# Climate Change (Collaborative Program)

This section presents the requirements for programs in:

- M.A. Anthropology with Collaborative Specialization in Climate Change
- M. Architecture 2-year stream with Collaborative Specialization in Climate Change
- M. Architecture 3-year stream with Collaborative Specialization in Climate Change
- M.A.Sc. Civil Engineering with Collaborative Specialization in Climate Change
- M.Eng. Civil Engineering with Collaborative Specialization in Climate Change
- M.A. Communication with Collaborative Specialization in Climate Change
- M.A. Economics with Collaborative Specialization in Climate Change
- M.A. English with Collaborative Specialization in Climate Change
- M.A. Geography with Collaborative Specialization in Climate Change
- M.Sc. Geography with Collaborative Specialization in Climate Change
- M.A. History with Collaborative Specialization in Climate Change
- M.A. Migration and Diaspora Studies with Collaborative Specialization in Climate Change
- M.A. Psychology with Collaborative Specialization in Climate Change
- M.A. Sociology with Collaborative Specialization in Climate Change
- M.A.Sc. Aerospace Engineering with Collaborative Specialization in Climate Change
- M.A.Sc. Electrical and Computer Engineering with Collaborative Specialization in Climate Change
- M.A.Sc. Environmental Engineering with Collaborative Specialization in Climate Change
- M.A.Sc. Materials Engineering with Collaborative Specialization in Climate Change
- M.A.Sc. Mechanical Engineering with Collaborative Specialization in Climate Change
- M.B.A. with Collaborative Specialization in Climate Change
- M.Eng. Electrical and Computer Engineering with Collaborative Specialization in Climate Change
- M.Eng. Environmental Engineering with Collaborative Specialization in Climate Change
- M.A. Political Economy with Collaborative Specialization in Climate Change
- M.A. Sustainable Energy with Collaborative Specialization in Climate Change
- M.Eng. Sustainable Energy with Collaborative Specialization in Climate Change

 M.Sc. Management with Collaborative Specialization in Climate Change

#### **Program Requirements**

### M.A. Anthropology with Collaborative Specialization in Climate Change (5.0 credits)

_			
	equirements - The	sis pathway:	
1.	1.0 credit in:		1.0
_	CLIM 5000 [1.0]	Climate Collaboration	
2.	0.0 credit in:		
_	CLIM 5800 [0.0]	Climate Seminar Series	
3.	1.0 credit in:		1.0
	ANTH 5401 [0.5]	Theories and Methods I	
	ANTH 5402 [0.5]	Theories and Methods II	4
wi	th the student's adv	oved electives, chosen in consultation risor	1.0
5.	2.0 credits in:		2.
	ANTH 5909 [2.0]	M.A. Thesis (in the specialization)	
To	tal Credits		5.
	-	earch essay pathway:	
1.	1.0 credit in:		1.
	CLIM 5000 [1.0]	Climate Collaboration	
2.	0.0 credit in:		
	CLIM 5800 [0.0]	Climate Seminar Series	
3.	1.0 credit in:		1.
	ANTH 5401 [0.5]		
	ANTH 5402 [0.5]	Theories and Methods II	
	2.0 credit in approach the student's adv	oved electives, chosen in consultation risor	2.
5.	1.0 credit in:		1.
	ANTH 5908 [1.0]	M.A. Research Essay (in the specialization)	
To	tal Credits		5.
D,	equirements - Cou	requerk nathway:	
	1.0 credit in:	isework paulway.	1.
1.	CLIM 5000 [1.0]	Climate Collaboration	١.
	CLIM SUUU IT.UI	Climate Collaboration	
^			0
2.	0.0 credit in:		0.
	<b>0.0 credit in:</b> CLIM 5800 [0.0]	Climate Seminar Series	
	0.0 credit in: CLIM 5800 [0.0] 1.0 credit in:		
	0.0 credit in: CLIM 5800 [0.0] 1.0 credit in: ANTH 5401 [0.5]	Theories and Methods I	
3.	0.0 credit in: CLIM 5800 [0.0] 1.0 credit in: ANTH 5401 [0.5] ANTH 5402 [0.5]	Theories and Methods I Theories and Methods II	1.
3. 4.	0.0 credit in: CLIM 5800 [0.0] 1.0 credit in: ANTH 5401 [0.5] ANTH 5402 [0.5] 0.5 credit in a 500	Theories and Methods I	1.
<b>4.</b> cli <b>5.</b>	0.0 credit in: CLIM 5800 [0.0] 1.0 credit in: ANTH 5401 [0.5] ANTH 5402 [0.5] 0.5 credit in a 500 mate change conte	Theories and Methods I Theories and Methods II 00-level ANTH course with sufficient nt, with departmental approval roved electives, chosen in	1.
3. 4. cli 5.	0.0 credit in: CLIM 5800 [0.0] 1.0 credit in: ANTH 5401 [0.5] ANTH 5402 [0.5] 0.5 credit in a 500 mate change conte 2.5 credits in app	Theories and Methods I Theories and Methods II 00-level ANTH course with sufficient nt, with departmental approval roved electives, chosen in	0.
3. 4. cli 5. co To M	0.0 credit in: CLIM 5800 [0.0] 1.0 credit in: ANTH 5401 [0.5] ANTH 5402 [0.5] 0.5 credit in a 500 mate change conte 2.5 credits in approxultation with the stal Credits Architecture 2 ith Collaboration ange (8.0 credits)	Theories and Methods I Theories and Methods II O0-level ANTH course with sufficient nt, with departmental approval roved electives, chosen in student's advisor  2-year stream ve Specialization in Climate dits)	0.
3. 4. cli 5. cc Tc	0.0 credit in: CLIM 5800 [0.0] 1.0 credit in: ANTH 5401 [0.5] ANTH 5402 [0.5] 0.5 credit in a 500 mate change conte 2.5 credits in approximation with the stal Credits Architecture 2 the Collaborative hange (8.0 credequirements - 8.0 credequir	Theories and Methods I Theories and Methods II O0-level ANTH course with sufficient nt, with departmental approval roved electives, chosen in student's advisor  2-year stream ve Specialization in Climate dits)	0. 1. 0. 2.
3. 4. cli 5. cc Tc	0.0 credit in: CLIM 5800 [0.0] 1.0 credit in: ANTH 5401 [0.5] ANTH 5402 [0.5] 0.5 credit in a 500 mate change conte 2.5 credits in approximation with the stal Credits Architecture 2 ith Collaboration and Collab	Theories and Methods I Theories and Methods II D0-level ANTH course with sufficient nt, with departmental approval roved electives, chosen in student's advisor  2-year stream ve Specialization in Climate dits) credits	0.
3. 4. cli 5. co To M W C	0.0 credit in: CLIM 5800 [0.0] 1.0 credit in: ANTH 5401 [0.5] ANTH 5402 [0.5] 0.5 credit in a 500 mate change conte 2.5 credits in appoinsultation with the stal Credits Architecture 2 the Collaborative hange (8.0 credit in: CLIM 5000 [1.0]	Theories and Methods I Theories and Methods II O0-level ANTH course with sufficient nt, with departmental approval roved electives, chosen in student's advisor  2-year stream ve Specialization in Climate dits)	1. 0. 2. <b>5.</b>
3. 4. cli 5. co To M W C	0.0 credit in: CLIM 5800 [0.0] 1.0 credit in: ANTH 5401 [0.5] ANTH 5402 [0.5] 0.5 credit in a 500 mate change conte 2.5 credits in approxultation with the stal Credits Architecture 2 the Collaborative hange (8.0 credit in: CLIM 5000 [1.0] 0.0 credit in:	Theories and Methods II Theories and Methods II 00-level ANTH course with sufficient nt, with departmental approval roved electives, chosen in student's advisor  2-year stream ve Specialization in Climate dits) credits  Climate Collaboration	1. 0. 2. <b>5.</b>
3. 4. cli 5. co To M W C	0.0 credit in: CLIM 5800 [0.0] 1.0 credit in: ANTH 5401 [0.5] ANTH 5402 [0.5] 0.5 credit in a 500 mate change conte 2.5 credits in apponsultation with the stal Credits Architecture 3 in the Collaboration in the Collaboration in the Collaboration in CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0]	Theories and Methods I Theories and Methods II D0-level ANTH course with sufficient nt, with departmental approval roved electives, chosen in student's advisor  2-year stream ve Specialization in Climate dits) credits	1. 0. 2.

ARCH 5200 [		Graduate Seminar 1: Introduction to Critical Thought in Architecture		ARCN 5909 [2.0]	Thesis - Directed Research Studio (DRS)	
ARCC 5100 [	[0.5]	Advanced Building Systems		Total Credits		14.0
ARCS 5105 [	[1.5]	Graduate Studio 1		M.A.Sc. Civil Eng	nineering	
ARCC 5200 [		Professional Practice			ve Specialization in Climate	
ARCH 5201 [		Graduate Seminar 2: Contemporary Theoretical Perspectives in Architecture		Change (6.0 cred	-	
ARCS 5106 [		Graduate Studio 2		Requirements: 1. 1.0 credit in:		1.0
4. 2.0 credits fr	-	Craduate Stadio 2	2.0		Climate Collaboration	1.0
ARCS 5909 [		Thesis - Independent Study (in the	2.0	CLIM 5000 [1.0]  2. 0.0 credit in:	Climate Collaboration	0.0
711100 0000 [		area of climate change)		CLIM 5800 [0.0]	Climate Seminar Series	0.0
ARCN 5909 [	[2.0]	Thesis - Directed Research Studio			inical engineering courses	2.5
		(DRS) (in the area of climate change)		4. 0.0 credit in:		2.5
Total Credits			8.0	CIVE 5901 [0.0]	Master's Seminar	2.5
M Architect	uro 3	-year stream		5. 2.5 credits in:	MACC There's (in the	2.5
with Collabo	rativ	e Specialization in Climate		CIVE 5909 [2.5]	M.A.Sc. Thesis (in the specialization)	
Change (16.0	0 cred	dits)		Total Credits		6.0
Requirements				M.Eng. Civil Eng	ineering	
1. 1.0 credit in:	:		1.0		ve Specialization in Climate	
CLIM 5000 [1	[0.1	Climate Collaboration		Change (6.0 cred	-	
2. 0.0 credit in:	:			Requirements - Proj	ect pathway:	
CLIM 5800 [0	-	Climate Seminar Series		1. 1.0 credit in:		1.0
		uired M.Arch courses:	13.0	CLIM 5000 [1.0]	Climate Collaboration	
Year 1 Fall Term				2. 0.0 credit in:		
ARCS 5031 [	-	M.Arch. 1 - Studio I		CLIM 5800 [0.0]	Climate Seminar Series	
ARCC 5096 [		Building Technology I			inical engineering courses	4.0
ARCH 5010 [	[0.5]	History and Theory of Modern		4. 1.0 credit in:	0	1.0
ARCN 5005 [		Architecture Theory and Practice of Architectural Representation		CIVE 5900 [1.0]	Civil Engineering Project (in the specialization)	
Year 1 Winter Te		Architectural representation		Total Credits		6.0
ARCS 5032 [		M.Arch. 1 - Studio II		Paguiramenta Cou	roowerk nothwey	
ARCC 5097 [	• •	Building Technology II		Requirements - Cou  1. 1.0 credit in:	rsework patriway.	1.0
ARCC 5099 [		Building Technology IV		CLIM 5000 [1.0]	Climate Collaboration	1.0
ARCH 5020 [		Theories of Modernity		2. 0.0 credit in:	Climate Collaboration	
Year 1 Summer	-	•		CLIM 5800 [0.0]	Climate Seminar Series	
ARCC 5098 [	[0.5]	Building Technology III			inical engineering courses	4.0
ARCS 5033 [	1.0]	M.Arch. 1 - Studio III		4. 1.0 credit from:	milear erigineering dearees	1.0
Year 2 Fall Term	1			ENVE 5105 [0.5]	Atmospheric Aerosols	
ARCS 5105 [	[1.5]	Graduate Studio 1		ENVE 5200 [0.5]	Climate Change and Engineering	
ARCC 5200 [	[0.5]	Professional Practice		ENVE 5201 [0.5]	Geo-Environmental Engineering	
ARCC 5100 [	[0.5]	Advanced Building Systems		ENVE 5205 [0.5]	Sludge Treatment and Disposal	
Year 2 Winter Te	erm			ENVJ 5908 [0.5]	Anaerobic Digestion	
ARCS 5106 [	[1.5]	Graduate Studio 2		ENVJ 5212 [0.5]	Climate Change Impacts on Water	
ARCH 5200 [		Graduate Seminar 1: Introduction to Critical Thought in Architecture		or approved Special T	Resources  Topics in the area of climate change	
Year 3 Fall Term	1			Total Credits	-1	6.0
ARCH 5201 [		Graduate Seminar 2: Contemporary Theoretical Perspectives in Architecture		M.A. Communica	ation ve Specialization in Climate	0.0
ARCN 5909 [	[2.0]	Thesis - Directed Research Studio (DRS)		Change (5.0 cred	dits)	
Year 3 Winter Te				·	earch essay pathway:	1.0
				1. 1.0 credit in: CLIM 5000 [1.0]	Climate Collaboration	1.0
				2. 0.0 credit in:	Cirriate Collaboration	

	CLIM 5800 [0.0]	Climate Seminar Series	
3.	1.5 credits in:		1.5
	COMS 5101 [1.0]	Foundations of Communication Studies	
	COMS 5605 [0.5]	Approaches to Communication Research	
4.	1.0 credit in:		1.0
	COMS 5908 [1.0]	Research Essay (in the specialization)	
5.	1.5 credits from th	e list of optional courses	1.5
То	tal Credits		5.0
Re	equirements - Thes	is pathway:	
1.	1.0 credit in:		1.0
	CLIM 5000 [1.0]	Climate Collaboration	
2.	0.0 credit in:		
	CLIM 5800 [0.0]	Climate Seminar Series	
3.	1.5 credits in:		1.5
	COMS 5101 [1.0]	Foundations of Communication Studies	
	COMS 5605 [0.5]	Approaches to Communication Research	
4.	2.0 credits in:		2.0
	COMS 5909 [2.0]	M.A. Thesis (in the specialization)	
5.	0.5 credit from the	list of optional courses	0.5
To	tal Credits		5.0
W	.A. Economics ith Collaborativ nange (4.0 cred	e Specialization in Climate	
0.	ialige (4.0 cleu	113)	
		sework pathway (4.0 credits)	
Re			1.0
Re	equirements - Cour		1.0
Re 1.	equirements - Cour 1.0 credit in:	sework pathway (4.0 credits)	1.0
Re 1.	equirements - Cour 1.0 credit in: CLIM 5000 [1.0]	sework pathway (4.0 credits)	1.0
1. 2.	equirements - Cour 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in:	sework pathway (4.0 credits)  Climate Collaboration	1.0
1. 2.	equirements - Cour 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0]	sework pathway (4.0 credits)  Climate Collaboration	
1. 2.	equirements - Cour 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 1.5 credit in:	Sework pathway (4.0 credits)  Climate Collaboration  Climate Seminar Series	
1. 2.	equirements - Cour 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 1.5 credit in: ECON 5020 [0.5]	Sework pathway (4.0 credits)  Climate Collaboration  Climate Seminar Series  Microeconomic Theory	
1. 2.	equirements - Cour 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 1.5 credit in: ECON 5020 [0.5] ECON 5021 [0.5]	Climate Collaboration Climate Seminar Series Microeconomic Theory Macroeconomic Theory	
1. 2.	equirements - Cour 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 1.5 credit in: ECON 5020 [0.5] ECON 5021 [0.5] ECON 5027 [0.5]	Climate Collaboration Climate Seminar Series Microeconomic Theory Macroeconomic Theory	1.5
1. 2. 3.	equirements - Cour 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 1.5 credit in: ECON 5020 [0.5] ECON 5021 [0.5] ECON 5027 [0.5] 0.5 credit in:	Climate Collaboration  Climate Seminar Series  Microeconomic Theory  Macroeconomic Theory  Econometrics I  Methods of Economic Research (including a research paper on a	1.5
1. 2. 3.	equirements - Cour 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 1.5 credit in: ECON 5020 [0.5] ECON 5021 [0.5] ECON 5027 [0.5] 0.5 credit in: ECON 5029 [0.5]	Climate Collaboration  Climate Seminar Series  Microeconomic Theory  Macroeconomic Theory  Econometrics I  Methods of Economic Research (including a research paper on a	1.5
1. 2. 3.	equirements - Cour 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 1.5 credit in: ECON 5020 [0.5] ECON 5021 [0.5] ECON 5027 [0.5] 0.5 credit in: ECON 5029 [0.5]	Climate Collaboration  Climate Seminar Series  Microeconomic Theory  Macroeconomic Theory  Econometrics I  Methods of Economic Research (including a research paper on a Climate Change-related topic)	1.5
1. 2. 3.	equirements - Cour 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 1.5 credit in: ECON 5020 [0.5] ECON 5021 [0.5] ECON 5027 [0.5] 0.5 credit in: ECON 5029 [0.5]	Climate Collaboration  Climate Seminar Series  Microeconomic Theory Macroeconomic Theory Econometrics I  Methods of Economic Research (including a research paper on a Climate Change-related topic)  Environmental Aspects of Economic Development	1.5
1. 2. 3.	equirements - Cour 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 1.5 credit in: ECON 5020 [0.5] ECON 5021 [0.5] ECON 5027 [0.5] 0.5 credit in: ECON 5029 [0.5] 0.5 credit in: ECON 5507 [0.5] ECON 5803 [0.5] ECON 5803 [0.5]	Climate Collaboration  Climate Seminar Series  Microeconomic Theory  Macroeconomic Theory  Econometrics I  Methods of Economic Research (including a research paper on a Climate Change-related topic)  Environmental Aspects of Economic Development Economics of Natural Resources Economics of the Environment	1.5
1. 2. 3.	equirements - Cour 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 1.5 credit in: ECON 5020 [0.5] ECON 5021 [0.5] ECON 5027 [0.5] 0.5 credit in: ECON 5029 [0.5] 0.5 credit in: ECON 5507 [0.5]	Climate Collaboration  Climate Seminar Series  Microeconomic Theory  Macroeconomic Theory  Econometrics I  Methods of Economic Research (including a research paper on a Climate Change-related topic)  Environmental Aspects of Economic Development Economics of Natural Resources	1.5
1. 2. 3.	equirements - Cour 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 1.5 credit in: ECON 5020 [0.5] ECON 5027 [0.5] ECON 5027 [0.5] 0.5 credit in: ECON 5029 [0.5] 0.5 credit in: ECON 5507 [0.5] ECON 5803 [0.5] ECON 5804 [0.5] ECON 5805 [0.5]	Climate Collaboration  Climate Seminar Series  Microeconomic Theory Macroeconomic Theory Econometrics I  Methods of Economic Research (including a research paper on a Climate Change-related topic)  Environmental Aspects of Economic Development Economics of Natural Resources Economics of the Environment Topics in Environmental and	1.5
1. 2. 3. 4.	equirements - Cour 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 1.5 credit in: ECON 5020 [0.5] ECON 5027 [0.5] ECON 5027 [0.5] 0.5 credit in: ECON 5029 [0.5] 0.5 credit in: ECON 5803 [0.5] ECON 5804 [0.5] ECON 5805 [0.5] or approved Special Change 0.5 credit in ECON mate Change conterns on the content of the content	Climate Collaboration  Climate Seminar Series  Microeconomic Theory Macroeconomic Theory Econometrics I  Methods of Economic Research (including a research paper on a Climate Change-related topic)  Environmental Aspects of Economic Development Economics of Natural Resources Economics of the Environment Topics in Environmental and Resource Economics I Topic in the area of Climate If at the 5000 level with sufficient and (may be an additional course areas)	1.5
1. 2. 3. 4. 5.	### According to Company Compa	Climate Collaboration  Climate Seminar Series  Microeconomic Theory Macroeconomic Theory Econometrics I  Methods of Economic Research (including a research paper on a Climate Change-related topic)  Environmental Aspects of Economic Development Economics of Natural Resources Economics of the Environment Topics in Environmental and Resource Economics I Topic in the area of Climate If at the 5000 level with sufficient and (may be an additional course areas)	0.5
1. 2. 3. 4. 5. Cl fro De To	### According to the province of the province	Climate Collaboration  Climate Seminar Series  Microeconomic Theory Macroeconomic Theory Econometrics I  Methods of Economic Research (including a research paper on a Climate Change-related topic)  Environmental Aspects of Economic Development Economics of Natural Resources Economics of the Environment Topics in Environmental and Resource Economics I Topic in the area of Climate If at the 5000 level with sufficient and (may be an additional course areas)	0.5 0.5

	CLIM 5000 [1.0]	Climate Collaboration	
2.	0.0 credit in:		
	CLIM 5800 [0.0]	Climate Seminar Series	
3.	1.5 credits in:		1.5
	ECON 5020 [0.5]	Microeconomic Theory	
	ECON 5021 [0.5]	Macroeconomic Theory	
	ECON 5027 [0.5]	Econometrics I	
4.	1.5 credits in:		1.5
	ECON 5909 [1.5]	M.A. Thesis (in the specialization)	
To	tal Credits		4.0
VI	.A. English		
	•	e Specialization in Climate	
	hange (4.5 cred	-	
Re	equirements - Cour	sework pathway (4.5 credits)	
	1.0 credit in:	, ( , (	1.0
	CLIM 5000 [1.0]	Climate Collaboration	
2.	0.0 credit in:		
	CLIM 5800 [0.0]	Climate Seminar Series	
3.		L at the 5000-level (excluding	2.5
	NGL 5908 and ENGL	`	
		uate seminar with sufficient Climate	0.5
		GL or another department, as	
	proved by the Coord pecialization.	linator of the Climate Change	
	0.5 credit in:		0.5
Э.	ENGL 5005 [0.5]	M.A. Seminar	0.5
To	otal Credits	W.A. Seminal	4.5
			4.5
		arch essay pathway (4.5 credits)	
1.	1.0 credit in:		1.0
	CLIM 5000 [1.0]	Climate Collaboration	
2.	0.0 credit in:		
	CLIM 5800 [0.0]	Climate Seminar Series	
3.	0.5 credit in:		0.5
_	ENGL 5005 [0.5]		
	<b>2.0 credits in</b> ENG NGL 5908)	L at the 5000 level (excluding	2.0
	1.0 credit in:		1.0
٠.	ENGL 5908 [1.0]	Research Essay (in the	1.0
	2.102 0000 [1.0]	specialization)	
To	tal Credits		4.5
٥,	auiromonte Thos	is pathway (4.5 credits)	
	1.0 credit in:	is patriway (4.3 credits)	1.0
••	CLIM 5000 [1.0]	Climate Collaboration	1.0
2	0.0 credit in:	Olimate Collaboration	
-	CLIM 5800 [0.0]	Climate Seminar Series	
3		at the 5000-level (excluding	1.0
	NGL 5909)	at and dood level (excluding	1.0
	0.5 credit in:		0.5
	ENGL 5005 [0.5]	M.A. Seminar	
5.	2.0 credits in:		2.0
	ENGL 5909 [2.0]	M.A. Thesis (in the specialization)	
To	tal Credits		4.5

## M.A. Geography with Collaborative Specialization in Climate Change (5.5 credits)

Requirements:		
1. 1.0 credit in:		1.0
CLIM 5000 [1.0]	Climate Collaboration	
2. 0.0 credit in:		0.0
CLIM 5800 [0.0]	Climate Seminar Series	
3. 1.0 credit in:		1.0
GEOG 5000 [0.5]	Approaches to Geographical Inquiry	
GEOG 5905 [0.5]	Masters Research Workshop	
4. 2.5 credits in:		2.5
GEOG 5909 [2.5]	M.A. Thesis (in the specialization and including oral examination of the thesis)	
5. 1.0 credit in appro	ved graduate-level electives	1.0

#### M.Sc. Geography with Collaborative Specialization in Climate Change (5.5 credits)

6. In addition to the formal requirements, MA students are required to attend the Departmental Seminar series, and

5.5

5.5

#### Requirements:

**Total Credits** 

the Graduate Field Camp.

	oquii omomor		
1.	1.0 credit in:		1.0
	CLIM 5000 [1.0]	Climate Collaboration	
2.	0.0 credit in:		0.0
	CLIM 5800 [0.0]	Climate Seminar Series	
3.	1.0 credit in:		1.0
	GEOG 5001 [0.5]	Modeling Environmental Systems	
	GEOG 5905 [0.5]	Masters Research Workshop	
4.	0.5 credit in Physic	cal Geography selected from:	0.5
	GEOG 5002 [0.5]	Quantitative Analysis for Geographical Research	
	GEOG 5103 [0.5]	Hydrologic Principles and Methods	
	GEOG 5104 [0.5]	Advanced Biogeography	
	GEOG 5107 [0.5]	Field Study and Methodological Research	
	GEOG 5303 [0.5]	Geocryology	
	GEOG 5307 [0.5]	Soil Resources	
	GEOG 5803 [0.5]	Seminar in Geomatics	
	GEOG 5804 [0.5]	Geographic Information Systems	
	GEOG 5900 [0.5]	Graduate Tutorial	
	up to 0.5 credit in G with departmental a	EOG or GEOM at the 4000 level, pproval	
5.	3.0 credits in:		3.0
	GEOG 5906 [3.0]	M.Sc. Thesis (in the specialization and including oral examination of the thesis)	

#### M.A. History with Collaborative Specialization in Climate Change (4.5 credits)

Requirements -	rocoarch	000011	nathway	/A E	crodite).

	equirements - resea	arch essay pathway (4.5 credits):	
1.	1.0 credit in:		1.0
	CLIM 5000 [1.0]	Climate Collaboration	
2.	0.0 credit in:		
	CLIM 5800 [0.0]	Climate Seminar Series	
3.	0.5 credit in:		0.5
	HIST 5003 [0.5]	Historical Theory and Method	
0. cc cc ur	5 credit may be take ourse. With departme ourses with historical	at the graduate level of which only in a designated public history ental permission, up to 0.5 credit of content may be taken from another risty, at the University of Ottawa, or institution.	1.5
5.	0.5 credit in:		0.5
	HIST 5900 [0.5]	Directed Research	
6.	1.0 credit in:		1.0
	HIST 5908 [1.0]	M.A. Research Essay (in the specialization)	
To	otal Credits		4.5
		s pathway (4.5 credits):	4.5
R		s pathway (4.5 credits):	<b>4.5</b> 1.0
R	equirements - thesi	s pathway (4.5 credits):  Climate Collaboration	
R(	equirements - thesi	,	
R(	equirements - thesi 1.0 credit in: CLIM 5000 [1.0]	,	
1. 2.	equirements - thesi 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in:	Climate Collaboration	
1. 2.	equirements - thesi 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 0.5 credit in: HIST 5003 [0.5]	Climate Collaboration  Climate Seminar Series  Historical Theory and Method	1.0
1. 2. 3. 4. 0. cc cc ur	equirements - thesi 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 0.5 credit in: HIST 5003 [0.5] 1.0 credit in HIST 5 credit may be take burse. With departments with historical	Climate Collaboration  Climate Seminar Series  Historical Theory and Method at the graduate level of which only in a designated public history ental permission, up to 0.5 credit of content may be taken from another risty, at the University of Ottawa, or	1.0
1. 2. 3. 4. 0. ccc ccc urrat	equirements - thesi 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 0.5 credit in: HIST 5003 [0.5] 1.0 credit in HIST 5 credit may be take burse. With departmentars with historical with at Carleton Universi	Climate Collaboration  Climate Seminar Series  Historical Theory and Method at the graduate level of which only in a designated public history ental permission, up to 0.5 credit of content may be taken from another risty, at the University of Ottawa, or	1.0
1. 2. 3. 4. 0. ccc ccc urrat	equirements - thesi 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 0.5 credit in: HIST 5003 [0.5] 1.0 credit in HIST 5 credit may be take ourse. With departmentaries with historical with at Carleton University another accredited in the control of	Climate Collaboration  Climate Seminar Series  Historical Theory and Method at the graduate level of which only in a designated public history ental permission, up to 0.5 credit of content may be taken from another risty, at the University of Ottawa, or	1.0

## M.A. Migration and Diaspora Studies with Collaborative Specialization in Climate Change (5.0 credits)

#### Requirements - Thesis Pathway:

1.0 credit in:		1.0
CLIM 5000 [1.0]	Climate Collaboration	
2. 0.0 credit in:		0.0
CLIM 5800 [0.0]	Climate Seminar Series	
3. 1.0 credit in:		1.0
MGDS 5001 [0.5]	MA Core Seminar: Migration and Diaspora Studies	
MGDS 5003 [0.5]	Research Seminar in Migration and Diaspora Studies	
electives (see below).	gration and Diaspora Studies Up to 1.0 credit in Migration and ticum placements (MGDS 5101) requirement.	1.0
5. 2.0 credits in:		2.0

series, and the Graduate Field Camp.

6. In addition to the formal requirements, M.Sc. students are required to attend the DGES Departmental Seminar

**Total Credits** 

MCD6 2000 to 01	M.A. Thosis (in the encoiglization)		DCVC 5004 [0 5]	Knowledge Mehilization	
MGDS 5909 [2.0]	M.A. Thesis (in the specialization)		PSYC 5004 [0.5] PSYC 5802 [0.5]	Knowledge Mobilization	
Total Credits		5.0	PS1C 5602 [0.5]	Special Topics: Professional Development	
•	earch Essay Pathway:		PSYC 5903 [0.5]	Practicum in Psychology	
1. 1.0 credit in:		1.0		C course work at the 5000 level,	0.
CLIM 5000 [1.0]	Climate Collaboration		0 1	al development courses above, and	
2. 0.0 credit in:		0.0	excluding elective sta	itistics courses	
CLIM 5800 [0.0]	Climate Seminar Series		6. 0.0 credit in:		
3. 1.0 credit in:		1.0	PSYC 5906 [0.0]	Pro-Seminar in Psychology	
MGDS 5001 [0.5]	MA Core Seminar: Migration and		6. 2.5 credits in:		2.
	Diaspora Studies		PSYC 5909 [2.5]	M.A. Thesis (in the specialization)	
MGDS 5003 [0.5]	Research Seminar in Migration and Diaspora Studies		Total Credits		5.
<b>4. 0.5 credit in MGD</b> MGDS 5101.	S at the 5000 level. May not include	0.5	M.A. Sociology with Collaborati	ve Specialization in Climate	
	Migration and Diaspora Studies	1.5	Change (5.0 cre	-	
	. Up to 1.0 credit in Migration and	1.0	• •	•	
	cticum placements (MGDS 5101)		Requirements - The	sis pathway:	
may count toward this	s requirement.		1. 1.0 credit in:		1.
6. 1.0 credit in:		1.0	CLIM 5000 [1.0]	Climate Collaboration	
MGDS 5908 [1.0]	Research Essay (in the		2. 0.0 credit in:		
	specialization)		CLIM 5800 [0.0]	Climate Seminar Series	
Total Credits		5.0	3. 1.0 credit in:		1.
Requirements - Cou	rsework Pathway		SOCI 5005 [0.5]	Recurring Debates in Social Thought	
1. 1.0 credit in:		1.0	SOCI 5809 [0.5]	The Logic of the Research Process	
CLIM 5000 [1.0]	Climate Collaboration		4. 1.0 credit in appre	oved electives, chosen in consultation	1.
2. 0.0 credit in:		0.0	with the student's adv	visor	
CLIM 5800 [0.0]	Climate Seminar Series		5. 2.0 credits in:		2.
3. 1.0 credit in:		1.0	SOCI 5909 [2.0]	M.A. Thesis (in the specialization)	
MGDS 5001 [0.5]	MA Core Seminar: Migration and Diaspora Studies		Total Credits		5.
MGDS 5003 [0.5]	Research Seminar in Migration and		Requirements - Res	earch essay pathway:	
	Diaspora Studies		1. 1.0 credit in:		1.
4. 0.5 credit in MGD	S at the 5000 level. May not include	0.5	CLIM 5000 [1.0]	Climate Collaboration	
MGDS 5101.	-		2. 0.0 credit in:		
5. 2.0 credits from N	Migration and Diaspora Studies	2.0	CLIM 5800 [0.0]	Climate Seminar Series	
	. Up to 1.0 credit in Migration and		3. 1.0 credit in:		1.
Diaspora Studies pra may count toward this	cticum placements (MGDS 5101) s requirement.		SOCI 5005 [0.5]	Recurring Debates in Social Thought	
6. 0.5 credit in a gra	duate course with sufficient climate	0.5	SOCI 5809 [0.5]	The Logic of the Research Process	
•	proved by the Coordinator of the			oved electives, chosen in consultation	2.
Climate Change Spec	cialization.	5.0	with the student's adv	· · · · · · · · · · · · · · · · · · ·	2.
			5. 1.0 credit in:		1.
M.A. Psychology with Collaborating	/ ve Specialization in Climate		SOCI 5908 [1.0]	M.A. Research Essay (in the specialization)	
Change (5.5 cree			Total Credits		5.
Requirements:			M.A.Sc. Aerospa	ace Engineering	
1. 1.0 credit in:		1.0	with Collaborati	ve Specialization in Climate	
CLIM 5000 [1.0]	Climate Collaboration		Change (5.0 cred	-	
2. 0.0 credit in:			Requirements:	•	
CLIM 5800 [0.0]	Climate Seminar Series		·		1
3. 1.0 credit in:		1.0	1. 1.0 credit in:	Climate Collaboration	1.
PSYC 5410 [0.5]	Advanced Analysis of Variance		CLIM 5000 [1.0]	Climate Collaboration	
PSYC 5411 [0.5]	Advanced Regression		2. 0.0 credit in:	Climata Carrier - Carrie	
	ofessional development courses:	0.5	CLIM 5800 [0.0]	Climate Seminar Series	4
PSYC 5002 [0.5]	Ethics in Psychology			rses offered by the OCIMAE.	1.
PSYC 5003 [0.5]	Open Science and Methodological			Mechanical and Aerospace	
	a por a colorido aria moti lodological		Engineering seminar	SANAS	
	Improvements		5. 2.5 credits in:	ociico	2.

MECH 5909 [2.5]	M.A.Sc. Thesis (in the		CLIM 5000 [1.0]	Climate Collaboration	
	specialization)		2. 0.0 credit in:		
Total Credits		5.0	CLIM 5800 [0.0]	Climate Seminar Series	
M A Sc Flectrica	I and Computer Engineering		3. 1.5 credits in cour	ses offered by the OCIMAE.	1.5
	e Specialization in Climate		•	Mechanical and Aerospace	
Change (5.0 cred	-		Engineering seminar s	series	
• .	,		5. 2.5 credits in:		2.5
Requirements: 1. 1.0 credit in:		1.0	MECH 5909 [2.5]	M.A.Sc. Thesis (in the	
CLIM 5000 [1.0]	Climate Collaboration	1.0	T-4-1 O114-	specialization)	
2. 0.0 credit in:	Olimate Collaboration	0.0	Total Credits		5.0
CLIM 5800 [0.0]	Climate Seminar Series	0.0	M.B.A.		
3. 1.5 credits in cours		1.5		e Specialization in Climate	
4. 2.5 credits in:		2.5	Change (8.5 cred	lits)	
SYSC 5909 [2.5]	M.A.Sc. Thesis (in the area of		Requirements:		
	climate change)		1. 1.0 credit in		1.0
Total Credits		5.0	CLIM 5000 [1.0]	Climate Collaboration	
M A Sc Environn	nental Engineering		2. 0.0 credit in:		
	e Specialization in Climate		CLIM 5800 [0.0]	Climate Seminar Series	
Change (5.0 cred	-		3. 0.25 credit in		0.25
• .	113)		BUSI 5108 [0.25]	Sustainable Business Development	
Requirements:		4.0		ve specialization courses designated	1.0
1. 1.0 credit in:	Climate Callabanation	1.0		mate change content, within the elsewhere, with permission of the	
CLIM 5000 [1.0]	Climate Collaboration		School of Business of	eisewhere, with permission of the	
2. 0.0 credit in: CLIM 5800 [0.0]	Climate Seminar Series		5. 4.25 credits in cor	mpulsory core courses	4.25
	ses, with at least 0.5 credit from two	1.5	6. 1.0 credit in elective	ve courses	1.0
	v listed below outside the area of	1.5	7. 1.0 credit in:		1.0
EIA, Sustainability and			BUSI 5999 [1.0]	Internship <sup>1</sup>	
4. 0.0 credit in:			8. 0.0 credit in		
ENVE 5800 [0.0]	Master's Seminar (participation		BUSI 5998 [0.0]	MBA Skills Workshop <sup>2</sup>	
	in the graduate student seminar series)		Total Credits		8.5
5. 2.5 credits in:	concey	2.5	1 Students with less	than two (2) years of professiona	I
ENVE 5909 [2.5]	Master's Thesis (in the		employment experie		
	specialization)			ete BUSI 5999 [1.0] Internship in o	rder
Total Credits		5.0	to graduate. Studen		
M.A.Sc. Materials	Engineering		•	vork experience may apply for an	
	e Specialization in Climate		exemption.  Non-credit require	d skills workshop	
Change (5.0 cred	-				
• .	,			l and Computer Engineering	
Requirements: 1. 1.0 credit in:		1.0		ve Specialization in Climate	
CLIM 5000 [1.0]	Climate Collaboration	1.0	Change (4.5 cred	•	
2. 0.0 credit in:	Olimate Collaboration			ect pathway (4.5 credits)	
CLIM 5800 [0.0]	Climate Seminar Series		1. 1.0 credit in:		1.0
	ses offered by the OCIMAE.	1.5	CLIM 5000 [1.0]	Climate Collaboration	
	Mechanical and Aerospace		2. 0.0 credit in:		0.0
Engineering seminar s	·		CLIM 5800 [0.0]	Climate Seminar Series	0.5
5. 2.5 credits in:		2.5	3. 0.5 credit in:	Denoughle and Distributed Energy	0.5
MECH 5909 [2.5]	M.A.Sc. Thesis (in the		ELEC 5302 [0.5]	Renewable and Distributed Energy Resource Technologies	
Total Credits	specialization)	5.0	SERG 5001 [0.5]	Sustainable Energy Policy for	
M.A.Sc. Mechanic	cal Engineering		SERG 5003 [0.5]	Engineers Energy Evaluation and Assessment	
	e Specialization in Climate			Tools	
Change (5.0 cred	-		SYSC 5005 [0.5]	Optimization Theory and Methods	
Requirements:	,		SYSC 5104 [0.5]	Methodologies For Discrete-Event	
PERMISHINE.					
1. 1.0 credit in:		1.0		Modeling And Simulation	

	or approved Advan- change	ced Topic in the area of climate	
4.	2.5 credits in cour	ses	2.5
5.	0.5 credit in:		0.5
	SYSC 5900 [0.5]	Systems Engineering Project (in the area of climate change)	
To	otal Credits		4.5
R	equirements - cour	sework pathway (4.5 credits)	
	1.0 credit in:	,	1.0
	CLIM 5000 [1.0]	Climate Collaboration	
2.	0.0 credit in:		0.0
	CLIM 5800 [0.0]	Climate Seminar Series	
3.	0.5 credit in:		0.5
	ELEC 5302 [0.5]	Renewable and Distributed Energy Resource Technologies	
	SERG 5001 [0.5]	Sustainable Energy Policy for Engineers	
	SERG 5003 [0.5]	Energy Evaluation and Assessment Tools	
	SYSC 5005 [0.5]	Optimization Theory and Methods	
	SYSC 5104 [0.5]	Methodologies For Discrete-Event Modeling And Simulation	
	or approved Advan-	ced Topic in the area of climate	
4.	3.0 credits in cour	ses	3.0
To	otal Credits		4.5
C	ith Collaborativ hange (5.0 cred equirements - Proje	•	
R	hange (5.0 cred	lits)	1.0
R	hange (5.0 cred equirements - Proje	lits)	1.0
Ro 1.	hange (5.0 cred equirements - Proje 1.0 credit in:	its) ect pathway	1.0
Ro 1.	hange (5.0 cred equirements - Proje 1.0 credit in: CLIM 5000 [1.0]	its) ect pathway	1.0
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1.	hange (5.0 cred equirements - Proje 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0]	ct pathway  Climate Collaboration	
1.	hange (5.0 cred equirements - Proje 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 0.5 credit from:	Climate Collaboration  Climate Seminar Series	
1.	hange (5.0 cred equirements - Proje 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 0.5 credit from: ENVE 5105 [0.5]	Climate Collaboration Climate Seminar Series Atmospheric Aerosols	
1.	hange (5.0 cred equirements - Proje 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 0.5 credit from: ENVE 5105 [0.5] ENVE 5200 [0.5]	Climate Collaboration Climate Seminar Series Atmospheric Aerosols Climate Change and Engineering	
1.	hange (5.0 cred equirements - Proje 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 0.5 credit from: ENVE 5105 [0.5] ENVE 5200 [0.5] ENVE 5201 [0.5]	Climate Collaboration Climate Seminar Series Atmospheric Aerosols Climate Change and Engineering Geo-Environmental Engineering	
1.	hange (5.0 cred equirements - Proje 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 0.5 credit from: ENVE 5105 [0.5] ENVE 5200 [0.5] ENVE 5201 [0.5] ENVE 5205 [0.5]	Climate Collaboration Climate Seminar Series Atmospheric Aerosols Climate Change and Engineering Geo-Environmental Engineering Sludge Treatment and Disposal	
1.	hange (5.0 cred equirements - Proje 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 0.5 credit from: ENVE 5105 [0.5] ENVE 5200 [0.5] ENVE 5201 [0.5] ENVE 5205 [0.5] ENVJ 5908 [0.5] ENVJ 5908 [0.5]	Climate Collaboration  Climate Seminar Series  Atmospheric Aerosols Climate Change and Engineering Geo-Environmental Engineering Sludge Treatment and Disposal Anaerobic Digestion Climate Change Impacts on Water	
1. 2. 3. diff El	hange (5.0 cred equirements - Projection: 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 0.5 credit from: ENVE 5105 [0.5] ENVE 5200 [0.5] ENVE 5201 [0.5] ENVE 5205 [0.5] ENVJ 5908 [0.5] ENVJ 5912 [0.5] or approved Special change 2.5 credits in courferent areas of study A, Sustainability and	Climate Collaboration  Climate Seminar Series  Atmospheric Aerosols  Climate Change and Engineering  Geo-Environmental Engineering  Sludge Treatment and Disposal  Anaerobic Digestion  Climate Change Impacts on Water  Resources  Il Topics in the area of climate  ses, with at least 0.5 credit from two or listed below outside the area of	
1. 2. 3. diff El	hange (5.0 cred equirements - Projection: 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 0.5 credit from: ENVE 5105 [0.5] ENVE 5200 [0.5] ENVE 5201 [0.5] ENVE 5205 [0.5] ENVJ 5205 [0.5] ENVJ 5212 [0.5] or approved Special change 2.5 credits in courferent areas of study A, Sustainability and	Climate Collaboration  Climate Seminar Series  Atmospheric Aerosols Climate Change and Engineering Geo-Environmental Engineering Sludge Treatment and Disposal Anaerobic Digestion Climate Change Impacts on Water Resources Il Topics in the area of climate ses, with at least 0.5 credit from two y listed below outside the area of	0.5
1. 2. 3. diff EI 5.	hange (5.0 cred equirements - Projections: 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 0.5 credit from: ENVE 5105 [0.5] ENVE 5200 [0.5] ENVE 5201 [0.5] ENVE 5205 [0.5] ENVJ 5205 [0.5] ENVJ 5212 [0.5] or approved Special change 2.5 credits in courferent areas of study A, Sustainability and 0.0 credit in: ENVE 5800 [0.0]	Climate Collaboration  Climate Seminar Series  Atmospheric Aerosols  Climate Change and Engineering  Geo-Environmental Engineering  Sludge Treatment and Disposal  Anaerobic Digestion  Climate Change Impacts on Water  Resources  Il Topics in the area of climate  ses, with at least 0.5 credit from two or listed below outside the area of	2.5
1. 2. 3. diff EI 5.	hange (5.0 cred equirements - Project 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 0.5 credit from: ENVE 5105 [0.5] ENVE 5200 [0.5] ENVE 5201 [0.5] ENVE 5205 [0.5] ENVJ 5908 [0.5] ENVJ 5912 [0.5] or approved Special change 2.5 credits in courferent areas of study A, Sustainability and 0.0 credit in: ENVE 5800 [0.0] 1.0 credit in:	Climate Collaboration  Climate Seminar Series  Atmospheric Aerosols Climate Change and Engineering Geo-Environmental Engineering Sludge Treatment and Disposal Anaerobic Digestion Climate Change Impacts on Water Resources I Topics in the area of climate ses, with at least 0.5 credit from two y listed below outside the area of Climate Change  Master's Seminar	0.5
4. dif EI 5.	hange (5.0 cred equirements - Projections: 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 0.5 credit from: ENVE 5105 [0.5] ENVE 5200 [0.5] ENVE 5201 [0.5] ENVE 5205 [0.5] ENVJ 5205 [0.5] ENVJ 5212 [0.5] or approved Special change 2.5 credits in courferent areas of study A, Sustainability and 0.0 credit in: ENVE 5800 [0.0]	Climate Collaboration  Climate Seminar Series  Atmospheric Aerosols Climate Change and Engineering Geo-Environmental Engineering Sludge Treatment and Disposal Anaerobic Digestion Climate Change Impacts on Water Resources Il Topics in the area of climate ses, with at least 0.5 credit from two y listed below outside the area of	2.5
4. diff EI 5.	hange (5.0 cred equirements - Project 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 0.5 credit from: ENVE 5105 [0.5] ENVE 5200 [0.5] ENVE 5201 [0.5] ENVE 5205 [0.5] ENVJ 5908 [0.5] ENVJ 5912 [0.5] or approved Special change 2.5 credits in courferent areas of study A, Sustainability and 0.0 credit in: ENVE 5800 [0.0] 1.0 credit in:	Climate Collaboration  Climate Seminar Series  Atmospheric Aerosols Climate Change and Engineering Geo-Environmental Engineering Sludge Treatment and Disposal Anaerobic Digestion Climate Change Impacts on Water Resources Il Topics in the area of climate ses, with at least 0.5 credit from two y listed below outside the area of Il Climate Change Master's Seminar	2.5
4. diff EI 5.	hange (5.0 cred equirements - Projection of the control of the con	Climate Collaboration  Climate Seminar Series  Atmospheric Aerosols Climate Change and Engineering Geo-Environmental Engineering Sludge Treatment and Disposal Anaerobic Digestion Climate Change Impacts on Water Resources Il Topics in the area of climate ses, with at least 0.5 credit from two y listed below outside the area of Il Climate Change Master's Seminar  Environmental Engineering Project (in the specialization)	2.5
4. dif EI 5. 6. Ro	hange (5.0 cred equirements - Projection 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 0.5 credit from: ENVE 5105 [0.5] ENVE 5200 [0.5] ENVE 5201 [0.5] ENVE 5205 [0.5] ENVJ 5205 [0.5] ENVJ 5212 [0.5] or approved Special change 2.5 credits in courferent areas of study A, Sustainability and 0.0 credit in: ENVE 5800 [0.0] 1.0 credit in: ENVE 5900 [1.0]	Climate Collaboration  Climate Seminar Series  Atmospheric Aerosols Climate Change and Engineering Geo-Environmental Engineering Sludge Treatment and Disposal Anaerobic Digestion Climate Change Impacts on Water Resources Il Topics in the area of climate ses, with at least 0.5 credit from two y listed below outside the area of Il Climate Change Master's Seminar  Environmental Engineering Project (in the specialization)	2.5
4. dif EI 5. 6. Ro	hange (5.0 cred equirements - Project 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 0.5 credit from: ENVE 5105 [0.5] ENVE 5200 [0.5] ENVE 5201 [0.5] ENVE 5205 [0.5] ENVJ 5908 [0.5] ENVJ 5912 [0.5] or approved Special change 2.5 credits in courferent areas of study A, Sustainability and 0.0 credit in: ENVE 5800 [0.0] 1.0 credit in: ENVE 5900 [1.0]	Climate Collaboration  Climate Seminar Series  Atmospheric Aerosols Climate Change and Engineering Geo-Environmental Engineering Sludge Treatment and Disposal Anaerobic Digestion Climate Change Impacts on Water Resources Il Topics in the area of climate ses, with at least 0.5 credit from two y listed below outside the area of Il Climate Change Master's Seminar  Environmental Engineering Project (in the specialization)	0.5 2.5 1.0
4. dii El 5. 6. To 1.	cultiments - Project 1.0 credit in: CLIM 5000 [1.0] 0.0 credit in: CLIM 5800 [0.0] 0.5 credit from: ENVE 5105 [0.5] ENVE 5200 [0.5] ENVE 5201 [0.5] ENVE 5205 [0.5] ENVJ 5908 [0.5] ENVJ 5912 [0.5] ENVJ 5912 [0.5] or approved Special change 2.5 credits in courferent areas of study A, Sustainability and 0.0 credit in: ENVE 5800 [0.0] 1.0 credit in: ENVE 5900 [1.0]  Otal Credits equirements - Court.	Climate Collaboration  Climate Seminar Series  Atmospheric Aerosols Climate Change and Engineering Geo-Environmental Engineering Sludge Treatment and Disposal Anaerobic Digestion Climate Change Impacts on Water Resources Il Topics in the area of climate ses, with at least 0.5 credit from two y listed below outside the area of Il Climate Change Master's Seminar  Environmental Engineering Project (in the specialization)	0.5 2.5 1.0

Atmospheric Aerosols Climate Change and Engineering	1.
Climate Change and Engineering	
One Francisco established a single	
Geo-Environmental Engineering	
Sludge Treatment and Disposal	
Anaerobic Digestion	
Climate Change Impacts on Water Resources	
al Topics in the area of climate	
ly listed below outside the area of	2.
	5.
dits)	
sis pathway (5.0 credits)	_
	1.
Climate Collaboration	
Climate Seminar Series	
T	1.
•	
Methodologies of Political Economy	_
NA A Thereis (in the consistention	2.
including an oral examination)	
below) 1 below) 1	1.
	5.
earch essay pathway (5.0 credits)	
	1.
Climate Collaboration	
	0.
Climate Seminar Series	0.
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Methodologies of Political Economy	
	1
Research Essay (in the	
specialization) roved graduate level electives (see	
	Climate Change Impacts on Water Resources al Topics in the area of climate rses, with at least 0.5 credit from two by listed below outside the area of d Climate Change  conomy re Specialization in Climate dits) sis pathway (5.0 credits)  Climate Collaboration  Climate Seminar Series  Theories of Political Economy Methodologies of Political Economy  M.A. Thesis (in the specialization, including an oral examination) oved graduate level electives (see below)  earch essay pathway (5.0 credits)  Climate Collaboration

 $<sup>^{\</sup>mathrm{1}}$  Up to one (1.0) credit may be taken at the 4000 (honours undergraduate) level.

### M.A. Sustainable Energy with Collaborative Specialization in Climate Change (6.0 credits)

Requirements - Coursework pathway:

1. 1.0 credit in:		1.0
CLIM 5000 [1.0]	Climate Collaboration	

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SERG 5800 [0.0] Sustainable Energy Seminar  O.5 credit in:  PADM 5121 [0.5] Policy Analysis: The Practical Art of Change  O.5 credit in:  PADM 5510 [0.5] Energy Economics  O.5 credit in:  PADM 5515 [0.5] Sustainable Energy Policy or PADM 5615 [0.8] plitics and Policy of Energy in Canada  1.0 credit from Sustainable Energy Policy courses sted below or other courses as approved by the MA upervisor  1.0 credit in:  PADM 5908 [1.0] Research Essay (in the specialization)  otal Credits  6.0  Requirements - Thesis pathway:  1.0 credit in:  CLIM 5000 [1.0] Climate Collaboration  0.0 credit in:  CLIM 5800 [0.0] Climate Seminar Series	SEF	RG 5003 [0.5]	Energy Evaluation and Assessment	
SERG 5800 [0.0] Sustainable Energy Seminar  0.5 credit in: 0.5 PADM 5121 [0.5] Policy Analysis: The Practical Art of Change  0.5 credit in: 0.5 PADM 5510 [0.5] Energy Economics  0.5 credit in: 0.5 PADM 5515 [0.5] Sustainable Energy Policy or PADM 5615 [0.8] bilitics and Policy of Energy in Canada  1.0 credit from Sustainable Energy Policy courses 1.0 sted below or other courses as approved by the MA upervisor  1.0 credit in: 1.0 PADM 5908 [1.0] Research Essay (in the specialization)  otal Credits 6.0  equirements - Thesis pathway: 1.0 credit in: 1.0 CLIM 5000 [1.0] Climate Collaboration  0.0 credit in:	SEF	RG 5005 [0.5]	Applied Interdisciplinary Project	
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PADM 5121 [0.5] Policy Analysis: The Practical Art of Change  0.5 credit in: 0.5 PADM 5510 [0.5] Energy Economics  0.5 credit in: 0.5 PADM 5515 [0.5] Sustainable Energy Policy or PADM 5615 [0.5] politics and Policy of Energy in Canada  1.0 credit from Sustainable Energy Policy courses 1.0 sted below or other courses as approved by the MA upervisor  1.0 credit in: 1.0 PADM 5908 [1.0] Research Essay (in the specialization)  otal Credits 6.0 equirements - Thesis pathway: 1.0 credit in: 1.0 CLIM 5000 [1.0] Climate Collaboration  0.0 credit in: CLIM 5800 [0.0] Climate Seminar Series	SEF	RG 5800 [0.0]	Sustainable Energy Seminar	
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or PADM 5615 [0.B) litics and Policy of Energy in Canada  1.0 credit from Sustainable Energy Policy courses sted below or other courses as approved by the MA upervisor  1.0 credit in:  PADM 5908 [1.0] Research Essay (in the specialization)  Otal Credits  6.0 requirements - Thesis pathway:  1.0 credit in:  CLIM 5000 [1.0] Climate Collaboration  0.0 credit in:  CLIM 5800 [0.0] Climate Seminar Series	. 0.5	credit in:		0.5
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. 1.5 credits III. 1.5			Climate Seminar Series	
	CLI	M 5800 [0.0]	Climate Seminar Series	1.5

To	otal Credits		6.0
	SERG 5909 [2.0]	MA Sustainable Energy Thesis (in the specialization)	
8.	2.0 credits in:		2.0
	or PADM 5615 [0	D.B)plitics and Policy of Energy in Canad	а
	PADM 5515 [0.5]	Sustainable Energy Policy	
7.	0.5 credit in:		0.5
	PADM 5510 [0.5]	Energy Economics	
6.	0.5 credit in:		0.5
	PADM 5121 [0.5]	Policy Analysis: The Practical Art of Change	
5.	0.5 credit in:		0.5
	SERG 5800 [0.0]	Sustainable Energy Seminar	
4.	0.0 credit in:		0.0
	SERG 5005 [0.5]	Applied Interdisciplinary Project	
	SERG 5003 [0.5]	Energy Evaluation and Assessment Tools	
	SERG 5002 [0.5]	Sustainable Energy Engineering for Policy Students	

#### Notes:

 Courses must be appropriate to the student's qualifications and selected with the approval of the student's program supervisor.

#### M.Eng. Sustainable Energy with Collaborative Specialization in Climate Change (5.0 Credits)

#### Requirements:

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1.	1.0 credit in:		1.0	
	CLIM 5000 [1.0]	Climate Collaboration		
2.	0.0 credit in:			
	CLIM 5800 [0.0]	Climate Seminar Series		
3.	1.5 credits in:		1.5	
	SERG 5001 [0.5]	Sustainable Energy Policy for Engineers		
	SERG 5003 [0.5]	Energy Evaluation and Assessment Tools		
	SERG 5005 [0.5]	Applied Interdisciplinary Project		
4.	0.0 credit in:			
	SERG 5800 [0.0]	Sustainable Energy Seminar		
5.	0.5 credit in:		0.5	
	Mechanical Engineering Focus:			
	Mechanical Energy Conversion courses (listed below), or Sustainable Energy Policy courses			
	or			
	Electrical Engineering focus:			
		Energy Systems courses (listed ble Energy Policy courses		
6.	2.0 credits in:		2.0	
	Mechanical Engine	eering focus:		
	Graduate-level MECH courses			
	or			
Electrical Engineering focus:				
Graduate-level ELEC, SYSC or EACJ courses				
Total Credits			5.0	

### M.Sc. Management with Collaborative Specialization in Climate Change (5.0 credits)

#### Requirements (5.0 credits):

1.	1.0 credit from:		1.0
	CLIM 5000 [1.0]	Climate Collaboration	
2.	0.0 credit in:		
	CLIM 5800 [0.0]	Climate Seminar Series	
3.	1.5 credits in:		1.5
	BUSI 5980 [0.5]	Foundations of Management Theory and Research	
	BUSI 5981 [0.5]	Statistics for Business Research	
	BUSI 5982 [0.5]	Research Methodology in Business	
4.	0.5 credit from:		0.5
	BUSI 5983 [0.5]	Qualitative Research Design	
	BUSI 5984 [0.5]	Quantitative Research Design	
5.	5. Completion of the Research Tutorial		
6.	2.0 credits in:		2.0
	BUSI 5989 [2.0]	M.Sc. Thesis (in the specialization)	
Total Credits			5.0

#### Regulations

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

#### Admission

Admission to the collaborative master's program in Climate Change is available to master's students who are admitted in one of the participating master's programs. To apply to one of the participating master's programs, please visit the Faculty of Graduate and Postdoctoral Affairs Admissions page.

#### Climate Change (CLIM) Courses

### CLIM 5000 [1.0 credit] Climate Collaboration

A seminar on the climate crisis from an interdisciplinary perspective. Drawing on a range of disciplinary approaches from the humanities, social sciences, public policy, engineering and natural science, students will engage with the many factors bearing on the climate crisis and how to address it.

#### CLIM 5800 [0.0 credit] Climate Seminar Series

A series of seminars presented by researchers and practitioners in the area of climate change. To complete this course, a student must attend six seminars.