

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
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- 400G or higher