

Infrastructure Protection and International Security
Update on Unit Response to External Reviewers' Report & Action Plan
Programs Being Reviewed: M. Infrastructure Protection and International Security
MEng. Infrastructure Protection and International Security
Graduate Diploma in Infrastructure Protection and International Security

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Approved by Dean: *David Mendeloff, Associate Dean (Academic) September 24, 2021*

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External Reviewer Recommendation	Original Action Item	Owner & Timeline	Progress Update July 2021	Will the action described require calendar changes? (Y or N)
1. Weakness: Future Directors must be defined and properly empowered to manage the program into the future.	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.	<i>Some progress has been made. There is now only one director reporting to both the Dean of FED and the Dean of FPA. Several technical issues of access to grades and grade approvals, CI contracts, teaching evaluations, have been or are being resolved. Some financial account matters need to be reviewed from the handover of the Directorship, which unfortunately coincided with the death of the previous director, Professor Abd El Halim, and the pandemic, which restricted access to campus.</i>	<i>N</i>
2. Concern: 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	<i>Meetings and communication matters have improved, though formal meetings were less frequent due to the Covid 19 emergency. However, conversation occur on a regular basis with Cis and faculty teaching IPIS-specific courses.</i>	<i>N</i>
3. 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	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.	<i>The new Dean of FED did convene a meeting. While following up has been difficult due to Covid, there is some promise of better interaction in the future and of possible collaboration on specific program innovations, e.g. cybersecurity. The departure of the full-time engineering professor associated with the program did make coordination more difficult, and it</i>	<i>N</i>

the program and likely make it more attractive to domestic and international students.			<i>is hoped that if that position is filled then there will be a link to IPIS.</i>	
<p>4. 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.</p> <p>2) faculty tasked with primary administrative roles in IPIS may not enjoy sufficient or appropriate release time or support from their home units.</p> <p>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.</p>	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.	<i>Communications with the Deans of FED and FPA seem to be working well. The key remaining problem is that the program relies almost exclusively on Cis for the delivery of the core program. There is only one faculty member teaching in the core, and replacing her while she is on sabbatical is difficult. There does need to be more engagement from full-time faculty, if only for oversight and curriculum development.</i>	N
<p>5. Concern: 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.</p>	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.	<i>Covid 19 has made coordination difficult, but some problems have been resolved through coordination by the graduate administrators. Having a permanent and stable administrator in IPIS has been very beneficial.</i>	N
<p>6. Concern: 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.</p>	The program directors will meet with OVPVPA 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; OVPVPA Program Directors and Program Assessment Specialists. By end of Fall term, 2019.	<i>Work still needs to be done on this matter. Covid prevented some progress, and the review of Learning Outcomes has been more problematic given the heavy reliance on Cis for course delivery, and the absence of associated full-time faculty members.</i>	N
<p>7. Opportunity: Recruitment of domestic and international students - diversifying the pool of international students and in increasing their overall numbers.</p>	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.	<i>Recruitment has been stable. While there is still an imbalance (more M.IPIS students and applicants than M.Eng, and more international M.Eng students and applicants than in MIPIS). There is still a need to examine recruitment of domestic engineers.</i>	N

<p>8. Opportunity: Hiring to replace retiring or departing faculty and meet the needs of the program</p>	<p>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.</p>	<p>IPIS Directors; Deans of FPA and FED (and possibly FGPA) Discussions will be initiated in Fall term, 2019.</p>	<p><i>Civil and Environmental Engineering has hired someone relevant to the IPIS program. We are currently under discussion to identify the precise nature of that individual's connection to the IPIS program and other formal support for the IPIS program in terms of a faculty member to provide administrative input.</i></p>	<p><i>N</i></p>
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