Civil and Environmental Engineering Graduate Studies Information Session

Professor Adda Athanasopoulos-Zekkos, CEE Graduate Chair
Professor Aline Cotel, Masters Chair
Professor Avery Demond, Environmental Engineering Undergraduate Chair
Professor Roman Hryciw, Civil Engineering Undergraduate Chair
Professor Jerry Lynch, CEE Chair
Importance of MSE/MEng Degree

- Prepares engineers for advanced practice in CEE discipline areas
- The “entry level” degree for some areas of CEE is the MS or Meng
- Affords greater job responsibility sooner
- Improves earning potential
- Provides an important step towards licensure as a PE
- Provides exposure to research and can open the door towards a PhD
Admission Requirements for MSE and MEng Degree Programs in CEE

- Generally, GPA > ~3.2 (exceptions are made)
- GRE required for all MSE except SUGS. Recommended for MEng
- Three letters of recommendation
  - get to know your professors!
- Convincing Research/Career and Personal Statements
  - Undergraduate research experience is helpful, but not essential
  - Professional internships & jobs also helpful, but not essential
- Apply online to:
  - Rackham Graduate School for MSE
  - College of Engineering for MEng
- Deadlines: January 15 for Fall & October 1 for Winter
  (different deadlines for other universities)
Sequential Undergraduate/Graduate Studies (SUGS)

- Master’s degree in two semesters
- Two technical electives (6 credits) counted towards both degrees

Requirements

- GPA > 3.5 but can petition if GPA < 3.5
- MSE application deadlines:
  - January 15 for Fall entry
  - October 1 for Winter entry
- Completion of a CEE SUGS form (course planning)
- May have up to 6 credits remaining for the BSE in the term in which they start the MSE
Admission Requirements for PhD Degree

- Generally, GPA > 3.5
- GRE required
  - plan to take GRE early in Fall of senior year
- Three letters of recommendation
  - get to know your professors!
- Convincing Research/Career and Personal Statement
  - Undergraduate and/or Graduate research experience is very helpful
- Apply online to Rackham
- Deadline: December 15 (earlier for some universities)
Master’s Degrees Offered and Requirements

- All MSE degrees require 30 credit hours, can count up to 6 credit hours of research or seminar credit. MEng requires 26 credit hours.
- Five Master’s degrees offered by CEE:
  - MSE in Civil Engineering
  - MSE in Construction Engineering & Management
  - MSE in Environmental Engineering
  - MEng in Construction Engineering & Management
  - MEng in Structural Engineering
- All MSE degrees can be combined with BSE degrees in SUGS Program
- Several dual Master’s degrees (51-54 credit hours)
Master’s Degrees Offered

- MSE in Civil Engineering
  - (≥ 8 credit hours in specialty, ≥ 15 credit hours in CEE)
  - Structural Engineering
  - Construction Engineering & Management
  - Materials and Highway Engineering
  - Geotechnical Engineering
  - Hydraulic and Hydrologic Engineering
  - Intelligent Systems Engineering
  - Transportation Systems Engineering

- MSE in Construction Engineering & Management
  - (≥ 18 credit hours in Construction ≥ 12 credit hrs in CEE)

- MSE in Environmental Engineering
  - (≥ 15 credit hours in CEE, 3 core courses required)

- MEng in Construction Engineering & Management
  - (≥ 18 credit hours in CEM, 2 seminar courses, 6 credit hour “minor”)

- MEng in Structural Engineering
  - (≥ 15 credit hours in Structural Engineering, 2 seminar courses, 6 credit hour “minor”)

7
Additional Master’s Degrees Requirements

- **SUGS** - Must enroll in a minimum of two full terms (full term = 9 credit hours)
- Minimum of 30 credits must be completed
- Cumulative GPA of “B” (3.0)
- Three credit hours of cognate (outside of specialty area). B- or better required.
- Advanced math course required; can be used as cognate
- Course not counted towards degree if grade is C- or lower
- Directed Study/Research/Seminars – No more than 6 hours
Funding Opportunities

- Bartus Scholarship: *need-based, renewable award for undergrad and grad*
- CoE Bridge to PhD Fellowships: *competitive fellowship for newly admitted domestic students who applied to PhD but enroll in Master’s instead*
- Walker Fellowship: *for Structures Master’s students*
- CEE Master’s Fellowships: *for newly admitted domestic Master’s students*
- Graduate Student Research Assistantship (GSRA) Appointments
- Graduate Student Instructor (GSI) Appointments
- External Scholarships and Fellowships
- Temporary research appointments (hourly wage)
Thinking about applying?

- Pay attention to your GPA
- Get to know your professors
- Get involved in undergraduate research
- Get involved in student organizations
- Set up advising appointment through CEE website (especially SUGS)  https://cee.engin.umich.edu/academics/undergraduate/
- Check out graduate program information on CEE website https://cee.engin.umich.edu/
- Check out UM graduate student resources
  Rackham Graduate School--website https://rackham.umich.edu/
- Check out requirements and deadlines for external scholarships and fellowships
- Consider taking the GRE (early in fall semester of senior year)
Questions?