## CARLETON UNIVERSITY COMMITTEE ON QUALITY ASSURANCE Cyclical Review of the Graduate programs in Infrastructure Protection and International Security Executive Summary

This Executive Summary and Final Assessment Report of the cyclical review of Carleton's graduate programs in Infrastructure Protection and International Security are provided pursuant to the provincial Quality Assurance Framework and Carleton's Institutional Quality Assurance Process (IQAP).

## **EXECUTIVE SUMMARY**

The graduate programs in Infrastructure Protection and International Security are offered jointly by the Faculty of Engineering and Design and the Norman Patterson School of International Affairs in the Faculty of Public Affairs.

As a consequence of the review, the programs were categorized by Carleton University's Senate Quality Assurance and Planning Committee (SQAPC) as being of good quality. (Carleton's IQAP 7.2.12).

The External Reviewers' report offered a very positive assessment of the programs. Within the context of this positive assessment, the report nonetheless made a number of recommendations for the continuing enhancement of the programs. These recommendations were productively addressed by the Director of the Infrastructure Protection and International Security graduate programs in a response to the External Reviewers' report and Action Plan that was submitted to SQAPC on February 6, 2020.

## IMPLEMENTATION PLAN: Infrastructure Protection and International Security Programs being reviewed: M. Infrastructure Protection and International Security MEng. Infrastructure Protection and International Security Graduate Diploma in Infrastructure Protection and International Security November 19, 2019

External Reviewer Recommendation & Categorization	Action Item	Owner	Timeline	Will the action described require calendar changes? ( Y or N)
<ol> <li>Weakness: Future Directors must be defined and properly empowered to manage the program into the future.</li> </ol>	The program directors will work with the University to identify solutions to overcome the technical difficulties and to streamline procedures.	IPIS Directors; IPIS Administrator	Meetings to be held in Fall term, 2019.	Ν
1. <i>Concern:</i> Lack of coordination within the program - moving forward IPIS faculty should find the time to meet on a regular basis and to coordinate course content, broader curriculum aspects, and specific program areas more closely and consistently.	The program directors will ensure that 3 meetings are scheduled each year with participating faculty, and will strongly encourage contract instructor participation.	IPIS Directors; IPIS Administrator	Ongoing	Ν

2. Concern: Lack of engagement of engineering faculty and engineering students - Engaging other engineering faculty, including electrical engineering and systems engineering faculty for cyber security and electrical power infrastructure, and other civil and environmental engineering faculty focused on natural hazards, would strengthen the breadth of offerings of the program and likely make it more attractive to domestic and international students.	Program directors will approach relevant Dean and Chairs to request more engagement. Providing support for other faculty members to develop courses and support IPIS will require Dean participation, support, and encouragement.	IPIS Directors; Deans of FPA and FED	Meetings to be initiated in Fall term, 2019.	Ν
<ul> <li>3. Concern: Support for an interdisciplinary program – 1) it is essential that interdisciplinary programs like IPIS be protected if there should be changes to the university's internal resource allocation model.</li> <li>2) faculty tasked with primary administrative roles in IPIS may not enjoy sufficient or appropriate release time or support from their home units.</li> <li>3) support for full-time faculty engagement in IPIS is perhaps too limited, Additional incentives could, and likely should, be offered to support regular full-time faculty's engagement with IPIS.</li> </ul>	Program directors will approach relevant Dean and Chairs to request more engagement.	IPIS Directors; Deans of FGPA, FPA and FED	Discussions will be initiated in Fall term, 2019.	Ν
<b>4. Concern:</b> Lack of coordination with other units - It seems this would not be very difficult to coordinate, if IPIS students were asked for course preferences earlier and better and timelier communication existed between IPIS and NPSIA.	Program directors will convene a meeting of staff in NPSIA, CEE and IPIS to discuss coordination on student registration and related matters.	IPIS Directors; Director of NPSIA; Chair of CIVE and other FED departments, as necessary.	Discussions will be initiated in Fall term, 2019.	Ν

<b>5. Concern:</b> Learning Outcomes - the learning outcomes should be specific and directly indicate the skills that a student will learn and indicate the skills that an employer can expect. The learning outcomes should differentiate between the MIPIS and IPIS MEng degrees and the diploma program, and be measurable.	The program directors will meet with OVPAVPA and with contract instructors and professors to refine the learning outcomes. This process will be initiated in Fall 2019 and will be included in discussions with new contract instructors as well as during the review of course outlines.	IPIS Directors; OVPAVPA Program Directors and Program Assessment Specialists.	By end of Fall term, 2019.	N
<b>6. Opportunity:</b> Recruitment of domestic and international students - diversifying the pool of international students and in increasing their overall numbers.	The program directors will meet with FGPA and with the Deans of FPA and FED to identify the assignment of domestic student targets and the financial arrangements associated with international students.	IPIS Directors; Deans of FPA, FED, FGPA	First round by end of Fall term, 2019. Ongoing thereafter.	N
7. <i>Opportunity:</i> Hiring to replace retiring or departing faculty and meet the needs of the program	The program directors will meet with the Deans of FPA and FED to discuss faculty hiring, and to impress upon them the critical importance of ensuring hires (new or replacement) that are attached primarily to IPIS, and with teaching and research obligations and interests relevant to the needs of the IPIS program.	IPIS Directors; Deans of FPA and FED (and possibly FGPA)	Discussions will be initiated in Fall term, 2019.	Y (possibly)