

ACCELERATED BS/MS DEGREE PROGRAMS IN MECHANICAL AND AEROSPACE ENGINEERING

Purpose

- The Accelerated BS/MS (for MS thesis or MS non-thesis options) degree program in Mechanical Engineering and in Aerospace Engineering at NCSU is designed to give qualified NCSU undergraduates the opportunity to complete a master's degree in *just one year beyond the bachelor's degree*.
- Its goal is also to attract our best undergraduate students into our graduate program.

Mechanism

- Graduate level courses in the ME or AE curriculum may be “*double counted*” to satisfy requirements of both the BS degree and the MS degree.
- A minimum of three courses (9 semester hours) and a maximum of four courses (12 semester hours) may be counted toward both the undergraduate and graduate degrees.

Requirements for the Accelerated BS/MS degree program

- A 3.7 or above GPA (overall, as well as in all math, science and engineering courses) at the time of admission and at the time of undergraduate graduation are required.
 - Application should be done in the semester when 92 hours of credit will be accumulated.
 - Transfer students must have completed two semesters as a full-time student at NC State.
- A grade of B or better is required for any courses to be counted toward both degrees.
 - Receiving a B- or lower grade in any “double counted” course makes you ineligible for the Accelerated BS/MS degree program.
- Students must complete all requirements for the MS degree in no more than 12 months from the completion of the BS degree if the non-thesis option (Option B) is selected and in no more than 18 months if the thesis option is selected.

Application procedure for Accelerated BS/MS degree program

First complete the pre-application form (below) and submit it to the MAE Graduate Office.

Once pre-approved, complete the following:

- An application to Graduate School for the MAE program (complete online)
 - Go to <http://www2.acs.ncsu.edu/grad/applygrad.htm> and click “Create Account” tab. (Question 6: Date you wish to enroll – enter the semester after expected receipt of BS degree)
 - Applications to the MAE Accelerated BS/MS degree program require an NCSU transcript (unofficial is acceptable), 3 Letters of Recommendation (filled out online by your recommenders), and a Personal Statement of Career Interests and Goals.
 - Applications do not require GRE test scores

Possible course substitutions¹ during the 4th year for Accelerated BS-MS program

Mechanical Engineering BS-MS Program	
Original Course in Undergraduate Program	Substitution Course in Graduate Program¹
MAE 435 <i>Principles of Automatic Control</i>	MAE 521 <i>Linear Control and Design of MIMO Systems</i>
MAE 4XX Departmental Elective (You may substitute for up to three departmental elective courses)	MAE 5XX or an approved non-MAE 4XX or 5XX level course ²
MAE 4XX Departmental Elective (You may substitute for up to three departmental elective courses)	MAE 5XX or an approved non-MAE 4XX or 5XX level course ²

Aerospace Engineering BS-MS Program	
Original Course in Undergraduate Program	Substitution Course in Graduate Program¹
MAE 435 <i>Principles of Automatic Control</i>	MAE 521 <i>Linear Control and Design of MIMO Systems</i>
MAE 458 <i>Propulsion</i>	MAE 504 <i>Fluid Dynamics of Combustion I</i>
MAE 4XX Departmental Elective	MAE 5XX or an approved non-MAE 4XX or 5XX level course ²

Fall Graduate Course Offerings³	Spring Graduate Course Offerings³
MAE 505, 511, 513, 533, 539, 541, 550, 560, approved non-MAE 4xx or 5xx level course	MAE 501, 518, 521, 534, 535, 537, 538, 540, 543, 545, approved non-MAE 4xx or 5xx level course

¹Note when signing up for classes, graduate course availability is subject to change and time conflicts can arise requiring you to modify your BS-MS plan.

²Approval from the MAE DGP required. Only one non-MAE 4XX course is permitted for graduate credit.

³See the complete university listing of graduate courses for more details.

Financial Support

Teaching or Research Assistantships may be available to MS thesis option students once all requirements for the BS degree have been met.

Questions? Contact the Graduate Office

Director of Graduate Programs: Dr. Paul I Ro (ro@ncsu.edu)

Graduate Programs Coordinator: Julia McLean (jamclea3@ncsu.edu)

Graduate Services Assistant: Kelly Petersen (kjpeter3@ncsu.edu)

North Carolina State University
The Graduate School

ACCELERATED BACHELOR'S/MASTER'S PLAN OF WORK

To: Dean of The Graduate School

From: Program Director: _____
Director's name/Program name

Student Information:

Name: _____ ID Number: _____

Degree/Program: _____ Signature: _____

Courses taken as undergraduate student:

Course Description	Prefix/No.	Hrs	Term
To be double-counted (12 hrs max):			
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Sub-total

To be applied to Graduate Degree Only (6 hrs max):			
_____	_____	_____	_____
_____	_____	_____	_____

Sub-total

Courses taken as graduate student:

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Sub-total

Total

Undergrad Coord Signature/Date: _____

DGP Signature/Date: _____

Approved for the Graduate School by: _____
Signature/Date