

# M.S. in Chemical Engineering

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## Degree Requirements

A minimum of 30 credits is required. Students must attain a minimum GPA of 3.0 in the core courses listed below, and a minimum overall GPA of 3.0.

## Degree Options

### M.S. in Chemical Engineering (courses only)

Code	Title	Credits
<b>Core Courses</b>		
CHE 611	Thermodynamics	3
CHE 612	Kinetics of Reactions and Reactor Design	3
CHE 624	Transport Phenomena I	3
CHE 626	Mathematical Methods in Chemical Engineering	3
<b>Elective Courses</b>		
Two electives in chemical engineering		6
Two electives in any engineering, science, or mathematics area including but not limited to chemical engineering		6
Two Elective courses (any subject area)		6
<b>Total Credits</b>		<b>30</b>

<sup>1</sup> 500-level courses offered in the department do not count toward degree requirements.

<sup>1</sup> Before deciding on a thesis topic and advisor, students must discuss thesis topics with at least three faculty members and get their signature on a form provided by the department. The signed form with the name of advisor selected and tentative title of thesis topic must be returned to the department for approval. Change of advisor requires consent of the previous advisor and departmental approval. The completed thesis must be examined and signed by three faculty members at least two of which must be on the department faculty. An oral presentation is also required. The MS thesis committee must be formed and submitted to the department for approval at least one semester before the expected graduation date. The department provides a form for the formation of the MS thesis committee.

<sup>2</sup> All students who receive departmental or research-based support must enroll each semester in CHE 791 Graduate Seminar.

<sup>3</sup> 500-level courses offered in the department do not count toward degree requirements.

### M.S. in Chemical Engineering (Master's thesis and/or students receiving department or research-based support)

Code	Title	Credits
<b>Core Courses</b>		
CHE 611	Thermodynamics	3
CHE 612	Kinetics of Reactions and Reactor Design	3
CHE 624	Transport Phenomena I	3
CHE 626	Mathematical Methods in Chemical Engineering	3
<b>Thesis <sup>1</sup></b>		
CHE 700B	Masters Project	3
CHE 701B & 701B or CHE 701C	Masters Thesis and Masters Thesis Masters Thesis	6
<b>Seminar</b>		
CHE 791	Graduate Seminar	0
<b>Elective Courses</b>		
One elective in Chemical Engineering		3
One elective in any Engineering, Science, or Mathematics area including but not limited to Chemical Engineering		3
Two elective courses (any subject area)		6
<b>Total Credits</b>		<b>33</b>

2 M.S. in Chemical Engineering

1 Before deciding on a thesis topic and advisor, students must discuss thesis topics with at least three faculty members and get their signature on a form provided by the department. The signed form with the name of advisor selected and tentative title of thesis topic must be returned to the department for approval. Change of advisor requires consent of the previous advisor and departmental approval. The completed thesis must be examined and signed by three faculty members at least two of which must be on the department faculty. An oral presentation is also required. The MS thesis committee must be formed and submitted to the department for approval at least one semester before the expected graduation date. The department provides a form for the formation of the MS thesis committee.

2 All students who receive departmental or research-based support must enroll each semester in CHE 791 ([http://catalog.njit.edu/search/?P=CHE %20791](http://catalog.njit.edu/search/?P=CHE%20791)) Graduate Seminar.