

# Certificate (CSEEM) & Master of Sustainable Energy and Environmental Management (MSEEM)

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**Georgia  
Tech**  
CREATING THE NEXT

Dr. Marilyn A. Brown  
Regents' Professor  
mbrown9@gatech.edu

Dr. Daniel Matisoff,  
Associate Professor  
Matisoff@gatech.edu

Dr. Alice Favero  
Program Coordinator  
alice.favero@gatech.edu

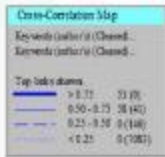
For more information: <https://cepl.gatech.edu/>

# The CSEEM and MSEEM Programs are Hosted by Georgia Tech's School of Public Policy

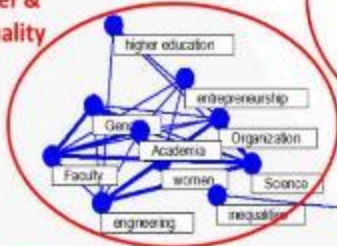
The Georgia Tech School of Public Policy is:

- Highly ranked by UNSWR and climbing (Information Technology Management; Energy & Environmental Policy (#12); and Policy Analysis)
- Multidisciplinary and networked globally;
- Policy relevant in S&T, E&E, ITC and Ethics;
- Effective thought leader informing programs and governance in STEM education and the workforce;
- Data driven forecasting innovation and entrepreneurial pathways;
- Impactful in designing policies for social good.

# Complex Web of Topics Define Georgia Tech's School of Public Policy



## Gender & Inequality



## Policy Making & Technology Policy



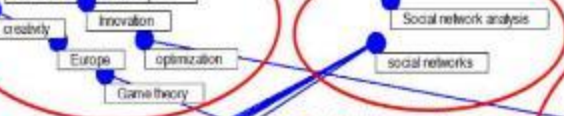
## ICT & Disabilities



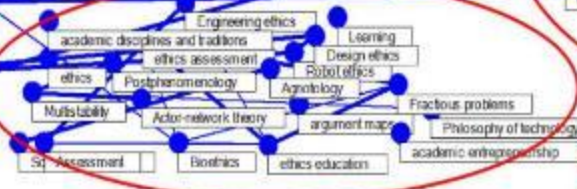
## Economics



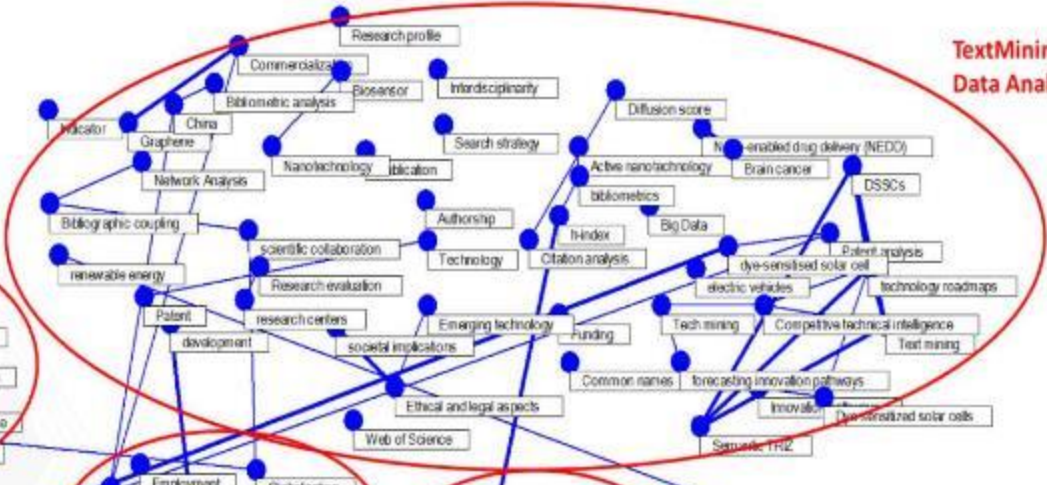
## Social Network Analysis



## Ethics & Education



## TextMining & Data Analytics



## Climate & Energy Policy





# Award-Winning Faculty

- Studying and sharing research with a faculty that has a national and international reputation.
- Our courses are taught by world-class faculty and renowned practitioners in fields ranging from:
  - pollution and utility regulation,
  - climate economics,
  - corporate social responsibility,
  - carbon credits and green energy financing, eco-certification,
  - life cycle analysis,
  - data analytics, and
  - environmental justice.

Omar Isaac Asensio



Data Science  
Policy  
Management

Marilyn A. Brown



MSEEM Co-Director  
Energy Policy Modeling, Smart Grid  
Policies, Renewables & EVs

Alice Favero



MSEEM Program Coordinator  
Environmental Economics, Climate  
Policy, Nat. Resource Economics

Scott Ganz



Social Organization  
Spatial Economic Analysis  
Impacts of Carbon Tax

Emanuele Massetti



Climate Change Economics  
Climate Policy

Dan Matisoff



MSEEM Co-Director  
Environmental Policy  
Energy Policy Analysis

Valerie Thomas



Environmental Modeling  
Energy Modeling

Michael Elliott



Environmental Planner  
Mediator

Bryan Norton



Sustainable Theory  
Sustainable Practice

Michael Rodgers

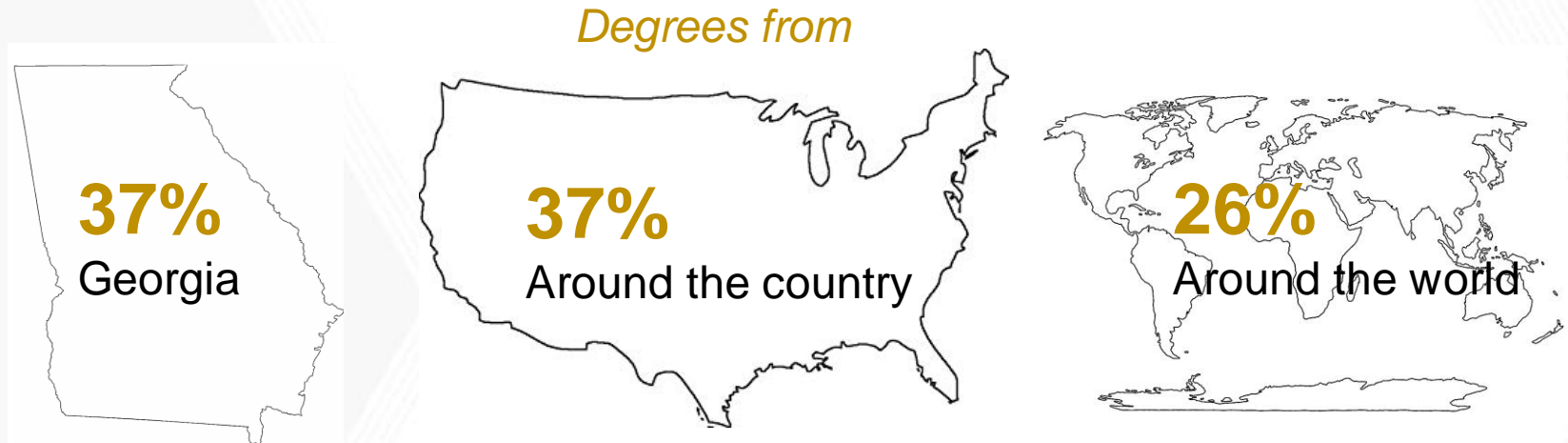


Transportation and Energy  
Air Quality  
Environmental Science

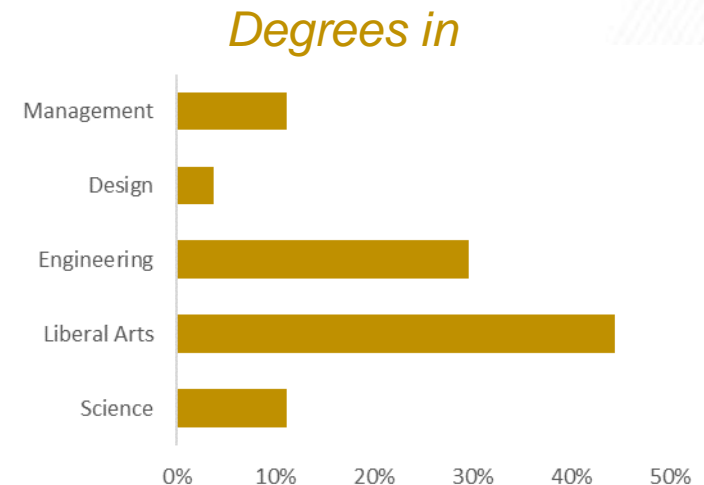


# Inaugural Class of MSEEM & CSEEM Students

- Impressive number of applications from East to West coast and around the globe



- Extremely well qualified students from different schools and educational backgrounds
- 24 students selected for the first opening year to build the value and reputation of the program
- Includes 5 MSEEM Fellows



# The Inaugural Class

- 14 MSEEM students: 11 full time; 3 part time
- 4 CSEEM students
- Extremely qualified students from different schools and educational backgrounds:
  - 67% with GPA > 3.0
  - 11% Science degree; 44% Liberal Arts; 30% Engineering; and 15% in Management



# Professional Sustainability Education

- The public and private sectors in Georgia and beyond have demonstrated increasing interest in implementing sustainable practices.
- The growing demand has resulted from:
  - the shift toward corporate social responsibility
  - the expansion of public programs targeting clean energy and environmental protection
  - an increase in funding and activity by environmental NGOs
- With the new professional MSEEM degree and “Stand-alone” Graduate Certificate (CSEEM), Georgia Tech can help meet this demand.

North Georgia Fires in 2016



Flood water after Hurricane Matthew



Farm damage from Hurricane Michael

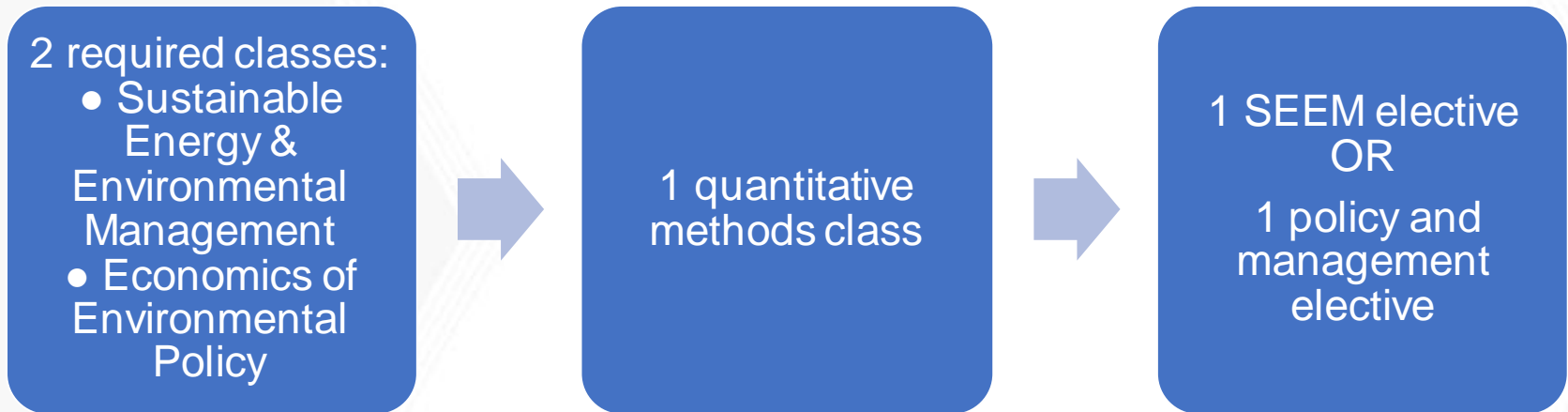




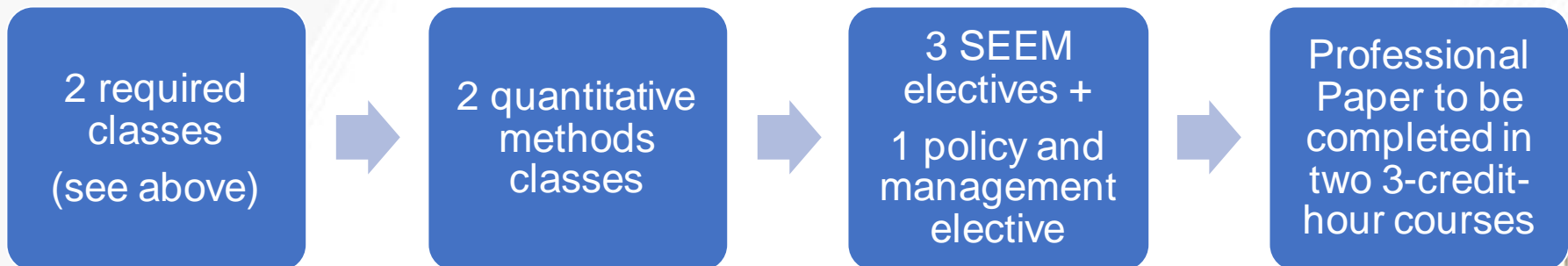
# Stackable and Flexible Programs

- MSEEM is offered on campus or via distance learning\*
- CSEEM can feed into MSEEM

CSEEM (total 12 credit hours):



MSEEM (total 30 credit hours):



\* Should numbers permit

# Illustrative Curriculum, One Year, Full Time

## Fall Semester (12 Credit Hours)

<b>PUBP 8803</b>	Sustainable Energy and Environmental Management	Daniel Matisoff	Required	3
<b>PUBP 6120</b>	Cost Benefit Analysis for Policy	Emanuele Massetti	Quant. Methods	3
<b>PUBP 6352</b>	Utility Regulation and Policy	Marilyn Brown	Sustainable Energy&Env Mgmt	3
<b>PUBP 6300</b>	Earth Systems	Mike Rodgers	Sustainable Energy&Env Mgmt	3

## Spring Semester (12 Credit Hours)

<b>PUBP 6312</b>	Economics of Environmental Policy	Emanuele Massetti	Required	3
<b>PUBP 6701</b>	Energy Technology and Policy	Marilyn Brown Valerie Thomas	Sustainable Energy&Env Mgmt	3
<b>PUBP 8813</b>	Big Data & Public Policy	Omar Asensio	Quant. Methods Elective	3
<b>PUBP 6354</b>	Climate Policy	Alice Favero	Policy&Mgmt	3

## Summer Semester (6 Credit Hours)

<b>PUBP 6801</b>	Capstone Research/Project Paper	Alice Favero & Dan Matisoff	Required	6
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**Total Hours 30**

# PUBP 8803: Sustainable Energy and Environmental Management

Professor: Dr. Daniel Matisoff

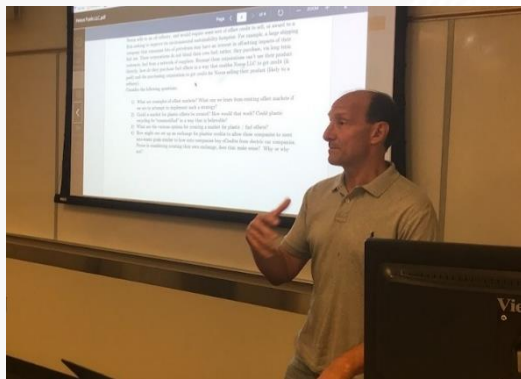
## Part 1: Sustainability Theory and Philosophy

Conservationism; Preservationism; Sustainable Development; Malthus vs. Prometheus

## Part 2: Tools for managing sustainability

Regulations; Markets; Participatory Processes; Corporate Social Responsibility

## Part 3: Case Analysis



“  
I joined The Coca-Cola Company because I knew that making even a small difference could have a meaningful impact globally.  
”

Ben Jordan  
SENIOR DIRECTOR,  
ENVIRONMENTAL POLICY





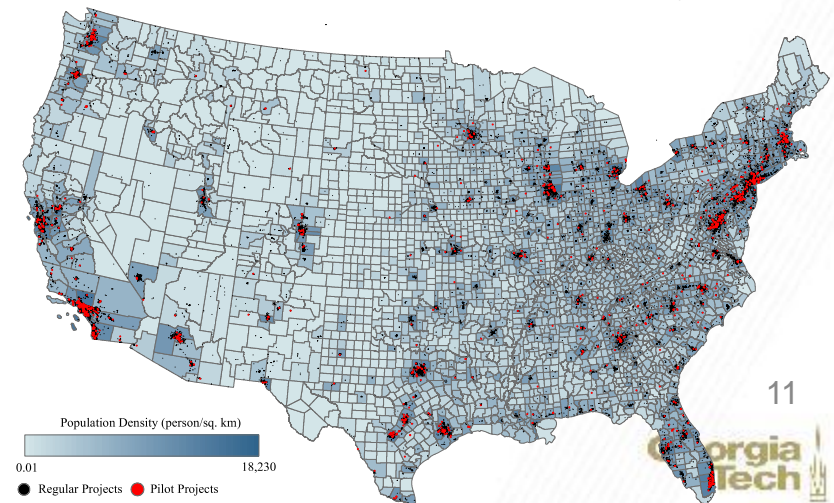
# Capstone Project

- The summer term of the MSEEM will be devoted to the Capstone Project (6 credits)
- Students will identify and define a real-world problem in the area of energy, sustainability and/or environment and a methodology to assess valuable solutions.
- Students can develop the project individually or as a team.

## The Kendeda Building for Innovative Sustainable Design



## LEED Construction & Pilot Projects



# Complete List of Courses

## Required Courses:

- PUBP 8803: Sustainable Energy & Environmental Management
- PUBP 6312: Economics of Environmental Policy

## Methods Electives:

- PUBP 6114 Applied Policy Methods
- PUBP 6120 Cost Benefit Analysis
- PUBP 8200 Adv Research Methods 1
- PUBP 8205 Adv Research Methods 2
- PUBP 8813 Big Data & Public Policy
- CEE 6327 Stat Meth Envr Data
- CEE 6355 Industrial Ecology-EnvE
- CP 6541 Environmental GIS
- MGT 6203 Data Analytics in Business
- MGT 6754 Business Fundamentals for Analytics
- MSE 6759 Material-Envir Conscious Design

## Policy & Management Electives:

- PUBP 6010 Ethics Epistemology & Public Policy
- PUBP 6012 Fundamentals of the Policy Process
- PUBP 6014 Organization Theory
- PUBP 6017 Public Management
- PUBP 6116 Microeconomic Policy Analysis
- PUBP 6118 Public Finance & Policy
- PUBP 6201 Public Policy Analysis
- PUBP 6221 Pol and Program Evaluation
- PUBP 6314 Policy Tools for Environmental Management
- PUBP 6326 Environ Values & Policy Goals
- PUBP 6327 Sustainability & Env Pol
- PUBP 6330 Environmental Law
- PUBP 6350 Energy Policy & Markets
- PUBP 6354 Climate Change Policy
- PUBP 6701 Energy Technology & Policy
- PUBP 8540 Adv Environmental Policy
- CP 6223 Policy Tools-Environ Mgt
- CP 6261 Environmental Law

## Sustainable Energy & Environmental Management (SEEM) Electives:

- PUBP 6300 Earth Systems
- PUBP 6310 Environmental Issues
- PUBP 6326 Environmental Values and Policy Goals
- PUBP 6327 Sustainability & Environmental Policy
- PUBP 6330 Environmental Law
- PUBP 6350 Energy Policy & Markets
- PUBP 6352: Utility Regulation and Policy
- PUBP 6701 Energy Technology & Policy
- PUBP 8803 Environmental Finance
- PUBP 8803 Sustainability & Environmental Policy
- PUBP 8803 Smart Cities
- PUBP 8833 Utility Regulation & Policy
- AE 8803 Energy Efficiency and Environmental Impacts
- ARCH 6531 Environmental Systems I
- CEE 6314 Environmental Modeling
- CEE 6345 Sustainable Engineering
- CEE 6390 Air Pollutant Formation & Control
- CEE 6625 Transportation, Energy, and Air Quality Class
- CEE 6790 Air Pollution Physics & Chemistry Class
- ChBE 8803 Chem Eng of Energy Systems Class
- CHEM 8833 Fund. and Challenges for a Sus. Chem. Enterprise
- CP 6190 Intro Climate Chng Plan
- CP 6213 Urb Env Plan & Design
- CP 6214 Environmental Planning
- CP 6217 Climate Change & City
- CP 6233 Sustainable Urban Dev
- EAS 6132 Intro to Climate Change
- EAS 6135 Intro Complex Environ Sys
- EAS 8803 Climate and Global Change
- EAS 8803 Environmental Geochemistry
- ECON 6380 Economic of Environment
- ECON 7032 Macroeconomics of Innovation
- HTS 6116 Environmental History
- INTA 8803 Energy & International Security Class
- MGT 6369 Sustainable Business Consulting Practicum
- MGT 6359 Bus Str Sustainability
- ME 6759 Material-Envir Conscious Dgn

You can find the complete list here: <https://cepl.gatech.edu/degrees/curriculum>

# Lecturers: Windows to the “Marketplace”

- Lecturers from the Atlanta metropolitan area will be hired to strengthen linkages to professional practice.
- These lecturers will be drawn from multiple sectors of the Atlanta business, government, and not-for-profit community.





# Georgia Tech uniqueness vis-a-vis benchmarked programs

- MSEEM is the only sustainability oriented masters program in Georgia
- In the Southeast, Duke University is a strong competitor.
- The MSEEM has a price (tuition & fee<sup>‡</sup>) advantage:
  - ✓ In-state student participating on-campus: \$20,658
  - ✓ Out-of-State student participating on-campus: \$39,503
  - ✓ On-line<sup>†</sup> student: \$35,729
- The CSEEM price<sup>‡</sup> is similarly attractive:
  - ✓ In-state student participating on-campus: \$8,263
  - ✓ Out-of-State student participating on-campus: \$15,802
  - ✓ On-line<sup>†</sup> student: \$13,454

<sup>‡</sup> Tuitions fees, and charges are subject to change

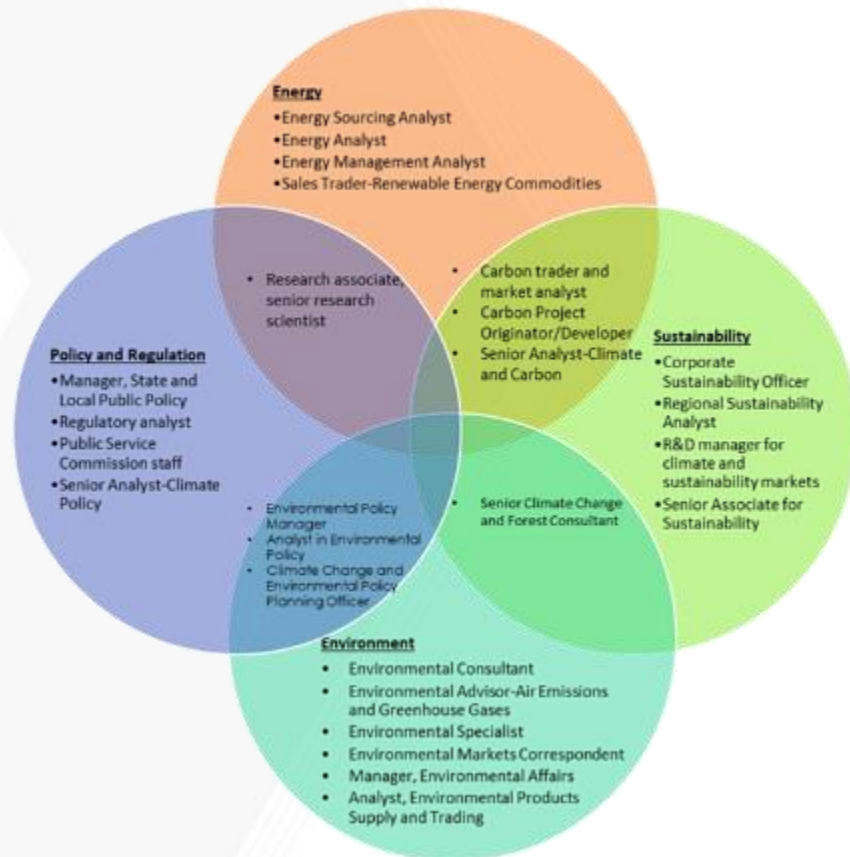
<sup>†</sup> The distance learning option will be available only with a cohort of 20+ students

# A Philanthropic Gift for Student Fellowships

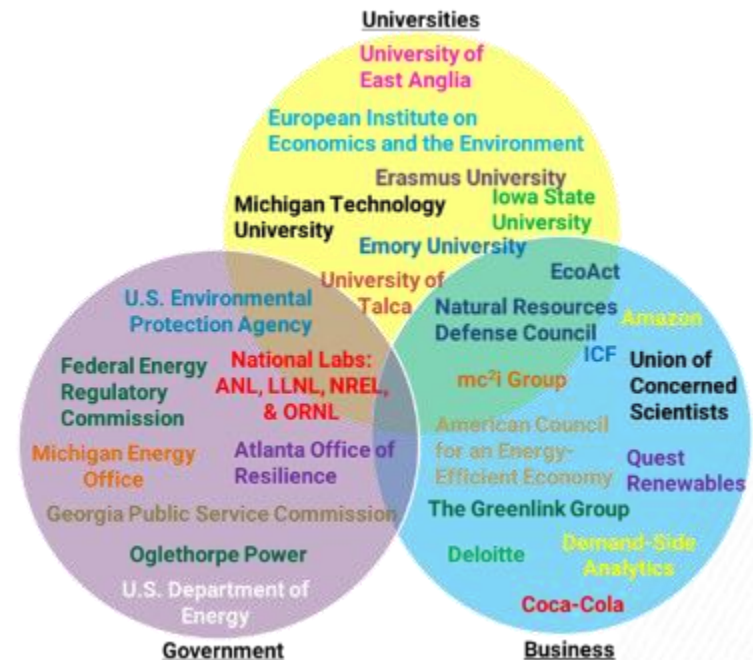
- A unique Fellowship opportunity
  - Thanks to a generous gift, MSEEM will be able to offer full graduate fellowships for 5 on-campus full-time students per year for the first 3 years.

# Job Opportunities

Illustrative job titles advertised in the Southeast, February–March 2018



Employers of Georgia Tech Graduates in Energy and Environmental Policy



# Q&A section

1. What kind of background do students in the C/MSEEM have?
2. What kind of opportunities are available for graduates of the C/MSEEM?
3. How many students are likely to be in each class?
4. How long does it take to get through the MSEEM?
5. Can we take the C/MSEEM part-time while working?
6. What courses do I need to take to complete the degree program?
7. Can we use the CSEEM credits for the MSEEM?
8. What kind of financial aid is available?
9. Can C/MSEEM students get credit for an elective course that is not currently on our approved list?