## CHEMICAL ENGINEERING, MS

Requirements for Students Matriculating in or before Academic Year 2019-2020. Learn more about Graduate College Academic Regulation 7.0 (http://catalog.okstate.edu/graduate-college).

**Total Hours:** 30 Hours

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 5123</td>
<td>Advanced Chemical Reaction Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CHE 5213</td>
<td>Advanced Transport Phenomena</td>
<td>3</td>
</tr>
<tr>
<td>CHE 5743</td>
<td>Chemical Engineering Process Modeling</td>
<td>3</td>
</tr>
<tr>
<td>CHE 5843</td>
<td>Principles of Chemical Engineering Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>CHE 5302</td>
<td>Introduction to Science and Engineering Research</td>
<td>2</td>
</tr>
</tbody>
</table>

**Hours Subtotal:** 14

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>CHE 6010</td>
<td>Offered for variable credit, 1 credit hour, maximum of 10 credit hours.</td>
</tr>
</tbody>
</table>

**Hours Subtotal:** 3

### Electives
Graduate-approved elective (CHE or other) courses, selected by the student with the approval of the student’s advisor. 7

### Suggested Elective Courses

#### Fall Semester
- CHE 5293 Advanced Biomedical Engineering
- CHE 5523 Colloid Processing
- CHE 5273 Basic Physiology and Physiological System Analysis for Engineers
- CHE 5373 Process Simulation
- CHE 5343 Advanced Environmental Engineering
- CHE 5733 Neural Networks

#### Spring Semester
- CHE 5283 Advanced Bioprocess Engineering
- CHE 5633 Stagewise Operations
- CHE 5263 Advanced Biomaterials Science and Engineering
- CHE 5853 Advanced Chemical Process Control
- CHE 5223
- MAE 6233 Turbulent Fluid Dynamics
- BAE 5030 Problems in Biosystems Engineering and Agricultural Technology

**Hours Subtotal:** 7

### Thesis
- CHE 5000 Master’s Thesis

**Hours Subtotal:** 6

**Total Hours:** 30

### Additional Graduate College Masters Degree Requirements

#### Plan I (coursework with thesis)
- A minimum of 30 credit hours
  - A minimum of 24 coursework credit hours comprised of:
    - 6 research or creative component credit hours
    - 21 in-residence credit hours (maximum of 9 transfer hours with "B" or better)
  - 21 credit hours at 5000- or 6000-level

#### Plan II (coursework without thesis)
- A minimum of 32 credit hours
  - A maximum of 3 credit hours of research or creative component
  - A minimum of 23 in-residence credit hours (maximum of 9 transfer credit hours with "B" or better)
  - A minimum of 21 credit hours at the 5000- or 6000-level

### General Graduate College Requirements
- A minimum Grade-Point-Average of 3.00 is required
- A minimum Grade of "C" is required in all degree applicable courses
- No courses utilizing the Pass-No Pass grading system are permitted