### Aerospace Engineering (PhD)

#### Degree Requirement

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Required Courses</strong></td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Select a minimum of twelve 500- to 700-level courses</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Minor Courses (Optional)</strong></td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>&quot;Minor Courses&quot; are approved in conjunction with the academic committee</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Research Courses</strong></td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>MAE 895 Doctoral Dissertation Research</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td>72</td>
</tr>
</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.

#### 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
- Tasnim Hassan
- He Huang
- Srinath Varadarajan Ekkad
- Tiegang Fang
- Ashok Gopalarathnam
- Richard David Gould
- Xiaoning Jiang
- Richard F. Keitie
- 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
- 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

**Assistant Professors**

- Landon Grace
- Kenneth Granlund
- Timothy Joseph Horn
- Arun Kumar Kota
- Jun Liu
Aerospace Engineering (PhD)

Jason F. Patrick
Pramod Kumar Veera Subbareddy
Jie Yin

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