Computational Science and Engineering, MS

School/College: College of Engineering

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(Effective 2019-2020)

The Master of Science in Computational Science and Engineering program provides advanced study and research in the following areas: Data Science and Engineering, High-performance Computing, and Modeling, Simulation and Visualization of Complex Systems. This is an interdisciplinary program that welcomes applicants and participants from all fields in Science, Technology, Engineering, and Mathematics.

Degree Requirements

Total credit hours: 30

• Required Core courses for all Options (12 credits): CSE 702, 703, 801, 804

Thesis Option

- Electives (9 credits): Take 9 credits from engineering, computer science, mathematics, physics, chemistry, biology, economics, business, agricultural science or other courses approved by the CSE department, with approval of advisor
- Select 2 additional credits to complete 30 credit requirement with approval of advisor. This can be thesis hours, supervised teaching, supervised research, or approved graduate courses with approval of advisor
- At least 18 credit hours should be at 600-700 level
- Seminar (CSE 792: 1 credit)
- Thesis (CSE 797: 6 credits)
- Pass thesis defense

Project Option

- Electives (12 credits): Take 12 credits from engineering, computer science, mathematics, physics, chemistry, biology, economics, business, agricultural science or other courses approved by the CSE department, with approval of advisor
- Select 2 additional credits to complete 30 credit requirement. This supervised teaching, supervised research, or approved graduate courses with approval of advisor
- At least 18 credit hours should be at 600-700 level
- Seminar (CSE 792: 1 credit)
- Project (CSE 796: 3 credits)

Course-Only Option

- Electives (15 credits): Take 15 credits from engineering, computer science, mathematics, physics, chemistry, biology, economics, business, agricultural science or other courses approved by the CSE department, with approval of advisor
- Select 2 additional credits to complete 30 credit requirement. This can be supervised teaching, supervised research, or approved graduate courses with approval of advisor
- Seminar (CSE 792: 1 credit)
- At least 18 credit hours should be at 600-700 level