# Aerospace 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 18 credits (6 courses) 500-level to 700-level</td>
<td>39</td>
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<td></td>
<td>MAE courses</td>
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<td></td>
<td>Select a minimum of 6 credits (2 courses) of 700 level courses</td>
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<td>Select a maximum of 15 credits (5 courses) of MAE or non-MAE</td>
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<td></td>
<td>technical elective courses approved in conjunction with the academic committee</td>
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<tr>
<td></td>
<td><strong>Minor/Additional Courses</strong></td>
<td>9</td>
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<td></td>
<td>“Minor/Additional Courses” are 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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<td></td>
<td>MAE 895</td>
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<td></td>
<td>Doctoral Dissertation Research (Complete a minimum of 24 research credits)</td>
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</table>

**Total Hours** 72

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 Saifuddin Gandhi
- Tasnim Hassan
- He Huang

- Srinath Varadarajan Ekkad
- Tiegang Fang
- Ashok Gopalarathnam
- Richard David Gould
- Xiaoning Jiang
- Richard F. Keltie
- Clement Kleinstreuer
- Andrey Valerevich Kuznetsov
- James Woodrow Leach
- 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

- Michael A. Boles
- Matthew Bryant
- Jeffrey W. Eischen
- Scott M. Ferguson
- Su Hao
- Charles Edward Hall Jr.
- Hsiao-Ying Shadow Huang
- Andre P. Mazzoleni
- Marie Muller
- Venkateswaran Narayanaswamy
- Brendan Timothy O’Connor
- Mark R. Pankow
Katherine Saul
Alexei V. Saveliev
Rohan A. Shirwalker
Hooman Vahedi Tafreshi
Christopher Raymond Vermillion
Chengying Xu

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**Assistant Professors**

James Braun
Darius Carter
Mingtai Chen
Chuyi Chen
Landon Grace
Kenneth Granlund
Veeraraghava Raju Hasti
Mohammad Heiranian
Timothy Joseph Horn
Jingjie Hu
Arun Kumar Kota
Andrew Jeungahn Lee
Donggun Lee
Jun Liu
Jason F. Patrick
Pramod Kumar Veera Subbareddy
Henry Oliver Tenadooah Ware
Chi-An Yi
Jie Yin

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**Emeritus Faculty**

Thomas A. Dow
Herbert Martin Eckerlin
Hassan A. Hassan
David S. McRae
Robert T. Nagel
John S. Strenkowski