

ACCELERATED BS/MS DEGREE PROGRAMS MECHANICAL AND AEROSPACE ENGINEERING

The Accelerated Bachelor's/Master's (ABM) degree program with the Department of Mechanical and Aerospace Engineering at NCSU is designed to give qualified NCSU undergraduates the opportunity to complete a master's degree in just 12 months beyond the bachelor's degree. Its goal is also to attract our best Mechanical and Aerospace Engineering undergraduate students into our graduate program.

How does it work? 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

- At least an overall GPA of 3.7 at the time of admission and at the time of undergraduate graduation is required.
 - An ABM Plan of Work should be completed during the sixth semester of the student's undergraduate academic program. A student's Graduate School admission application must be submitted during the seventh semester.
 - Transfer students must have completed two semesters as a full-time student at NC State to qualify for the ABM program.
 - If the undergraduate GPA drops below 3.50 at any point after completing the ABM Plan of Work, the student will be ineligible to apply for admission to the ABM graduate program.
- 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 no more than 18 months if the thesis option is selected.

Application procedure for Accelerated BS/MS degree program

First, consult with the Undergraduate of Undergraduate Advising to be advised on the *double-counted courses completed as an undergraduate student*. Next, submit the ABM Plan of Work to the MAE Graduate Office (EB3 – 3113). The MAE Director of Graduate Programs will schedule an advising appointment with the student to outline *courses completed as a graduate student*.

Once the ABM Plan of Work is approved by the Director of Graduate Programs, complete the following:

- An application to The Graduate School for the MAE program (complete online)
 - [Application Management](https://applygrad.ncsu.edu/apply) portal (applygrad.ncsu.edu/apply).
 - Students MUST be admitted to the Graduate School the term (Fall/Spring) that immediately follows undergraduate degree completion.
 - 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.

IMPORTANT: The MAE Undergraduate Director of Advising monitors the completion of the undergraduate degree to ensure approved courses were successfully completed. Any deviation from the *approved courses taken as an undergraduate student* section requires a new ABM Plan of Work to be completed and approved by the Director of Undergraduate Advising and the Director of Graduate Programs before applying to the Graduate School.

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.

Questions? Contact the Graduate Office

Director of Graduate Programs: Dr. Kara Peters (kjpeters@ncsu.edu)

Graduate Programs Coordinator: Iyana Porter (mae_gradoffice@ncsu.edu)

Graduate Services Assistant: Tonja Austin (mae_gradadmission@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: _____ UGPA: _____

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