph.D.	Renaming Graduate Program	The Ph.D. program in “Information Studies” is being renamed to “Information” to better communicate and reflect the breadth of study within the discipline. Faculty and students were consulted and are supportive of this change.	11/03/2017	09/01/2018

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Ontario Institute for Studies in Education	Curriculum Studies and Teacher Development	Curriculum, Teaching and Learning	M.Ed., M.A., Ph.D.	New Graduate Emphasis	A new graduate emphasis “Arts in Education” offers courses from various arts disciplines. This emphasis is aimed at students studying elementary and secondary arts education, as well as community, museum and gallery educators interested in examining arts education beyond schooling.	11/16/2017	09/01/2018
Ontario Institute for Studies in Education	Curriculum Studies and Teacher Development	Curriculum, Teaching and Learning	M.Ed., M.A., Ph.D.	New Graduate Emphasis	A new graduate emphasis “Digital Technologies in Education” is designed to engage educators in a critical examination of technology and its effective use in educational contexts. Courses in learning sciences, psychology, diversity studies, and information and communication technology, address emerging trends in the area of cotemporary educational technology.	11/16/2017	09/01/2018
Ontario Institute for Studies in Education	Curriculum Studies and Teacher Development	Curriculum, Teaching and Learning	M.Ed., M.A., Ph.D.	New Graduate Emphasis	A new graduate emphasis “Indigenous Education and Decolonization” will focus on land itself as a teacher and source of knowledge. The emphasis will be grounded in decolonization pedagogy, with a commitment to anti-colonization and decolonization practices. This emphasis aligns with the program, unit, and OISE’s commitment to interdisciplinary reflection on decolonizing settler-colonial relations, and opening spaces to incorporate Indigenous knowledges.	11/16/2017	09/01/2018



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Ontario Institute for Studies in Education	Curriculum Studies and Teacher Development	Curriculum, Teaching and Learning	M.Ed., M.A., Ph.D.	New Graduate Emphasis	A new graduate emphasis “Qualitative Methodologies” will encourage a focused exploration of qualitative paradigms, approached and methods with, and beyond, the scope of schools and education. Students choose introductory and specialized courses with a focus on a range of contemporary qualitative methods: research and participatory inquiry; arts-based research and performed ethnography; feminist and queer approaches; indigenous methodologies; anti-colonial, decolonial and post-foundational; and social justice research.	11/16/2017	09/01/2018
Ontario Institute for Studies in Education	Curriculum Studies and Teacher Development	Curriculum, Teaching and Learning	M.Ed., M.A., Ph.D.	New Graduate Emphasis	A new graduate emphasis “Science Math and Technology” is dedicated to exploring theory, practice and contemporary issues pertaining to science, mathematics and technology education in diverse settings and context. Courses will explore topics in the STEM disciplines, mathematics pedagogy, equity, inclusion, diversity, activism, and social and environmental justice.	11/16/2017	09/01/2018
Ontario Institute for Studies in Education	Higher Education	Leadership, Higher and Adult Education	M.Ed.	Renaming field	The existing M.Ed. field “Health Professional Education” will be renamed “Education in the Professions”. The new field name reflects the inter-professional nature of educational research in the professions, which address common themes and problems from across various professions.	03/09/2018	09/01/2018