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></td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Select a minimum of nine 500-level to 700-level</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>courses approved in conjunction with the academic</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>committee</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Project Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MAE 586</td>
<td>Project Work in Mechanical and Aerospace Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

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></td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Select a minimum of seven 500-level to 700-level</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>courses approved in conjunction with the academic</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>committee</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Research Course</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>MAE 695</td>
<td>Master's Thesis Research</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td></td>
<td>30</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 (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
Tasnim Hassan
He Huang
Jack Ray Edwards Jr
Srinath Ekkad
Tiegang Fang
Ashok Gopalarathnam
Richard David Gould
Xiaoning Jiang
Richard F. Kettle
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. Mazzenoli
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

**Lecturer**

Steven Berg

**Practice/Research/Teaching Professor**

Stephen D. Terry

**Emeritus Faculty**

John A. Bailey
Herbert Martin Eckerlin
Francis J. Hale