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>Required Courses</td>
<td>27</td>
<td>Non-Thesis Option</td>
</tr>
<tr>
<td>Select a minimum of 18 credits (6 courses) of 500-level to 700-level MAE courses</td>
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<tr>
<td>Select a maximum of 9 credits (3 courses) of non-MAE or MAE technical elective courses approved by the Director of Graduate Programs</td>
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</tbody>
</table>

| Project Course | 3 |
| MAE 586 | Project Work In Mechanical and Aerospace Engineering |

Total Hours 30

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>Required Courses</td>
<td>21</td>
<td>Non-Thesis Option</td>
</tr>
<tr>
<td>Select a minimum of 12 credits (4 courses) of 500-level to 700-level MAE courses</td>
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<tr>
<td>Select a maximum of 9 credits (3 courses) of non-MAE or MAE technical elective courses approved by the Director of Graduate Programs</td>
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</tbody>
</table>

| Research Course | 9 |
| MAE 695 | Master's Thesis Research |

Total Hours 30

* "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 (DGPs) 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
Farhan Sialfuddin Gandhi
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

**Assistant Professors**

James Braun
Darius Carter
Mingtai Chen
Chuyl Chen
Landon Grace
Kenneth Granlund
Veeraraghava Raju Hasti
Mohammad Heiranian
Timothy Joseph Horn
Arun Kumar Kota
Donggun Lee
Jun Liu
Marie Muller
Mark R. Pankow
Jason F. Patrick
Jong Eun Ryu
Pramod K. V. Subbareddy
Jie Yin

**Lecturers**

Steven Berg
William Gregory Eades

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

**Practice/Research/Teaching Professor**

Stephen D. Terry