

# MASTER OF ENGINEERING - CHEMICAL (M.E.)

Degree: Master of Engineering

Major: Engineering

Concentration: Chemical Engineering

## Requirements:

- a. All College of Graduate Studies general degree requirements.
- b. Completion of a minimum of 30 semester hours of coursework, of which at least 6 hours must come from:
  - CHEN 6302 Transport Phenomena, CHEN 6343 Kinetics and Reactor Design, CHEN 6347 Advanced Thermodynamics, and CHEN 6348 Adv Chem Engineering Math.
  - All other CHEN 5XXX and 6XXX level courses may be taken toward your degree.
  - Other 5xxx and 6xxx level courses from other engineering or science disciplines may be considered for approval by department graduate advisor on a per case basis.
  - Of the 30 hours, a maximum of 6 credit hours may be taken external to the chemical engineering department. Additionally, no external courses may be taken until a minimum of 9 credit hours are completed within the chemical engineering department.

3. Satisfactory completion of a final comprehensive examination.

- Comprehensive Examination Format:
  - The comprehensive exam will consist of four (4) written subject examinations on topics selected by the student, based on the following criteria:
    - At least two (2) selected from the ME core classes:
      - CHEN 6302 Transport Phenomena
      - CHEN 6343 Kinetics and Reactor Design
      - CHEN 6347 Advanced Thermodynamics
      - CHEN 6348 Adv Chem Engineering Math
    - The remaining selected from 5XXX and 6XXX courses taken in chemical engineering.
  - Each portion of the exam will last for one (1) hour, with all four being completed consecutively in one day. The comprehensive exam will be administered once per long semester. A student must pass all four subjects to successfully pass the comprehensive exam. A student who fails only one subject must, in the next long semester, either retake only the failed subject or take four subjects that satisfy a new exam attempt. **NOTE: YOU MAY NOT TAKE AN EXAM FOR A COURSE IN WHICH YOU ARE CURRENTLY ENROLLED.**

CHEN 6302	Transport Phenomena (A minimum of 6 semester hours of core courses selected from the following:)
CHEN 6343	Kinetics and Reactor Design
CHEN 6347	Advanced Thermodynamics
CHEN 6348	Adv Chem Engineering Math (Elective Courses)
Elective Courses <sup>1</sup>	
24	
CHEN 5000:6999 <sup>2</sup>	

<sup>1</sup> 5000 and 6000 level courses from other engineering or science disciplines may be considered for approval by department graduate advisor.

<sup>2</sup> At least 12 hours must come from CHEN. Students are strongly encouraged to take more than 12 hours from CHEN, as you will need to have course options for your comprehensive examination.

*Up to six credit hours of graduate level coursework (5000 level) taken as part of B.S. engineering programs at Lamar University can be counted toward the 30-hour degree requirement. These courses shall receive prior approval by the department chair or his/her designee.*

## Degree Requirements

Students must complete a minimum of 30 credit hours and a comprehensive examination.

Code	Title	Hours
<b>Engineering Core Courses</b>		<b>6</b>
Select 6 credit hours from the following:		