

# Department of Mechanical and Aerospace Engineering

MS and PhD

Degree Requirements

*Updated Fall 2016*

# MS Degree Requirements (Non-thesis)

**Graded Courses:** 27.0 credits  
 -May include up to three non-MAE approved courses

**Project:** 3.0 credits

**Total:** 30.0 credits

Sample Plan of Work

Course Type	Credits
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
Graded Course (Optional non-MAE)	3.0
Graded Course (Optional non-MAE)	3.0
Graded Course (Optional non-MAE)	3.0
MAE 586	3.0
<b>Total Credits</b>	<b>30.0</b>

# MS Degree Requirements (Thesis)

**Graded Courses:** 21.0 credits

-May include up to three non-MAE approved courses

**Research:** 9.0 credits

**Total:** 30.0 credits

**Sample Plan of Work**

Course Type	Credits
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
Graded Course (Optional non-MAE)	3.0
Graded Course (Optional non-MAE)	3.0
Graded Course (Optional non-MAE)	3.0
MAE 695	9.0
<b>Total Credits</b>	<b>30.0</b>

# PhD Degree Requirements

## (without Minor)

### Sample Plan of Work

If previous MS is from NCSU

**MS Transfer Credit:** 30.0

**Graded Courses:** 18.0 credits

-May include up to two non-MAE approved courses

**Research:** 24.0 credits

**Total:** 72.0 credits

\*starting Fall 2016, all PhD students are required to take a minimum of two 700-level courses

Course Type	Credits
Transfer Credit	30.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
Graded Course (Optional non-MAE)	3.0
Graded Course (Optional non-MAE)	3.0
MAE 895	24.0
<b>Total Credits</b>	<b>72.0</b>

# PhD Degree Requirements (with Minor)

## Sample Plan of Work

If previous MS is from NCSU

**MS Transfer Credit:** 30.0

**Graded Courses:** 21.0 credits

-May include up to three non-MAE approved courses for minor

**Research:** 24.0 credits

**Total:** 75.0 credits

\*starting Fall 2016, all PhD students are required to take a minimum of two 700-level courses

Course Type	Credits
Transfer Credit	30.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
Graded Course (minor area)	3.0
Graded Course (minor area)	3.0
Graded Course (minor area)	3.0
MAE 895	24.0
<b>Total Credits</b>	<b>75.0</b>

# PhD Degree Requirements (without Minor)

## Sample Plan of Work

If previous MS is **NOT** from NCSU

**MS Transfer Credit:** 18.0

**Graded Courses:** 18.0 credits

-May include up to two non-MAE approved courses

**Research:** 36.0 credits

**Total:** 72.0 credits

\*starting Fall 2016, all PhD students are required to take a minimum of two 700-level courses

Course Type	Credits
Transfer Credit	18.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Courses	3.0
Graded Course (Optional non-MAE)	3.0
Graded Course (Optional non-MAE)	3.0
MAE 895	36.0
<b>Total Credits</b>	<b>72.0</b>

# PhD Degree Requirements (with Minor)

## Sample Plan of Work

If previous MS is **NOT** from NCSU

**MS Transfer Credit:** 18.0

**Graded Courses:** 21.0 credits

-May include up to three non-MAE approved courses for minor

**Research:** 33.0 credits

**Total:** 72.0 credits

\*starting Fall 2016, all PhD students are required to take a minimum of two 700-level courses

Course Type	Credits
Transfer Credit	18.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
Graded Course (minor area)	3.0
Graded Course (minor area)	3.0
Graded Course (minor area)	3.0
MAE 895	33.0
<b>Total Credits</b>	<b>72.0</b>

# Direct-to-PhD Degree Requirements

## Sample Plan of Work

**GPA:** 3.5

**Graded Courses:** 39.0 credits (minimum)

-May include up to five non-MAE approved courses

**Minor Courses** (optional): 9.0 credits

- If not seeking a minor, additional MAE graded courses or research should replace these credits.

**Research:** 24.0 credits (minimum)

**Total:** 72.0 credits

\*starting Fall 2016, all PhD students are required to take a minimum of two 700-level courses

Course Type	Credits
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
MAE Graded Course	3.0
Graded Course (minor area) or MAE 895	3.0
Graded Course (minor area) or MAE 895	3.0
Graded Course (minor area) or MAE 895	3.0
MAE 895	24.0
Total Credits	72.0