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>Required Courses</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select a minimum of thirteen 500-</td>
<td></td>
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<tr>
<td></td>
<td>level to 700-level courses (^1)</td>
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<tr>
<td></td>
<td>Minor Courses (Optional)</td>
<td>9</td>
<td></td>
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<tr>
<td></td>
<td>&quot;Minor Courses&quot; are approved</td>
<td></td>
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<tr>
<td></td>
<td>in conjunction with the academic</td>
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<td></td>
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<tr>
<td></td>
<td>committee (^2)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Research Courses</td>
<td>24</td>
<td></td>
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<tr>
<td></td>
<td>MAE 895 Doctoral Dissertation</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Research</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Total Hours</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.

\(^2\) "Minor Courses" are limited to 500-level and 700-level courses only

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 Saiifuddin 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  Furman Y. Sorrell Jr.
Kenneth Granlund  John S. Strenkowski
Veeraraghava Raju Hasti  Carl F. Zorowski
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

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**Practice/Research/Teaching Professor**

Stephen D. Terry

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**Lecturers**

Steven Berg

William Gregory Eades

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**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