STEM Education Strand

**STEM Education Core (15 hours)**

- SEM 603: Curriculum and Instruction in STEM Education
- SEM 706: Research in STEM Education
- SEM 770: Special Topics in STEM Education (Equity Issues)
- SEM 613: Effective Use of Technology
- History of Education (select 1 course)
  - EPE 651: (P-20) History of Education in the United States
  - SEM 604: History of STEM Education
  - SEM 701: History of Mathematics Education
  - EPE 653: History of Higher Education

**Methods (Take 3 courses- 9 hours)**

- SEM 708: Engineering in STEM Education
- SEM 670: Advanced Study Mathematics
- SEM 674: Advanced Studies in Teaching Elementary School Science
- SEM 704: Designing Project-Enhanced Environments in STEM Education
- SEM 770: Special Topics in STEM Education
- EPE 672: College Teaching and Learning
- GS 699: Practicum for College Teaching

**Elective STEM Courses (6 credit hours)**

- SEM 702: Theoretical Foundations of Mathematics Education
- SEM 703: Advanced Research in Mathematics Education
- SEM 708: Engineering in STEM Education
- SEM 704: Designing Project-Enhanced Environments in STEM Education
- SEM 674: Advanced Studies in Teaching Elementary School Science
- SEM 670: Advanced Elementary Mathematics Methods
- SEM 610: Teacher Leadership in STEM Education
- SEM 770: Special Topics in STEM Education
- SEM 781: Independent Study in STEM Education

**Elective Other (Outside of STEM Education) (9 or 12 hours) (approval of advisor)**

**Suggestions:**

- EPE 557: Gathering, Analyzing, and Using Educational Data
- EPE 558: Gathering, Analyzing, and Using Educational Data
- 400G or higher

Revised 8/10/11 by Tom J. Wallace