Master of Science (Course- and Research-Based Degree)  
Department of Energy, Environmental and Chemical Engineering  
Washington University in St. Louis

The Master of Science (MS) in Energy, Environmental and Chemical Engineering is typically a two-year degree program where the student completes coursework, engages in research under supervision of a faculty member, and writes a thesis compiling the results of the research.

Degree Requirements:
A total of 30 credits is required for graduation – 24 credits of coursework (as per details below) and 6 credits of research. A minimum GPA of 2.75 for the coursework has to be maintained for good standing and graduation from the program. Completion of the degree program must be consistent with the residency and other applicable requirements of Washington University and the McKelvey School of Engineering.

A) Coursework - 24 credits (minimum)
- Core classes (5 classes, 15 credits)
  EECE 501  Transport Phenomena in EECE
  EECE 503  Mathematical Methods in EECE

  In addition to the two courses above, take 3 from the following list of 5 classes:
  EECE 502  Thermodynamics
  EECE 504  Aerosol Science and Technology
  EECE 505  Aquatic Chemistry
  EECE 506  Bioprocess Engineering
  EECE 507  Kinetics & Reaction Engineering

- EECE Seminar: Up to 2 credits will count. Attendance at all Seminars required during residency

- Elective Classes: Minimum number to make up 24 credits (at least three classes, can take more), should be chosen with approval of the research advisor  
  o Courses must be 400-level and higher, with a maximum of two 400-level courses

- 6 credits of graduate coursework from other Universities can be transferred with the approval of the Graduate Committee and Advisor. These credits cannot have been used to fulfill graduation requirements for an undergraduate degree.

B) Research – 6 credits (minimum)
- 6 credits (sufficient work done to write a comprehensive thesis, evaluated and approved by a 3-person faculty committee formed with the approval of the Advisor)

MS “Along the Way” to a PhD:
Doctoral students may also receive a MS in EECE "along the way" in their PhD program. They should have passed the PhD Proposal defense, completed 30 units of required coursework, and published or submitted at least one peer-reviewed journal manuscript from their thesis research.