# Mechanical Engineering (MS)

## Degree Requirements

### Non-Thesis Option

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Required Courses</strong></td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Select a minimum of nine 500-level to 700-level courses approved in conjunction with the academic committee</td>
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<tr>
<td></td>
<td><strong>Project Course</strong></td>
<td>3</td>
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<tr>
<td>MAE 586</td>
<td>Project Work In Mechanical and Aerospace Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

* "Required Courses" may include up to three non-MAE courses approved by the Director of Graduate Programs.

### Thesis Option

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Required Courses</strong></td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Select a minimum of seven 500-level to 700-level courses approved in conjunction with the academic committee</td>
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<td><strong>Research Course</strong></td>
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<td>MAE 695</td>
<td>Master's Thesis Research</td>
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<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

* "Required Courses" may include up to three non-MAE courses approved by the Director of Graduate Programs.

## Accelerated Bachelor's/Master's Degree Requirements

The Accelerated Bachelor's/Master's (ABM) degree program allows exceptional undergraduate students at NC State an opportunity to complete the requirements for both the Bachelor's and Master's degrees at an accelerated pace. These undergraduate students may double count up to 12 credits and obtain a non-thesis Master's degree in the same field within 12 months of completing the Bachelor's degree, or obtain a thesis-based Master's degree in the same field within 18 months of completing the Bachelor's degree.

This degree program also provides an opportunity for the Directors of Graduate Programs (DGP's) at NC State to recruit rising juniors in their major to their graduate programs. However, permission to pursue an ABM degree program does not guarantee admission to the Graduate School. Admission is contingent on meeting eligibility requirements at the time of entering the graduate program.

## Faculty

### Full Professors

- Gregory D. Buckner
- Tarek Echekki
- Tasnim Hassan
- He Huang
- Jack Ray Edwards Jr
- Srinath Ekkad
- Tiegang Fang
- Ashok Gopalarathnam
- Richard David Gould
- Xiaoning Jiang
- Richard F. Keltie
- Clement Kleinstreuer
- Andrey Valerevich Kuznetsov
- Hong Luo
- Kevin M. Lyons
- Gracious Ngaile
- Kara Jo Peters
- Afsaneh Rabiei
- Lawrence M. Silverberg
- Juei Feng Tu
- Fen Wu
- Fuh-Gwo Yuan
- Yong Zhu
- Mohammed A. Zikry

### Associate Professors

- Matthew Bryant
- Jeffrey W. Eischen
- Scott M. Ferguson
- Charles Edward Hall Jr.
- Hsiao-Ying Shadow Huang
- Andre P. Mazzoleni
- Venkat Narayanaswamy
Brendan O’Connor
Katherine Saul
Alexei V. Saveliev
Rohan A. Shirwalker
Hooman Vahedi Tafreshi
Christopher R. Vermillion
Cheryl Xu

Larry H. Royster
Ronald O. Scattergood
Furman Y. Sorrell Jr.
John S. Strenkowski
Carl F. Zorowski

Assistant Professors
Landon Grace
Kenneth Granlund
Timothy Joseph Horn
Arun Kumar Kota
Jun Liu
Marie Muller
Mark R. Pankow
Jason F. Patrick
Jong Eun Ryu
Pramod K. V. Subbareddy
Jie Yin

Practice/Research/Teaching Professors
Stephen D. Terry

Emeritus Faculty
John A. Bailey
Herbert Martin Eckerlin
Francis J. Hale
Franklin D. Hart
Hassan A. Hassan
Thomas H. Hodgson
Richard R. Johnson
David S. McRae
James C. Mulligan
Robert T. Nagel

Lecturer
Steven Berg