Department of Civil Engineering  
Master of Science (M.S.) Degree Requirements  
Area of Study: Water Resources Engineering

The Master of Science (M.S.) degree requires 32 credit hours of approved courses and research. At least 25 credit hours must be coursework, and a thesis.

NOTE: All documents requiring departmental signatures must be submitted to the Civil Engineering Graduate Office at least one day prior to the Office of Graduate Studies deadline.

In addition to fulfilling the University and requirements for the Master of Science (M.S.) degree, a student enrolled in the Civil Engineering graduate program in the area of Water Resources Engineering must satisfy the following department requirements:

- A minimum of 15 hours must be CVEN/OCEN/MEMA coursework (exclusive of CVEN 681 and CVEN 691).
- A minimum of 24 hours must be taken from course offerings of the following colleges: Engineering, Geosciences, and Science.
- A maximum of 9 hours of advanced undergraduate coursework (must be 400-level if CVEN/OCEN/MEMA courses).
- A minimum of 18 hours of graduate level coursework taken at Texas A&M University (excluding CVEN 691).
- A maximum of 7 hours of CVEN 691 or combination of CVEN 691 and CVEN 685.
- The combination of CVEN 691, CVEN 685, transfer credit, and permissible undergraduate coursework may not exceed the greater of 12 hours or one-third (1/3) of the total hours on the degree plan.

The following area requirements and/or recommendations:

- Recommended Coursework: CVEN 423 Geomatics for Civil Engineers  
  CVEN 455 Urban Stormwater Management  
  CVEN 458 Hydraulic Engineering  
  CVEN 463 Hydrology  
  CVEN 627 Engineering Surface Water Hydrology  
  CVEN 628 Advanced Hydraulic Engineering  
  CVEN 658 Civil Engineering Applications of GIS  
  CVEN 664 Water Resources Engineering Planning and Management  
  CVEN 665 Water Resources Systems  
  CVEN 673 Transport Phenomena in Porous Media  
  CVEN 674 Groundwater Engineering  
  CVEN 675 Stochastic Hydrology  
  CVEN 681 Seminar in Environmental and Water Resources Engineering

Relevant CVEN, OCEN, MEMA, and other Graduate Courses per recommendations of the advisory committee and department requirements
• Degree Plan: An advisory committee must be formed and a Degree Plan must be submitted and approved by the advisory committee by the end of the first semester of study.

• Research Proposal: A draft Research Proposal must be submitted to the advisory committee chair at least 2 weeks (10 working days) prior to revision and subsequent submittal to other members of advisory committee. These other members of the advisory committee will be provided at least 2 weeks (10 working days) to review the revised draft Research Proposal prior to the end of the second semester of study. Thus, the draft Research Proposal must be submitted to the advisory committee chair at least 4 weeks (20 working days) prior to end of the second semester of study.

• Completion of Thesis: A draft Thesis must be submitted to the advisory committee chair at least 2 weeks (10 working days) prior to revision and subsequent submittal to other members of advisory committee. These other members of the advisory committee will be provided at least 2 weeks (10 working days) to review the revised draft Thesis prior to the Final Defense. Thus, the draft Thesis must be submitted to the advisory committee chair at least 4 weeks (20 working days) prior to the Final Defense.

• Final Defense: A Final Defense consisting of an oral examination will be scheduled with all of the advisory committee members. At this examination, the student will give a presentation of the research work completed for the degree and documented in the Thesis.

1. 3 of these 24 hours may be outside of colleges of Engineering, Geosciences, and Science if selected from a list of courses approved by the student’s specialty area as outlined by the specialty area’s documented course work requirements.
2. Certain courses within the College of Engineering are prohibited from use on the degree plan unless written justification is made by the student’s advisor and approved by the Departmental Graduate Advisor prior to enrolling in the course. Please see Departmental Graduate Advisor for listing of prohibited courses.
3. All coursework should be discussed with advisory committee chair before enrolling in course. All coursework must be consistent with the student’s chosen field of study and commensurate with graduate study.