Cybersecurity (Collaborative Specialization)

This section presents the requirements for programs in:

- · M.C.S. Computer Science with Collaborative Specialization in Cybersecurity
- · M.A.Sc. Electrical and Computer Engineering with Collaborative Specialization in Cybersecurity
- M.Eng. Electrical and Computer Engineering with Collaborative Specialization in Cybersecurity
- M.Eng. Infrastructure Protection and International Security with Collaborative Specialization in Cybersecurity
- Master of Information Technology: Digital Media with Collaborative Specialization in Cybersecurity
- · Master of Information Technology: Network Technology with Collaborative Specialization in Cybersecurity
- · M. Infrastructure Protection and International Security with Collaborative Specialization in Cybersecurity
- · M.A. International Affairs with Collaborative Specialization in Cybersecurity

Program Requirements

M.C.S. Computer Science with Collaborative Specialization in Cybersecurity (5.0 credits)

Requirements - Research Project pathway (5.0 credits)

1	. 1.0 credit in:		1.0
	CYBR 5000 [1.0]	Science and Social Science of	
		Cybersecurity	
2	3.0 crodite in cour	rea work Course work must include a	3 0

- 3.0 credits in course work. Course work must include a minimum of 1.5 credits of OCICS courses in three different research areas (see OCICS course listing by research 4. 1.0 credit in graduate project (each candidate 1.0
- submitting a project will be required to present a departmental seminar on their project) COMP 5003 [1.0] Craduate Project (M.C.S.) (in the

Total Credits	
	area of the specialization)
COMP 5903 [1.0]	Graduate Project (W.C.S.) (In the

Requirements - Thesis pathway (5.0 credits)

1. 1.0 credit in:		1.0
CYBR 5000 [1.0]	Science and Social Science of Cybersecurity	

- 2. 1.5 credits in course work. Course work must include a minimum of 1.5 credits of OCICS courses in three different research areas (see OCICS course listing by research areas).
- 3. 2.5 credits in graduate thesis (each candidate 2.5 submitting a thesis will be required to present a departmental seminar on their thesis) COMP 5905 [2.5] M.C.S. Thesis (in the area of the

specialization) **Total Credits** 5.0

M.A.Sc. Electrical and Computer Engineering with Collaborative Specialization in Cybersecurity (5.0 credits)

Requirements:

1. 1.0 credit in:		1.0
CYBR 5000 [1.0]	Science and Social Science of Cybersecurity	
3. 1.5 credits in cours	ses	1.5
4. 2.5 credits in:		2.5
SYSC 5909 [2.5]	M.A.Sc. Thesis (in the area of cybersecurity)	
Total Credits		5.0

M.Eng. Electrical and Computer Engineering with Collaborative Specialization in Cybersecurity (4.5 credits)

Requirements - by project (4.5 credits)

To	otal Credits		4.5
	SYSC 5900 [0.5]	Systems Engineering Project (in the area of cybersecurity)	
5.	0.5 credit in:		0.5
4.	2.5 credits in cours	ses	2.5
	CYBR 5000 [1.0]	Science and Social Science of Cybersecurity	
2.	1.0 credit in:		1.0
	SYSC 5902 [0.5]	Research Methods for Engineers	
1.	0.5 credit in:		0.5

Total Credits		4.5
Requirements - cou	rsework pathway (4.5 credits)	
1. 0.5 credit in:		0.5
SYSC 5902 [0.5]	Research Methods for Engineers	
1. 1.0 credit in:		1.0
CYBR 5000 [1.0]	Science and Social Science of Cybersecurity	
4. 3.0 credits in coul elective in the area of	rses, including 0.5 credit in approved the specialization	3.0
Total Credits		4.5

M.Eng. Infrastructure Protection and **International Security** with Collaborative Specialization in Cybersecurity (5.0 credits)

Requirements - Research project pathway:

5.0

	. , . ,	
1. 1.0 credit in:		1.0
CYBR 5000 [1.0]	Science and Social Science of Cybersecurity	
2. 1.5 credits in:		1.5
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	
3. 0.5 credit from:		0.5
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			s from the Intelligence and IA) and Security Defence Policy	
IPIS 5304 [0.5]	Intelligence and National Security: Policies and Operations		(SDP) designated fiel School of International	ds offered by the Norman Paterson al Affairs.	
IPIS 5305 [0.5]	National Security Policy and Law		4. 1.0 credit from:		1.0
IPIS 5306 [0.5]	Emergency and Business Continuity Management		IPIS 5501 [0.5]	Transportation and Aviation Security	
IPIS 5320 [0.5]	Topics in Infrastructure Security		IPIS 5504 [0.5]	Fundamentals of Fire Safety	
	Policy s from the Intelligence and		IPIS 5505 [0.5]	Natural Hazards in Canada: Risk and Impact	
	IA) and Security Defence Policy		IPIS 5507 [0.5]	Blast Load Effects on Structures	
(SDP) designated fiel School of Internationa	ds offered by the Norman Paterson al Affairs.		IPIS 5508 [0.5]	Introduction to Explosives and Explosion Effects as they relate to	
4. 1.0 credit from:		1.0		Infrastructure and its Components	
IPIS 5501 [0.5]	Transportation and Aviation Security		IPIS 5509 [0.5] IPIS 5520 [0.5]	Introduction to Cybersecurity Selected Topics in Engineering of	
IPIS 5504 [0.5]	Fundamentals of Fire Safety			Critical Infrastructure	
IPIS 5505 [0.5]	Natural Hazards in Canada: Risk and Impact		or an engineering cou Associate Director.	irse approved by the IPIS Director or	
IPIS 5507 [0.5]	Blast Load Effects on Structures			oved electives in the area of the	0.5
IPIS 5508 [0.5]	Introduction to Explosives and Explosion Effects as they relate to			aduate courses from the Faculty	0.5
1010 10 -1	Infrastructure and its Components		0	esign that have been selected in	
IPIS 5509 [0.5]	Introduction to Cybersecurity		Associate Director.	approved by, the MIPIS Director and	
IPIS 5520 [0.5]	Selected Topics in Engineering of Critical Infrastructure		Total Credits		5.0
or an engineering cou Associate Director.	irse approved by the IPIS Director or			ation Technology: Digital Me	dia
5. 1.0 credit in:		1.0	Cybersecurity (5	•	
IPIS 5907 [1.0]	Research Project (in the area of the			.o credits)	
	specialization)		Requirements:		
Total Credits		5.0	1. 1.0 credit in:		1.0
Requirements - Cou	rsework pathway:	1.0	CYBR 5000 [1.0]	Science and Social Science of Cybersecurity	
1. 1.0 credit in:	Caianaa and Caaial Caianaa af	1.0	2. 0.5 credit in:		0.5
CYBR 5000 [1.0]	Science and Social Science of Cybersecurity	4.5	ITEC 5002 [0.5]	Fundamentals of Information Technology Research	
2. 1.5 credits in:	0.11. 11. 6 . 4 . 5 . 6 . 11	1.5	3. 0.0 credit in:		
IPIS 5101 [0.5]	Critical Infrastructure Protection: Issues and Strategies		ITEC 5001 [0.0]	Information Technology Seminars	
IPIS 5105 [0.5]	Critical Infrastructure Risk		4. 1.0 credit from co	re courses:	1.0
11 10 0 100 [0.0]	Assessment		ITEC 5200 [0.5]	Entertainment Technologies	
IPIS 5106 [0.5]	Management of Critical		ITEC 5201 [0.5]	Computer Animation Technologies	
	Infrastructure		ITEC 5202 [0.5]	Visual Effects Technologies	
3. 0.5 credit from:	Torrariam and International Contribu	0.5	ITEC 5203 [0.5]	Game Design and Development Technologies	
IPIS 5104 [0.5] IPIS 5301 [0.5]	Terrorism and International Security Disarmament, Arms Control and		ITEC 5204 [0.5]	Emerging Interaction Techniques	
	Nonproliferation		ITEC 5205 [0.5]	Design and Development of Data- Intensive Applications	
IPIS 5302 [0.5]	Contemporary International Security		ITEC 5206 [0.5]	Data Protection and Rights Management	
			1770 7007 10 71	•	
IPIS 5303 [0.5]	Intelligence Statecraft and International Affairs		ITEC 5207 [0.5]	Data Interaction Techniques	
IPIS 5303 [0.5] IPIS 5304 [0.5]	<u> </u>		ITEC 5208 [0.5]	Virtual Reality and 3D User Interfaces	
	International Affairs Intelligence and National Security:		ITEC 5208 [0.5]	Virtual Reality and 3D User	
IPIS 5304 [0.5]	International Affairs Intelligence and National Security: Policies and Operations National Security Policy and Law Emergency and Business		ITEC 5208 [0.5] ITEC 5920 [0.5] 5. 2.5 credits in:	Virtual Reality and 3D User Interfaces Special Topics in Digital Media	2.5
IPIS 5304 [0.5] IPIS 5305 [0.5]	International Affairs Intelligence and National Security: Policies and Operations National Security Policy and Law		ITEC 5208 [0.5]	Virtual Reality and 3D User Interfaces	2.5

Master of Information Technology: Network Technology with Collaborative Specialization in Cybersecurity (5.0 credits)

Requirements - Coursework pathway:	Requirements -	- Coursework	pathway:
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	ITEC 5100 [0.5] ITEC 5101 [0.5] ITEC 5102 [0.5] ITEC 5103 [0.5] ITEC 5205 [0.5] ITEC 5910 [0.5] 2.5 credits in: ITEC 5909 [2.5]	Applied Programming I Planning and Design of Computer Networks Cross Layer Design for Wireless Multimedia Networks Designing Secure Networking and Computer Systems Cloud and Datacentre Networking Design and Development of Data- Intensive Applications Special Topics in Network Technologies Master's Thesis (in the area of the specialization)	2.5
	ITEC 5100 [0.5] ITEC 5101 [0.5] ITEC 5102 [0.5] ITEC 5103 [0.5] ITEC 5205 [0.5] ITEC 5910 [0.5] 2.5 credits in:	Planning and Design of Computer Networks Cross Layer Design for Wireless Multimedia Networks Designing Secure Networking and Computer Systems Cloud and Datacentre Networking Design and Development of Data- Intensive Applications Special Topics in Network Technologies	2.5
	ITEC 5100 [0.5] ITEC 5101 [0.5] ITEC 5102 [0.5] ITEC 5103 [0.5] ITEC 5205 [0.5] ITEC 5910 [0.5]	Planning and Design of Computer Networks Cross Layer Design for Wireless Multimedia Networks Designing Secure Networking and Computer Systems Cloud and Datacentre Networking Design and Development of Data- Intensive Applications Special Topics in Network	2.5
4.	ITEC 5100 [0.5] ITEC 5101 [0.5] ITEC 5102 [0.5] ITEC 5103 [0.5] ITEC 5205 [0.5]	Planning and Design of Computer Networks Cross Layer Design for Wireless Multimedia Networks Designing Secure Networking and Computer Systems Cloud and Datacentre Networking Design and Development of Data- Intensive Applications Special Topics in Network	
4.	ITEC 5100 [0.5] ITEC 5101 [0.5] ITEC 5102 [0.5] ITEC 5103 [0.5]	Planning and Design of Computer Networks Cross Layer Design for Wireless Multimedia Networks Designing Secure Networking and Computer Systems Cloud and Datacentre Networking Design and Development of Data-	
4.	ITEC 5100 [0.5] ITEC 5101 [0.5] ITEC 5102 [0.5] ITEC 5103 [0.5]	Planning and Design of Computer Networks Cross Layer Design for Wireless Multimedia Networks Designing Secure Networking and Computer Systems Cloud and Datacentre Networking	
4.	ITEC 5100 [0.5] ITEC 5101 [0.5] ITEC 5102 [0.5]	Planning and Design of Computer Networks Cross Layer Design for Wireless Multimedia Networks Designing Secure Networking and Computer Systems	
4.	ITEC 5100 [0.5]	Planning and Design of Computer Networks Cross Layer Design for Wireless Multimedia Networks	
4.	ITEC 5100 [0.5]	Planning and Design of Computer Networks	
4.		11 0 0	
4.	ITEC 5010 [0.5]	A sectional Discourse sections:	
	1.0 credit from co		1.0
	ITEC 5001 [0.0]	Information Technology Seminars	
3.	0.0 credit in:		
	ITEC 5002 [0.5]	Fundamentals of Information Technology Research	
2.	0.5 credit in:	2,20,000,	0.5
1.	CYBR 5000 [1.0]	Science and Social Science of Cybersecurity	1.0
	equirements - Thes	sis pathway:	1.0
	otal Credits		5.0
0. fro	5 credit in a 4000-le om the graduate sup raduate Studies in th	electives, which may include up to vel ITEC course with permission pervisor or the Associate Director of the School.	
by G	the graduate super raduate Studies in th		1.0
	ITEC 5910 [0.5]	Special Topics in Network Technologies	
	ITEC 5205 [0.5]	Design and Development of Data- Intensive Applications	
	ITEC 5103 [0.5]	Cloud and Datacentre Networking	
	ITEC 5102 [0.5]	Designing Secure Networking and Computer Systems	
	ITEC 5101 [0.5]	Cross Layer Design for Wireless Multimedia Networks	
	ITEC 5100 [0.5]	Planning and Design of Computer Networks	
4.	2.0 credits from c	ore courses:	2.0
-	ITEC 5001 [0.0]	Information Technology Seminars	
3.	0.0 credit in:	Technology Research	
	ITEC 5002 [0.5]	Fundamentals of Information	0.0
_	0.5 credit in:	Cybersecurity	0.5
2.	1.0 credit in: CYBR 5000 [1.0]	Science and Social Science of Cybersecurity	1.0

M. Infrastructure Protection and International Security

with Collaborative Specialization in Cybersecurity (5.0 credits)

Requirements:

1. 1.0 credit in:		1.0
CYBR 5000 [1.0]	Science and Social Science of	
	Cybersecurity	0.0
2. 2.0 credits in:		2.0
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	
3. 1.0 credit from:		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 5306 [0.5]	Emergency and Business Continuity Management	
IPIS 5320 [0.5]	Topics in Infrastructure Security Policy	
	from the IIA or SDP designated orman Paterson School of	
4. 0.5 credit from:		0.5
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 5509 [0.5]	Introduction to Cybersecurity	
IPIS 5520 [0.5]	Selected Topics in Engineering of Critical Infrastructure	
selected in consultatio	ve in the area of the specialization, on with, and approved by, the MIPIS a Director and associated faculty	0.5
selected in consultation	n with, and approved by, the MIPIS	0.5 5.0
selected in consultation Director and Associated when necessary. Total Credits M.A. International	n with, and approved by, the MIPIS e Director and associated faculty al Affairs re Specialization in	

	CYBR 5000 [1.0]	Science and Social Science of Cybersecurity	
2.	1.5 credits in:		1.5
	INAF 5015 [0.5]	Research Design and Methods for International Affairs	
	INAF 5016 [0.5]	Statistical Analysis for International Affairs	
	INAF 5017 [0.25]	International Policymaking in Canada: Structure and Process	
	INAF 5018 [0.25]	Law and International Affairs	
	nd of the second term	mics, successfully completed by the n, from (See Note 1, below):	0.5
	INAF 5009 [0.5]	International Aspects of Economic Development	
	INAF 5205 [0.5]	Economics of Conflict	
	INAF 5214 [0.5]	Economics for Defence and Security	
	INAF 5221 [0.5]	Economics of Security and Intelligence	
	INAF 5308 [0.5]	International Trade: Theory and Policy	
	INAF 5309 [0.5]	International Finance: Theory and Policy	
	INAF 5600 [0.5]	The Economics of Human Development	
	INAF 5703 [0.5]	International Public Economics	
4.	2.0 credits in:		2.0
	INAF 5909 [2.0]	M.A. Thesis (in the specialization)	
	Successful complete camination (See Note	ion of second language proficiency e 3, below)	
To	otal Credits		5.0
			5.0
R	equirements - Rese	earch essay pathway:	
R	equirements - Rese 1.0 credit in:		1.0
R:	equirements - Rese 1.0 credit in: CYBR 5000 [1.0]	sarch essay pathway: Science and Social Science of Cybersecurity	1.0
R:	equirements - Rese 1.0 credit in: CYBR 5000 [1.0] 1.5 credit in:	Science and Social Science of Cybersecurity	
R:	equirements - Rese 1.0 credit in: CYBR 5000 [1.0] 1.5 credit in: INAF 5015 [0.5]	Science and Social Science of Cybersecurity Research Design and Methods for International Affairs	1.0
R:	equirements - Rese 1.0 credit in: CYBR 5000 [1.0] 1.5 credit in: INAF 5015 [0.5]	Science and Social Science of Cybersecurity Research Design and Methods for International Affairs Statistical Analysis for International Affairs	1.0
R:	equirements - Rese 1.0 credit in: CYBR 5000 [1.0] 1.5 credit in: INAF 5015 [0.5]	Science and Social Science of Cybersecurity Research Design and Methods for International Affairs Statistical Analysis for International	1.0
R(1.	equirements - Rese 1.0 credit in: CYBR 5000 [1.0] 1.5 credit in: INAF 5015 [0.5] INAF 5016 [0.5] INAF 5017 [0.25]	Science and Social Science of Cybersecurity Research Design and Methods for International Affairs Statistical Analysis for International Affairs International Policymaking in Canada: Structure and Process Law and International Affairs	1.0
Ro 1. 2.	equirements - Rese 1.0 credit in: CYBR 5000 [1.0] 1.5 credit in: INAF 5015 [0.5] INAF 5016 [0.5] INAF 5017 [0.25] INAF 5018 [0.25] 0.5 credit in econo	Science and Social Science of Cybersecurity Research Design and Methods for International Affairs Statistical Analysis for International Affairs International Policymaking in Canada: Structure and Process	1.0
Ro 1. 2.	equirements - Rese 1.0 credit in: CYBR 5000 [1.0] 1.5 credit in: INAF 5015 [0.5] INAF 5016 [0.5] INAF 5017 [0.25] INAF 5018 [0.25] 0.5 credit in econo	Science and Social Science of Cybersecurity Research Design and Methods for International Affairs Statistical Analysis for International Affairs International Policymaking in Canada: Structure and Process Law and International Affairs mics, successfully completed by the	1.0
Ro 1. 2.	### Acceptable of the second of the second terms ### Acceptable of the second terms	Science and Social Science of Cybersecurity Research Design and Methods for International Affairs Statistical Analysis for International Affairs International Policymaking in Canada: Structure and Process Law and International Affairs Inics, successfully completed by the Inform (See Note 1, below) International Aspects of Economic	1.0
Ro 1. 2.	equirements - Rese 1.0 credit in: CYBR 5000 [1.0] 1.5 credit in: INAF 5015 [0.5] INAF 5016 [0.5] INAF 5017 [0.25] INAF 5018 [0.25] 0.5 credit in econolid of the second term INAF 5009 [0.5]	Science and Social Science of Cybersecurity Research Design and Methods for International Affairs Statistical Analysis for International Affairs International Policymaking in Canada: Structure and Process Law and International Affairs mics, successfully completed by the m, from: (See Note 1, below) International Aspects of Economic Development	1.0
Ro 1. 2.	equirements - Rese 1.0 credit in: CYBR 5000 [1.0] 1.5 credit in: INAF 5015 [0.5] INAF 5016 [0.5] INAF 5017 [0.25] INAF 5018 [0.25] 0.5 credit in econol do the second term INAF 5009 [0.5]	Science and Social Science of Cybersecurity Research Design and Methods for International Affairs Statistical Analysis for International Affairs International Policymaking in Canada: Structure and Process Law and International Affairs International Affairs International Affairs International Affairs International Affairs International Affairs International Aspects of Economic Development Economics of Conflict Economics for Defence and	1.0
Ro 1. 2.	equirements - Rese 1.0 credit in: CYBR 5000 [1.0] 1.5 credit in: INAF 5015 [0.5] INAF 5016 [0.5] INAF 5017 [0.25] INAF 5018 [0.25] 0.5 credit in econol of the second term INAF 5009 [0.5] INAF 5205 [0.5] INAF 5214 [0.5]	Science and Social Science of Cybersecurity Research Design and Methods for International Affairs Statistical Analysis for International Affairs International Policymaking in Canada: Structure and Process Law and International Affairs International Affairs International Policymaking in Canada: Structure and Process Law and International Affairs International Affairs International Affairs International Aspects of Economic Development Economics of Conflict Economics for Defence and Security Economics of Security and	1.0
Ro 1. 2.	equirements - Rese 1.0 credit in: CYBR 5000 [1.0] 1.5 credit in: INAF 5015 [0.5] INAF 5016 [0.5] INAF 5017 [0.25] INAF 5018 [0.25] 0.5 credit in econd of the second term INAF 5009 [0.5] INAF 5205 [0.5] INAF 5214 [0.5]	Science and Social Science of Cybersecurity Research Design and Methods for International Affairs Statistical Analysis for International Affairs International Policymaking in Canada: Structure and Process Law and International Affairs International Affairs International Affairs International Affairs International Affairs International Affairs International Aspects of Economic Development Economics of Conflict Economics for Defence and Security Economics of Security and Intelligence International Trade: Theory and	1.0
Ro 1. 2.	equirements - Rese 1.0 credit in: CYBR 5000 [1.0] 1.5 credit in: INAF 5015 [0.5] INAF 5016 [0.5] INAF 5018 [0.25] 0.5 credit in econol of the second term INAF 5009 [0.5] INAF 5205 [0.5] INAF 5214 [0.5] INAF 5221 [0.5] INAF 5308 [0.5]	Science and Social Science of Cybersecurity Research Design and Methods for International Affairs Statistical Analysis for International Affairs International Policymaking in Canada: Structure and Process Law and International Affairs International Affairs International Affairs International Affairs International Affairs International Aspects of Economic Development International Aspects of Economic Development Economics of Conflict Economics for Defence and Security Economics of Security and Intelligence International Trade: Theory and Policy International Finance: Theory and	1.0
Ro 1. 2.	equirements - Rese 1.0 credit in: CYBR 5000 [1.0] 1.5 credit in: INAF 5015 [0.5] INAF 5016 [0.5] INAF 5018 [0.25] 0.5 credit in econd of the second term INAF 5009 [0.5] INAF 5205 [0.5] INAF 5214 [0.5] INAF 5221 [0.5] INAF 5308 [0.5] INAF 5309 [0.5]	Science and Social Science of Cybersecurity Research Design and Methods for International Affairs Statistical Analysis for International Affairs International Policymaking in Canada: Structure and Process Law and International Affairs International Affairs International Affairs International Affairs International Affairs International Aspects of Economic Development International Aspects of Economic Development Economics of Conflict Economics for Defence and Security Economics of Security and Intelligence International Trade: Theory and Policy International Finance: Theory and Policy The Economics of Human	1.0
3. er	equirements - Rese 1.0 credit in: CYBR 5000 [1.0] 1.5 credit in: INAF 5015 [0.5] INAF 5016 [0.5] INAF 5017 [0.25] INAF 5018 [0.25] 0.5 credit in econd of the second term INAF 5009 [0.5] INAF 5205 [0.5] INAF 5214 [0.5] INAF 5221 [0.5] INAF 5308 [0.5] INAF 5309 [0.5] INAF 5309 [0.5]	Science and Social Science of Cybersecurity Research Design and Methods for International Affairs Statistical Analysis for International Affairs International Policymaking in Canada: Structure and Process Law and International Affairs mics, successfully completed by the n, from: (See Note 1, below) International Aspects of Economic Development Economics of Conflict Economics for Defence and Security Economics of Security and Intelligence International Trade: Theory and Policy International Finance: Theory and Policy The Economics of Human Development	1.0

INAF 5908 [1.0]	Research Essay (in the specialization)	
5. 1.0 credits in Field below)	d and Elective courses (See Note 2,	1.0
6. Successful completion of second language proficiency examination (see Note 3, below)		
Total Credits		5.0
Requirements - Cou	rsework pathway (5.0 credits)	
1. 1.0 credit in:		1.0
CYBR 5000 [1.0]	Science and Social Science of Cybersecurity	
2. 1.0 credit in:		1.0
INAF 5016 [0.5]	Statistical Analysis for International Affairs	
INAF 5017 [0.25]	International Policymaking in Canada: Structure and Process	
INAF 5018 [0.25]	Law and International Affairs	
3. 0.5 credit in economics, successfully completed by the end of the second term, from: (See Note 1, below)		0.5
INAF 5009 [0.5]	International Aspects of Economic Development	
INAF 5205 [0.5]	Economics of Conflict	
INAF 5214 [0.5]	Economics for Defence and Security	
INAF 5221 [0.5]	Economics of Security and Intelligence	
INAF 5308 [0.5]	International Trade: Theory and Policy	
INAF 5309 [0.5]	International Finance: Theory and Policy	
INAF 5600 [0.5]	The Economics of Human Development	
INAF 5703 [0.5]	International Public Economics	
4. 0.5 credit in courses in the area of the specialization and approved by the NPSIA M.A. Program Supervisor or Associate Director as being relevant to the student's program of study.		0.5
5. 2.0 credits in Field and Elective courses (See Note 2, below)		2.0
6. Successful completion of second language proficiency examination (see Note 3, below)		
Total Credits		5.0

- All students must complete the 0.5 credit economics course for their designated field, or an approved alternate economics course. For students in the IEP field both INAF 5308 and INAF 5309, or approved equivalent, must be completed.
- 2. For elective courses, 1.5 credits of the total required 5.0 credits may be selected from courses offered in other departments, with a maximum of 1.0 credit from a single department and a maximum of 1.0 credit selected from fourth year undergraduate courses. Any course not identified as an INAF 5000-level course must be approved by the M.A. Program Supervisor.
- Students must successfully complete an examination in second language proficiency administered by Carleton University's School of Linguistics and Language Studies, or meet the equivalent standard as determined by the School of Linguistics and Language

Studies. Details of the language requirement are provided on the School website.

Regulations

See the General Regulations section of this Calendar and the regulations of the participating unit.

Cybersecurity (CYBR) Courses

CYBR 5000 [1.0 credit]

Science and Social Science of Cybersecurity

Overview of legal, governance, and strategic considerations of cybersecurity from a Canadian and international perspective, and the computer science and engineering concepts critical to effective cybersecurity operations.