Climate Change (Collaborative Program)

This section presents the requirements for programs in:

- M.A. Anthropology with Collaborative Specialization in Climate Change
- M.A. Communication with Collaborative Specialization in Climate Change
- M.A. English 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.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)

Requirements - Thesis pathway:

1. 1.0 credit in:		1.0
CLIM 5000 [0.0]	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. 1.0 credit in approved electives, chosen in consultation with the student's advisor		1.0
5. 2.0 credits in:		2.0
ANTH 5909 [2.0]	M.A. Thesis (in the specialization)	
Total Credits		5.0

Requirements - Research essay pathway:

1. 1.0 credit in:		1.0
CLIM 5000 [0.0]	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. 2.0 credit in approved electives, chosen in consultation with the student's advisor		2.0
5. 1.0 credit in:		1.0
ANTH 5908 [1.0]	M.A. Research Essay (in the specialization)	
Total Credits		5.0

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

Requirements - Research essay pathway:

1. 1.0 credit in:		1.0
CLIM 5000 [0.0]	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. 1.0 credit in:		1.0
COMS 5908 [1.0]	Research Essay (in the specialization)	
5. 1.5 credits from the list of optional courses		1.5
Total Credits		5.0

Requirements - Thesis pathway:

1. 1.0 credit in:		1.0
CLIM 5000 [0.0]	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
Total Credits		5.0

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

Requirements - Coursework pathway:

1. 1.0 credit in:		1.0
CLIM 5000 [0.0]	Climate Collaboration	
2. 0.0 credit in:		
CLIM 5800 [0.0]	Climate Seminar Series	
3. 2.5 credits in ENGL at the 5000-level (excluding ENGL 5908 and ENGL 5909)		2.5
4. 0.5 credit in a graduate seminar with sufficient Climate Change content in ENGL or another department, as approved by the Coordinator of the Climate Change Specialization.		0.5

5. 0.5 credit in:		0.5
ENGL 5005 [0.5]	M.A. Seminar	
Total Credits		4.5

Requirements - Research essay pathway:

1. 1.0 credit in:		1.0
CLIM 5000 [0.0]	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]	M.A. Seminar	
4. 2.0 credits in ENGL at the 5000 level (excluding ENGL 5908)		2.0
5. 1.0 credit in:		1.0
ENGL 5908 [1.0]	Research Essay (in the specialization)	
Total Credits		4.5

Requirements - Thesis pathway:

1. 1.0 credit in:		1.0
CLIM 5000 [0.0]	Climate Collaboration	
2. 0.0 credit in:		
CLIM 5800 [0.0]	Climate Seminar Series	
3. 1.0 credit in ENGL at the 5000-level (excluding ENGL 5909)		1.0
4. 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)	
Total Credits		4.5

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

Requirements - Thesis pathway:

1. 1.0 credit in:		1.0
CLIM 5000 [0.0]	Climate Collaboration	
2. 0.0 credit in:		
CLIM 5800 [0.0]	Climate Seminar Series	
3. 1.0 credit in:		1.0
SOCI 5005 [0.5]	Recurring Debates in Social Thought	
SOCI 5809 [0.5]	The Logic of the Research Process	
4. 1.0 credit in approved electives, chosen in consultation with the student's advisor		1.0
5. 2.0 credits in:		2.0
SOCI 5909 [2.0]	M.A. Thesis (in the specialization)	
Total Credits		5.0

Requirements - Research essay pathway:

1. 1.0 credit in:		1.0
CLIM 5000 [0.0]	Climate Collaboration	
2. 0.0 credit in:		
CLIM 5800 [0.0]	Climate Seminar Series	
3. 1.0 credit in:		1.0
SOCI 5005 [0.5]	Recurring Debates in Social Thought	
SOCI 5809 [0.5]	The Logic of the Research Process	
4. 2.0 credit in approved electives, chosen in consultation with the student's advisor		2.0
5. 1.0 credit in:		1.0
SOCI 5908 [1.0]	M.A. Research Essay (in the specialization)	
Total Credits		5.0

M.A.Sc. Aerospace Engineering with Collaborative Specialization in Climate Change (5.0 credits)

Requirements:

1. 1.0 credit in:		1.0
CLIM 5000 [0.0]	Climate Collaboration	
2. 0.0 credit in:		
CLIM 5800 [0.0]	Climate Seminar Series	
3. 1.5 credits in courses offered by the OCIMAE.		1.5
4. Participation in the Mechanical and Aerospace Engineering seminar series		
5. 2.5 credits in:		2.5
MECH 5909 [2.5]	M.A.Sc. Thesis (in the specialization)	
Total Credits		5.0

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

Requirements:

1. 1.0 credit in:		1.0
CLIM 5000 [0.0]	Climate Collaboration	
2. 0.0 credit in:		0.0
CLIM 5800 [0.0]	Climate Seminar Series	
3. 1.5 credits in courses		1.5
4. 2.5 credits in:		2.5
SYSC 5909 [2.5]	M.A.Sc. Thesis (in the area of climate change)	
Total Credits		5.0

M.A.Sc. Environmental Engineering with Collaborative Specialization in Climate Change (5.0 credits)

Requirements:

1. 1.0 credit in:		1.0
CLIM 5000 [0.0]	Climate Collaboration	
2. 0.0 credit in:		
CLIM 5800 [0.0]	Climate Seminar Series	
3. 1.5 credits in courses, with at least 0.5 credit from two different areas of study listed below outside the area of EIA, Sustainability and Climate Change		1.5
4. 0.0 credit in:		
ENVE 5800 [0.0]	Master's Seminar (participation in the graduate student seminar series)	
5. 2.5 credits in:		2.5
ENVE 5909 [2.5]	Master's Thesis (in the specialization)	
Total Credits		5.0

M.A.Sc. Materials Engineering with Collaborative Specialization in Climate Change (5.0 credits)

Requirements:

1. 1.0 credit in:		1.0
CLIM 5000 [0.0]	Climate Collaboration	
2. 0.0 credit in:		
CLIM 5800 [0.0]	Climate Seminar Series	
3. 1.5 credits in courses offered by the OCIMAE.		1.5
4. Participation in the Mechanical and Aerospace Engineering seminar series		
5. 2.5 credits in:		2.5
MECH 5909 [2.5]	M.A.Sc. Thesis (in the specialization)	
Total Credits		5.0

M.A.Sc. Mechanical Engineering with Collaborative Specialization in Climate Change (5.0 credits)

Requirements:

1. 1.0 credit in:		1.0
CLIM 5000 [0.0]	Climate Collaboration	
2. 0.0 credit in:		
CLIM 5800 [0.0]	Climate Seminar Series	
3. 1.5 credits in courses offered by the OCIMAE.		1.5
4. Participation in the Mechanical and Aerospace Engineering seminar series		
5. 2.5 credits in:		2.5
MECH 5909 [2.5]	M.A.Sc. Thesis (in the specialization)	
Total Credits		5.0

M.B.A. with Collaborative Specialization in Climate Change (8.5 credits)

Requirements:

1. 1.0 credit in		1.0
CLIM 5000 [0.0]	Climate Collaboration	
2. 0.0 credit in:		
CLIM 5800 [0.0]	Climate Seminar Series	
3. 0.25 credit in		0.25
BUSI 5108 [0.25]	Sustainable Business Development	
4. 1.0 credit in elective specialization courses designated as having sufficient climate change content, within the School of Business or elsewhere, with permission of the School of Business.		1.0
5. 4.25 credits in compulsory core courses		4.25
6. 1.0 credit in elective courses		1.0
7. 1.0 credit in:		1.0
BUSI 5999 [1.0]	Internship [1]	
8. 0.0 credit in		
BUSI 5998 [0.0]	MBA Skills Workshop [2]	
Total Credits		8.5

[1] Students with less than two (2) years of professional employment experience must successfully complete BUSI 5999 [1.0] Internship in order to graduate. Students with two or more years work experience may apply for an exemption.

[2] Non-credit required skills workshop.

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

Requirements - by Project (4.5 credits)

1. 1.0 credit in:		1.0
CLIM 5000 [0.0]	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 Advanced Topic in the area of climate change		
4. 2.5 credits in courses		2.5
5. 0.5 credit in:		0.5
SYSC 5900 [0.5]	Systems Engineering Project (in the area of climate change)	
Total Credits		4.5

Requirements - by Coursework (4.5 credits)

1. 1.0 credit in:		1.0
CLIM 5000 [0.0]	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 Advanced Topic in the area of climate change		
4. 3.0 credits in courses		3.0
Total Credits		4.5

M.Eng. Environmental Engineering with Collaborative Specialization in Climate Change (5.0 credits)

Requirements - Project pathway

1. 1.0 credit in:		1.0
CLIM 5000 [0.0]	Climate Collaboration	
2. 0.0 credit in:		
CLIM 5800 [0.0]	Climate Seminar Series	
3. 0.5 credit from:		0.5
ENVE 5105 [0.5]	Atmospheric Aerosols	

ENVE 5200 [0.5]	Climate Change and Engineering	
ENVE 5201 [0.5]	Geo-Environmental Engineering	
ENVE 5205 [0.5]	Sludge Treatment and Disposal	
ENVJ 5908 [0.5]	Anaerobic Digestion	
ENVJ 5212 [0.0]	Climate Change Impacts on Water Resources	
or approved Special Topics in the area of climate change		
4. 2.5 credits in courses, with at least 0.5 credit from two different areas of study listed below outside the area of EIA, Sustainability and Climate Change		2.5
5. 0.0 credit in:		
ENVE 5800 [0.0]	Master's Seminar	
6. 1.0 credit in:		1.0
ENVE 5900 [1.0]	Environmental Engineering Project (in the specialization)	
Total Credits		5.0

Requirements - Coursework pathway

1. 1.0 credit in:		1.0
CLIM 5000 [0.0]	Climate Collaboration	
2. 0.0 credit in:		
CLIM 5800 [0.0]	Climate Seminar Series	
3. 1.5 credits from:		1.5
ENVE 5105 [0.5]	Atmospheric Aerosols	
ENVE 5200 [0.5]	Climate Change and Engineering	
ENVE 5201 [0.5]	Geo-Environmental Engineering	
ENVE 5205 [0.5]	Sludge Treatment and Disposal	
ENVJ 5908 [0.5]	Anaerobic Digestion	
ENVJ 5212 [0.0]	Climate Change Impacts on Water Resources	
or approved Special Topics in the area of climate change		
4. 2.5 credits in courses, with at least 0.5 credit from two different areas of study listed below outside the area of EIA, Sustainability and Climate Change		2.5
Total Credits		5.0

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

Requirements:

1. 1.0 credit in:		1.0
CLIM 5000 [0.0]	Climate Collaboration	
2. 0.0 credit in:		
CLIM 5800 [0.0]	Climate Seminar Series	
3. 2.0 credits in:		2.0
SERG 5001 [0.5]	Sustainable Energy Policy for Engineers	
SERG 5003 [0.5]	Energy Evaluation and Assessment Tools	
SERG 5004 [1.0]	Applied Interdisciplinary Project	
4. 0.0 credit in:		
SERG 5800 [0.0]	Sustainable Energy Seminar	
5. 2.0 credits in:		2.0
Mechanical Engineering 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 [0.0]	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. 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

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.