

NRE Undergraduate Curriculum (2006-2007)

Rev. 6
11/8/06

Freshman	Fall	CHEM 1310 General Chemistry 3-3-4	MATH 1501 Calculus 1 (Minimum Grade C) 4-0-4	HISTORY HIST 2111, HIST 2112, POL 1101, INTA 1200, or PUBP 3000 (Social Scien, See Note 4) 3-0-3	HPS 1040 Wellness 2-0-2	ENGL 1101 English Composition 1 [Humanities] 3-0-3	= 16 hours	
	Spring	PHYS 2211 Physics 1 3-3-4 <small>MATH 1502*</small>	MATH 1502 Calculus 2 (Minimum Grade C) 4-0-4 <small>MATH 1501</small>	CS 1371 Introduction to Computing 3-0-3	NRE 2110 Introduction to Nuclear & Rad. Engineering 2-0-2	ENGL 1102 English Composition 2 [Humanities] 3-0-3 <small>ENGL 1101</small>		= 16 hours
Sophomore	Fall	PHYS 2212 Physics 2 3-3-4 <small>PHYS 2211</small>	MATH 2401 Calculus 3 (Minimum Grade C) 4-0-4 <small>MATH 1502</small>	COE 2001 Statics 2-0-2 <small>MATH 1502, PHYS 2211</small>	Economics ECON 2100, ECON 2105 or ECON 2106 [Social Science] (See Note 5) 3-0-3	Humanities Elective (See Note 7) 3-0-3	= 16 hours	
	Spring	PHYS 2213 Introduction to Modern Physics 3-0-3 <small>PHYS 2212</small>	MATH 2403 Differential Equations (Minimum Grade C) 4-0-4 <small>MATH 1502</small>	NRE 3212 Fundamentals of NRE 3-0-3 <small>PHYS 2211, PHYS 2213*, MATH 2401, MATH 2403*</small>	MSE 2001 Engineering Materials 3-0-3 <small>CHEM 1310</small>	ECE 3710 Circuits & Electronics 2-0-2 <small>PHYS 2212</small>		= 15 hours
Junior	Fall	NRE 3301 Radiation Physics 3-0-3 <small>PHYS 2213</small>	ME 3322 Thermo- dynamics 3-0-3 <small>PHYS 2211, MATH 2403</small>	ME 3340 Fluid Mechanics (See Note 8) 3-0-3 <small>ME 2202 (See Note 8), ME 3322*</small>	ECE 3025 Electro- magnetics 3-0-3 <small>ECE 3710, MATH 2401 MATH 2403, NRE 2110</small>	ECE 3741 Instrument & Electronics Lab 0-3-1 <small>ECE 3710</small>	Social Science Elective (See Note 7) 3-0-3	= 16 hours
	Spring	NRE 3112 Nuc. Radiation Detection (See Note 6, No W's) 2-3-3 <small>NRE 2110, NRE 3301</small>	NRE 3316 Radiation Protection Engineering 3-0-3 <small>NRE 3301, MATH 2403</small>	COE 3001 Mechanics of Deformable Bodies 3-0-3 <small>COE 2001, MSE 2001*, MATH 2403*</small>	ME 3345 Heat Transfer 3-0-3 <small>ME 3322, ME 3340, MATH 2403</small>	ISYE 3025 Engineering Economics 1-0-1 <small>(ECON 2100, 2105 or 2106)</small>	MATH/ISYE 3770 Statistics (Minimum Grade C) 3-0-3 <small>MATH 2401</small>	
Senior	Fall	NRE 4204 Nuclear Reactor Physics 4-0-4 <small>NRE 3301, MATH/ISYE 3770</small>	NRE 4214 Reactor Engineering 3-0-3 <small>ME 3340, ME 3345</small>	NRE 4328 Radiation Sources & Applications 3-0-3 <small>NRE 3301, (NRE 3112 or NRE 3212)</small>	Technical Elective (See Note 2) 3-0-3	Ethics HTS 2084, INTA 2030, PST 3105, PST 3109, PST 3127 or PST 4176 (SS or HUM, See Note 1) 3-0-3	= 16 hours	
	Spring	NRE 4206 Radiation Physics Lab (See Note 6, No W's) 1-3-2 <small>NRE 3212, NRE 4204</small>	NRE 4232 NRE Design (See Note 6, No W's) 1-9-4 <small>NRE 4328, NRE 4204</small>	Technical Elective (See Note 2) 3-0-3	Technical Elective (See Note 2) 3-0-3	Social Science or Humanities Elective (See Notes 3 & 7) 3-0-3		= 15 hours

NOTES:

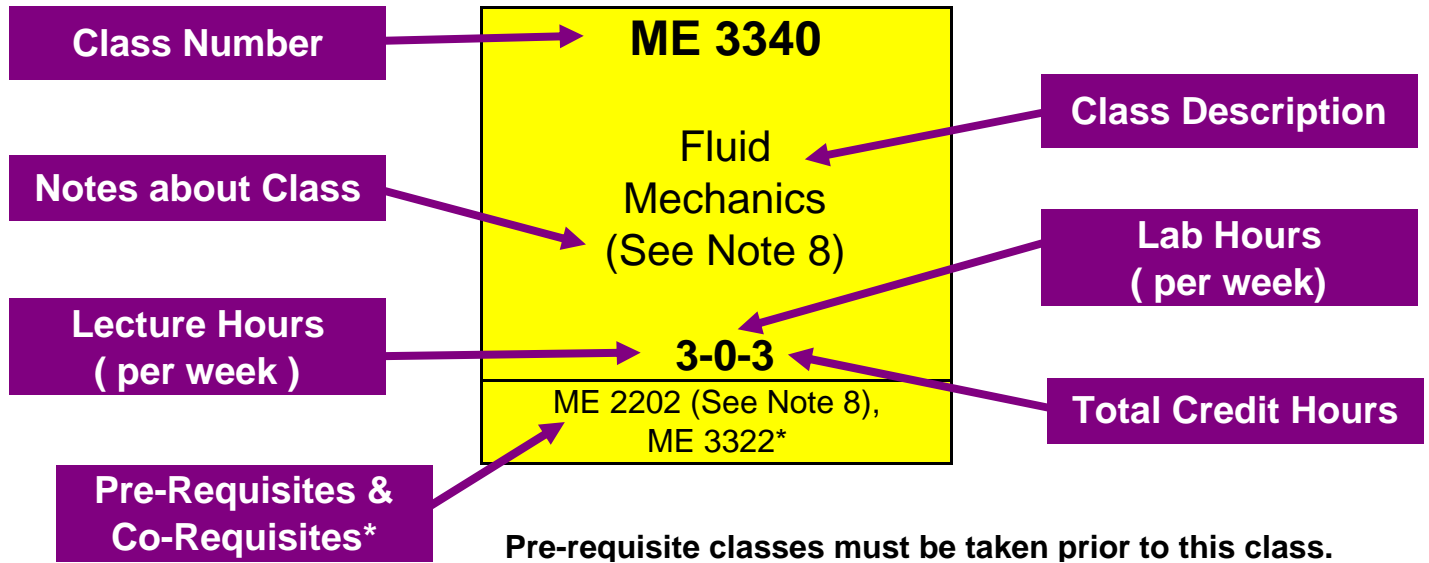
1. PST 3105, 3109, 3127 & 4176 are humanities (HUM). HTS 2084 & INTA 2030 are social sciences (SS).
 2. Technical Electives may be selected from any course offered in the College of Engineering, Science or Computing at the 3000 level or above, excluding Psychology (PSYC) and Applied Physiology (APPH). This course cannot substantially overlap any course which you intend to use for your BSNRE.
 3. If ethics is humanities, social science elective is required for this class. If ethics is social science humanities elective is required. All students need 12 hrs of social science & 12 hrs of humanities.
 4. Credit is only awarded for INTA 1200 or POL 1101, not both. Classes are exactly the same.
 5. No credit is awarded for (ECON 2105 or ECON 2106) if ECON 2100 is taken.
 6. NRE 3112, NRE 4206 & NRE 4232 cannot be dropped after registration closes without documented reasons.
 7. A list of classes that satisfy social science electives and humanities electives can be found at <http://www.registrar.gatech.edu/students/core.php>
 8. NRE students do not take ME 2202, so NRE 3212 is set up as a pre-req in OSCAR for registration purposes.
- * Class co-requisites have an asterisk (*) after the class. Pre-reqs do not have an asterisk behind the class.

126 Total Hours

Graduation Requirements

- A. All classes must be taken as LETTER GRADE.
- B. Minimum grade of D required for each class, except as noted.
- C. Overall GPA must be greater than 2.00.
- D. NRE GPA (including all NRE classes) must be greater than 2.00.

Undergraduate Curriculum Sheet Explained



Pre-requisite classes must be taken prior to this class.
 *Co-requisites can be taken at the same time.

NRE Class Sequence

NRE classes are only offered one time year. Plan accordingly...

Class Number	Semester Offered	Class Type
NRE 2110	Spring	Required
NRE 3112	Spring	Required
NRE 3212	Spring	Required
NRE 3301	Fall	Required
NRE 3316	Spring	Required
NRE 4204	Fall	Required
NRE 4206	Spring	Required
NRE 4214	Fall	Required
NRE 4232	Spring	Required
NRE 4328	Fall	Required
COE 2001	Every Semester *	Required
COE 3001	Every Semester *	Required
ME 3322	Every Semester *	Required
ME 3340	Every Semester *	Required
ME 3345	Every Semester *	Required

* These are planned for every summer. Low enrollments or unforeseen circumstances could cause cancellation.