

Academic Programs

- Many different paths to success
- Many different student needs

MS/MCE

- Develop a program that makes sense to *YOU*
- Research – develop expertise (guided)

PhD

- Develop and conduct research
- Build on MS/MCE – specialized expertise

Academic Programs: PhD

- Total ~ 3 to 4 years
- Masters + 18 to 24 hrs. typical (+2 to 3 semesters)
 - Course selection with support from advisor/committee
- Preliminary Exams
 - Written + Oral; early in 3rd semester
 - Develop feasible research plan
 - 4 to 5 person committee (one outside department rep)
- Final Defense

Academic Programs: MS/MCE

MS

- “*Thesis*” 3 – 6 hours of research
 - MS if funded - RA
 - Need advisor + 2 person committee
 - TA selected by faculty

MCE

- Only coursework in most cases
 - “*3 Hour Project*” if approved by faculty

Jobs: not much difference

Academic Programs: MCE Requirements

- *Minimum 7* CON courses
- *1* course in CE (not from CON)
- *2* “*Supporting*” courses (see course choice list)
- Total *10* courses = *30* credit hours
- No more than 12 hours per semester!

A complete 30 hour Graduate Plan is due to the construction faculty prior to the end of the first semester.

Academic Programs: MS Requirements

- Same as MCE except:
 - Select courses that support research – recommended courses by advisor
- *Minimum 7* CON courses
- *1 “Supporting”* course (see course choice list)
- Total *8* courses = *24* credit hours
- Thesis = *6* credit hours
- No more than 12 hours per semester!

A complete 30 hour Graduate Plan is due to the construction faculty prior to the end of the first semester.

CE Courses

- CE 536 Numerical Methods
- CE 537 Computer Methods & Applications
- CE 538 Information Technology (Rasdorf) (Spring 2019)
- CE 592 Robotic Vision Systems (Han)
- CE 522 Pre-stressed Concrete Design
- CE 523 Steel Design
- CE 524 Masonry Design
- CE 528 Wood Design
- CE 548 Engineering Properties of Soils
- CE 549 Soil & Site Improvement
- CE 744 Foundation Engineering
- CE 503 Highway Design
- CE 504 Airport Design (for Navy and Air Force officers)
- CE 755 Pavement Design
- CE 590 Facilities Engineering (Fall)

Supporting Courses

- All CON Courses
- Specified CE Courses
- Other Courses
 - ISE 501 Operations Research
 - ISE 510 Applied Engineering Economy
 - ISE 562 Simulation Modeling
 - ST 515 Experimental Statistics for Engineers I
 - ST 516 Experimental Statistics for Engineers II
 - EGR 590-601 Environmental Compliance for Facilities Engineers (Spring)
 - CE 675 Project (3 hour maximum)

MCE Plan

Name: _____

Fall:

Spring:

Fall:



CON 1

CON 2

CON 3

CON 4

CON 5

CON 6

CON 7

CE

Support 1

Support 2
