Mechanical Engineering (PhD)

Degree Requirement

<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></td>
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<tr>
<td></td>
<td>Select a minimum of 6 credits (2 courses) of 700 level courses</td>
<td>39</td>
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<tr>
<td></td>
<td>Select a minimum of 18 credits (6 courses) 500-level to 700-level MAE courses</td>
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<tr>
<td></td>
<td>Select a maximum of 15 credits (5 courses) of non-MAE or MAE technical elective courses approved in conjunction with the academic committee</td>
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<tr>
<td></td>
<td><strong>Research Courses</strong></td>
<td>24</td>
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<tr>
<td>MAE 895</td>
<td>Doctoral Dissertation Research (Complete a minimum of 24 research credit hours)</td>
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<td></td>
<td><strong>Additional Courses</strong></td>
<td>9</td>
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<td></td>
<td>&quot;Additional Courses&quot; are approved in conjunction with the academic committee</td>
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<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td>72</td>
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</tbody>
</table>

1 "Required Courses" must consist a minimum of two 700-level courses, and may consist of up to five non-MAE courses approved in conjunction with the academic committee.

2 "Additional Courses" are limited to MAE 500/700-level and MAE 895

Additional Requirements

- Students with a previous MS degree from NCSU:
  - without minor – may transfer up to 18 credit hours
  - with minor – may transfer up to 30 credit hours
- Students with a previous MS from outside NCSU:
  - without minor – may transfer up to 18 credit hours
  - with minor – may transfer up to 18 credit hours

Faculty

**Full Professors**

Gregory D. Buckner
Tarek Echekki
Farhan Saifuddin 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
Chuyi 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

Practice/Research/Teaching Professor
Stephen D. Terry

Lecturers
Steven Berg
William Gregory Eades

Emeritus Faculty
John A. Bailey
Herbert Martin Eckerlin
Francis J. Hale
Franklin D. Hart
Hassan A. Hassan