

# Welcome to SEAS!

## Admitted Student Visit Day

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### Specialization

### Coordinator

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[seas.umich.edu](https://seas.umich.edu)

# Agenda

**01** **Specialization Overview**  
Program mission, goals, and overview

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**02** **Faculty**  
Core faculty members

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**03** **Curriculum**  
Courses, dual degrees, master's projects/thesis

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**04** **Careers and Employment**  
Alumni outcomes, careers data

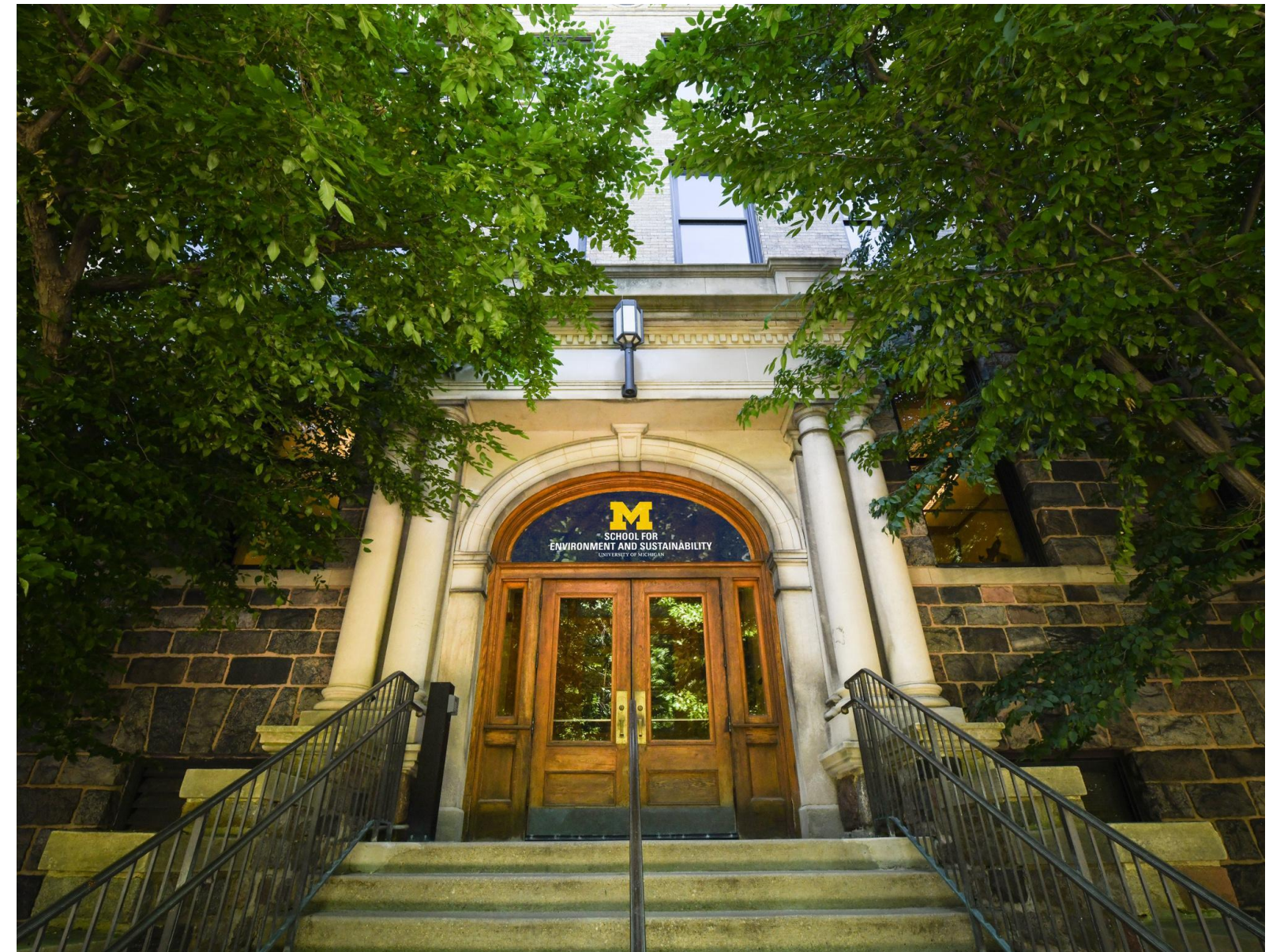
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**05** **SEAS, Ann Arbor, and U-M**  
Rankings, community, culture

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**06** **Questions**

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# SEAS

Innovative, Integrated, Justice-Oriented, Entrepreneurial, Global

## Mission

At the University of Michigan School for Environment and Sustainability (SEAS), we are at the forefront of building a more sustainable and just world for all by transforming the impact of higher education and reimagining the future. We are advancing action through innovation, research, education and engagement in society, and developing leaders who are empowered to halt the climate crisis and create an environmentally sound future for generations to come.

## Who We Are

Situated within the nation's top public research university, the University of Michigan School for Environment and Sustainability (SEAS) has been a pioneer in environmental education, research, and activism for more than a century.



# Geospatial Data Sciences

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Our interdisciplinary Geospatial Data Sciences field of study prepares industry leaders to develop and use analytical and computer-based methods to assess and protect the Earth's natural resources.

# A Professional School

Exposure to Employers and Alumni



69

EMPLOYERS  
ATTENDED  
THE 2025  
GREEN  
CAREER FAIR



86

ALUMNI  
PARTICIPATED IN  
CAREER TREK AND  
ALUMNI PANELS  
THROUGHOUT THE  
2021-2021  
ACADEMIC YEAR



28

EMPLOYER  
INFORMATION  
SESSIONS WERE  
HOSTED FOR THE  
2021-2022  
ACADEMIC YEAR

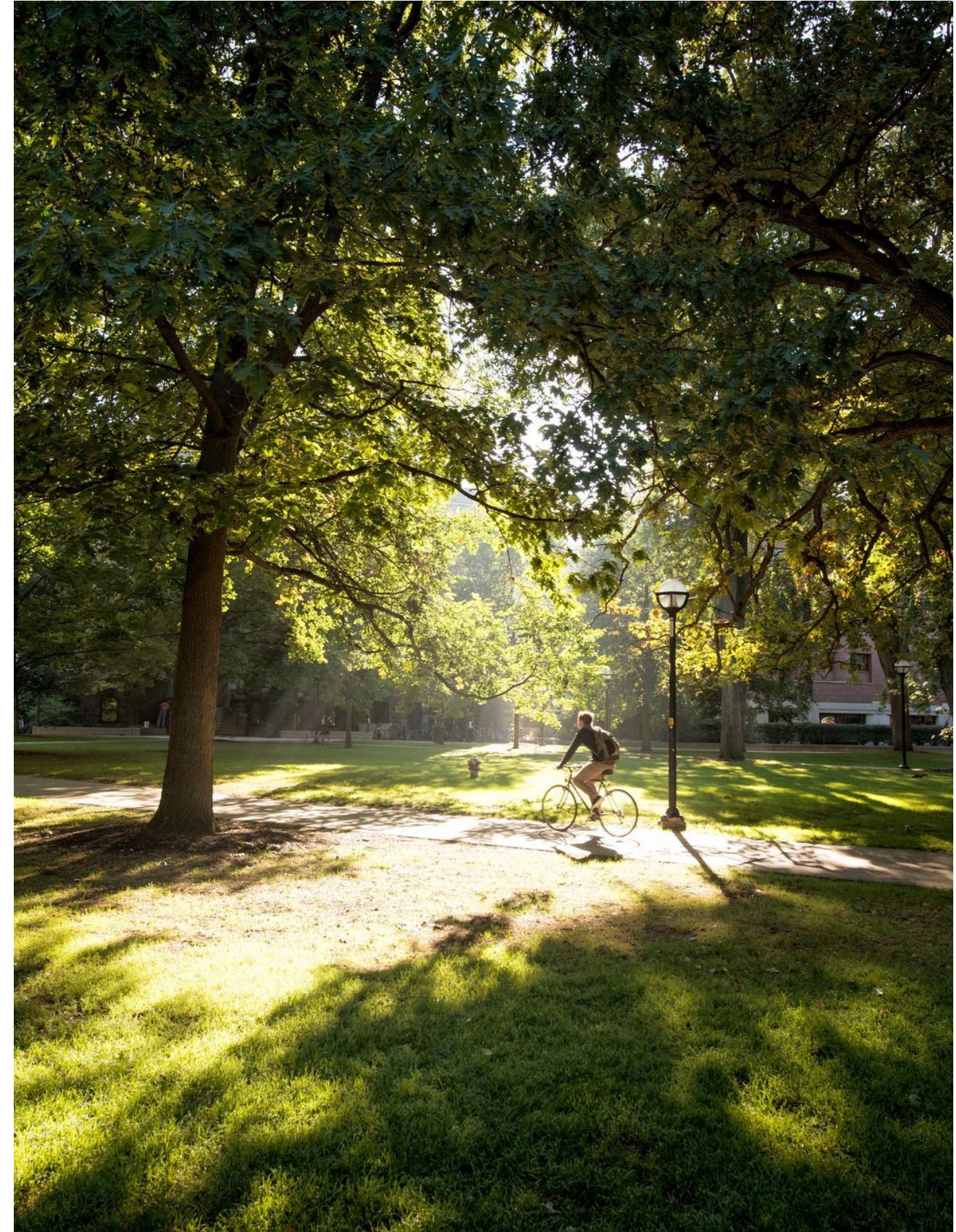
# SEAS is Interdisciplinary

Design

Technology

Social Systems

Natural Systems



# Supportive Community

Largest living alumni body of any university



**13,800+**

TOTAL ALUMNI, THE LARGEST GRADUATE  
POPULATION OF ANY ENVIRONMENTAL DEGREE  
PROGRAM



**33%**

OF SEAS ALUMNI HAVE RECEIVED A DUAL  
DEGREE FROM ANOTHER ONE OF U-M'S  
NATIONALLY RANKED TOP 10 PROGRAMS

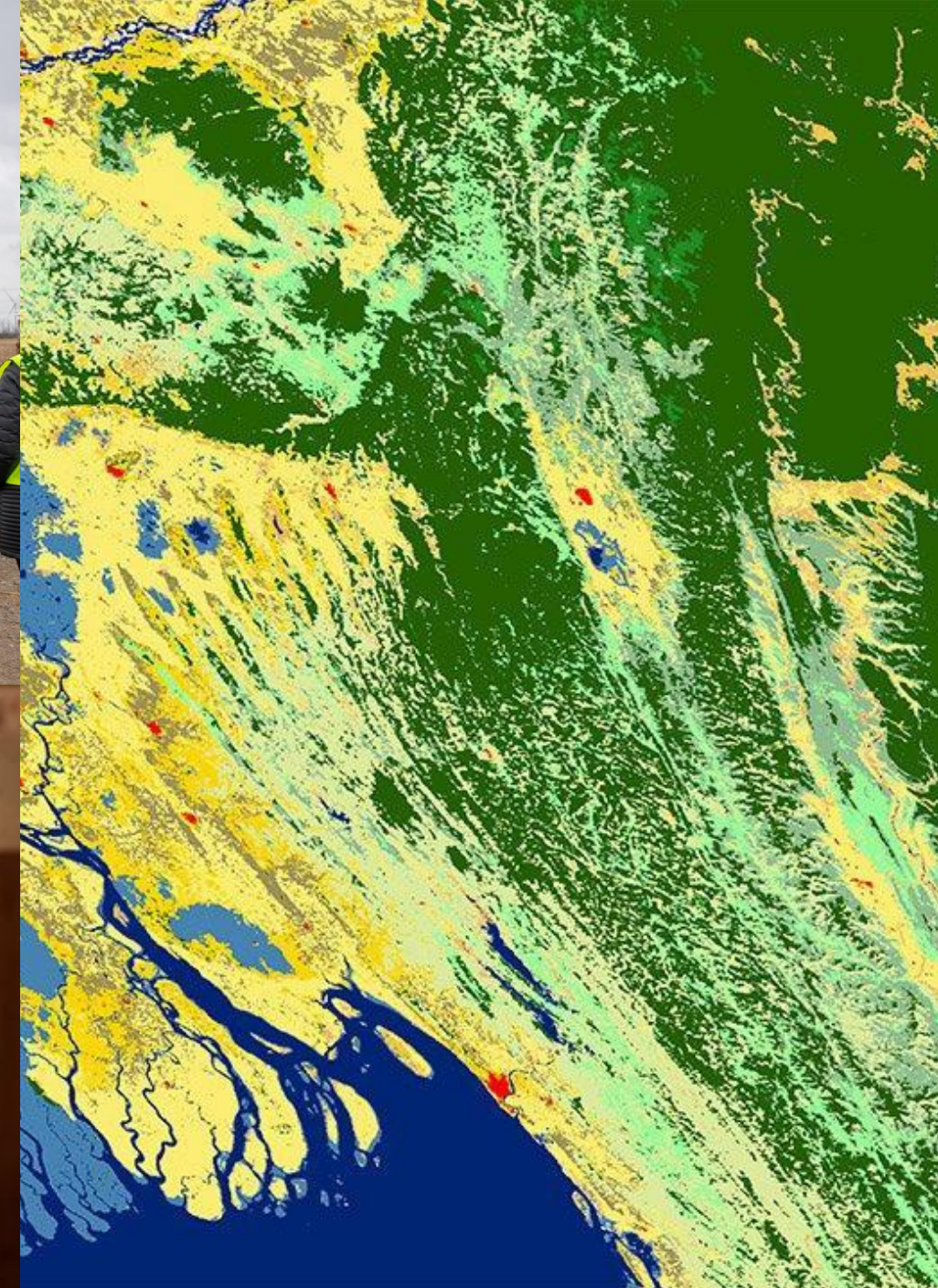


**Alumni**

ARE REPRESENTED IN ALL 50 STATES AND  
80+ COUNTRIES

# Overview

- GIS, remote sensing, statistics, data science, modeling
- Broad toolkit; typically students choose to combine it with interest in a particular domain such as:
  - Ecosystem Science and Management
  - Environmental Justice
  - Sustainability and Development
- Requirements are designed to be very flexible



# Core Faculty

Leading experts in geographic information science, data-driven modeling and processing, advanced statistical methods, remote sensing, land use, wildlife conservation, and sustainable development



**Shannon Brines**

Lecturer



**Neil Carter**

Associate Professor



**Silvia  
Cordero-Sancho**

Lecturer



**Bill Currie**

Professor, Associate Dean



**Kim C. Diver**

Lecturer III



**Ayumi  
Fujisaki-Manome**

Associate Research  
Scientist



**Dimitrios  
Gounaridis**

Research Scientist,  
Lecturer



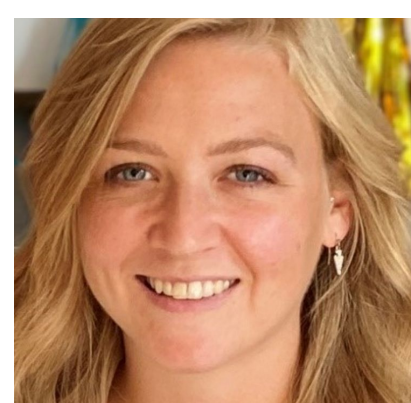
**Meha Jain**

Associate Professor



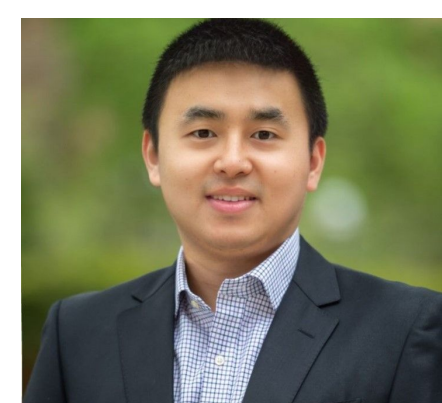
**Dani Jones**

Assoc. Research Scientist



**Abby Hutson**

Asst. Research Scientist



**Yi Hong**

Research Scientist



**Derek Van Berkel**

Assistant Professor



**Kai Zhu**

Associate Professor

# About the Curriculum



## Sample Courses

- Remote Sensing of Environment
- Environmental Spatial Data Analysis
- GIS and Natural Resource Applications
- Introductory Python for Geospatial Data Sciences I



## Master's Project or Thesis

- Project
  - Group project (3-7 students), interdisciplinary, real-world applied problem for an external client
- Thesis
  - Individual research and writing, often a publishable journal article



## SEAS and GDS Core

- Required GDS courses
  - GIS
  - remote sensing
- Electives
  - modeling, statistics
  - other fields of study
- Certification programs
  - Environmental Spatial Analysis
  - Complex Systems
  - Urban informatics



## Dual Degrees

- Other U-M schools
  - Law
  - Public Policy
  - Business
  - Engineering
  - Education

# Course Schedule

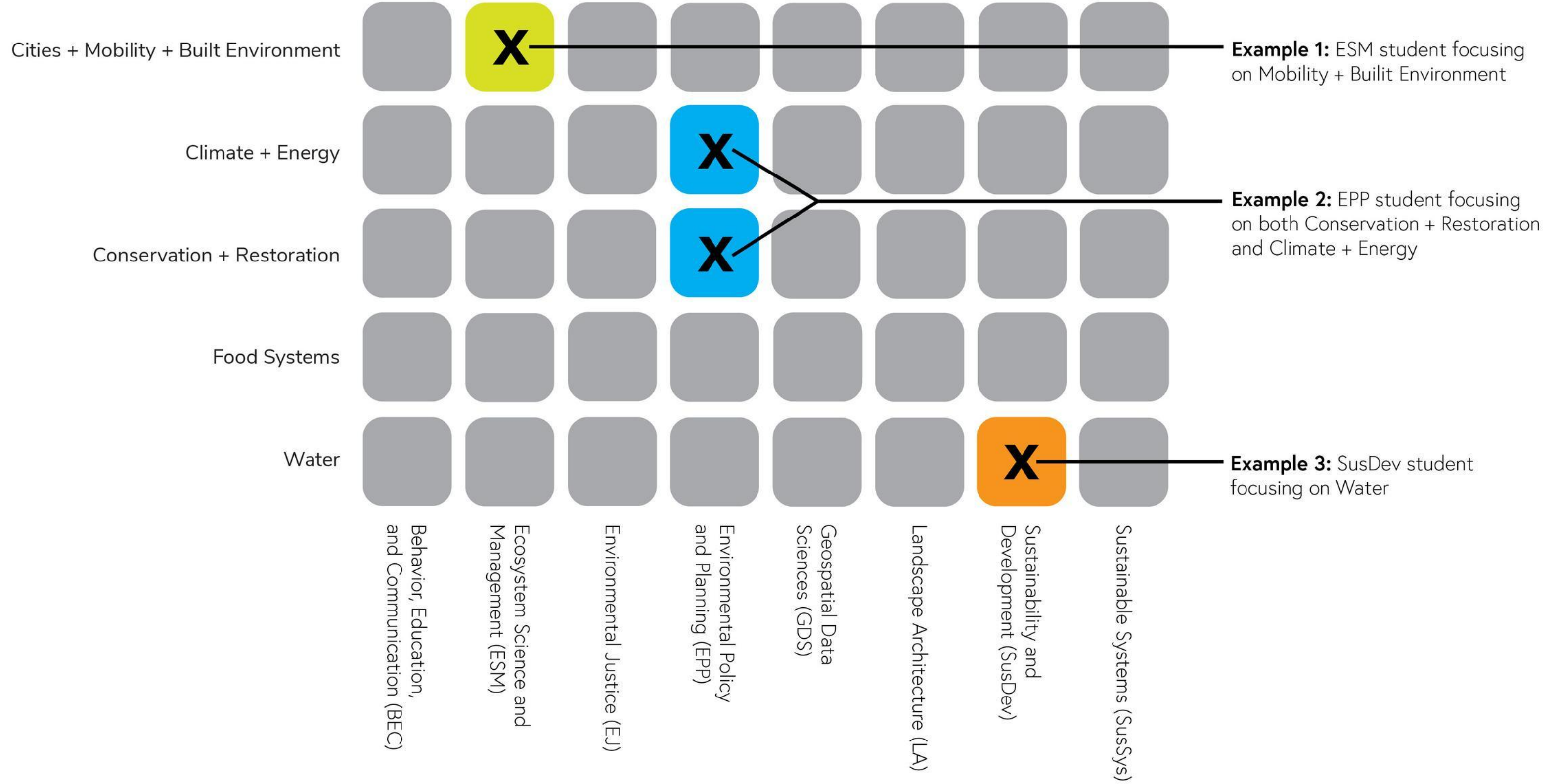
## Fall

- EAS 501 Geovisualization (Van Berkel)
- EAS 501 Multivariate stats (Gronewold)
- EAS 531 Intro to GIS (Diver)
- EAS 538 Nat Res Statistics (Ibanez)
- EAS 540 GIS and Nat Res Applic (Brines)
- EAS 543 Envntal Spatial Data Analysis (Cordero-Sancho)

## Winter

- EAS 531 Intro to GIS (Carter)
- EAS 538 Nat Res Statistics (Jain)
- EAS 539 Landscape Ecology (Currie)
- EAS 541 Remote Sensing (Gounaridis)
- EAS 639 Intro to Python (Brines); followed by Advanced Python
- EAS501.006 GPS and Geospatial Field Technologies (Brines)

# Themes



# Specializations



# M.S. Capstone Options

## Project

- Work as interdisciplinary team (3 to 7 students)
- Help client solve a real-world issue
- Report and presentation

## Thesis

- Work primarily individually with Faculty Advisor
- Conduct research to answer a scientific question
- Peer-reviewed publication(s)

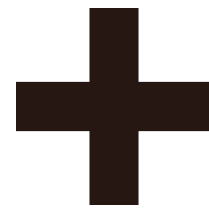
## Practicum

- Work primarily individually with Faculty Advisor
- Help client solve a real-world issue
- Report and presentation

## Non-opus

- For students with ample professional experience
- Only coursework, take additional classes
- Work independently

# Dual Degrees



**Master of science in engineering (MSE)**

**Master of business administration (MBA)**

**Master of urban and regional planning (MURP)**

**Master of science in public policy (MPP)**

**Juris doctor (JD)**

**Self-initiated dual degrees**

# Alumni Employment

## All Sectors

### Academia

- PhD programs at various universities
- Faculty positions at various universities

### Government

- NASA
- NOAA
- FEMA
- US Forest Service
- US EPA
- US Department of Energy
- Great Lakes Commission
- Southeastern MI Council of Governments

### Private

- ESRI
- ENVIRON
- Greenman-Pedersen, Inc. INSIDEO

### NGOs

- National Wildlife Federation
- African Wildlife Foundation
- The Nature Conservancy
- World Resources Institute
- United Nations Environment Programme
- Ecological Restoration Institute
- Grand Traverse Conservancy
- Leelanau Conservancy





# SEAS Employment by Numbers



SATISFIED  
WITH POST-GRAD  
POSITION



JOB SEEKERS  
FOUND  
FULL-TIME JOBS



FOUND POSITION  
WITHIN 6 MONTHS

  
**ENROLLMENT  
DEADLINE  
APRIL 15**

**Come join us!**

# Questions?

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