CLIMATE SCIENCE AND SOLUTIONS (M.S.)

This degreeprovides foundational knowledge in climate change science and mitigation strategies, while allowing students to pursue depth areas of their choosing such as research on specific impacts, mitigation, or adaptation strategies, the energy transition, geospatial aspects of decarbonization, climate action planning for communities, or natural hazards. Both thesis and non-thesis options are available.

See the department website for optional career path areas. Each student will design a study plan, in consultation with an advisor and graduate committee, that totals to 30 credit hours and includes the following requirements:

Code	Title	Hours
Required:		
GEOG 5130	Global Climate Change	3
GEOG 5350	Climate Change Mitigation	3
ESS 5010	Seminar	1
One course in tools or research methods relevant to their thesis or non-thesis project		3
Total Hours		**10**

For the thesis option, the study plan will include at least 6 credits and a maximum of 10 credits of thesis work (GEOG 5000 or GEOL 5000) and a minimum of 20 credits of coursework. For the non-thesis option, the study plan will include a 3 credits of GEOG 5990 or GEOL 5990 #(Non-thesis Master's Research) and 27 credits of course work.

For both options, a minimum of 18 credits must be completed at the 5000-level in related areas, as approved by the candidate's committee or non-thesis project advisor, including thesis and non-thesis course credit hours. The thesis research or non-thesis project portion of the program for each student consists of a substantial project in which the student demonstrates the ability to do rigorous independent work.

1. Students will have an understanding of basic climate science, impacts and opportunities for mitigation of greenhouse gas emissions and enhancement of sinks.

2. Students will develop technical skills and research methodologies necessary to independently investigate key aspects of climate science, impacts, mitigation strategies or adaptation.

3. Students will demonstrate their ability to collaborate with a faculty advisor and graduate committee to conduct independent research useful to either the scientific community or to a related goal of a partnering entity.

4. Students will demonstrate their ability to communicate effectively, professionally, and within group settings.