

Worksheet for Master of Science in Chemical Engineering (MSCH)

This degree requires a thesis and an undergraduate degree in Chemical Engineering. Background courses in Chemical Engineering will be completed as needed.

Course	Description	Credits
ECH 6105 OR ECH 6107	Advanced Thermodynamics OR Molecular Thermodynamics	3
ECH 6285 OR BME 6634	Advanced Transport Phenomena OR Biotransport Phenomena	3
ECH 6515 OR ECH 6506	Reacting System OR Chemical Engineering Kinetics	3
ECH 6840 OR ECH 6412	Mathematical Methods for Chemical Engineering OR Process Analysis and Modeling	3
ECH Electives	5000/6000 Level	18
Total		30

Coursework must have a minimum of

- 16 hours at 6000 level
- 12 hours of ECH 6000 level

May include a maximum of 4 hours of independent study. Student in thesis option must have a minimum of 6 hours of ECH 6971 (thesis).

At least 2 members of the Thesis committee must be from tenured or tenure track Chemical & Biomedical Engineering faculty. All thesis option students are required to present a departmental seminar based on their research as part of their oral examination. The examination must be scheduled after the Thesis Supervisory Committee has approved the Thesis. The Graduate Coordinator should be notified so he can coordinate the seminar scheduling.

Students in this program are also required to pass the FE (Fundamentals of Engineering Examination) offered by the Society of Professional Engineers. Candidates who have at least one publication in a journal or proceedings or presentation at a conference (based on their M.S. Thesis research) may be exempted from this comprehensive examination requirement.

Students wishing to continue on for a Ph.D. must apply to the Office of Graduate Studies.