

ME International Plan Undergraduate Curriculum (Catalog: 2011 - 2012)

Freshman	Fall	CHEM 1310 General Chemistry (See Note 2) 3-3-4	MATH 1501 Calculus 1 (Minimum Grade C) 4-0-4	US Perspective HIST 2111, HIST 2112, POL 1101, INTA 1200, or PUBP 3000 [Social Science] 3-0-3	Wellness APPH 1040, APPH 1050 or HPS 1040 2-0-2	ENGL 1101 English Composition 1 3-0-3	= 16 hours
	Spring	PHYS 2211 Physics 1 3-3-4 MATH 1501	MATH 1502 Calculus 2 (Minimum Grade C) 4-0-4 MATH 1501	CS 1371 Introduction to Computing 3-0-3	ME/CEE 1770 Engineering Graphics (See Note 3, No W's) 2-3-3	ENGL 1102 English Composition 2 3-0-3 ENGL 1101	
Sophomore	Fall	PHYS 2212 Physics 2 3-3-4 PHYS 2211	MATH 2401 Calculus 3 (Minimum Grade C) 4-0-4 MATH 1502	ME 2110 Creative Decisions and Design (See Note 3, No W's) 2-3-3 ME/CEE 1770, COE 2001*	MSE 2001 Engineering Materials 3-0-3 CHEM 1310	COE 2001 Statics 2-0-2 MATH 1502, PHYS 2211	= 16 hours
	Spring	ECE 3710 Circuits & Electronics 2-0-2 PHYS 2212	MATH 2403 Differential Equations (Minimum Grade C) 4-0-4 MATH 1502	ME 2202 Dynamics of Rigid Bodies 3-0-3 COE 2001	ME 2016 Computing Techniques 3-0-3 CS 1371, MATH 1502, MATH 2403*	Science Elective BIOL 1510, BIOL 1520, EAS 1600, EAS 1601 or PHYS 2213 (See Note 9) 3-0-3	= 15 hours = 16 hours
Junior	Fall	ECE 3741 Instrument & Electronics Lab 0-3-1 ECE 3710	COE 3001 Mechanics of Deformable Bodies 3-0-3 COE 2001, MATH 2403*	ME 3322 Thermo- dynamics 3-0-3 PHYS 2211, MATH 2403	ME 3340 Fluid Mechanics 3-0-3 ME 2202, MATH 2403 MATH 2401, ME 3322*	Economics ECON 2100, 2101, 2105 or 2106 (See Note 5) 3-0-3	Humanities Elective (See Note 6) 3-0-3
	Spring	ME 3017 System Dynamics 3-0-3 ME 2202, ME 2016, MATH 2403, ECE 3710	ME 3345 Heat Transfer 3-0-3 ME 3322, ME 3340, MATH 2403	MATH 3670 Statistics (ISYE 3770 is also accepted) 3-0-3 MATH 2401	ISYE 3025 Engineering Economics 1-0-1 (ECON 2100, 2101, 2105 or 2106)	Social Science Elective (See Note 6) 3-0-3	Humanities Elective (See Note 6) 3-0-3
Senior	Fall	Design Elective ME 3180 or ME 4315 3180: Machine Design 4315: Energy Sys Design 3-0-3 ME 2110, ME 3345 (for ME 4315 only), COE 3001 (for ME 3180 only)	ME 3210 Design, Materials & Manufacture 3-0-3 MSE 2001, ME 2110	ME 3057 Experimental Methods Lab (See Note 3, No W's) 2-3-3 COE 3001, ME 3340, ME 3017*, ME 3345*, MATH 3670*	ME Elective 3000 Level or Above ME Class (See Note 4) 3-0-3	Free Elective 2000 Level or Above (See Note 1) 3-0-3	= 16 hours = 15 hours
	Spring	ME 4056 ME Systems Lab (See Note 3, No W's) 2-3-3 ME 3057, ME 3345, ME 3017, MATH 3670	ME 4182 Capstone Design (See Note 3, No W's) 1-6-3 COE 3001, ME 3345, ME2110, ME3210, ME3017, MATH 3670, Design Elect.	ME Elective 3000 Level or Above ME Class (See Note 4) 3-0-3	Social Science Elective (See Note 6) 3-0-3	Free Elective 2000 Level or Above (See Note 1) 3-0-3	= 15 hours

* Class co-requisites have an asterisk (*) after it. These classes can be taken prior to or at the same time.

129 Total Hours

Notes: See backside for all notes.

International Plan Overlay Classes		
Country or Regional Elective (See Notes 7 & 8) 3-0-3	Global Economics (See Notes 7 & 8) 3-0-3	International Relations (See Notes 7 & 8) 3-0-3

Included in
Major GPA if
filled in with
dark color

Required Overlay Classes	
Ethics HTS 2084, INTA 2030, PHIL 3105, PHIL 3109, PHIL 3127 or PHIL 4176 (See Notes 7 & 10) 3-0-3	Global Perspective (See Note 7) 3-0-3

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Notes

1. **Free Electives:** Free electives may not duplicate course content in any other courses used for the BSME.
2. **CHEM 1310:** CHEM 1211K can substitute for CHEM 1310. CHEM 1211K & 1212K are recommended for pre-health students.
3. ME 1770, 2110, 3057, 4056 & 4182 cannot be dropped after phase 2 registration closes without documented medical reasons.
4. **ME Elective:** Any ME class that is 3000 level or above, excluding ME 3141, 3700, 3720, 3743, 3744, 4741, 4742 and 4753. See below.
5. **Economics:** Students can receive credit for only one of ECON 2100, ECON 2101, ECON 2105 & ECON 2106. The only exception is that students can receive 6 hours credit for both ECON 2105 and ECON 2106.
6. **Humanities Electives and Social Science Electives:** See below.
7. **Overlay Areas: All overlay areas** must be taken as part of or in addition to the curriculum. They can be free electives, economics, humanities electives or social science electives. See section below for class options.
8. **IP Classes:** Classes that satisfy the International Plan requirements are at: <http://www.catalog.gatech.edu/specialacademic/international.php>

Notes Continued

9. **Science Elective:** CHEM 1212K can satisfy the science elective.
10. **Ethics Overlay:** PHIL 3105, 3109, 3127 & 4176 are humanities electives. INTA 2030 & HTS 2084 are social science electives.

GPA & Grade Requirements

1. All classes taken for the BSME degree must be taken LETTER GRADE. This includes all electives.
2. **Overall GPA:** Must be 2.00 or above (truncated) at graduation.
3. **Required Grades:**
 - Minimum grade of a D or better is required except as noted.
 - If a pre-requisite for an ME class requires a C or better, the C is required before taking the next class. Ex: A grade of C or better is required in MATH 2403 before taking ME 3322.
4. **Major GPA:**
 - Must be 2.00 or above (truncated) at graduation.
 - Classes used to calculate it are all ME and COE classes required by name and number plus the Design Elective and ME electives.

Humanities, Social Science and Required Overlays (Ethics & Global Perspective)

1. **Humanities Electives:** A current list is at <http://www.catalog.gatech.edu/students/ugrad/core/corec.php>
2. **Social Science Electives:** A current list is at <http://www.catalog.gatech.edu/students/ugrad/core/coree.php>
3. **Global Perspective Overlay:** A current list of classes is at <http://www.catalog.gatech.edu/students/ugrad/core/gp.php>

ME Electives

1. A list of ME Electives offered each semester is at <http://www.me.gatech.edu/undergraduate/registration#sp>
2. ME electives are 3000-level or above ME classes, excluding ME 3141, 3700, 3720, 3743, 3744, 4741, 4742 & 4753.
3. **Design Elective (ME 3180 / ME 4315):** Students may take both design electives, ME 3180 & ME 4315. One class will satisfy the design elective and the other class satisfies an ME Elective.
4. **Research:** Students may use up to 4 hours of ME 4699/4903 for ME elective credit. In addition, up to 6 hours of 2699/4699/4903 from any department may be used as free elective credit. More information about research is at: <https://www.me.gatech.edu/undergraduate/research>
5. **Minors:** Students who successfully complete a Ga. Tech minor **approved by the ME department** are allowed to substitute courses required for the minor for up to six hours of ME elective credit. If a student does not complete the minor, then this substitution is disallowed and the student must complete six hours of ME elective credit.

ME Approved Minors:	Biomedical Engineering	Materials Science and Engineering
Aerospace Engineering	Computing Science	Mathematics
Biology	Earth and Atmospheric Sciences	Nuclear and Radiological Engineering

Pre-Requisites

1. **The ME curriculum has a 7 or 8 semester pre-requisite chain, depending on the design class selected. Plan carefully!**
2. Students can select either ME 3180 or ME 4315 for the design elective. More students select ME 3180.
3. **Pre-reqs are strictly enforced in ME. Carefully plan your schedule in advance and have it checked by an advisor.**

Upon completion of these classes, you will have a minimum of (...) semesters remaining until graduation.

Machine Design (ME 3180) for the Design Elective	Minimum # of Semesters	Energy Systems Design (ME 4315) for the Design Elective
	7	MATH 1501
MATH 1501	6	MATH 1502, PHYS 2211
MATH 1502, PHYS 2211	5	COE 2001
COE 2001	4	ME 2202, MATH 2401, MATH 2403
MATH 2401, MATH 2403, PHYS 2212, ME 2202, CS 1371, ME 1770, CHEM 1310	3	ME 1770, ME 3322, ME 3340, CS 1371, PHYS 2212, CHEM 1310
ME 2110, ME 3322, ME 3340, ME 2016 ECE 3710, COE 3001, MSE 2001	2	COE 3001, ME 2110, ME 3345, ME 2016, ECE 3710, MSE 2001
ME 3180 , ME 3057, ME 3345, ME 3017 ME 3210, MATH 3670	1	ME 4315 , ME 3017, ME 3057, ME 3210, MATH 3670
ME Elect, ME 4182, ME 4056, ECE 3741, ISYE 3025	0	ME Elect, ME 4182, ME 4056, ISYE 3025, ECE 3741