Infrastructure Protection and International Security

Program Requirements

M. Infrastructure Protection and International Security (5.0 credits)

Requirements:
1. 2.0 credits in:
   - IPIS 5101 [0.5] Critical Infrastructure Protection: Issues and Strategies
   - IPIS 5103 [0.5] Infrastructure Engineering Principles
   - IPIS 5105 [0.5] Critical Infrastructure Risk Assessment
   - IPIS 5106 [0.5] Management of Critical Infrastructure

2. 1.0 credit from:
   - IPIS 5104 [0.5] Terrorism and International Security
   - IPIS 5301 [0.5] Disarmament, Arms Control and Nonproliferation
   - IPIS 5302 [0.5] Contemporary International Security
   - IPIS 5303 [0.5] Intelligence Statecraft and International Affairs
   - IPIS 5304 [0.5] Intelligence and National Security: Policies and Operations
   - IPIS 5305 [0.5] National Security Policy and Law
   - IPIS 5320 [0.5] Topics in Infrastructure Security Policy
   - Or 5000-level courses from the IIA or SDP designated fields offered by the Norman Paterson School of International Affairs.

3. 1.5 credit from:
   - IPIS 5501 [0.5] Transportation and Aviation Security
   - IPIS 5504 [0.5] Fundamentals of Fire Safety
   - IPIS 5505 [0.5] Natural Hazards in Canada: Risk and Impact
   - IPIS 5507 [0.5] Blast-load Effects on Structures
   - IPIS 5508 [0.5] Introduction to Explosives and Explosion Effects as they relate to Infrastructure and its Components
   - IPIS 5520 [0.5] Selected Topics in Engineering of Critical Infrastructure
   - Or an engineering course approved by the IPIS Director or Associate Director.

4. 1.0 credit remaining may be selected as follows:
   - Research Project Option:
     - 1.0 credit in:
       - IPIS 5907 [1.0] Research Project

Total Credits 5.0

Graduate Diploma in Infrastructure Protection and International Security (3.0 credits)

Level 2 (Concurrent)
Level 3 (Direct Entry)

Requirements:
1. 1.5 credits in:
   - IPIS 5101 [0.5] Critical Infrastructure Protection: Issues and Strategies
   - IPIS 5105 [0.5] Critical Infrastructure Risk Assessment
   - IPIS 5106 [0.5] Management of Critical Infrastructure

Total Credits 5.0
2. 1.0 credit from electives: 1.0

- IPIS 5104 [0.5] Terrorism and International Security
- IPIS 5301 [0.5] Disarmament, Arms Control and Nonproliferation
- IPIS 5302 [0.5] Contemporary International Security
- IPIS 5303 [0.5] Intelligence Statecraft and International Affairs
- IPIS 5304 [0.5] Intelligence and National Security: Policies and Operations
- IPIS 5305 [0.5] National Security Policy and Law
- IPIS 5320 [0.5] Topics in Infrastructure Security Policy
- IPIS 5501 [0.5] Transportation and Aviation Security
- IPIS 5504 [0.5] Fundamentals of Fire Safety
- IPIS 5505 [0.5] Natural Hazards in Canada: Risk and Impact
- IPIS 5507 [0.5] Blast-load Effects on Structures
- IPIS 5508 [0.5] Introduction to Explosives and Explosion Effects as they relate to Infrastructure and its Components
- IPIS 5520 [0.5] Selected Topics in Engineering of Critical Infrastructure

3. 0.5 credit in: 0.5
   a) for students without a B.Eng. in Civil Engineering (or equivalent):
      IPIS 5103 [0.5] Infrastructure Engineering Principles
   b) for students with a B.Eng. in Civil Engineering (or equivalent):
      0.5 additional credit from electives in Item 2 above

Total Credits 3.0

Co-op Option
Full-time M.IPIS and M.Eng. IPIS students who have completed a minimum of three classes in each of their first two terms, including 1.5 credits in core compulsory courses, and IPIS 5002 or IPIS 5003 as required, may select a co-op option to start in their third term. Registration in subsequent co-op terms will require the successful completion of all core program requirements.

IPIS 5913 [0.0] Co-operative Work Term is in addition to the 5.0 credits required for the IPIS program - Two (2) co-op terms must be successfully completed before the student is eligible to receive a co-op designation on their academic transcript. For details on requirements and regulations, please see section 14.0 (Co-operative Education Policy) of the Graduate Calendar.

Admission Requirements
Proficiency in English is necessary to pursue graduate studies at Carleton University. All applicants whose first language is not English must satisfy this requirement as per the General Regulations.

M. Infrastructure Protection and International Security
The minimum requirement for admission into the M. I.P.I.S. is a B.A. Honours degree in a discipline related to International Affairs or a Bachelor’s degree in Science or Engineering. Students will normally be expected to have a B+ average (or higher) to be considered for admission.

Students without a background in engineering or science will be required to complete IPIS 5003 [0.0] Mathematics and Engineering Primer for non-Engineers, which will be in addition to the regular degree requirements and is to be completed in the first fall term in which the student is registered. IPIS 5003 is a prerequisite for the required course in Infrastructure Engineering Principles, and for other engineering electives.

M. Eng. Infrastructure Protection and International Security
The minimum requirement for admission into the M.Eng. I.P.I.S. is a B.Eng. degree or equivalent. Students will normally be expected to have a B+ average (or higher) to be considered for admission.

Students without a background in the social sciences or policy work in the Canadian context will be required to complete IPIS 5002 [0.0] Policy Primer, which will be in addition to the regular degree requirements and is to be completed in the first fall term in which the student is registered.

Accelerated Pathway
The accelerated pathway to the Master of Infrastructure Protection and International Security and the Master of Engineering in Infrastructure Protection and International Security is a flexible and individualized plan of graduate study for students in their final year of a Carleton undergraduate degree in a related discipline.

Students in their third year of study in their undergraduate program who are interested in the accelerated pathway should consult with the Director and Associate Director in the I.P.I.S. Program to determine if the accelerated pathway is appropriate for them and to confirm their selection of courses and Honours project/thesis supervisor for their final year of undergraduate studies.

Accelerated Pathway Requirements
1. IPIS courses at the 5000-level with a grade of B+ or higher
2. Minimum overall CGPA of A-

Students may receive advanced standing with transfer of credit of up to 1.0 credit which can reduce their time to completion.