

NC STATE

Engineering

ADVISOR EDITION

ENGINEERING FIRST YEAR
**NEW STUDENT
ORIENTATION
2016**



Information for COE New Student Orientation Advising

2016 New Student Orientation Dates:

Monday, July 11 – Tuesday, July 12
Tuesday, July 12– Wednesday, July 13
Wednesday, July 13 – Thursday, July 14
Thursday, July 14 – Friday, July 15
Monday, July 18 – Tuesday, July 19

2016 New Student Orientation Schedule -- Highlights:

Day #1 (July 11, 12, 13, 14 & 18)

2:30 – 3:15 pm College Welcome Stewart Theatre
3:00 – 4:30 pm Group Advising TSU Coastal Ballroom

Day #2 (July 12, 13, 14, 15 & 19)

9:30 am ~ 1pm Advising & MyPack Registration 201, 226, 255 Daniels Hall

Academic Advising Sessions:

Goal: Before leaving, students should be registered for 10 - 12 hours. They can add classes after orientation.

- Academic Advising sessions are from **9:30am~1pm on Day #2**
- Orientation Counselors (OC's) will bring students to your computer room.
- You will advise ~15 students in each of 2 advising time periods.
- Changes to student's schedules should be **minimal** beyond AP's, H/SS & PE choices.
- It is the **OC's RESPONSIBILITY** to get students where they need to be - not yours ☺
- Registration is simultaneous with advising (9:30am – 1:00pm in Daniels Hall).
- Each student should meet one-on-one with an advisor before leaving.
- Please initial the Schedule Approval Form of EFY NSO Booklet

NOTE: Sometimes students have questions **after** attending New Student Orientation. In this case please let them know to call their Academic Advisor, Departmental Coordinator of Advising, or Academic Affairs directly (please see COA contact list).

Advanced Placement Policy for AP Exams

No.	Test Title	Score	Credit
7	US History	3,4	3 hours for HI 252
		5	6 hours for HI 251 & HI 252
13	History of Art	3,4,5	3 hours elective credit in humanities or fine arts, depending upon curriculum
14	Art: Studio Art - Drawing Portfolio	3,4,5	3 hours elective credit, pending portfolio review by department of Art and Design in College of Design
15	Art: Studio Art - 2-D Design	3,4,5	3 hours elective credit, pending portfolio review by department of Art and Design in College of Design
16	Art: Studio Art - 3-D Design	3,4,5	3 hours elective credit, pending portfolio review by department of Art and Design in College of Design
20	Biology	4,5	8 hours for BIO 181/181L and BIO 183/183L
25	Chemistry	3	4 hours for CH 101 and CH 102
		4,5	8 hours for CH 101, CH 102, CH 201, CH 202
28	Chinese		No credit awarded
31	Computer Science A	4,5	3 hours for CSC 116
33	Computer Science AB	3,4,5	3 hours for CSC 116
34	Economics: Microeconomics	3,4,5	3 hours for EC 201
35	Economics: Macroeconomics	3,4,5	3 hours for EC 202
36	English Language & Composition	4	Eligible to submit portfolio to apply for ENG 101 credit. See the First-Year Writing Program website for guidelines for submitting portfolios.
		5	4 hours credit for ENG 101
37	English Literature & Composition	5	3 hours credit for ENG 208
40	Environmental Science	3,4,5	4 hours credit for MEA 100
43	European History	3,4	3 hours credit for HI 205
		5	6 hours credit for HI 208 and HI 209
48	French Language	4	Placement into FLF 202. Upon completion of FLF 202 with a grade of C- or better on the first attempt, students receive 3 hours credit for FLF 201.
		5	6 hours for FLF 201 and FLF 202 upon completion of a 300-level course with a grade of C- or better
51	French Literature	4	Placement into FLF 202. Upon completion of FLF 202 with a grade of C- or better on the first attempt, students receive 3 hours credit for FLF 201.
		5	6 hours for FLF 201 & 202 upon completion of a 300-level course with a C- or better
53	Human Geography	3,4,5	3 hours for GEO 200
55	German Language	4	Placement into FLG 202. Upon completion of FLG 202 with a grade of C- or better on the first attempt, students receive 3 hours credit for FLG 201.
		5	6 hours for FLG 201 and FLG 202 upon completion of a 300-level course with a grade of C- or better
57	Government & Politics: US	3,4,5	3 hours for PS 201
58	Government & Politics: Comparative	3,4,5	3 hours for PS 241
60	Latin: Vergil	4	Placement into LAT 202. Upon completion of LAT 202 with a grade of C- or better on first attempt, students receive 3 hours credit for LAT 201.
		5	6 hours credit for LAT 201 and LAT 202 upon completion of a 300-level course with a grade of C- or better

Advanced Placement Policy for AP Exams

No.	Test Title	Score	Credit
61	Latin: Literature	4	Placement into LAT 202. Upon completion of LAT 202 with a grade of C- or better on first attempt, students receive 3 hours credit for LAT 201.
		5	6 hours credit for LAT 201 and LAT 202 upon completion of a 300-level course with a grade of C- or better
66	Math: Calculus AB	3	Placement in MA 241. Upon completion of this course with a C- or better on the first attempt, 4 hours credit will be awarded for MA 141.
		4,5	4 hours credit for MA 141.
68	Math: Calculus BC	2	Placement in MA 241. Upon completion of this course with a C- or better on the first attempt, 4 hours credit will be awarded for MA 141.
		3	4 hours credit for MA 141; then OPTION 1: Placement into MA 241 OPTION 2: Placement into MA 242. Upon completion of MA 242 with a grade of C- or better, students will receive 4 hours credit for MA 241.
		4,5	8 hours for MA 141 and 241.
76	Music Theory: Aural Subscore	4,5	1 hour for MUS 104
77	Music Theory: Non-Aural Subscore	4,5	3 hours for MUS 103
78	Physics B	4,5	8 hours for PY 211 and PY 212
80	Physics C: Mechanics	4,5	4 hours for PY 205 + 206
82	Physics C: Electricity & Magnetism	4,5	4 hours for PY 208 + 209
83	Physics 1	4,5	4 hours for PY 211
84	Physics 2	4,5	4 hours for PY 212
85	Psychology	3,4,5	3 hours for PSY 200
87	Spanish Language	4	Placement into FLS 202. Upon completion of FLS 202 with a grade of C- or better on the first attempt, students will receive 3 hours credit for FLS 201.
		5	6 hours for FLS 201 and FLS 202 upon completion of a 300-level course with a grade of C- or better
89	Spanish Literature	4	Placement into FLS 202. Upon completion of FLS 202 with a grade of C- or better on the first attempt, students will receive 3 hours credit for FLS 201.
		5	6 hours for FLS 201 and FLS 202 upon completion of a 300-level course with a grade of C- or better
90	Statistics	3,4,5	3 hours for ST 301 upon completion of ST 302 with a grade of C- or better; or 3 hours for ST 311 for non-statistics majors
93	World History	3,4	3 hours for HI 233
		5	6 hours for HI 205 and HI 233

International Baccalaureate (IB) Policy

NC State does not currently award placement or credit for standard-level exams.

GROUP 1 EXAMS (Best Language)

Test Title	Level	Score	Credit
English A1/A2	Higher (<u>Without</u> IB diploma)	5 - 7	3 hours credit for ENG 220
	Higher (<u>With</u> IB diploma)	3 - 4	Eligible to submit writing portfolio to apply for credit for ENG 101; contact the Freshman Writing Program with questions.
	Higher (<u>With</u> IB diploma)	5 - 7	3 hours credit for ENG 220; 4 hours credit for ENG 101 may also be awarded after review by Freshman Writing Program. Students with IB diplomas must submit documentation to the Freshman Writing Office, Tompkins 246. Contact the Freshman Writing Program for details.

GROUP 2 EXAMS (Second Modern Language)

Foreign Languages Credit will be awarded Higher in French (FLF), German (FLG) and/or Spanish (FLS)	6	Placement into FL* 202. Upon completion of FL* 202 with a grade of C- or better on the first attempt, 3 hours credit will be given for FL* 201.
	7	6 credit hours for FL* 201 and FL* 202 upon completion of an FL* 300-level course with a grade of C- or better.

GROUP 3 EXAMS (Individuals and Societies)

Business & Management	Higher	5,6,7	3 hours credit, BUS *** elective
Economics	Higher	6,7	EC 201 and EC 202
Geography			Under Review
History, World	Higher	5,6,7	3 hours credit for HI 233
History, American	Higher	5,6,7	3 credit hours for HI 252
History, European	Higher	5,6,7	3 hours credit for HI 233
History of the Islamic World	Higher	5,6,7	3 hours credit for HI 2**
Philosophy	Higher	5,6,7	3 hours credit for PHI 205
Psychology	Higher	5,6,7	3 credit hours for PSY 200
Social Anthropology	Higher	5,6,7	3 credit hours for ANT 252

http://admissions.ncsu.edu/apply/credit-opportunities/international-baccalaureate-ib/
Retrieved: June 12, 2015

International Baccalaureate (IB) Policy
NC State does not currently award placement or credit for standard-level exams.

GROUP 4 EXAMS (Experimental Sciences)			
Biology	Higher	5,6,7	Evaluated on an individual basis. Contact biology department for review.
Chemistry	Higher	5	4 credit hours for CH 101 and CH 102
		6,7	8 credit hours for CH 101, CH 102, CH 201, & CH 202
Design Technology	Higher	1 - 7	Contact College of Design
Physics	Higher	5,6,7	Option 1: Placement into PY 208; upon completion of that course with a grade of C or better, four credit hours for PY 205.
			Option 2: Credit for PY 211 and PY 212
GROUP 5 EXAMS (Mathematics)			
Mathematics	Higher	5	Placement into MA 241; upon completion of that course with a grade of C or better, 4 credit hours will be awarded for MA 141.
		6,7	4 credit hours for MA 141
GROUP 6 EXAMS (The Arts and Electives)			
Art/Design	Higher	1 - 7	Contact College of Design
Classical Languages			
Greek	Higher	6	Placement into GRK 202. Upon completion of this course with a grade of C or better on the first attempt, 3 hours credit will be awarded for GRK 201.
		7	6 hours credit for GRK 201 and GRK 202 upon completion of a GRK 300-level course with a grade of C or better.
Latin	Higher	6	Placement into LAT 202. Upon completion of this course with a grade of C or better on the first attempt, 3 hours credit will be awarded for LAT 201.
		7	6 hours credit for LAT 201 and LAT 202 upon completion of a LAT 300-level course with a grade of C or better.
Computer Science	Higher	5,6,7	3 credit hours for CSC 200
Theatre Arts	Higher	5,6,7	3 credit hours for COM 103

<http://admissions.ncsu.edu/apply/credit-opportunities/international-baccalaureate-ib/>
Retrieved: June 12, 2015

Articulation Agreement North Carolina School of Science Math (NCSSM)

Courses are in the NC State Transfer Equivalency data base and appear as transfer courses on the student's degree audit.

ESS equivalency is grade earned at NCSSM

NCSSM Course(s)	Condition(s)	NCSU Course(s)
Chemistry		
CH 401 + CH 402	Grade of B or better in each course	CH 101 + 102; CH 201 + 202
CH 405 + CH 406	Grade of B or better in each course	CH 101 + 102; CH 201 + 202
CH 424 + CH 426	Grade of B or better in each course	CH 101 + 102; CH 201 + 202

Mathematics		
MA 416 + MA 426	Grade of B or better in each course	MA 141 + MA 241
MA 420 + MA 422 + MA 424	Grade of B or better in each course	MA 141 + MA 241
MA 432 + MA 434	Grade of B or better in each course	MA 141 + MA 241
MA 480 + MA 482	Grade of B or better in each course	MA 242
MA 484 + MA 486	Grade of B or better in each course	MA 242
MA 464 + MA 466	Grade of B or better in each course	MA 416

Physics		
PH 352 + PH 354	Grade of B or better in each course	PY 211
PH 355	Grade of B or better in each course	PY 211
PH 403	Grade of B or better in each course	PY 211 + PY 212
PH 404 + PH 406 + PH 408	Grade of B or better in each course	PY 205 + 206; PY 208 + 209
PH 418 + PH 420	Grade of B or better in each course	PY 123 + PY 125
PH 424 + PH 426	Grade of B or better in each course	PY 211 + PY 212

Statistics		
MA 404 + MA 406 + MA 408	Grade of B or better in each course	ST 311
MA 440 + MA 442 + MA 444	Grade of B or better in each course	ST 370

Environmental Science		
BI 424 + BI 426	Grade of B or better in each course	MEA 100
BI 430 + BI 432	Grade of B or better in each course	MEA 100

Biology		
BI 434 + BI 436 + BI 438	Grade of B or better in each course	BIO 183 + BIO 181

Foreign Language - French		
FR 307 + FR 354 + FR 356 + FR 358	Grade of B or better in each course	FLF 202
FR 404 + FR 406 + FR 408	Grade of B or better in each course	FLF 308

Foreign Language - Latin		
LA 307 +LA 404 + LA 406 + LA 408	Grade of B or better in each course	LAT 202
LA 410 + LA 412 + LA 414	Grade of B or better in each course	FL 295

Foreign Language - Spanish		
SP 307 + SP 352	Grade of B or better in each course	FLS 202
SP 354 + SP 356 + SP 358	Grade of B or better in each course	FLS 331
SP 454 + SP 456 + SP 458	Grade of B or better in each course	FLS 340

<https://www.acs.ncsu.edu/scripts/ugadmiss/trnsfcrs.pl/3?instit=000977237&state=NC&country=SelectCountry>

Retrieved: June 12, 2015

A- and AS-level Equivalencies

Subject	Level	Grade	Course Credit Earned
Chemistry	A-level	C or higher	CH 101 + 102 and CH 201 + 202
Classics	A-level	C or higher	CLA 320 and CLA *** for 3 credits
Classics	AS-level	n/a	no credit
English Language & Lit	A-level	C or higher	6 hours ENG 2**
English Language	A-level	C or higher	3 credits – ENG 2**
English Literature	A-level	C or higher	3 credits – ENG 2**
English Language & Lit	AS-level	n/a	no credit
English Language	AS-level	n/a	no credit
English Literature	AS-level	n/a	no credit
Environmental Management	A-level	C or higher	3 credits – ES 100
Foreign Language French	A-level	C or higher	6 credits – FLF 201, FLF 202
Foreign Language German	A-level	C or higher	6 credits – FLG 201, FLG 202
Foreign Language Spanish	A-level	C or higher	6 credits – FLS 201, FLS 202
Foreign Language French	AS-level	n/a	no credit
Foreign Language German	AS-level	n/a	no credit
Foreign Language Spanish	AS-level	n/a	no credit
History	A-level	C or higher	6 credits at 200-level
History	AS-level	C or higher	3 credits at 200-level
	The current History examination topics would match to our courses as:		
	1) Modern European History, 1789-1939; HI 210		
	2) Southeast Asia: from Colonies to Nations, 1870-1980; HI 264		
	3) International History, 1945-91; HI 2**		
	4) The History of Tropical Africa, 1855-1914; HI 276		
	5) The History of the USA, c. 1840-1968; HI 252		
	6) Caribbean History, 1794-1900; HI 2**		
Mathematics	A-level	C or higher	MA 111 + MA 141
Further Mathematics	A-level	C or higher	MA 241 + MA 305
Physics	A-level	C or higher	PY 211 + PY 212
Psychology	A-level	C or higher	PSY 200, PSY 230, PSY ***
Psychology	AS-level	C or higher	PSY 200, PSY 230
Sociology	A-level	C or higher	SOC 202
Sociology	AS-level	C or higher	SOC 2**

College Level Examination Program (CLEP) Credit Policy

<u>History and Social Sciences</u>	<u>Score/Credit</u>
American Government	50/ PS 201
Principles of Macroeconomics	50/ EC 202
Principles of Microeconomics	50/ EC 201
Intro. Sociology	50/ SOC 202
US History I	50/ HI 251
US History II	50/ HI 252
Western Civilization I	50/ HI 207
Western Civilization II	50/ HI 205

<u>Science and Mathematics</u>	<u>Score/Credit</u>
Calculus	48/ MA 131 or MA 141, depending upon major
College Algebra	50/ MA 107
College Algebra/Trigonometry	50/ MA 111
Precalculus	50/ MA 107
Trigonometry	50/ MA 101
Biology	Evaluated on an individual basis. Contact Biological Sciences (919.515.3341) Department for review.

<http://admissions.ncsu.edu/apply/credit-opportunities/college-level-examination-program-clep/>
Retrieved: June 16, 2015

4

NC Cmty College

PHY 252	General Physics II
---------	--------------------

POLITICAL SCIENCE	
POL 110	Intro Political Science
POL 120	American Government
POL 130	State & Local Gov't
POL 210	Comp Government
POL 220	International Relations
POL 250	Intro Political Theory

PORTUGUESE

POR 111	Elementary Portuguese I
POR 112	Elementary Portuguese II
POR 141	Culture & Civilization
POR 181	Portuguese Lab I
POR 182	Portuguese Lab II
POR 211	Intermed Portuguese I
POR 212	Intermed Portuguese II
POR 221	Portuguese Conversation
POR 231	Portuguese Read & Comp
POR 281	Portuguese Lab III
POR 282	Portuguese Lab IV

PSYCHOLOGY

PSY 150	General Psychology
PSY 211	Psychology of Adjustment
PSY 215	Positive Psychology
PSY 231	Forensic Psychology
PSY 237	Social Psychology
PSY 239	Psych of Personality
PSY 241	Developmental Psych
PSY 243	Child Psychology
PSY 246	Adolescent Psychology
PSY 249	Psychology of Aging
PSY 259	Human Sexuality
PSY 263	Educational Psychology
PSY 271	Sports Psychology
PSY 275	Health Psychology
PSY 281	Abnormal Psych

RELIGION

REL 110	World Religions
REL 111	Eastern Religions
REL 112	Western Religions
REL 211	Intro Old Testament
REL 212	Intro New Testament
REL 221	Religion in America

RUSSIAN

RUS 111	Elementary Russian I
RUS 112	Elementary Russian II
RUS 181	Russian Lab I
RUS 182	Russian Lab II
RUS 211	Intermediate Russian I

NC Cmty College

RUS 212	Intermediate Russian II
RUS 221	Russian Conversation
RUS 231	Reading and Conversation
RUS 281	Russian Lab III
RUS 282	Russian Lab IV

SOCIOLOGY

SOC 210	Intro to Sociology
SOC 213	Sociology of Family
SOC 215	Group Processes
SOC 220	Social Problems
SOC 225	Social Diversity
SOC 230	Race & Ethic Relations
SOC 232	Social Context of Aging
SOC 234	Sociology of Gender
SOC 240	Social Psychology
SOC 242	Sociology of Deviance
SOC 244	Soc of Death & Dying
SOC 245	Drugs and Society
SOC 250	Sociology of Religion

SPANISH

SPA 111	Elementary Spanish I
SPA 112	Elementary Spanish II
SPA 141	Culture & Civilization
SPA 161	Cultural Immersion
SPA 181	Spanish Lab I
SPA 182	Spanish Lab II
SPA 211	Intermediate Spanish I
SPA 212	Intermediate Spanish II
SPA 221	Spanish Conversation
SPA 231	Reading and Composition
SPA 281	Spanish Lab III
SPA 282	Spanish Lab IV

NCSU

FLR 202
FL 295
FL 295
Elective
Elective

SOC 202
SOC 204
Elective
SOC 203
SOC elective
SOC 305
Elective
SOC elective
SOC 301
SOC 206
SOC elective
SOC elective
SOC elective

FLS 101
FLS 102
FL 295
FL 295
Elective
Elective
FLS 201
FLS 202
FLS 208
FL 295
Elective
Elective

NCSU

PY 208

PS elective
PS 201
PS 202
PS 241
PS 231
PS elective

FLP 101
FLP 102
FL 295
Elective
Elective
FLP 201
FLP 202
FLP elect
FL 295
Elective
Elective

PSY 200
PSY elective
PSY elective
PSY elective
PSY 311
PSY elective
PSY 376
PSY elective
PSY elective
PSY elective
PSY elective
EDP 304
PSY elective
PSY elective
PSY elective

REL 300
REL elective
REL elective
REL 311
REL 312
REL 320

FLR 101
FLR 102
Elective
Elective
FLR 201

Biological Engineering [11BEBS Req Term Spring 13]									
Freshman Year									
Fall Semester			Credits		Spring Semester			Credits	
CH	101	Chemistry, A Molecular Science ¹	3	BAE	100	Intro to Biol. Engr.		1	
CH	102	General Chemistry Lab ¹	1	CH	***	Chemistry Elective ³		4	
E	101	Introduction to Engr & Prob Solv ^{1,2}	1	MA	241	Calculus II ¹		4	
E	115	Intro to Computing Environ ^{1,2}	1	PY	205	Physics for Engr & Sc I ¹		3	
ENG	101	Academic Writing and Research ^{1,2}	4	PY	206	Physics for Engr & Sc I ¹ Lab		1	
MA	141	Calculus I ¹	4	EC	205	Economics (GEP Soc Sci Req*) ⁴		3	
HESF	1**	Fitness & Wellness	1						
Semester Total 15					Semester Total 16				
Sophomore Year									
Fall Semester			Credits		Spring Semester			Credits	
BAE	200	Comp Meth In Biol Engr	2	BAE	202	Intro to BAE Methods		4	
MAE	206	Engineering Statics or		MAE	208	Engineering Dynamics ²		3	
CE	214	Engineering Mechanics-Statics ²	3	MA	341	Applied Diff Equations		3	
MA	242	Calculus III	4	MAE	301	Engr Thermodynamics I		3	
PY	208	Physics for Engr & Sc II	3	***	***	Biological Science/Chem Elective ⁵		3	
PY	208	Physics for Engr & Sc II Lab	1						
BIO	181	Intro Biol: Ecol, Evol & Biodiv or							
BIO	183	Intro. Biol: Cell & Mol Biol	4						
Semester Total 17					Semester Total 16				
Junior Year									
Fall Semester			Credits		Spring Semester			Credits	
BAE	302	Transport Phenomena	3	BAE	315	Prop Biol Eng Materials		3	
BAE	***	BAE Elective ⁶	3	BAE	***	BAE Elective ⁶		3	
MAE	308	Fluid Mechanics or		MAE	314	Solid Mechanics or			
CE	382	Hydraulics ²	3	CE	313	Mechanics of Solids ²		3	
ECE	331	Prin Elect Engr I	3	ST	370	Prob & Statistics for Engr		3	
***	***	Adv. Biol Elective ⁷	3	***	***	GEP Requirement*		3	
				HES	***	Health & Exercise Studies		1	
Semester Total 15					Semester Total 16				
Senior Year									
Fall Semester			Credits		Spring Semester			Credits	
BAE	401	Bioinstrumentation	3	BAE	452	Engr Design II		2	
BAE	451	Engr Design I	2	BAE	***	BAE 425 Industr Micro & Bioproc or			
***	***	Engr Elective ⁸	3			BAE 474 Ecological Engineering		3	
***	***	Ethics (GEP IP Requirement*) ⁹	3	***	***	GEP Requirement*		3	
ENG	331	Comm. Engr. & Tech. or	3	***	***	GEP IP Requirement *		2-3	
ENG	333	Comm. Sci. & Res.		***	***	GEP Requirement*		3	
				***	***	GEP Requirement*		3	
Semester Total 14					Semester Total 16-17				
Minimum Total Credit Hours Required for Graduation									125

Major/Program requirements and footnotes:
¹Courses required for Change of Degree Audit (CODA). CH 101, 102; MA 141, 241; PY 205, 206 must be completed with C or higher.
²Grade of C- or better required, E 115 requires satisfactory completion (S).
³Choose from CH 201& 202; CH 220; or CH 221 & 222.
⁴Choose from EC 205, ARE 201 or EC 201.
⁵Choose from SSC 200, CH 201& 202; CH 220; CH 221 & 222, PB(BIO) 360 or any advanced biology elective (footnote #7).
⁶Choose from BAE 361, 322, 371, or 481.
⁷Choose from GN 311, HS(FS) 462, MB 351, PB 321, PB(BIO) 360, BIO 361, BIO 414, SSC 332.
⁸Choose from BAE 361, 322, 371, 425, 462, 471, 472, 473, 474, 481, 528, or 578; or CHE 435; or ISE 311; or TE 435.
⁹Choose from IDS 201, STS 302, or 304.
***General Education Program (GEP) requirements and GEP Footnotes:**
To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied.
University approved GEP course lists for each of the following categories can be found at <http://oucc.ncsu.edu/gep-courses>.
Humanities (6 credit hours selected from two different disciplines/course prefixes)
Choose from the University approved GEP Humanities course list.
Social Sciences (6 credit hours selected from two different disciplines/course prefixes)
Choose 3 credits from the University approved GEP Social Sciences course list in a discipline other than Economics.
Economics 205 (or EC 201 or ARE 201), taken as part of the Major requirements, satisfies 3 credit hours needed to fulfill the GEP Social Sciences requirement.
Health & Exercise Studies (2 credit hours – must include one HESF 100-level course)
Choose from the University approved GEP Health & Exercise Studies course list.
Additional Breadth - (3 credit hours to be selected from the following University approved GEP course lists)
Choose from the Humanities/Social Sciences/Visual and Performing Arts
Interdisciplinary Perspectives (5-6 credit hours)
Choose from the University approved GEP Interdisciplinary Perspectives course list.
The following **Co-Requisites** must be satisfied to complete the General Education Program requirements:

- I. **U.S. Diversity** (USD)
Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite.
- J. **Global Knowledge** (GK)
Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite.
- K. **Foreign Language proficiency** - Proficiency at the FL_102 level is required for graduation.

Biomedical Engineering [14BMEBS Req Term Spring 13]											
Freshman Year											
Fall Semester			Credits	Spring Semester			Credits				
CH	101	Chemistry, A Molecular Science ¹	3	CH	221	Organic Chem I	3				
CH	102	General Chemistry Lab ¹	1	CH	222	Organic Chem I Lab	1				
E	101	Introduction to Engr & Prob Solv ^{1,2}	1	MA	241	Calculus II ¹	4				
E	115	Intro to Computing Environ ^{1,2}	1	PY	205	Physics for Engr & Sc I ¹	3				
ENG	101	Academic Writing and Research ^{1,2}	4	PY	206	Physics for Engr & Sc I Lab ¹	1				
MA	141	Calculus I ¹	4	EC	205	Economics (GEP Soc Sci Req*) ³	3				
HESF	1**	Fitness & Wellness	1	HES	***	Health & Exercise Studies	1				
Semester Total			15	Semester Total			16				
Sophomore Year											
Fall Semester			Credits	Spring Semester			Credits				
BME	201	Comp Meth in BME	3	BIO	183	Intro Biol: Cellular & Molecular	4				
BME	204	Biomedical Measurements	3	BME	203	Intro Mat Sci of Biomaterials	3				
MAE	206	Engineering Statics <i>or</i>	3	BME	252	Engineering Design I	1				
CE	214	Engineering Mechanics - Statics		BME	210	Analog & Digital Circuits	4				
MA	242	Calculus III	4	MAE	208	Engineering Dynamics <i>or</i>	3				
PY	208	Physics for Engr & Sc II	3	CE	215	Engineering Mechanics - Dynamics					
PY	209	Physics for Engr & Sc II Lab	1								
Semester Total			17	Semester Total			15				
Junior Year											
Fall Semester			Credits	Spring Semester			Credits				
BME	301	Human Physiology for Engineers I	3	BME	302	Human Physiology for Engineers II	3				
BME	311	Linear Systems in BME	3	***	***	BME Elective B ⁴	3				
MA	341	Applied Diff Equations	3	***	***	BME Elective C ⁴	3				
***	***	BME Elective A ⁴	3	BME	352	Engineering Design II	2				
ST	370	Prob and Statistics for Engrs	3	ENG	331	Comm.Engr.& Tech. <i>or</i>	3				
				ENG	333	Comm. Sci. & Res.					
				***	***	GEP Requirement*	3				
Semester Total			15	Semester Total			17				
Senior Year											
Fall Semester			Credits	Spring Semester			Credits				
BME	451	BME Senior Design I	3	BME	452	BME Senior Design II	3				
***	***	BME Elective D ⁴	3	***	***	BME Elective F ⁴	3				
***	***	BME Elective E ⁴	3	***	***	GEP Requirement*	2-3				
MAE	301	Thermodynamics I <i>or</i>	3	***	***	GEP Requirement*	3				
MSE	301	Equilibrium and Rate Processes		***	***	GEP Requirement*	3				
***	***	GEP Requirement*	3	***	***	GEP Requirement*	3				
Semester Total			15	Semester Total			17-18				
Minimum Total Credit Hours Required for Graduation							127				

Major/Program requirements and footnotes:

¹ Courses required for Change of Degree Audit (CODA). CH 101, 102; MA 141, 241; PY 205; 206 must be completed with C or higher.

² Grade of C- or better required. E 115 requires satisfactory completion (S).

³ Choose from EC 201 or 205, or ARE 201.

⁴ Choose from an appropriate sequence of electives. These must include at least 15 hours of engineering topics.

No specific emphasis: Students will work out a plan of study with their advisor that includes at least two 300- or 400-level BME electives and any other courses listed for the emphasis areas. There must be a sequence of at least three related upper-level BME electives to demonstrate an area of depth. One course can be an appropriate non-engineering course.

Biomechanics: (A) MAE 314 or CE 313: Solid Mechanics; (B) MAE 308 or CE 382: Fluid Mechanics; (C) BME 342: Experimental & Analytical Methods in Biomechanical Engineering Analysis; (D) BME 441: Biomechanics; (E) and (F) Any BME elective or appropriate course approved by the student's advisor.

Biomaterials: (A) TE 463: Polymer Engineering; (B) PCC 471:Chemistry of Biopolymers (no engineering topics); (C) MAE 314 or CE 313: Solid Mechanics; (D) BME/TE 466: Polymeric Biomaterials; (E) Any BME elective or appropriate course approved by the student's advisor; and (F) TE/BME 467: Mechanics of Tissues and Implants. Students following this emphasis area should take MAE 301 or MSE 301 in the fall of their junior year and ST 370 in the spring of their junior year.

Biomedical Instrumentation: (A) Any BME elective or appropriate course approved by the student's advisor; (B) BME 422: Fundamentals of Biomedical Instrumentation; (C) BME 412: Biomedical Signal Processing; (D) BME 425: Bioelectricity; (E) and (F) Take two from BME 480: Biomedical Microcontroller Applications; ECE 435: Elements of Control; ECE 436: Digital Control Systems; ECE 455: Computer Control of Robots; ECE 456: Mechatronics; ECE 561: Embedded Sytems; and BME 522: Medical Instrumentation. Students following this emphasis area may choose to take a GEP course in the fall semester of the junior year and BME Elective A in the spring semester of the senior year.

***General Education Program (GEP) requirements and GEP Footnotes:**
To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied. University approved GEP course lists for each of the following categories can be found at <http://oucc.ncsu.edu/gep-courses>

Humanities (6 credit hours selected from two different disciplines/course prefixes)
Choose from the University approved GEP Humanities course list .

Social Sciences (6 credit hours selected from two different disciplines/course prefixes)
Choose 3 credits from the University approved GEP Social Sciences course list in a discipline other than Economics. Economics 205 (or EC 201 or ARE 201), taken as part of the Major requirements, satisfies 3 credit hours needed to fulfill the GEP Social Sciences requirement.

Health & Exercise Studies (2 credit hours – must include one HESF 100-level course)
Choose from the University approved GEP Health & Exercise Studies course list.

Additional Breadth - (3 credit hours to be selected from the following University approved GEP course lists)
Choose from the Humanities/Social Sciences/Visual and Performing Arts

Interdisciplinary Perspectives (5-6 credit hours)
Choose from the University approved GEP Interdisciplinary Perspectives course list.

The following **Co-Requisites** must be satisfied to complete the General Education Program requirements:

- I. U.S. Diversity** (USD)
Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite.
- J. Global Knowledge** (GK)
Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite.
- K. Foreign Language proficiency** - Proficiency at the FL_102 level is required for graduation.

Chemical Engineering [14CHEBS Req Term Spring 13]											
Freshman Year											
Fall Semester			Credits	Spring Semester			Credits				
CH	101	Chemistry, A Molecular Science ¹	3	CH	201	Chemistry – Quantitative Sci.	3				
CH	102	General Chemistry Lab ¹	1	CH	202	Quantitative Chem Lab	1				
E	101	Introduction to Engr & Prob Solv ^{1,2}	1	MA	241	Calculus II ¹	4				
E	115	Intro to Computing Environ ^{1,2}	1	PY	205	Physics for Engr & Sc I ¹	3				
ENG	101	Academic Writing and Research ^{1,2}	4	PY	206	Physics for Engr & Sc I Lab ¹	1				
MA	141	Calculus I ¹	4	EC	205	Economics (or EC 201 or ARE 201)*	3				
HESF	1**	Health & Exercise Studies	1	HES	***	Health & Exercise Studies	1				
Semester Total			15	Semester Total			16				
Sophomore Year											
Fall Semester			Credits	Spring Semester			Credits				
CH	221	Organic Chemistry I (or CH 225)	3	CH	223	Organic Chemistry II (or CH 227)	3				
CH	222	Organic Chemistry I Lab (or CH 226)	1	CH	224	Organic Chemistry II Lab (or CH 228)	1				
CHE	205	Chemical Proc Prin ²	4	CHE	225	Chemical Proc Systems ²	3				
MA	242	Calculus III ²	4	MA	341	Applied Differential Eq ²	3				
***	***	GEP Requirement*	3	PY	208	Physics Engr & Scientists II	3				
				PY	209	Physics Engr & Scientists II Lab	1				
				***	***	GEP Requirement*	3				
Semester Total			15	Semester Total			17				
Junior Year											
Fall Semester			Credits	Spring Semester			Credits				
CH	315	Quantitative Analysis	4	CH	***	Chemistry Elective ³	4				
CHE	311	Transport Processes I ²	3	CHE	312	Transport Processes II	3				
CHE	315	Chem Process Thermo	3	CHE	316	Thermo of Chem & Phase Eq	3				
ECE	331	Prin Electrical Engr <i>or</i>		CHE	330	Chem Engr Lab I	4				
MSE	201	Struct & Prop Engr Mat	3	***	***	Free Elective	3				
***	***	GEP Requirement*	3								
CHE	395	Professional Dev Seminar	1								
Semester Total			17	Semester Total			17				
Senior Year											
Fall Semester			Credits	Spring Semester			Credits				
CHE	331	Chem Engr Lab II	2	CHE	435	Proc System Analy & Control	3				
CHE	446	Des & Analy Chem Reactors	3	CHE	451	CHE Design II	3				
CHE	450	CHE Design I	3	***	***	Technical Elective ⁴	3				
***	***	Technical Elective ⁴	3	***	***	GEP Requirement*	3				
***	***	GEP Requirement*	3	***	***	GEP Requirement (Interdisc Persp)*	2-3				
Semester Total			14	Semester Total			14-15				

Major/Program requirements and footnotes:

¹ Courses required for Change of Degree Audit (CODA). CH 101, 102; MA 141, 241; PY 205; 206 must be completed with C or higher.

² Grade of C- or better required, E 115 requires satisfactory completion (S).

³ Chemistry electives include: BCH 351, BCH 451, CH 335, CH 437, CH 610, FS 402, FS 502, PCC 461, PCC 464, PSE 335.

⁴ Technical Electives: BAE 322, BEC 462, BEC 463, BEC 488, BEC 562, BEC 577, BIT 464, BIT 563, BME 466, CE 373, CE 476, CE 477, CE 479, CE 484, E 304, ECE 331, ECE 468, ECE 568, ISE 311, ISE 443, CHE 460 and higher electives, MAE 206, MAE 208, MAE 314, MAE 406, MAE 421, MSE 201, MEA 479, NE 404, NE 419, PSE 425, TE 466

***General Education Program (GEP) requirements and GEP Footnotes:**
To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied. University approved GEP course lists for each of the following categories can be found at <http://oucc.ncsu.edu/gep-courses>.

Humanities (6 credit hours selected from two different disciplines/course prefixes)
Choose from the University approved GEP Humanities course list .

Social Sciences (6 credit hours selected from two different disciplines/course prefixes)
Choose 3 credits from the University approved GEP Social Sciences course list in a discipline other than Economics. Economics 205 (or EC 201 or ARE 201), taken as part of the Major requirements, satisfies 3 credit hours needed to fulfill the GEP Social Sciences requirement.

Health & Exercise Studies (2 credit hours – must include one HESF 100-level course)
Choose from the University approved GEP Health & Exercise Studies course list.

Additional Breadth - (3 credit hours to be selected from the following University approved GEP course lists)
Choose from the Humanities/Social Sciences/Visual and Performing Arts

Interdisciplinary Perspectives (5-6 credit hours)
Choose from the University approved GEP Interdisciplinary Perspectives course list.

The following **Co-Requisites** must be satisfied to complete the General Education Program requirements:

- I. U.S. Diversity** (USD)
Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite.
- J. Global Knowledge** (GK)
Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite.
- K. Foreign Language proficiency** - Proficiency at the FL_102 level is required for graduation.

Civil Engineering [14CEBS Req Term Sum 2 2015]

Freshman Year							
Fall Semester				Credits			
Credits				Spring Semester			
CH	101	Chemistry, A Molecular Science ¹	3	CSC	111	Intro to Comp - Python	3
CH	102	General Chemistry Lab ¹	1	EC	205	Economics (GEP Soc Sci Req*)	3
E	101	Introduction to Engr & Prob Solv ^{1,2}	1	MA	241	Calculus II ¹	4
E	115	Intro to Computing Environ ^{1,2}	1	PY	205	Physics for Engr & Sc I ¹	3
ENG	101	Academic Writing and Research ^{1,2}	4	PY	206	Physics for Engr & Sc I Lab ¹	1
MA	141	Calculus I ¹	4	HES	***	Health & Exercise Studies	1
HESF	1**	Fitness & Wellness	1				
Semester Total			15	Semester Total			15

Sophomore Year							
Fall Semester				Spring Semester			
Credits				Credits			
CE	214	Engr Mech - Statics ²	3	CE	313	Mechanics of Solids	3
TDE	220	Civil Engineering Graphics	3	CE	382	Hydraulics	3
MA	242	Calculus III	4	MA	341	Appl Differential Eq <i>or</i>	
PY	208	Physics for Engr & Sc II	3	MA	305	Elem Linear Algebra	3
PY	209	Physics for Engr & Sc II Lab	1	MSE	200	Mech Prop of Struct Mat	3
***	***	GEP Requirement*	3	***	***	GEP Requirement*	3
Semester Total			17	Semester Total			15

Junior Year									
Fall Semester				Spring Semester					
Credits				Credits					
CE	***	CE Area Intro Elective ³	3	CE	***	CE Area Intro Elective ³	3		
CE	***	CE Area Intro Elective ³	3	CE	***	CE Area Intro Elective ³	3		
CE	***	CE Area Intro Elective ³	3	CE	***	CE Elective I ⁴	3		
CE		390 Engineering Economics	1	***	***	Basic Science Elect ⁵	3		
ST		370 Prob & Stat for Engr	3	CE	***	CE Lab, if needed (CE 324 or CE 381)	0		
***	***	GEP Requirement*	3	***	***	GEP Requirement*	3		
			Semester Total	16				Semester Total	15

Senior Year								
Fall Semester				Spring Semester				
			Credits			Credits		
CE	***	CE Elective ⁴	3	CE	***	CE Elective ⁴	3	
CE	***	CE Elective ⁴	3	CE	***	CE Elective ⁴	3	
CE	***	CE Elective ⁴	3	***	***	CE Elective ⁴	3	
***	***	CE/MA/Science Elective	3	***	***	GEP Requirement*	3	
***	***	COM 110 or ENG 331	3	***	***	GEP Requirement*	2-3	
***	***	ECE 331 or MAE 301	3					
			Semester Total	18			Semester Total	14-15

Minimum Total Credit Hours Required for Graduation 126

Major/Program requirements and footnotes:

¹Courses required for Change of Degree Audit (CODA). CH 101, 102; MA 141, 241; PY 205, 206 must be completed with C or higher.

²Minimum grade of C-, E 115 requires satisfactory completion (S).

³CE Area Intro Electives to be selected following approved list: CE 263, CE 305, CE 327, CE 332, CE 339, CE 342, CE 367, CE 373, CE 383, CE 426, CE 487

⁴CE Electives to be selected following approved list: CE 215, CE 301, CE 305, CE 324, CE 325, CE 327, CE 332, CE 339, CE 342, CE 367, CE 373, CE 381, CE 383, CE 400, CE 401, CE 402, CE 403, CE 413, CE 420, CE 421, CE 425, CE 426, CE 435, CE 437, CE 440, CE 443, CE 444, CE 450, CE 463, CE 466, CE 476, CE 477, CE 479, CE 480, CE 484, CE 487, CE 488

⁵Basic Science elective - Select one: BIO 181, BIO 183 or MEA 101.

One CE elective must be a capstone design from the list: CE 400, CE 420, CE 421, CE 450, CE 480.

***General Education Program (GEP) requirements and GEP Footnotes:**

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied. University approved GEP course lists for each of the following categories can be found at <http://oucc.ncsu.edu/gep-courses>.

Humanities (6 credit hours selected from two different disciplines/course prefixes)

Choose from the University approved GEP Humanities course list .

Social Sciences (6 credit hours selected from two different disciplines/course prefixes)

Choose 3 credits from the University approved GEP Social Sciences course list in a discipline other than Economics.

Economics 205 (or EC 201 or ARE 201), taken as part of the Major requirements, satisfies 3 credit hours needed to fulfill the GEP Social Sciences requirement.

Health & Exercise Studies (2 credit hours – must include one HESF 100-level course)

Choose from the University approved GEP Health & Exercise Studies course list.

Additional Breadth - (3 credit hours to be selected from the following University approved GEP course lists)

Choose from the Humanities/Social Sciences/Visual and Performing Arts

Interdisciplinary Perspectives (5-6 credit hours)

Choose from the University approved GEP Interdisciplinary Perspectives course list.

The following **Co-Requisites** must be satisfied to complete the General Education Program requirements:

- U.S. Diversity** (USD)
Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite.
- Global Knowledge** (GK)
Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite.
- Foreign Language proficiency** - Proficiency at the FL_102 level is required for graduation.

Construction Engineering [14CNEBS Subplan CNEGEN Req Term Spring 15]

Freshman Year							
Fall Semester			Credits	Spring Semester			Credits
CH	101	Chemistry, A Molecular Science ¹	3	CSC	111	Intro to Comp - Python	3
CH	102	General Chemistry Lab ¹	1	EC	205	Econ (ARE/EC 201; GEP Soc Sci Req'ment*)	3
E	101	Introduction to Engr & Prob Solv ^{1,2}	1	MA	241	Calculus II ¹	4
E	115	Intro to Computing Environ ^{1,2}	1	PY	205	Physics for Engr & Sc I ¹	3
ENG	101	Academic Writing and Research ^{1,2}	4	PY	206	Physics for Engr & Sc I Lab ¹	1
MA	141	Calculus I ¹	4	HES*	***	Health & Exercise Studies	1
HESF	10*	Fitness & Wellness Course*	1				
Semester Total			15	Semester Total			15

Sophomore Year							
Fall Semester			Credits	Spring Semester			Credits
CE	214	Engr Mech - Statics ²	3	CE	313	Mechanics of Solids	3
TDE	220	Civil Engineering Graphics	3	MA	302	Num Analysis of Diff Eqns	1
MA	242	Calculus III	4	MSE	200	Mech Prop of Struct Mat	3
PY	208	Physics for Engr & Sc II	3	CE	365	Construction Equipment & Methods	3
PY	209	Physics for Engr & Sc II Lab	1	ST	370	Prob & Stat for Engr	3
CE	263	Intro to Construction Engr	3	***	***	Mgt Science Elective (GEP Soc Sci) ³	3
Semester Total			17	Semester Total			16

Junior Year							
Fall Semester			Credits	Spring Semester			Credits
CE	301	Civil Engr Measur & Geomatics	3	CE	327	Reinforced Concrete Design	3
CE	332	Materials of Construction	3	CE	342	Eng Behav of Soils & Fdns	4
CE	382	Hydraulics	3	CE	464	Legal Aspects of Contracting	3
CE	390	Engineering Economics	1	***	***	Math / Science Elective ⁴	4
CE	463	Const Est, Planning & Cont	3	CE	***	CE Elective ⁶	3
***	***	COM 110 or ENG 331	3				
Semester Total			16	Semester Total			17

Senior Year										
Fall Semester				Credits		Spring Semester				Credits
CE	426	Structural Steel Design		3	ACC	200	Intro to Managerial Accounting <i>or</i>			3
CE	466	Building Construction Engr		3	MIE	330	Human Resource Mgt ⁵			
ECE	331	Prin of Elect Engr <i>or</i>			CE	469	Constr Engr Project			3
MAE	301	Engr Thermodynamics I		3	CE	***	CE Lab (CE 324 or CE 381 or 468)			1
***	***	GEP Requirement*		3	***	***	GEP Requirement*			3
***	***	GEP Requirement*		3	***	***	GEP Requirement*			3
					***	***	GEP Requirement (Interdisc Perspectives)*			2
Semester Total				15	Semester Total				15	

Minimum Total Credit Hours Required for Graduation 127

Major/Program requirements and footnotes:

¹Courses required for Change of Degree Audit (CODA). CH 101, 102; MA 141, 241; PY 205, 206 must be completed with C or higher.

²Grade of C- or better required, E 115 requires satisfactory completion (S).

³Select from SOC 205, SOC 301, SOC/AFS 305 (USD), SOC 310 , PS 202, PS 310, PS 312, PS 314, PS 320, LPS 315

⁴Math/Science Elective - Select one: BIO 183, CH 201 and 202, or MEA 101 and MEA 110 or MA 302 & either MA 305 or MA 341

⁵MIE 330 is restricted to BUS Majors and Minors

⁶CE 305, CE 325, CE 367, CE 383

***General Education Program (GEP) requirements and GEP Footnotes:**

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied.

University approved GEP course lists for each of the following categories can be found at

<http://oucc.ncsu.edu/gep-courses>.

Humanities (6 credit hours selected from two different disciplines/course prefixes)

Choose from the University approved GEP Humanities course list .

Social Sciences (6 credit hours selected from two different disciplines/course prefixes)

Economics 205 (or EC 201 or ARE 201), taken as part of the Major requirement; and one of SOC 205, SOC 301, SOC/AFS 305 (USD), PS 202, PS 310, PS 312, F 314, PS 315, PS 320 taken as part of the Major requirement satisfies 6 credit hours needed to fulfill the GEP Social Sciences requirement from two different disciplines..

Health and Exercise Studies (2 credit hours – must include one HESF 100-level course and one additional HES course)

Choose from the University approved GEP Health and Exercise Studies course list.

Additional Breadth - (3 credit hours to be selected from the following University approved GEP course lists)

Choose from the Humanities/Social Sciences/Visual and Performing Arts

Interdisciplinary Perspectives (5-6 credit hours)

Choose from the University approved GEP Interdisciplinary Perspectives course list.

The following **Co-Requisites** must be satisfied to complete the General Education Program requirements:

- U.S. Diversity** (USD)
Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite.
- Global Knowledge** (GK)
Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite.
- Foreign Language proficiency** - Proficiency at the FL_102 level is required for graduation.

Construction Engineering [14CNEBS Subplan CNE MEC Req Term Spring 15]

Freshman Year						
Fall Semester			Credits	Spring Semester		Credits
CH	101	Chemistry, A Molecular Science ¹	3	CSC	111 Intro to Comp Python	3
CH	102	General Chemistry Lab ¹	1	EC	205 Econ (ARE/EC 201; GEP Soc Sci Req'ment	3
E	101	Introduction to Engr & Prob Solv ^{1,2}	1	MA	241 Calculus II ¹	4
E	115	Intro to Computing Environ ^{1,2}	1	PY	205 Physics for Engr & Sc I ¹	3
ENG	101	Academic Writing and Research ^{1,2}	4	PY	206 Physics for Engr & Sc I Lab ¹	1
MA	141	Calculus I ¹	4	HES	*** Health & Exercise Studies	1
HESF	10*	Fitness & Wellness	1			
Semester Total			15	Semester Total		15

Sophomore Year											
Fall Semester				Credits		Spring Semester				Credits	
CE	214	Engr Mech - Statics ²		3	CE	313	Mechanics of Solids			3	
TDE	220	Civil Engineering Graphics (or GC 120)		3	CE	365	Construction Equipment & Methods			3	
MA	242	Calculus III		4	MSE	200	Mech Prop of Struct Mat			3	
PY	208	Physics for Engr & Sc II		3	MAE	301	Engr. Thermodynamics I			3	
PY	209	Physics for Engr & Sc II Lab		1	ST	370	Prob & Stat for Engr			3	
CE	263	Intro to Construction Engr		3	***	***	Mgt Science Elective (GEP Soc Sci) ³			3	
Semester Total				17	Semester Total					18	

Junior Year							
Fall Semester				Spring Semester			
			Credits				Credits
CE	382	Hydraulics	3	CE	367	Mech & Elect Sys in Bldgs	3
CE	463	Const Est, Planning & Cont	3	CE	464	Legal Aspects of Contracting	3
CE	390	Engineering Economics	1	CE	***	CE Elective (CE 305, 332, 373 or 383)	3
MAE	302	Engr. Thermodynamics II	3	MAE	305	ME Lab I	1
MA	302	Num Analysis of Diff Eqns	1	MAE	310	Cond & Radiation Heat Trans	3
MA	341	Differential Equations	3	***	***	GEP Requirement*	3
***	***	COM 110 or ENG 331	3				
Semester Total			17	Semester Total			16

Senior Year									
Fall Semester					Spring Semester				
			Credits				Credits		
ACC	200	Intro to Managerial Accounting <i>or</i>		CE	469	Constr Engr Project			3
MIE	330	Human Resource Mgt	3	MAE	403	Air Conditioning			3
ECE	331	Prin of Elect Engr I	3	***	***	General Engineering Elective ⁴			4
MAE	406	Energy Conserv in Industry	3	***	***	GEP Requirement*			3
***	***	GEP Requirement*	3	***	***	GEP Requirement*			2
***	***	GEP Requirement*	3						
Semester Total			15	Semester Total			15		

Minimum Total Credit Hours Required for Graduation 127

Major/Program requirements and footnotes:

¹Courses required for Change of Degree Audit (CODA). CH 101, 102; MA 141, 241; PY 205, 206 must be completed with C or higher.
²Grade of C- or better required, E 115 requires satisfactory completion (S).
³Select from SOC 205, SOC 301, SOC/AFS 305 (USD), SOC 310 , PS 202, PS 310, PS 312, PS 314, PS 320, LPS 315
⁴General Engineering Elective: either CE 342, or MAE 306 ME Lab II plus one of the following: CE 301, CE 305, CE 332, CE 327*, CE 373, CE 383, CE 476*(F), CE 477*(S), CE 478 (F), CE 479* (S), CE 487 (S), or MAE 421 (S): *(CE 327: pre-req CE 332) (CE 476, CE 477, & CE 479: pre-req CE 373)

***General Education Program (GEP) requirements and GEP Footnotes:**
To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied. Universi approved GEP course lists for each of the following categories can be found at <http://www.ncsu.edu/uap/academic-standards/gep/courselists/index.html>.

Humanities (6 credit hours selected from two different disciplines/course prefixes)
Choose from the University approved GEP Humanities course list .
Social Sciences (6 credit hours selected from two different disciplines/course prefixes)
Choose 3 credits from the University approved GEP Social Sciences course list in a discipline other than Economics. Economics 205 (or EC 201 or ARE 201), taken as part of the Major requirements, satisfies 3 credit hours needed to fulfill the GEP Social Sciences requirement.
Health and Exercise Studies (2 credit hours – must include one HESF 100-level course and one additional HES course)
Choose from the University approved GEP Health and Exercise Studies course list.
Additional Breadth - (3 credit hours to be selected from the following University approved GEP course lists)
Choose from the Humanities/Social Sciences/Visual and Performing Arts
Interdisciplinary Perspectives (5-6 credit hours)
Choose from the University approved GEP Interdisciplinary Perspectives course list.
The following **Co-Requisites** must be satisfied to complete the General Education Program requirements:

- I. **U.S. Diversity** (USD)
Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite.
- J. **Global Knowledge** (GK)
Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite.
- K. **Foreign Language proficiency** - Proficiency at the FL_102 level is required for graduation.

Environmental Engineering [14ENEBS Req Term Spring 13]

				Freshman Year			
Fall Semester				Spring Semester			
			Credits				Credits
CH	101	Chemistry, A Molecular Science ¹	3	CH	201	Chemistry - A Quantitative Science	3
CH	102	General Chemistry Lab ¹	1	EC	205	Econ (ARE/EC 201; GEP Soc Sci Req'ment*)	3
E	101	Introduction to Engr & Prob Solv ^{1,2}	1	MA	241	Calculus II ¹	4
E	115	Intro to Computing Environ ^{1,2}	1	PY	205	Physics for Engr & Sc I ¹	3
ENG	101	Academic Writing and Research ^{1,2}	4	PY	206	Physics for Engr & Sc I Lab ¹	1
MA	141	Calculus I ¹	4	HES	***	Health & Exercise Studies	1
HESF	10*	Fitness & Wellness Course*	1				
Semester Total			15	Semester Total			15

Sophomore Year							
Fall Semester				Spring Semester			
			Credits				Credits
CE	214	Engr Mech – Statics	3	BIO	183	Intro. Biol: Cell & Mol Biol	4
CE	373	Fundamentals of Envr Engr	3	CE	313	Mechanics of Solids	3
CHE	205	Chem Proc Principles	4	CSC	111	Intro to Computing Python	3
MA	242	Calculus III	4	MEA	323	Earth System Chemistry	3
***	***	COM 110 (preferred) or GC 120 (GEP) ³	3	MA	341	Appl Differential Equations I	3
Semester Total			17	Semester Total			16

Junior Year							
Fall Semester				Spring Semester			
			Credits				Credits
CE	378	Environ Chem & Microbiology	4	CE	342	Engr Behavior of Soils & Found	4
CE	390	Engineering Economics	1	CE	381	Hydraulics Sys Meas Lab	1
CE	339	Civil Engineering Systems	3	CE	383	Hydrology & Urban Water Sys	3
CE	382	Hydraulics	3	MAE	301	Engr Thermodynamics I	3
PY	208	Physics for Engr & Sc II	3			Graphics/Communication Elective ³	3
PY	209	Physics for Engr & Sc II Lab	1	PS	320	US Environ Law and Politics <i>or</i>	
ST	370	Probability & Statistics for Engr	3	PS	336	Global Envir Pol (GEP Soc Sci Req*)	3
Semester Total			18	Semester Total			17

				Senior Year					
CE	476	Air Pollution Control	<i>or</i>	CE	477	Solid Waste Engineering	3		
CE	479	Air Quality		3	CE	481	Environmental Engineering Project	3	
CE	484	Water Supply & Waste Water Sys		3	***	***	Environmental Engr Elect ⁴	3	
CE	488	Water Resources Engineering		3	***	***	GEP Requirement*	3	
***	***	GEP Requirement*		3	***	***	GEP Requirement (Interdisciplinary Persp)*	2-3	
***	***	GEP Requirement*		3					
Semester Total				15	Semester Total				14-15
				Minimum Total Credit Hours Required for Graduation					127

Major/Program requirements and footnotes:

¹Courses required for Change of Degree Audit (CODA). CH 101, 102; MA 141, 241; PY 205, 206 must be completed with C or higher.
²Minimum grade of C-, E 115 requires satisfactory completion (S).
³Graphics/Communication Elective: If select COM 110, take GIS 410 or TDE 220; if select GC 120, take ENG 331 or COM 110.
⁴Select from CE(MEA) 435 (Spring only), CE 476 (Fall only), CE(MEA) 479 (Spring only) or CE 487 (Spring only).

***General Education Program (GEP) requirements and GEP Footnotes:**
To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied. University approved GEP course lists for each of the following categories can be found at <http://oucc.ncsu.edu/gep-courses>.
Humanities (6 credit hours selected from two different disciplines/course prefixes)
Choose from the University approved GEP Humanities course list .
Social Sciences (6 credit hours selected from two different disciplines/course prefixes)
Economics 205 (or EC 201 or ARE 201), taken as part of the Major requiremen; and PS 320 or PS 336 taken as part of the Major requirement satisfies 6 credit hours needed to fulfill the GEP Social Sciences requirement from two different disciplines.
Health and Exercise Studies (2 credit hours – must include one HESF 100-level course and one additional HES course)
Choose from the University approved GEP Health and Exercise Studies course list.
Additional Breadth - (3 credit hours to be selected from the following University approved GEP course lists)
Choose from the Humanities/Social Sciences/Visual and Performing Arts
Interdisciplinary Perspectives (5-6 credit hours)
Choose from the University approved GEP Interdisciplinary Perspectives course list.
The following **Co-Requisites** must be satisfied to complete the General Education Program requirements:

- I. **U.S. Diversity** (USD)
Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite.
- J. **Global Knowledge** (GK)
Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite.
- K. **Foreign Language proficiency** - Proficiency at the FL_102 level is required for graduation.

Computer Science [14CSCBS Req Term Spring 13]							
				Freshman Year			
Fall Semester			Credits	Spring Semester			Credits
CH	101	Chemistry, A Molecular Science ¹	3	CSC	116	Intro to Computing - JAVA ²	3
CH	102	General Chemistry Lab ¹	1	MA	241	Calculus II ¹	4
E	101	Introduction to Engr & Prob Solv ^{1,2}	1	PY	205	Physics for Engr & Sc I ¹	3
E	115	Intro to Computing Environ ¹	1	PY	206	Physics for Engr & Sc I Lab ¹	1
ENG	101	Academic Writing and Research ^{1,2}	4	***	***	GEP Requirement*	3
MA	141	Calculus I ^{1,2}	4	HESF	1**	Fitness & Wellness	1
Semester Total			14	Semester Total			15
				Sophomore Year			
Fall Semester			Credits	Spring Semester			Credits
CSC	216	Prog Lang Concepts-Java ²	3	CSC	230	C & Software Tools	3
CSC	226	Appl Discrete Math for CSC ²	3	CSC	316	Data Structures for CSC	3
MA	242	Calculus III	4	MA	305	Intro Linear Algebra and Matrices	3
PY	208	Physics for Engr & Sc II	3	***	***	GEP Requirement*	3
PY	209	Physics for Engr & Sc II Lab	1	***	***	Basic Science Elect ³	3
HES	***	Health & Exercise Studies	1				
Semester Total			15	Semester Total			15
				Junior Year			
Fall Semester			Credits	Spring Semester			Credits
CSC	236	Comp Org & Assem Lang for CSC	3	CSC	326	Software Engineering	3
CSC	246	Operating Systems for CSC	3	CSC	379	Ethics in Computing	1
CSC	333	Automata Theory	3	CSC	***	CSC Restricted Elective ⁴	3
ST	370	Prob and Stat for Engrs	3	ENG	331	Comm for Engr and Tech	3
***	***	GEP Requirement*	3	EC	205	Fund of Econ (EC 201 <i>or</i> ARE 201)*	3
				***	***	Other Restricted Elective ⁴	3
Semester Total			15	Semester Total			16
				Senior Year			
Fall Semester			Credits	Spring Semester			Credits
CSC	***	CSC Restricted Elective ⁴	3	CSC	492	CSC Senior Design Project	3
CSC	***	CSC Restricted Elective ⁴	3	CSC	***	CSC Restricted Elective ⁴	3
***	***	GEP Requirement*	3	***	***	Other Restricted Elective ⁴	3
***	***	GEP Requirement*	3	***	***	Free Elective	3
***	***	Other Restricted Elective ⁴	3	***	***	GEP Requirement*	2-3
				***	***	Free Elective	0-1
Semester Total			15	Semester Total			15
Minimum Total Credit Hours Required for Graduation							120 ⁵

Major/Program requirements and footnotes:

¹ Courses required for Change of Degree Audit (CODA). CH 101, 102; MA 141, 241; PY 205, 206 must be completed with C or higher.

² D+ or lower grades are not accepted.

³ To be selected from CH 201, PY 123, 124, or any PY course with a prerequisite of PY 208, or any PB, BIO, MEA, or ZO course.

⁴ CSC and Other Restricted Electives, see: <http://www.csc.ncsu.edu/academics/undergrad/restrict.php>.

⁵The GPA earned in all courses attempted at NCSU must be 2.0 or higher. The GPA in all courses bearing the CSC designation must be 2.0 or higher **or** a grade of C- or higher in each CSC course used to satisfy the requirements in the major

***General Education Program (GEP) requirements and GEP Footnotes:**

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied. University approved GEP course lists for each of the following categories can be found at <http://oucc.ncsu.edu/gep-courses..>

Humanities (6 credit hours selected from two different disciplines/course prefixes)

Choose from the University approved GEP Humanities course list .

Social Sciences (6 credit hours selected from two different disciplines/course prefixes)

Choose 3 credits from the University approved GEP Social Sciences course list in a discipline other than Economics.

Economics 205 (or EC 201 or ARE 201), taken as part of the Major requirements, satisfies 3 credit hours needed to fulfill the GEP Social Sciences requirement.

Health and Exercise Studies (2 credit hours – must include one HESF 100-level course and one additional HES course)

Choose from the University approved GEP Health and Exercise Studies course list.

Additional Breadth - (3 credit hours to be selected from the following University approved GEP course lists)

Choose from the Humanities/Social Sciences/Visual and Performing Arts

Interdisciplinary Perspectives (5-6 credit hours)

Choose from the University approved GEP Interdisciplinary Perspectives course list.

The following **Co-Requisites** must be satisfied to complete the General Education Program requirements:

- I. U.S. Diversity** (USD)
Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite.
- J. Global Knowledge** (GK)
Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite.
- K. Foreign Language proficiency** - Proficiency at the FL_102 level is required for graduation.

Computer Engineering [14CPEBS Req Term Spring 13]							
Freshman Year							
Fall Semester			Credits	Spring Semester			Credits
CH	101	Chemistry, A Molecular Science ¹	3	ECE	109	Intro to Computer Systems ²	3
CH	102	General Chemistry Lab ¹	1	MA	241	Calculus II ¹	4
E	101	Introduction to Engr & Prob Solv ^{1,2}	1	PY	205	Physics for Engr & Sc I ¹	3
E	115	Intro to Computing Environ ^{1,2}	1	PY	206	Physics for Engr & Sc I ¹ Lab	1
ENG	101	Academic Writing and Research ^{1,2}	4	***	***	Economics EC 201/205, ARE 201(GEP*)	3
MA	141	Calculus I ¹	4	HESF	10*	Fitness & Wellness	1
***	***	GEP Requirement*	3				
Semester Total			17	Semester Total			15
Sophomore Year							
Fall Semester			Credits	Spring Semester			Credits
ECE	200	Intro. to ECE Laboratory ²	4	COM	110	Public Speaking	3
ECE	209	Computer Systems Programming ²	3	CSC	226	Discrete Mathematics ²	3
MA	242	Calculus III	4	ECE	211	Electric Circuits ²	4
PY	208	Physics for Engr & Sc II	3	ECE	212	Fund of Logic Des ²	3
PY	209	Physics for Engr & Sc II ¹ Lab	1	ECE	220	Analytical Found. Of ECE ²	3
Semester Total			15	Semester Total			16
Junior Year							
Fall Semester			Credits	Spring Semester			Credits
ECE	301	Linear Systems	3	ECE	309	Object-Oriented Programming	3
ECE	302	Intro. to Microelectronics	4	ECE	380	Engr Profession for ECE ³	1
ECE	306	Intro. to Embedded Systems	3	ECE	310	Design of Complex Digital Sys	3
ST	371	Intro to Prob and Dist Theory	3	***	***	Open/Technical Elective ⁴	3
***	***	GEP Requirement*	3	ENG	331	Comm for Engr & Tech	3
				HES	***	Health & Exercise Studies	1
Semester Total			16	Semester Total			14
Senior Year							
Fall Semester			Credits	Spring Semester			Credits
ECE	484	ECE Senior Design Project I	3	ECE	485	ECE Senior Design Project II	3
ECE	4**	CPE Elective ⁵	3	ECE	4**	ECE Elective ⁶	3
ECE	4**	CPE Elective ⁵	3	ECE	4**	ECE Elective ⁶	3
***	***	GEP Requirement*	3	***	***	GEP Requirement*	3
***	***	GEP Requirement*	3	***	***	GEP Requirement*	2-3
Semester Total			15	Semester Total			14-15
Minimum Total Credit Hours Required for Graduation							122

Major/Program requirements and footnotes:

¹Courses required for Change of Degree Audit (CODA). CH 101, 102; MA 141, 241; PY 205, 206 must be completed with C or higher.

²Grade of C- or better required, E 115 requires satisfactory completion (S).

³Students in the entrepreneurs program should take ECE 383/ECE 482/ECE 483 instead of ECE 380/ECE 484/ECE 485.

⁴Open/Technical electives: E 304; ECE 305; ECE 308; any ECE 4** elective; CE 214 or MAE 206; ISE 311; MAE 208, MAE 301, MAE 302, MSE 200 or MSE 201.

⁵ECE 4** electives (Choose 2 courses): (Comp Arch Sys) ECE 463, ECE 464; (Embed Sys) ECE 461; (Network Sys) ECE 407, ECE 470; (Software Sys) ECE 466.

⁶ECE 4** electives (Choose 2): ECE 402, ECE 403, ECE 404, ECE 407, ECE 420, ECE 421, ECE 422, ECE 423, ECE 434, ECE 436, ECE 442, ECE 445, ECE 451, ECE 452, ECE 453, ECE 455, ECE 456, ECE 461, ECE 463, ECE 464, ECE 465, ECE 492 (Special Topics Classes). Students with major GPAs greater than 3.2 can also take ECE 5** courses.

***General Education Program (GEP) requirements and GEP Footnotes:**

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied. University approved GEP course lists for each of the following categories can be found at

<http://oucc.ncsu.edu/gep-courses>

Humanities (6 credit hours selected from two different disciplines/course prefixes)

Choose from the University approved GEP Humanities course list .

Social Sciences (6 credit hours selected from two different disciplines/course prefixes)

Choose 3 credits from the University approved GEP Social Sciences course list in a discipline other than Economics.

Economics 205 (or EC 201 or ARE 201), taken as part of the Major requirements, satisfies 3 credit hours needed to fulfill the GEP Social Sciences requirement.

Health and Exercise Studies (2 credit hours – must include one HESF 100-level course and one additional HES course)

Choose from the University approved GEP Health and Exercise Studies course list.

Additional Breadth - (3 credit hours to be selected from the following University approved GEP course lists)

Choose from the Humanities/Social Sciences/Visual and Performing Arts

Interdisciplinary Perspectives (5-6 credit hours)

Choose from the University approved GEP Interdisciplinary Perspectives course list.

The following **Co-Requisites** must be satisfied to complete the General Education Program requirements:

- I. U.S. Diversity** (USD)
Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite.
- J. Global Knowledge** (GK)
Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite.
- K. Foreign Language proficiency** - Proficiency at the FL_102 level is required for graduation.

Electrical Engineering [14EEBS Req Term Spring 13]						
Freshman Year						
Fall Semester			Credits	Spring Semester		Credits
CH	101	Chemistry, A Molecular Science ¹	3	ECE	109 Intro to Computer Systems ²	3
CH	102	General Chemistry Lab ¹	1	MA	241 Calculus II ¹	4
E	101	Introduction to Engr & Prob Solv ^{1,2}	1	PY	205 Physics for Engr & Sc I ¹	3
E	115	Intro to Computing Environ ^{1,2}	1	PY	206 Physics for Engr & Sc I Lab ¹	1
ENG	101	Academic Writing and Research ^{1,2}	4	***	*** Economics EC 201/205, ARE 201(GEP*)	3
MA	141	Calculus I ¹	4	HESF	10* Fitness & Wellness	1
***	***	GEP Requirement*	3			
Semester Total			17	Semester Total		15
Sophomore Year						
Fall Semester			Credits	Spring Semester		Credits
ECE	200	Intro. to ECE Laboratory ²	4	COM	110 Public Speaking	3
ECE	209	Computer Systems Programming ²	3	ECE	211 Electric Circuits ²	4
MA	242	Calculus III	4	ECE	212 Fund of Logic Des ²	3
PY	208	Physics for Engr & Sc II	3	ECE	220 Analytical Found. Of ECE ²	3
PY	209	Physics for Engr & Sc II Lab	1	***	*** GEP Requirement*	3
Semester Total			15	Semester Total		16
Junior Year						
Fall Semester			Credits	Spring Semester		Credits
ECE	301	Linear Systems	3	ECE	303 Electromagnetic Fields	3
ECE	302	Intro. to Microelectronics	4	ECE	380 Engr Profession for EE ⁴	1
ECE	3**	ECE Foundation Elective ³	3	ECE	3** ECE Foundation Elective ³	3
ST	371	Intro to Prob and Dist Theory	3	***	*** Open/Technical Elective ⁵	3
HES*	***	Health & Exercise Studies	1	ENG	331 Comm for Engr & Tech	3
				***	*** GEP Requirement*	3
Semester Total			14	Semester Total		16
Senior Year						
Fall Semester			Credits	Spring Semester		Credits
ECE	484	ECE Senior Design Project I	3	ECE	485 ECE Senior Design Project II	3
ECE	4**	EE Elective ⁶	3	ECE	4** ECE Elective ⁷	3
ECE	4**	EE Elective ⁶	3	ECE	4** ECE Elective ⁷	3
***	***	Open/Technical Elective ⁵	3	***	*** GEP Requirement*	3
***	***	GEP Requirement*	3	***	*** GEP Requirement*	2-3
Semester Total			15	Semester Total		14-15
Minimum Total Credit Hours Required for Graduation						122

Major/Program requirements and footnotes:
¹Courses required for Change of Degree Audit (CODA). CH 101, 102; MA 141, 241; PY 205, 206 must be completed with C or higher.
²Grade of C- or better required, E 115 requires satisfactory completion (S).
³ECE foundation electives: E 304; ECE 305; ECE 308; ECE 435 or either ECE 306 or ECE 310.
⁴Students in the entrepreneurs program should take ECE 383/ECE 482/ECE 483 instead of ECE 380/ECE 484/ECE 485.
⁵Open/Technical electives (Choose 2): any ECE 3** or ECE 4**; CE 214 or MAE 206; ISE 311; MAE 208, MAE 301, MAE 308; MSE 200 or MSE 201.
⁶EE 4** electives (Choose 2 courses from within any one of the following lists): (Comm. Sig Proc Sys) ECE 402, ECE 420; ECE 421; (Control Sys) ECE 436, ECE 455, ECE 456; (Circ, E&M Sys) ECE 403, ECE 422; (Nano Sys) ECE 404, ECE 442, ECE 445; (Power Sys) ECE 434, ECE 451, ECE 452, ECE 453, ECE 552.
⁷ECE 4** electives (Choose 2): ECE 402, ECE 403, ECE 404, ECE 407, ECE 420, ECE 421, ECE 422, ECE 423, ECE 434, ECE 436, ECE 442, ECE 445, ECE 451, ECE 452, ECE 453, ECE 455, ECE 456, ECE 461, ECE 463, ECE 464, ECE 465, ECE 492 (Special Topics Classes). Students with major GPAs greater than 3.2 can also take ECE 5** courses.
General Education Program (GEP) requirements and GEP Footnotes:
To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied. University approved GEP course lists for each of the following categories can be found at <http://oucc.ncsu.edu/gep-courses>
Humanities (6 credit hours selected from two different disciplines/course prefixes)
Choose from the *University approved GEP Humanities course list*.
Social Sciences (6 credit hours selected from two different disciplines/course prefixes)
Choose 3 credits from the *University approved GEP Social Sciences course list in a discipline other than Economics*.
Economics 205 (or EC 201 or ARE 201), taken as part of the Major requirements, satisfies 3 credit hours needed to fulfill the GEP Social Sciences requirement.
Health and Exercise Studies (2 credit hours – must include one HESF 100-level course and one additional HES course)
Choose from the *University approved GEP Health and Exercise Studies course list*.
Additional Breadth - (3 credit hours to be selected from the following University approved GEP course lists)
Choose from the *Humanities/Social Sciences/Visual and Performing Arts*
Interdisciplinary Perspectives (5-6 credit hours)
Choose from the *University approved GEP Interdisciplinary Perspectives course list*.
The following **Co-Requisites** must be satisfied to complete the General Education Program requirements:

- I. **U.S. Diversity** (USD)
Choose from the *University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite.*
- J. **Global Knowledge** (GK)
Choose from the *University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite.*
- K. **Foreign Language proficiency** - Proficiency at the FL_102 level

Industrial Engineering [14IEBS Req Term Spring 14]						
Freshman Year						
Fall Semester			Credits		Spring Semester	
					Credits	
CH	101	Chemistry, A Molecular Science ¹	3			
CH	102	General Chemistry Lab ¹	1	EC	205 Economics (or EC 201 or ARE 201*)	3
E	101	Introduction to Engr & Prob Solv ^{1,2}	1	MA	241 Calculus II ¹	4
E	115	Intro to Computing Environ ^{1,2}	1	PY	205 Physics for Engr & Sc I ¹	3
ENG	101	Academic Writing and Research ^{1,2}	4	PY	206 Physics for Engr & Sc I Lab ¹	1
MA	141	Calculus I ¹	4	HES	*** Health & Exercise Studies	1
HESF	10*	Fitness & Wellness	1	***	*** GEP Requirement*	3
Semester Total			15	Semester Total 15		
Sophomore Year						
Fall Semester			Credits		Spring Semester	
					Credits	
MSE	200	Mech Prop Struc Mat	3	ECE	331 Prin of Elect Engr	3
ISE	110	Comp Model for Engrs ³	3	ISE	215 Found of Design & 3D Model for Engr	1
MA	242	Calculus III	4	ISE	216 Mfg Engr Practicum	3
PY	208	Physics for Engr & Sc II	3	MA	303 Linear Analysis	3
PY	209	Physics for Engr & Sc II Lab	1	ST	372 Intro Stat Infer & Regres	3
ST	371	Intro Prob & Dist Theory ²	3	***	*** Engr Science Elect ⁴	3
Semester Total			17	Semester Total 16		
Junior Year						
Fall Semester			Credits		Spring Semester	
					Credits	
ENG	331	Tech Writing	3	ISE	352 Work Anal & Design	3
ISE	315	Intro to Computer-Aided Manufacturing	1	ISE	362 Stochastic Models in IE	3
ISE	316	Mfg Engr I - Processes	3	ISE	443 Quality Control	3
ISE	361	Deter Models in IE	3	***	*** Technical Elect ⁶	3
ISE	441	Intro to Simulation	3	CE	214 Engr Mech - Statics	3
***	***	Ethics (GEP Req*) ⁵	3			
Semester Total			16	Semester Total 15		
Senior Year						
Fall Semester			Credits		Spring Semester	
					Credits	
ISE	311	Engr Economic Analysis	3	ISE	498 Sr Design Proj	3
ISE	408	Cont of Prod & Ser Sys	3	***	*** Technical Elect ⁶	3
ISE	453	Design of Prod, Logistics & Serv Syst	3	***	*** GEP Requirement*	3
***	***	Technical Elect ⁶	3	***	*** GEP Requirement*	3
***	***	GEP Requirement*	3	***	*** GEP Requirement*	2-3
Semester Total			15	Semester Total 14-15		

Major/Program requirements and footnotes:
¹Courses required for Change of Degree Audit (CODA). CH 101, 102; MA 141, 241; PY 205, 206 must be completed with C or higher.
²Grade of C- or better required, E 115 requires satisfactory completion (S).
³ISE 110 must be completed with a grade of C or higher.
⁴Engineering science electives: CE 313, MAE 208, MAE 301, MAE 308, or MAE 314
⁵Ethics elective: IDS 201, IDS(NR) 303, STS 214, STS 302, STS 304, STS 322, or STS(PHI) 325
⁶Technical elective: ISE 416, 417, 452, 462, 495; MSE 445, 465, 485; ST 430, 431
.
***General Education Program (GEP) requirements and GEP Footnotes:**
To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied. University approved GEP course lists for each of the following categories can be found at <http://oucc.ncsu.edu/gep-courses>
Humanities (6 credit hours selected from two different disciplines/course prefixes)
Choose from the *University approved GEP Humanities course list* .
¹Courses required for Change of Degree Audit (CODA). CH 101, 102; MA 141, 241; PY 205 must be completed with C or higher.
²Grade of C- or better required, E 115 requires satisfactory completion (S).
Social Sciences (6 credit hours selected from two different disciplines/course prefixes)
Choose 3 credits from the *University approved GEP Social Sciences course list in a discipline other than Economics*.
Economics 205 (or EC 201 or ARE 201), taken as part of the Major requirements, satisfies 3 credit hours needed to fulfill the GEP Social Sciences requirement.
Health and Exercise Studies (2 credit hours – must include one HESF 100-level course and one additional HES course)
Choose from the *University approved GEP Health and Exercise Studies course list*.
Additional Breadth - (3 credit hours to be selected from the following University approved GEP course lists)
Choose from the *Humanities/Social Sciences/Visual and Performing Arts*
Interdisciplinary Perspectives (5-6 credit hours)
Choose from the *University approved GEP Interdisciplinary Perspectives course list*.
The following **Co-Requisites** must be satisfied to complete the General Education Program requirements:

- I. **U.S. Diversity** (USD)
Choose from the *University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite.*
- J. **Global Knowledge** (GK)
Choose from the *University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite.*
- K. **Foreign Language proficiency** - Proficiency at the FL_102 level is required for graduation.

Materials Science & Engineering [14MSEBS Req Term Spring 15]

Freshman Year							
Fall Semester				Spring Semester			
			Credits				Credits
CH	101	Chemistry, A Molecular Science ¹	3	CH	201	Chemistry, A Quant Science	3
CH	102	General Chemistry Lab ¹	1	CH	202	Quantitative Chemistry Lab	1
E	101	Introduction to Engr & Prob Solv ^{1,2}	1	MA	241	Calculus II ¹	4
E	115	Intro to Computing Environ ^{1,2}	1	PY	205	Physics for Engr & Sc I ¹	3
ENG	101	Academic Writing and Research ^{1,2}	4	PY	206	Physics for Engr & Sc I Lab ¹	1
MA	141	Calculus I ¹	4	HESF	10*	Fitness & Wellness Course*	1
EC	205	Economics (or EC 201 or ARE 201)*	3	***	***	GEP Requirement*	3
Semester Total			17	Semester Total			16

Sophomore Year									
Fall Semester				Credits		Spring Semester		Credits	
MSE	201	Struct & Prop Engr Materials ²		3	CH	220	Intro to Organic Chemistry		4
MA	242	Calculus III		4	MA	341	Applied Diff Equations I		3
ST	370	Prob & Statistics for Engineers		3	MSE	255	Exp Meth Struct Analysis of Matls		2
PY	208	Physics for Engr & Sc II		3	MSE	260	Math Methods for Material Engineers		3
PY	209	Physics for Engr & Sc II Lab		1	MSE	270	MSE Seminar		1
HES*	***	Health & Exercise Studies		1	***	***	GEP Requirement*		3
Semester Total				15	Semester Total				16

				Junior Year					
Fall Semester				Credits	Spring Semester			Credits	
MSE	300	Structure of Matls at Nanoscale		3	MSE	355	Elect, Mag & Opt Prop of Matls	3	
MSE	301	Intro Thermodynamics of Matls		3	MSE	360	Kinetic Process in Matls	3	
MSE	320	Intro Defects in Solids		3	MSE	370	Microstructure of Inorganic Matls	3	
MSE	335	Exp Meth Analysis of Matls Properties		2	MSE	380	Microstructure of Organic Matls	3	
***	***	Tech Elect ^{3,4,5}		3	***	***	Engineering Elective ^{3,5}	3	
***	***	GEP Requirement*		3					
Semester Total				17	Semester Total				15

				Senior Year					
Fall Semester				Credits	Spring Semester			Credits	
MSE	420	Mechanical Prop of Matls		3	MSE	470	Matl Sci & Engr Design Project		3
MSE	423	Intro to Matls Engr Design		1	MSE	480	Materials Forensics and Degradation		3
MSE	***	MSE Processing Elective ⁵		3	MSE	***	Tech Elect ^{3,4,5}		3
MSE	***	Tech Elect ^{3,4,5}		3	***	***	GEP Requirement*		3
ENG	331	Technical Writing (or ENG 333)		3	***	***	Ethics Elective (GEP Requirement*) ⁶		2-3
***	***	GEP Requirement*		3					
Semester Total				16	Semester Total				14-15
Major/Program requirements and footnotes:					Minimum Total Credit Hours Required for Graduation				126

Major/Program requirements and footnotes:

¹Courses required for Change of Degree Audit (CODA). CH 101, 102; MA 141, 241; PY 205, 206 must be completed with C or higher.

²Minimum grade of C-, E 115 requires satisfactory completion (S).

³Choose any course from the following list: CE 214 or MAE 206, CE 215 or MAE 208, CE 313 or MAE 314, CSC 200, ECE 331, ISE 311, MSE 350, MSE(NE) 409, NE 202, TE 205, CHE 455, MSE 440, MSE 445, MSE 455, MSE 456, MSE 460

⁴Choose any course from the following list: BCH 451,CH 221, CH 223, CH 315,CH 401, CH 437, MA 305, MA 351, MA 401, MA 402, MA 405, MEA 463, PY 328, PY 407, PY 411, PY 412, PY 414, PY 415, PY 463, ST 370, CE 214or MAE 206, CE 215 or MAE 208, CE 313 or MAE 314, CSC 200, ECE 331, ISE 311, MSE 350, MSE(NE) 409, NE 202, TE 205, CHE 455, MSE 440, MSE 445, MSE 455, MSE 456, MSE 460

⁵Choose any course from the following list: CHE 455, MSE 440, 445, 455, 456, 460.

⁶Ethics course must be chosen from the following list: IDS 201; STS 302, 304, 325 (PHI 325); PHI 214, 221 or 375.

*General Education Program (GEP) requirements and GEP Footnotes:

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied. University approved GEP course lists for each of the following categories can be found at <http://oucc.ncsu.edu/gep-courses>.

Humanities (6 credit hours selected from two different disciplines/course prefixes)

Choose from the University approved GEP Humanities course list .

Social Sciences (6 credit hours selected from two different disciplines/course prefixes)

Choose 3 credits from the University approved GEP Social Sciences course list in a discipline other than Economics. Economics 205 (or EC 201 or ARE 201), taken as part of the Major requirements, satisfies 3 credit hours needed to fulfill the GEP Social Sciences requirement.

Health and Exercise Studies (2 credit hours – must include one HESF 100-level course and one additional HES course)

Choose from the University approved GEP Health and Exercise Studies course list.

Additional Breadth - (3 credit hours to be selected from the following University approved GEP course lists)

Choose from the Humanities/Social Sciences/Visual and Performing Arts

Interdisciplinary Perspectives (5-6 credit hours)

Choose from the University approved GEP Interdisciplinary Perspectives course list.

The following **Co-Requisites** must be satisfied to complete the General Education Program requirements:

- U.S. Diversity** (USD)
Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite.
- Global Knowledge** (GK)
Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite.
- Foreign Language proficiency** - Proficiency at the FL_102 level is required for graduation.

Aerospace Engineering [14AEBS Req Term Sum 2 13]

Freshman Year								
Fall Semester				Spring Semester				
			Credits				Credits	
CH	101	Chemistry, A Molecular Science ¹	3	CSC	113	Intro Comp MATLAB (or CSC 112)	3	
CH	102	General Chemistry Lab ¹	1	GC	120	Foundations of Graphics	3	
E	101	Introduction to Engr & Prob Solv ^{1,2}	1	MA	241	Calculus II ¹	4	
E	115	Intro to Computing Environ ^{1,2}	1	PY	205	Physics for Engr & Sc I ¹	3	
ENG	101	Academic Writing and Research ^{1,2}	4	PY	206	Physics for Engr & Sc I ¹ Lab	1	
MA	141	Calculus I ¹	4	HES	***	Health & Exercise Studies	1	
EC	205	Economics (or EC 201 or ARE 201)*	3					
HESF	10*	Fitness & Wellness	1					
Semester Total			18	Semester Total			15	

Sophomore Year								
Fall Semester				Spring Semester				
		Credits				Credits		
MA	242	Calculus III	4	MA	341	Applied Differential Eq	3	
MAE	206	Engineering Statics ^{2,3}	3	MAE	208	Engineering Dynamics ^{2,3}	3	
MAE	250	Introduction to Aerospace Engineering	1	MAE	314	Solid Mechanics ^{2,3}	3	
MAE	251	Aero Vehicle Perf	3	MAE	252	Aerodynamics I	3	
PY	208	Physics for Engr & Sc II	3	MAE	253	Experimental Aerodynamics I	1	
PY	209	Physics for Engr & Sc II Lab	1	***	***	GEP Requirement*	3	
***	***	GEP Requirement*	3	Semester Total				16
			Semester Total					18

Junior Year										
Fall Semester					Spring Semester					
Credits					Credits					
MAE	301	Engr Thermodynamics I ²			3	MAE	351	Aerodynamics II		3
MAE	361	Dynamics & Controls			3	MAE	352	Experimental Aerodynamics II		1
MAE	371	Aero Struc I			3	MSE	201	Struc Prop of Engr Materials (or ECE 331)		3
MAE	372	Aero Vehicle Struc Lab			1	***	***	GEP Requirement*		3
		English Elective ⁴			3	MAE	***	Technical Elective ⁶		3
***	***	Ethics (GEP Requirement*) ⁵			3	MAE	***	Technical Elective ⁶		3
Semester Total 16						Semester Total 16				

Senior Year							
Fall Semester				Spring Semester			
			Credits				Credits
MAE	405	Controls Lab	1	MAE	481	Aero Vehicle Design II	3
MAE	435	Princ of Automatic Controls	3	***	***	GEP Requirement*	2-3
MAE	451	Experimental Aerodynamics III	1	***	***	GEP Requirement*	3
MAE	480	Aero Vehicle Design I	3	MAE	***	Technical Elective ⁶	3
MAE	***	Technical Elective ⁶	3	MAE	***	Technical Elective ⁶	3
MAE	***	Technical Elective ⁶	3				
Semester Total			14	Semester Total			14-15
				Minimum Total Credit Hours Required for Graduation			127

Major/Program requirements and footnotes:

¹Courses required for Change of Degree Audit (CODA): CH 101, 102; MA 141, 241; PY 205, 206 must be completed with C or higher.

²Minimum grade of C-, E 115 requires satisfactory completion (S).

³Students must have a 2.5 GPA to enroll in this course.

⁴ENG 331 Comm Engr & Technology or other approved course.

⁵Select from STS 302, STS 304, PHI 214 or PHI 375.

⁶**Flight/Space** (3 credit hours) Select either MAE 457 Flight Stability & Control or MAE 453 Intro to Space Flight; **Structures** (3 credit hours) Select either MAE 472 Aero Structures II or MAE 432 Applied Finite Element; **Propulsion** (3 credit hours) Select either MAE 458 Propulsion or MAE 459 Rocket Propulsion; **Open** (9 credit hours) Select from approved lists.

*General Education Program (GEP) requirements and GEP Footnotes:

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied.

University approved GEP course lists for each of the following categories can be found at <http://oucc.ncsu.edu/gep-courses>.

Humanities (6 credit hours selected from two different disciplines/course prefixes)

Choose from the University approved GEP Humanities course list .

Social Sciences (6 credit hours selected from two different disciplines/course prefixes)

Choose 3 credits from the University approved GEP Social Sciences course list in a discipline other than Economics. Economics 205 (or EC 201 or ARE 201), taken as part of the Major requirements, satisfies 3 credit hours needed to fulfill the GEP Social Sciences requirement.

Health and Exercise Studies (2 credit hours – must include one HESF 100-level course and one additional HES course)

Choose from the University approved GEP Health and Exercise Studies course list.

Additional Breadth - (3 credit hours to be selected from the following University approved GEP course lists)

Choose from the Humanities/Social Sciences/Visual and Performing Arts

Interdisciplinary Perspectives (5-6 credit hours)

Choose from the University approved GEP Interdisciplinary Perspectives course list.

The following **Co-Requisites** must be satisfied to complete the General Education Program requirements:

- U.S. Diversity** (USD)
Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite.
- Global Knowledge** (GK)
Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite.
- Foreign Language proficiency** - Proficiency at the FL_102 level is required for graduation.

Mechanical Engineering [14MEBS Req Term Summer 2 2015]

				Freshman Year			
Fall Semester			Credits	Spring Semester			Credits
CH	101	Chemistry, A Molecular Science ¹	3	CSC	113	Intro Comp MATLAB	3
CH	102	General Chemistry Lab ¹	1	MA	241	Calculus II ¹	4
E	101	Introduction to Engr & Prob Solv ^{1,2}	1	PY	205	Physics for Engr & Sc I ¹	3
E	115	Intro to Computing Environ ^{1,2}	1	PY	206	Physics for Engr & Sc I ¹ Lab	1
ENG	101	Academic Writing and Research ^{1,2}	4	GC	120	Foundations of Graphics	3
MA	141	Calculus I ¹	4	HESF	10*	Fitness & Wellness Course*	1
EC	205	Economics (or EC 201 or ARE 201)*	3				
HES	***	Health & Exercise Studies	1				

Semester Total 18

Semester Total 15

Sophomore Year							
Fall Semester			Credits	Spring Semester			Credits
MA	242	Calculus III	4	MA	341	Appl Differential Eq	3
MAE	200	Introduction to ME Design	1	MAE	201	Engr Thermodynamics I ²	3
MAE	206	Engineering Statics ^{2,3}	3	MAE	205	ME Lab I	1
PY	208	Physics for Engr & Sc II	3	MAE	208	Engineering Dynamics ^{2,3}	3
PY	209	Physics for Engr & Sc II ¹ Lab	1	MAE	214	Solid Mechanics ^{2,3}	3
ST	370	Prob & Stat for Engineers (or ST 371)	3	***	***	GEP Requirement*	3
***	***	GEP Requirement*	3				

Semester Total 18

Semester Total 16

				Junior Year				
Fall Semester				Credits	Spring Semester			Credits
ENG	331	Comm Engr & Tech		3	ECE	331	Principles of Elec. Engr. I	3
MAE	302	Engr Thermodynamics II		3	MAE	310	Heat Transfer Fundamentals	3
MAE	306	ME Lab II		1	MAE	316	Strength of Mech Comp	3
MAE	308	Fluid Mechanics		3	MSE	200	Mech. Prop. Engr. Materials	3
MAE	315	Dynamics of Machines		3	**E	***	Tech Elective ⁴	3
***	***	GEP Requirement*		3	***	***	GEP Requirement* (Inter Persp)	2-3

Semester Total 16

Semester Total 16-17

			Senior Year				
Fall Semester			Credits		Spring Semester		Credits
MAE	405	Controls Lab	1	**E	***	Tech Elective ⁴	3
MAE	435	Prin of Auto Control	3	MAE	416	ME Senior Design	4
MAE	4**	Mech Engr Design Elective ⁵	3	***	***	GEP Requirement*	3
E	*	Tech Elective ⁴	3	***	***	Ethics (GEP Req*) ⁶	3
ISE	311	Engr Econ Analysis	3				

Semester Total 13

Semester Total 13

Minimum Total Credit Hours Required for Graduation 126

Major/Program requirements and footnotes:

¹Courses required for Change of Degree Audit (CODA). CH 101, 102; MA 141, 241; PY 205, 206 must be completed with C or higher.

²Minimum grade of C-, E 115 requires satisfactory completion (S).

³Students must have a 2.5 GPA to enroll in this course

⁴Technical electives must be selected from the following list (when offered): MAE 320, MAE 403, MAE 406, MAE407, MAE 408, MAE 410, MAE 42 MAE 426, MAE 430, MAE 442, MAE 472, MAE 495, MAE 496 (with permission of the instructor, limited to 3 credit hours), MAE 5** (with permission of the instructor, 3.5 GPA), up to 3 hours outside of MAE with permission of MAE advisor.

⁵Choose one: MAE 412, 415, 485

⁶Select from IDS 201, STS 302, STS 304, STS(PHI) 325, PHI 214 or PHI 375.

*General Education Program (GEP) requirements and GEP Footnotes:

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied.

University approved GEP course lists for each of the following categories can be found at

http://oucc.ncsu.edu/gep-courses.

Humanities (6 credit hours selected from two different disciplines/course prefixes)

Choose from the University approved GEP Humanities course list .

Social Sciences (6 credit hours selected from two different disciplines/course prefixes)

Choose 3 credits from the University approved GEP Social Sciences course list in a discipline other than Economics.

Economics 205 (or EC 201 or ARE 201), taken as part of the Major requirements, satisfies 3 credit hours needed to fulfill the GEP Social Sciences requirement.

Health and Exercise Studies (2 credit hours – must include one HESF 100-level course and one additional HES course)

Choose from the University approved GEP Health and Exercise Studies course list.

Additional Breadth - (3 credit hours to be selected from the following University approved GEP course lists)

Choose from the Humanities/Social Sciences/Visual and Performing Arts

Interdisciplinary Perspectives (5-6 credit hours)

Choose from the University approved GEP Interdisciplinary Perspectives course list.

The following **Co-Requisites** must be satisfied to complete the General Education Program requirements:

I. **U.S. Diversity** (USD)

Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite.

J. **Global Knowledge** (GK)

Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite.

K. **Foreign Language proficiency** - Proficiency at the FL_102 level is required for graduation.

Nuclear Engineering [14NEBS Req Term Spring 13]

Freshman Year									
Fall Semester				Credits		Spring Semester		Credits	
CH	101	Chemistry, A Molecular Science ¹	3	CSC	112	Intro to Computing - FORTRAN			3
CH	102	General Chemistry Lab ¹	1	MA	241	Calculus II ¹			4
E	101	Introduction to Engr & Prob Solv ^{1,2}	1	PY	205	Physics for Engr & Sc I ¹			3
E	115	Intro to Computing Environ ^{1,2}	1	PY	206	Physics for Engr & Sc I Lab ¹			1
ENG	101	Academic Writing and Research ^{1,2}	4	EC	205	Economics (or EC 201 or ARE201)*			3
MA	141	Calculus I ¹	4	***	***	GEP Requirement*			3
HESF	10*	Fitness & Wellness Course*	1						
Semester Total			15	Semester Total			17		

Semester Total 15

Semester Total 17

Sophomore Year								
Fall Semester				Credits		Spring Semester		Credits
MAE	206	Engineering Statics		3	MAE	208	Engineering Dynamics	3
MA	242	Calculus III		4	MA	341	Appl Differential Eq	3
NE	201	Intro to Nuclear Engr		2	NE	202	Rad. Sources, Interact & Detect ²	4
PY	208	Physics for Engr & Sc II		3	***	***	GEP Requirement*	3
PY	209	Physics for Engr & Sc II Lab		1	***	***	GEP Requirement*	3
***	***	Advanced Communication Elect ³		3				

Semester Total 16

Semester Total 16

				Junior Year				
Fall Semester				Credits		Spring Semester		Credits
MAE	301	Engr Thermo I		3	MAE	308	Fluid Mechanics	3
MA	401	Appl Diff Equations II		3	MSE	201	Struct Prop of Engr Mat	3
NE	301	Fund of Nuclear Engr ²		4	NE	400	Nuclear React Ener Conver	4
ISE	311	Engr Ec Analysis		3	NE	401	React Analysis & Des	4
***	***	GEP Requirement*		3	HES*	***	Health & Exercise Studies	1

Semester Total 16

Semester Total 15

Senior Year							
Fall Semester			Credits	Spring Semester		Credits	
NE	402	Reactor Engr	4	NE	405	Reactor Systems	3
NE	404	Rad Safety & Shielding	3	NE	408	Nucl Engr Des Proj	3
NE	406	Nuclear Engr Senior Design Prep	1	***	***	Engr Tech Elective ⁶	3
NE	***	NE Elective ⁴	3	***	***	GEP Requirement*	3
***	***	Tech Elective ⁵	3	***	***	GEP Requirement*	2-3

Semester Total 14

Semester Total 14-15

Minimum Total Credit Hours Required for Graduation 123

Major/Program requirements and footnotes:

¹Courses required for Change of Degree Audit (CODA). CH 101, 102; MA 141, 241; PY 205, 206 must be completed with C or higher.

²Grade of C- or better required, E 115 requires satisfactory completion (S).

³Advanced Communication Elective: COM 110, COM 112, COM 211, ENG 288, ENG 289, ENG 316, ENG 331, ENG 332, ENG 333, FLA 201, FLA 202, FLF 201, FLF 202, FLJ 201, FLJ 202, FLJ 203, FLJ 204, FLR 201, FLR 202, FLS 201, FLS 202, GRK 201, GRK 202, LAT 201, LAT 202. If any of the listed courses are taken to satisfy this requirement, must take another course for any of the GEP requirements.

⁴Nuclear Engineering Electives: NE 409, NE 412, NE 418, NE 509, NE 512, NE 528.

⁵Technical Electives: BUS 370, 420; CSC 302; CH 315, 331; ECE 331, 421; MA 405, 427; MAE 301, 310, 316, 410, 421; MSE 301; PY 341, 411, 414, 415, 525, 528; ST 361, 371.

⁶Engineering Technical Electives: Any course from (2) or any College of Engineering course at the 300-level or above.

*General Education Program (GEP) requirements and GEP Footnotes:

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied.

University approved GEP course lists for each of the following categories can be found at

http://oucc.ncsu.edu/gep-courses.

Humanities (6 credit hours selected from two different disciplines/course prefixes)

Choose from the University approved GEP Humanities course list .

Social Sciences (6 credit hours selected from two different disciplines/course prefixes)

Choose 3 credits from the University approved GEP Social Sciences course list in a discipline other than Economics.

Economics 205 (or EC 201 or ARE 201), taken as part of the Major requirements, satisfies 3 credit hours needed to fulfill the GEP Social Sciences requirement.

Health and Exercise Studies (2 credit hours – must include one HESF 100-level course and one additional HES course)

Choose from the University approved GEP Health and Exercise Studies course list.

Additional Breadth - (3 credit hours to be selected from the following University approved GEP course lists)

Choose from the Humanities/Social Sciences/Visual and Performing Arts

Interdisciplinary Perspectives (5-6 credit hours)

Choose from the University approved GEP Interdisciplinary Perspectives course list.

The following **Co-Requisites** must be satisfied to complete the General Education Program requirements:

I. **U.S. Diversity** (USD)

Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite.

J. **Global Knowledge** (GK)

Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite.

K. **Foreign Language proficiency** - Proficiency at the FL_102 level is required for graduation.

Paper Science & Engineering [15PSEBS Req Term Spring 013]

Freshman Year							
Fall Semester		Credits	Spring Semester		Credits		
CH	101 Chemistry, A Molecular Science ¹	3	CH	201 Chemistry, A Quant Science ²	3		
CH	102 General Chemistry Lab ¹	1	CH	202 Quantitative Chemistry Lab ²	1		
E	101 Introduction to Engr & Prob Solv ^{1,2}	1	EC	205 Economics (or EC 201 or ARE 201)*	3		
E	115 Intro to Computing Environ ^{1,2}	1	MA	241 Calculus II ¹	4		
ENG	101 Academic Writing and Research ^{1,2}	4	PY	205 Physics Engr & Scientists I ¹	3		
MA	141 Calculus I ¹	4	PY	206 Physics for Engr & Sc I Lab ¹	1		
HESF	10* Fitness & Wellness Course*	1	PSE	201 Pulping & Papermaking Technology ²	3		
Semester Total		15	Semester Total		18		

Sophomore Year							
Fall Semester		Credits	Spring Semester		Credits		
CH	221 Organic Chemistry I	3	CH	223 Organic Chemistry II	3		
CH	222 Organic Chemistry I Lab	1	CH	224 Organic Chemistry II Lab	1		
CHE	205 Chemical Proc Prin	4	PY	208 Physics Engr & Scientists II	3		
MA	242 Calculus III	4	PY	209 Physics for Engr & Sc II Lab	1		
PSE	212 Paper Properties ²	4	PSE	371 Pulping Process Analysis ²	3		
			***	*** Advised Electives ³	3		
			HES*	*** Health & Exercise Studies	1		
Semester Total		16	Semester Total		15		

Junior Year							
Fall Semester		Credits	Spring Semester		Credits		
MAE	301 Engineering Thermodynamics I	3	PSE	332 Wood & Pulping Chemistry	3		
***	*** Engineering Elective ⁴	3	PSE	360 Pulp & Paper Unit Proc. II	3		
PSE	211 Pulp & Paper Internship ⁵	1	***	*** Advised Electives ³	3		
PSE	322 Wet End/Polymer Chemistry	4	***	*** GEP Requirement*	3		
PSE	355 Pulp & Paper Unit Proc. I ²	3	***	*** GEP Requirement*	3		
***	*** GEP Requirement*	3					
Semester Total		17	Semester Total		15		

Senior Year							
Fall Semester		Credits	Spring Semester		Credits		
PSE	415 Senior Research Projects	3	PSE	416 Project Design & Analysis	3		
PSE	417 Process Design & Analy. Lab	3	PSE	465 Paper Physics & Product Design	3		
PSE	425 Bioenergy & Biomaterials Engineering	3	PSE	472 Paper Process Analysis	3		
PSE	475 Process Control	3	***	*** Advised Electives ³	3		
***	*** GEP Requirement*	3	***	*** GEP IP Requirement*	2-3		
			***	*** GEP IP Requirement*	3		
Semester Total		15	Semester Total		17-18		

Minimum Total Credit Hours Required for Graduation 128

Textile Engineering [18TEBS Sub Plan TEPE Req Term Spring 13]

Freshman Year							
Fall Semester		Credits	Spring Semester		Credits		
CH	101 Chemistry, A Molecular Science ¹	3	TE	105 TE: Materials & Systems ¹	2		
CH	102 General Chemistry Lab ¹	1	TE	110 Comp Model Engr ²	3		
E	101 Introduction to Engr & Prob Solv ^{1,2}	1	MA	241 Calculus II ¹	4		
E	115 Intro to Computing Environ ^{1,2}	1	PY	205 Physics for Engr & Sc I ¹	3		
ENG	101 Academic Writing and Research ^{1,2}	4	PY	206 Physics for Engr & Sc I Lab ¹	1		
MA	141 Calculus I ¹	4	***	*** GEP Requirement*	3		
T	101 Intro to College of Textiles	2	HESF	1** Fitness & Wellness Course*	1		
Semester Total		16	Semester Total		17		

Sophomore Year							
Fall Semester		Credits	Spring Semester		Credits		
MA	242 Calculus III	4	MA	341 Appl Differential Eq	3		
MAE	206 Engr Statics or		MSE	201 Struct & Prop of Engr Mat'ls	3		
CE	214 Engr Statics ²	3	TE	201 Textile Engr. Sci.	4		
PY	208 Physics for Engr & Sc II	3	TE	205 Analog & Digital Circuits	4		
PY	209 Physics for Engr & Sc II Lab	1	EC	205 Economics* or			
TE	200 Polymer Sci & Engr	3	EC	201 Economics* or			
GC	120 Found of Graphics	3	ARE	201 Economics*	3		
Semester Total		17	Semester Total		17		

Junior Year							
Fall Semester		Credits	Spring Semester		Credits		
TE	301 Engr Textile Structures I	3	TE	302 Textile Mfg Proc II	4		
TE	303 Thermodynamics for TE	3	TE	404 Six Sigma Quality	3		
MAE	314 Solid Mechanics or		TE	424 Tex Engr Qual Impr Lab	1		
CE	313 Mech of Solids	3	PCC	301 Tech of Dyeing & Finish	4		
***	*** GEP Requirement*	3	***	*** GEP Requirement*	3		
ST	370 Prob & Stat for Engr	3	HES	*** Health & Exercise Studies	1		
Semester Total		15	Semester Total		16		

Senior Year							
Fall Semester		Credits	Spring Semester		Credits		
TE	401 Textile Engr Des I	4	TE	402 Textile Engr Des II	4		
TE	463 Polymer Engineering	3	***	*** Concentration Elective ³	3		
***	*** Concentration Elective ³	3	***	*** Concentration Elective ³	3		
***	*** GEP Requirement*	3	***	*** GEP IP Requirement*	2-3		
***	*** GEP Requirement*	3					
Semester Total		16	Semester Total		12-13		

Minimum Total Credit Hours Required for Graduation 126

Major/Program requirements and footnotes:

¹Courses required for Change of Degree Audit (CODA). CH 101, 102; MA 141, 241; PY 205, 206 must be completed with C or higher.

²Grade of C- or better required, E 115 requires satisfactory completion (S).

³Advised Electives: ACC 200, ACC 210, ACC 310, ACC 311, ACC 340, ACC 411, ARE 301, ARE 336, BAE 425, BBS 425, BCH 451, BUS 305, BUS 320, CH 315,CH 331, CH 401, CH 431,CH 437, CHE 225, CHE 311,CHE 312, CHE 315, CHE 316, EC 301, EC 302,EC 310,EC 336, ET 310, ET 410, ISE 311, MA 225, MA 303, MA 305, MA 325, MA 351, MA 401, MA 402, MA 403, MA 407, MA 408, MA 410,MA 421,MA 425, MA 426, MA 430, MIE 201, MIE 305, MIE 330,MIE 335, MSE 201,ST 311,ST 361, ST 370, ST 371, ST 431,ST 435

⁴Engineering Elective: AES 411, CE 214 or MAE 206, CHE 225, ECE 331, MSE 201, TE 200.

⁵There is one required internship in industry. PSE 211 should be taken the first semester upon returning from the internship.

*General Education Program (GEP) requirements and GEP Footnotes:

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied.

University approved GEP course lists for each of the following categories can be found at

http://oucc.ncsu.edu/gep-courses.

Humanities (6 credit hours selected from two different disciplines/course prefixes)

Choose from the University approved GEP Humanities course list .

Social Sciences (6 credit hours selected from two different disciplines/course prefixes)

Choose 3 credits from the University approved GEP Social Sciences course list in a discipline other than Economics.

Economics 205 (or EC 201 or ARE 201), taken as part of the Major requirements, satisfies 3 credit hours needed to fulfill the GEP Social Sciences requirement.

Health and Exercise Studies (2 credit hours – must include one HESF 100-level course and one additional HES course)

Choose from the University approved GEP Health and Exercise Studies course list.

Additional Breadth - (3 credit hours to be selected from the following University approved GEP course lists)

Choose from the Humanities/Social Sciences/Visual and Performing Arts

Interdisciplinary Perspectives (5-6 credit hours)

Choose from the University approved GEP Interdisciplinary Perspectives course list.

The following **Co-Requisites** must be satisfied to complete the General Education Program requirements:

I. **U.S. Diversity** (USD)

Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite.

J. **Global Knowledge** (GK)

Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite.

K. **Foreign Language proficiency** - Proficiency at the FL_102 level is required for graduation.

Major/Program requirements and footnotes:

¹Courses required for Change of Degree Audit (CODA). CH 101, 102; MA 141, 241; PY 205, 206 must be completed with C or higher.

²Grade of C- or better required, E 115 requires satisfactory completion (S).

³Three Concentration Electives should be chosen from one of the following:

Machine Design: MAE 208, TE/CHE 435, and one other elective with an MAE or TE prefix (selected with the approval of advisor). In addition, student in this concentration should take MAE 301 instead of TE 303, and MAE 206 for Statics.

Medical Textiles: TE(BME) 466, TE(BME) 467, TE(TMS) 565, TE(BME) 566. In addition, students in this concentration should have one year of biology or BIO 183 and take MSE(BME) 203 instead of MSE 201.

Materials Science and Engineering: MSE 350 & 450, and one other elective with an MSE or TE prefix (selected with the approval of advisor). In addition, students in this concentration may take MSE 301 instead of TE 303.

*General Education Program (GEP) requirements and GEP Footnotes:

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied.

University approved GEP course lists for each of the following categories can be found at

http://oucc.ncsu.edu/gep-courses.

Humanities (6 credit hours selected from two different disciplines/course prefixes)

Choose from the University approved GEP Humanities course list .

Social Sciences (6 credit hours selected from two different disciplines/course prefixes)

Choose 3 credits from the University approved GEP Social Sciences course list in a discipline other than Economics.

Economics 205 (or EC 201 or ARE 201), taken as part of the Major requirements, satisfies 3 credit hours needed to fulfill the GEP Social Sciences requirement.

Health and Exercise Studies (2 credit hours – must include one HESF 100-level course and one additional HES course)

Choose from the University approved GEP Health and Exercise Studies course list.

Additional Breadth - (3 credit hours to be selected from the following University approved GEP course lists)

Choose from the Humanities/Social Sciences/Visual and Performing Arts

Interdisciplinary Perspectives (5-6 credit hours)

Choose from the University approved GEP Interdisciplinary Perspectives course list.

The following **Co-Requisites** must be satisfied to complete the General Education Program requirements:

I. **U.S. Diversity** (USD)

Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite.

J. **Global Knowledge** (GK)

Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite.

K. **Foreign Language proficiency** - Proficiency at the FL_102 level is required for graduation.



General Education Program (GEP) Requirements in the *Humanities, Social Sciences, Visual & Performing Arts, and Interdisciplinary Perspectives*

A total of **seven courses (21 credit hours)** from the appropriate GEP category list is required. These courses may be taken in any order. All of the courses must be completed for a letter grade; none of the seven courses may be taken as pass / fail or credit only grading.

Some courses will have a USD or GK indicator. The USD or GK code identifies a course that will not only fulfill the specific GEP category in which it is listed but will also satisfy either the U.S. Diversity (USD) or Global Knowledge (GK) GEP co-requisites. Courses which will satisfy *only the co-requisite* are indicated as *co-req* only.

The General Education Program (GEP) for undergraduates at N.C. State took effect Summer II, 2009. The GEP applies to students who entered NC State Summer II, 2009 and later. Students entering prior to Summer II 2009 must satisfy the general education requirements (GEP or GER) as specified by their degree plan.

Students should consider the **GEP web site the authoritative source for approved courses and requirements. This document is provided merely as a planning tool. See <http://oucc.ncsu.edu/gep-regs>**

<div>Humanities</div> <div>http://oucc.ncsu.edu/gep-humanities</div> <div>Select two courses from different disciplines.</div> <div></div> <div><div>Special Major Requirements:</div><div>ME & AE majors may select PHI 214, PHI(STS)325, or PHI 375 to fulfill Ethics requirement OR see Interdisciplinary Perspectives requirements</div><div>MSE majors may select PHI 214, PHI 221, PHI(STS)325 or PHI 375 to fulfill Ethics requirement OR see Interdisciplinary Perspectives requirements</div></div>	
<div>Social Sciences</div> <div>http://oucc.ncsu.edu/gep-soc-sciences</div> <div>Select an Introductory Economics course (EC 205/EC 201/ARE 201).</div> <div></div> <div>Select one course from Social Sciences other than Economics.</div> <div><div>Special Major Requirements:</div><div>CEM majors select SOC 205, SOC 301, SOC 305/AFS 305 (USD), SOC 310, PS 202, PS 310, PS 312, PS 314, PS 320, LPS 315</div><div>ENE majors select PS 336 (GK) or PS 320.</div></div>	
<div>Interdisciplinary Perspectives</div> <div>http://oucc.ncsu.edu/gep-ip-course</div> <div>Select two courses.</div> <div></div> <div><div>Special Major Requirements</div><div>BE majors select IDS 201 (GK) or STS 302(GK), STS 304</div><div>IE majors select IDS 201 (GK), IDS(NR) 303 or STS 214, STS 302(GK), STS 304, STS 322, STS(PHI) 325</div><div>AE & ME majors select IDS (GK), STS 302(GK), STS 304, or STS(PHI) 325 to fulfill Ethics requirement OR see Humanities Requirements</div><div>MSE majors select IDS 201 (GK), STS 302 (GK), STS 304, STS 325 to fulfill Ethics requirement OR see Humanities Requirements</div></div>	
<div>Additional Breadth</div> <div>http://oucc.ncsu.edu/gep-humanities</div> <div>http://oucc.ncsu.edu/gep-soc-sciences</div> <div>http://oucc.ncsu.edu/gep-vpa</div> <div>Select one course from Humanities, Social Sciences, or Visual & Performing Arts.</div> <div></div>	
<div><div><i>The following requirements must also be met:</i></div><div>US Diversity (USD) Course from selections above or select an additional course.</div><div>http://oucc.ncsu.edu/gep-usd-course</div><div>Global Knowledge (GK) Course from selections above or select an additional course.</div><div>http://oucc.ncsu.edu/gep-gk-course</div></div>	

HUMANITIES			
GK AFS 240	Afr Civilization	GK FLG 315	Germanic Civilization & Cult
USD AFS 241	Intro to Afr-Am Studies II	GK FLG 320	Intro to German Literature
USD AFS/ENG 248	Surv of Afr-Am Lit	GK FLG 323	20th Cent German Lit
GK AFS/HI 275	Intro to Hist of South & East Africa	GK FLG 325	German Lyric Poetry
GK AFS/HI 276	Intro to Hist of West Africa	GK FLI 318	Italian Society Through the Cinema
GK AFS 342	Intro to the Afr Diaspora	GK FLJ 342	Classic Japanese Lit in Trans
GK AFS 343	African Religions	GK FLJ 344	Early Modern Japanese Lit in Trans
USD AFS 344	Leadership in Afr Am Communties	GK FLJ 345	Modern Japanese Lit in Trans
USD AFS/ARS 346	Black Popular Cult	GK FLN 301	Advanced Hindi: Readings in Lit I
GK AFS/ENG 349	Afr Lit in English	GK FLN 302	Advanced Hindi: Readings in Lit II
USD AFS/HI 372	Afr-Am Hist Thr the Civil War, 1619-1865	GK FLN 401	Hindi Lit & South Asian Cult Contexts
USD AFS/HI 373	Afr-Am Hist Since 1865	GK FLR 303	Russian Lit in Trans: The 19th Cent
GK AFS 442	Issues in the Afr Diaspora	GK FLR 304	Russian Lit in Trans: The 20th Cent
USD AFS/ENG 448	Afr-Am Lit	GK FLR 318	Russian Cinema and Society
USD AFS/HI 455	Hist of the Civil Rights Movement	GK FLS 340	Intro to Hisp Lit and Cult
GK AFS/HI 475	Hist of the Republic of South Africa	GK FLS 341	Lit and Cult of Spain I
GK AFS/HI 476	Leadership in Modern Africa	GK FLS 342	Lit and Cult of Spain II
GK AFS/HI 479	Africa (sub-Saharan) in the 20th Cent	GK FLS 343	Lit and Cult of Spain III
GK ANT/FLJ 351	Contemporary Culture in Japan	GK FLS 351	Lit and Cult of Latin America I
ARC 242	Hist of West Architecture	GK FLS 352	Lit and Cult of Latin America II
GK CLA 210	Classical Mythology	GK FLS 353	Lit and Cult of Latin America III
GK CLA 215	Ancient World in Modern Media	GK HA/HI 240	Introduction to Visual Culture
GK CLA 320	Masterpieces of Classical Literature	HI 205	West Civilization Since 1400
GK CLA 325	Gender, Ethnicity & Identity	GK HI 207	Ancient Mediterranean World
COM 200	Comm Media in a Changing World	GK HI 208	The Middle Ages
COM 211	Argumentation & Advocacy	GK HI 209	Europe, Renaiss to Waterloo, 1300-1815
COM/ENG 395	Studies in Rhetoric & Digital Media	GK HI 210	Modern Europe 1815-Present
USD ECD 225	Foundations of Cultural Competence	GK HI 214	Hist & Archaeology of Anc Lat America
ENG 201	Writing Literary Analysis	GK HI 215	Latin America to 1826
ENG 206	Studies In Drama	GK HI 216	Latin America Since 1826
ENG 207	Studies in Poetry	GK HI 221	British Hist to 1688
ENG 208	Studies In Fiction	GK HI 222	Hist of British Cults & Societies
ENG 209	Intro to Shakespeare	GK HI 232	The World from 1200-1750
GK ENG/FL 219	Studies in Great Works of Non-West Lit	GK HI 233	The World in the 20th Cent
GK ENG/FL 220	Studies in Great Works of West Lit	HI 251	Early Am Hist
GK ENG/FL 221	Lit of the West World I	HI 252	Modern Am Hist
GK ENG/FL 222	Lit of the West World II	USD HI 254	Modern Am Hist
GK ENG/FL 223	Contemporary World Lit I	GK HI 263	Asian Civilization to 1800
GK ENG/FL 224	Contemporary World Lit II	GK HI 264	Modern Asia: 1800 to Present*
ENG 232	Lit & Medicine	GK HI 270	Modern Middle East
ENG 233	The Lit of Agriculture	GK HI 307	Jewish History
GK ENG/FL 246	Lit of the Holocaust	USD HI/REL 320	Religion in American History
USD ENG 249	Native Am Lit	GK HI 324	History of Common Law & Constitution
ENG 251	Major British Writers	GK HI 332	Germany and the World Wars
ENG 252	Major Am Writers	HI 335	The World at War
ENG 261	English Lit I	GK HI 338	Empire, War, and Revolution in Russia
ENG 262	English Lit II	USD HI 346	Intro to Civil War and Reconstruction
USD ENG 265	Am Lit I	HI 350	Am Military Hist
USD ENG 266	Am Lit II	HI 351	U.S. Naval Hist
USD ENG 267	LGBTQI - Literature in the U.S.	USD HI 360	U.S. Agricultural History
ENG 283	Intro to Am Folklore	HI 364	Hist of North Carolina
USD ENG/WGS 305	Women and Literature	HI 365	The Am West
ENG 362	The British Novel of the 18th Cent	USD HI 366	Native Am Hist
ENG 368	Am Poetry to 1900	GK HI 370	Modern Egypt
ENG 369	The Am Novel of the 19th Cent	GK HI 371	Modern Japan, 1850 to Present
ENG 370	Early 20th-Cent Fiction	GK HI 374	Visual Culture of Modern South Asia
ENG 371	Late 20th-Cent Fiction	HI 380	Hist of Nonprofits, Philant, & Soc Change
ENG 372	Early 20th-Cent Poetry	GK HI 381	NGO Nonprofits in a Global Context
ENG 373	Late 20th-Cent Poetry	HI 400	Civilization of the Ancient Near East
ENG 377	Fantasy	GK HI/REL 402	Early Christianity to Time of Eusebius
GK ENG 380	Modern Drama	HI 403	Ancient Greek Civilization
ENG 385	Biblical Backgrounds of English Lit	HI 404	Rome to 337 A. D.
ENG 390	Classical Backgrounds of English Lit	HI 405	Hist & Archaeology of the Roman Empire
GK ENG/FL 392	Major World Author	HI 406	From Roman Empire to Middle Ages
GK ENG/FL 393	Studies in Literary Genre	GK HI/REL 407	Islamic Hist to 1798
GK ENG/FL 394	Studies in World Literature	GK HI/REL 408	Islam in the Modern World
GK ENG 398	Contemporary Lit I (1900 to 1940)	HI 409	The High Middle Ages
GK ENG 399	Contemporary Lit II (1940 to Present)	GK HI 410	Italian Renaissance
GK ENG/FL 406	Modernism	GK HI 411	The Prot & Cath Reform of the 16th Cent
GK ENG/FL 407	Postmodernism	GK HI 412	The Sexes & Soc in Early-Modern Europe
ENG 420	Major Am Author	GK HI 414	France in the Old Regime
ENG 439	17th-Cent English Lit	GK HI 415	The French Revolution
ENG 449	16th-Cent English Lit.	GK HI 418	Fascist Italy & Nazi Germany
ENG 451	Chaucer	GK HI 419	Modern European Imperialism
ENG 460	Major British Author	GK HI 420	European Diplomatic Hist
ENG 464	British Lit, 1900-1945	GK HI 421	European Intellectual Hist: The 18th Cent
ENG 465	British Lit, Since 1945	GK HI 422	European Intellectual Hist: The 19th Cent
ENG 467	Am Colonial Lit	GK HI 423	Women in European Enlightenment
ENG 468	Am Romantics	GK HI 425	Tudor & Stuart England
ENG 469	Am Realism & Naturalism	GK HI 429	20th Cent Britain
ENG 470	Am Lit, 1914-1945	GK HI 430	Modern France
ENG 471	Am Lit, Since 1945	GK HI 435	Europe Since 1945
USD ENG 476	Southern Lit	HI 441	Colonial & Revolutionary U.S.
ENG 486	Shakespeare, The Earlier Plays	HI 443	U. S. Constitutional Hist
ENG 487	Shakespeare, The Later Plays	HI 444	U. S. Constitutional Hist Since 1870
GK FLC 351	Modern Chinese Pop Culture	HI 445	Early Am Frontiers
GK FLF 301	Surv of Fr Lit -Mid Ages Thr the Enlight	USD HI 446	Civil War & Reconstruction
GK FLF 302	Surv of Fr Lit-Rom to the Contemp Period	USD HI/WGS 447	Hist of Am Women to 1900
GK FLF 315	French Civilization & Cult	USD HI/WGS 448	Am Women in the 20th Cent
GK FLF 414	Studies in French Prose		
GK FLF 425	Lit, Cinema & Cult of the Franco World		
HI 451	The Vietnam War		
HI 452	Recent America		
USD HI 453	US-Latin Am Relations Since 1823		
HI 454	Hist of US Foreign Rel, 1900-Present		
HI 456	Early Am Thought		
HI 457	20th-Cent U.S. Intellectual Hist		
HI 458	Modern Am Historical Biography		
HI 459	The Early Am Republic		
HI 461	Civilization of the Old South		
USD HI 462	Social Hist of the New South		
GK HI 465	Oil & Crisis in the Gulf		
GK HI 466	Hist of the Palestinian-Israeli Conflict		
GK HI 467	Modern Mexico		
GK HI 469	Latin Am Revolutions in the 20th Cent		
GK HI 471	Revolutionary China		
GK HI 473	Japan's Empire in Asia 1868-1945		
GK HI 474	Modern India		
GK HI 477	Women in the Middle East		
GK HI 478	Islam & Christianity in Sub-Saharan Africa		
GK HI 486	Science and Empire		
HON 202	Inquiry, Discovery, & Lit		
HON 290	Special Topics - Hist		
HON 293	Special Topics - Lit		
HON 294	Special Topics - Philosophy or Rel		
HON 341	Time Travel		
GK HON 342	Issues in Contemporary Rel		
HON 344	Kantian Ethics		
HON 345	On the Human		
USD HON 346	Ethics & Gender		
HON 347	Freedom & the Self		
LAR 221	Intro to Environ & Behav for Designers		
PHI 205	Intro to Philosophy		
PHI 210	Representation, Reason & Reality		
PHI 214	Issues in Business Ethics		
PHI 221	Contemporary Moral Issues		
PHI 300	Ancient Philosophy		
PHI 301	Early Modern Philosophy		
PHI 302	19th Cent Philosophy		
PHI 305	Philosophy of Rel		
PHI 309	Contemporary Political Philosophy		
PHI 310	Existentialism		
PHI 312	Philosophy of Law		
PHI 313	Ethical Problems in Law		
PHI/STS 325	Bio-Medical Ethics		
PHI 330	Metaphysics		
PHI 331	Philosophy of Language		
PHI 332	Philosophy of Psychology		
PHI 333	Theory of Knowledge		
PHI 340	Philosophy of Science		
PHI 375	Ethics		
PHI 376	Hist of Ethics		
PHI 401	Kant's Critique of Pure Reason		
PHI 420	Global Justice		
PHI/PSY 425	Intro to Cognitive Science		
PHI 440	The Scientific Method		
PHI 447	Philosophy, Evolution and Human Nature		
PS 361	Intro to Political Theory		
PS 362	Am Political Thought		
GK REL 200	Intro to the Study of Rel		
GK REL 210	Religious Traditions of the World		
GK REL 230	Asian Religions		
REL/SOC 309	Rel & Society		
GK REL 311	Intro to the Old Testament		
GK REL 312	Intro to the New Testament		
GK REL 314	Intro to Intertestamental Lit		
GK REL 317	Christianity		
USD REL 323	Rel Cults, Sects, & Min Faiths in America		
GK REL 327	Issues in Contemporary Rel		
GK REL 331	The Hindu Tradition		
GK REL 332	The Buddhist Traditions		
GK REL 333	Chinese Rels		
GK REL 334	Japanese Rels		
GK REL 340	Intro to Islam		
GK REL 350	Intro to Judaism		
GK REL 383	Rel, Globalism, & Justice		
GK REL/HI 402	Early Christianity to Time of Eusebius		
GK REL 412	Adv Readings in the Christian Gospels		
GK REL 413	The Life & Letters of the Apostle Paul		
USD REL 423	Religion & Politics in America		
REL/STS 471	Darwinism and Christianity		
REL/WGS 47:	Women & Rel		
GK REL 482	Rel & Conflict		
GK REL 489	Interpretations of Rel		
USD WGS/ENG 30	Women & Lit		
USD WGS 492	Theor Iss in Women's & Gender Studies		

The current University-approved list is available at:
<http://oucc.ncsu.edu/gep-humanities>
Retrieved 6.12.2015

SOCIAL SCIENCES

USD	AFS/SOC 305	Racial & Ethnic Relations	GEO 200	Principles of Geography	PS 331	U.S. Foreign Policy
	ANT 251	Physical Anthropology	GK	GEO/SOC 220	Cultural Geography	PS 335
GK	ANT 252	Cultural Anthropology		HON 295	Special Topics - Social Sciences	PS 336
GK	ANT 253	Unearthing the Past	USD	HON 352	Self, Schooling, & the Social Order	PS 341
USD	ANT 254	Lang & Culture	GK	HON 353	Code Breakers: Unlocking Hum Lang	PS 342
GK	ANT/SOC 261	Tech in Soc & Culture		NR 460	Renewable Resource Pol and Mgt	PS 345
USD	ANT 310	Native Peoples & Cultures of N America	NS	210	Leadership & Management	PSY 200
GK	ANT 315	Aztecs, Maya & Their Predecessors	PRT	152	Intro to Parks, Rec & Tourism	PSY 201
GK	ANT 325	Andean South America	PRT	200	Leisure Behavior, Health & Wellness	PSY 311
GK	ANT 330	Peoples & Cultures of Africa	PS	201	Amer Pol & Gov	PSY 376
GK	ANT 346	Peoples & Cultures of Southeast Asia	PS	202	State & Local Gov	USD
	ANT 370	Intro to Forensic Anthropology	PS	203	Intro to Nonprofits	PSY/WGS 406
	ANT 385	Island Archaeology	PS	204	Problems of Amer Democracy	SOC 202
	ANT 389	Fundamentals of Archaeological Res	PS	205	Law & Justice	USD
ARE	201	Intro to Agricultural & Resource Econ	GK	PS 231	Intro to Int'l Relations	SOC 203
ARE	309	Env Law & Economic Policy	GK	PS 236	Issues in Global Pol	USD
ARE	311	Agricultural Markets	GK	PS 241	Intro to Comparative Pol	SOC/WGS 204
ARE	433	U.S Agricultural Policy	PS	301	The Presidency & Congress	SOC 205
			PS	302	Campaigns & Elect in the US Pol Sys	SOC 206
	AS 321	Air Force Leadership Studies I	USD	PS 303	Race in U.S. Pol	SOC/GEO 220
	COM 112	Interpersonal Comm	PS	305	Justice Sys in the Amer Pol Proc	SOC 241
OK, USD	COM/HSS 392	Int'l & Crosscultural Comm	USD	PS/WGS 306	Gender & Pol in the U. S.	SOC 300
	EC 201	Principles of MicroEcon	USD	PS 309	Equality & Justice in US Law	SOC 301
	EC 202	Principles of MacroEcon	PS	310	Public Policy	SOC 302
	EC 205	Fundamentals of Econ	PS	312	Intro to Public Administration	SOC 303
	EC 301	Intermediate Microeconomics	PS	314	Science, Tech & Public Policy	SOC 304
			PS	315	Public Leadership	GK
	EDP 304	Educational Psych	PS	320	U.S. Env Law & Pol	SOC 351
	EDP 370	Applied Child Development				
	ENG 210	Intro to Lang & Linguistics				

The current University-approved list is available at:

VISUAL & PERFORMING ARTS

	ADN 111	Two Dimensional Design	GK	ENG 282	Intro to Film	HS 242	Intro to Small Scale Landscape Design
	ADN 112	Three Dimensional Design		ENG 292	Writing About Film	LAR 444	Hist of Landscape Architecture
	ADN 272	Intro to Printing & Surface Des	GK	ENG/FLM 378	Women & Film	MUS 103	Music Theory I
GK	ADN 275	Survey of Fibers in Arts & Design		ENG 382	Film & Lit	MUS 120	Rudiments of Music
	ADN 311	Basic Visual Laboratories		ENG 384	Introduction to Film Theory	MUS 180	Intro to Musical Experiences
USD	AFS/MUS 230	Introduction to African-Amer Mus	GK	FL 216	Art & Soc in France	MUS 181	Exploring Music Theory
USD	AFS/MUS 260	Hist of Jazz	GK	FLF 318	The Heritage of French Cinema	GK	MUS 200
	ARC 140	Experiencing Architecture	GK	FLG 318	New German Cinema	GK	MUS 201
	ARC 241	Intro to World Architecture	GK	FLS 360	Hispanic Cinema	GK	MUS 202
GK	ARS 251	The Arts of a World Capital: London	FTM	400	Major Fashion Designers		MUS 205
GK	ARS 252	Vienna in 1900	GC	120	Foundations of Graphics	USD	MUS 206
	ARS 259	The Arts & Politics	GD	203	Hist of Graphic Des		MUS 305
	ARS/MUS 306	Mus Composition with Computers	GD	303	Graphic Des Theory & Practice	GK	MUS 310
	ARS 351	Arts, Ideas & Values	HA	201	Hist of Art Anc Greece Thr the Renaiss	GK	MUS 315
GK	ARS 353	Arts & Cross Cultural Contacts	HA	202	Hist of Art Renaiss Thr the 20th Cent	GK	MUS 320
GK	ARS 354	The Arts & the Sacred	HA	203	Hist of Amer Art	GK	MUS 330
	COM 110	Public Speaking	HA	401	I9th Cent European Art	GK	MUS 350
GK	COM/ENG 364	Hist of Film to 1940	HA	404	Italian Renaissance Art & Matl Cult	USD	MUS/WGS 360
GK	COM/ENG 374	Hist of Film From 1940	HA	410	Hist of Art & Photography		TDE 351
	D 231	Des Hist for Engineers & Scientists	HON	299	Special Topics - Visual & Performing Arts		THE 103
	DAN 272	Dance Composition	HON	391	Mus & Social Life		THE 203
	DS 101	Hist of Des I					

The current University-approved list is available at:

INTERDISCIPLINARY PERSPECTIVES

	AEE/ANS/PB 208	Ag Biotech: Issues & Implications	GK	HA/HI 240	Introduction to Visual Culture	PHI 210	Representation, Reason & Reality
	ANT/SOC 261	Technology in Society & Culture		HI 321	Ancient & Medieval Science	PHI 312	Philosophy of Law
	ARE/EC 336	Intro to Resource & Env Econ		HI 322	Rise of Modern Science	PHI 313	Ethical Problems in Law
	ARS/STS 257	Tech in the Arts		HI 341	Tech in Hist	PHI/STS 325	Bio-Medical Ethics: Inter Inquiry
	BIO 165	Intro to Environmental Res		HI 440	Amer Env Hist	PHI 331	Philosophy of Language
	BIO 227	Biological Illustration		HI 480	Scientific Revolution: 1300-1700	PHI 332	Philosophy of Psychology
	BIO 233	Human-Animal Interactions		HI 481	Hist of the Life Sciences	PHI 340	Philosophy of Science
GK	BIO 380	Water Resources		HI 482	Darwinism in Science & Soc	USD	PHI 422
	BIO 440	Human Animal: Evol Perspective	GK	HI 483	Science & Religion in European Hist		PHI/PSY 425
	BIT 100	Current Topics in Biotechnology	GK	HI 484	Science in European Culture		PHI 440
GK	CS 224	Seed, Biotechnology & Societies		HI 485	Hist of Amer Tech		PHI 447
GK	CS 230	Introduction to Agroecology	HON	296	Sp Top -H/VSS/VPA Persp		PO 411
	CSC 281	Found of Interactive Game Design	HON	297	Sp Top- Math/Nat Sci Perspective		PP 241
	D 100	Design Thinking I	USD	HON 310	The Creative Process in Science	GK	PRT 449
	D 101	Design Thinking II	GK	HON 311	Words Through Space & Time	GK	PRT 450
	EI 201	Expl Interdisc. Entrepre Thinking		HON 341	Time Travel		PSE 220
	EI 331	Interdisc Entrep. Thinking I		HON 345	On the Human		REL/STS 471
	EMA 365	Foundations in Arts Entrepreneurship	USD	HON 346	Ethics & Gender		SLC 250
	EMA 370	Practical Arts Entrepreneurship		HON 347	Freedom & the Self		SMT 201
	ENG 232	Lit & Medicine		HSS 120	Intro Humanities & Social Sci		SMT 230
	ENG 376	Science Fiction	ID	444	History of Industrial Design		SMT 231
	ENG 425	Analysis of Sci & Tech Writing	GK	IDS 201	Env Ethics		SMT 232
GK	ENT 207	Insects and Human Disease	USD	IDS 210	Intro to America Studies		SMT 310
GK	ES/ET 100	Intro to Environmental Science		IDS 211	Eating through Amer Hist		SOC 381
GK	ES 200	Climate Change & Sustainability		IDS/NR 303	Humans & the Environment		SSC 185
GK	ES 300	Energy & the Environment	GK	IDS 310	Animals in the Global Community	USD	STS/WGS 210
	ET 410	Toxic Substance & Soc					STS 214
GK	FLF 212	French: Lang, Culture & Tech	GK	IS 200	Intro to International Studies		STS 301
GK	FLG 212	German Lang, Culture, Science & Tech		LSC 101	Crit & Creative Thinking in Life Sci	GK	STS 302
GK	FLG 440	Green Germany: Nat & Envin	GK	MEA 100	Earth Systems Science: Exp the Conn		STS 304
GK	FLS 212	Spanish, Lang, Tech, Culture		MIE 201	Intro to Business Processes		STS 322
	FOR 220	Urban & Community Forestry		NR 406	Conservation of Biological Diversity	GK	STS 323
GK	FOR/FW 221	Conservation of Natural Resources		PB 213	Plants in Civilization		STS 402
	FOR 248	Forest Hist, Tech & Soc		PB 219	Plants in Folklore, Myth, and Religion		STS 405
	FOR 330	North Carolina Forests		PCC 274	Introduction to Forensic Science	USD	SW 260
GK	FOR 414	World Forestry		PCC 401	Manuf & Impact on Safety, the Envir, & Soc		WGS 224

The current University-approved list is available at:

http://oucc.ncsu.edu/gep-ip-course Retrieved 6.12.2015

http://oucc.ncsu.edu/gep-soc-sciences Retrieved 6.12.2015

http://oucc.ncsu.edu/gep-vpa Retrieved 6.12.2015

GLOBAL KNOWLEDGE (GK)

Humanities		Humanities (cont'd)	
AFS 240	Afr Civilization	HI 307	Jewish History
AFS/HI 275	Intro to Hist of South & East Africa	HI 324	History of Common Law & Constitution
AFS/HI 276	Intro to Hist of West Africa	HI 332	Germany and the World Wars
AFS 342	Intro to African Diaspora	HI 338	Empire, War, and Revolution in Russia
AFS 343	African Religions	HI 370	Modern Egypt
AFS/ENG 349	African Literature in English	HI 371	Modern Japan, 1850 to Present
AFS 442	Issues in the Afr Diaspora	HI 374	Visual Culture of Modern South Asia
AFS/HI 475	Hist of the Republic of South Africa	HI 381	NGO Nonprofits in a Global Context
AFS/HI 476	Leadership in Modern Africa	HI 410	Italian Renaissance
AFS/HI 479	Africa (sub-Saharan) in the 20th Cent	HI 411	The Prot & Cath Reform of the 16th Cent
ANT/FLJ 351	Contemporary Culture in Japan	HI 412	The Sexes & Soc in Early-Modern Europe
CLA 210	Classical Mythology	HI 414	France in the Old Regime
CLA 215	Ancient World in Modern Media	HI 415	The French Revolution
CLA 320	Masterpieces of Classical Literature	HI 418	Fascist Italy & Nazi Germany
CLA 325	Gender, Ethnicity & Identity	HI 419	Modern European Imperialism
ENG 380	Modern Drama	HI 420	European Diplomatic Hist
ENG 398	Contemporary Lit I (1900 to 1940)	HI 421	European Intellectual Hist: The 18th Cent
ENG 399	Contemporary Lit II (1940 to Present)	HI 422	European Intellectual Hist: The 19th Cent
ENG/FL 219	Studies in Great Works of Non-West Lit	HI 423	Women in European Enlightenment
ENG/FL 220	Studies in Great Works of West Lit	HI 425	Tudor & Stuart Engl&
ENG/FL 221	Lit of the West World I	HI 429	20th Cent Britain
ENG/FL 222	Lit of the West World II	HI 430	Modern France
ENG/FL 223	Contemporary World Lit I	HI 435	Europe Since 1945
ENG/FL 224	Contemporary World Lit II	HI 465	Oil & Crisis in the Gulf
ENG/FL 246	Literature of the Holocaust	HI 466	Hist of the Palestinian-Israeli Conflict
ENG/FL 392	Major World Author	HI 467	Modern Mexico
ENG/FL 393	Studies in Literary Genre	HI 469	Latin Am Revolutions in the 20th Cent
ENG/FL 394	Studies in World Lit	HI 471	Revolutionary China
ENG/FL 406	Modernism	HI 473	Japan's Empire in Asia 1868-1945
ENG/FL 407	Postmodernism	HI 474	Modern India
FLC 351	Modern Chinese Pop Culture	HI 477	Women in the Middle East
FLF 301	Surv of Fr Lit -Mid Ages Thr the Enlight	HI 478	Islam & Christianity in Sub-Saharan Africa
FLF 302	Surv of Fr Lit-Rom to the Contemp Period	HI 486	Science and Empire
FLF 315	French Civilization & Cult	HI/REL 402	Early Christianity to Time of Eusebius
FLF 414	Studies in French Prose	HI/REL 407	Islamic Hist to 1798
FLF 425	Lit, Cinema & Cult of the Franco World	HI/REL 408	Islam in the Modern World
FLG 315	Germanic Civilization & Cult	HON 342	Issues in Contemporary Religion
FLG 320	Intro to German Literature	REL 200	Intro to the Study of Rel
FLG 323	20th Cent German Lit	REL 210	Religious Traditions of the World
FLG 325	German Lyric Poetry	REL 230	South Asian Religious Traditions
FLI 318	Italian Society Through the Cinema	REL 311	Intro to the Old Testament
FLJ 342	Classic Japanese Lit in Trans	REL 312	Intro to the New Testament
FLJ 344	Early Mod Japanese Lit in Trans	REL 314	Intro to Intertestamental Lit
FLJ 345	Modern Japanese Lit in Translation	REL 317	Christianity
FLN 301	Advanced Hindi: Readings in Lit I	REL 327	Issues in Contemporary Rel
FLN 302	Advanced Hindi: Readings in Lit II	REL 331	The Hindu Tradition
FLN 401	Hindi Lit & South Asian Cult Contexts	REL 332	The Buddhist Traditions
FLR 303	Russian Lit in Trans: The 19th Cent	REL 333	Chinese Rels
FLR 304	Russian Lit in Trans: The 20th Cent	REL 334	Japanese Rels
FLR 318	Russian Cinema and Society	REL 340	Islam
FLS 340	Intro to Hispanic Lit and Cultures	REL 350	Intro to Judaism
FLS 341	Lit & Cult of Spain I	REL 383	Rel, Globalism, & Justice
FLS 342	Lit & Cult of Spain II	REL 412	Adv Readings in the Christian Gospels
FLS 343	Lit & Cult of Spain III	REL 413	The Life & Letters of the Apostle Paul
FLS 351	Lit & Cult of Latin America I	REL 482	Rel & Conflict
FLS 352	Lit & Cult of Latin America II	REL 489	Interpretations of Rel
FLS 353	Lit & Cult of Latin America III		
HA/HI 240	Introduction to Visual Culture		
HI 207	Ancient World to 180 AD		
HI 208	The Middle Ages	ANT 252	Cultural Anthropology
HI 209	Europe, Renaiss to Waterloo, 1300-1815	ANT 253	Introduction to Prehistory
HI 210	Hist & Archaeology of 1815-Present	ANT/SOC 261	Technology in Society and Culture
HI 214	Hist & Archaeology of Anc Lat America	ANT 315	Aztecs, Maya & Their Predecessors
HI 215	Latin America to 1826	ANT 325	Andean South America
HI 216	Latin America Since 1826	ANT 330	Peoples and Cultures of Africa
HI 221	British Hist to 1688	ANT 346	Peoples & Cultures of Southeast Asia
HI 222	Hist of British Cults & Societies	COM/HSS 392	Int'l & Crosscultural Comm
HI 232	The World from 1200-1750	GEO/SOC 220	GEO/SOC 220
HI 233	The World in the 20th Cent	HON 353	Code Breakers: Unlocking Hum Lang
HI 263	Asian Civilization to 1800		
HI 264	Modern Asia: 1800 to Present*		
HI 270	Modern Middle East		

The current University-approved list is available at:

Humanities		Social Sciences	
AFS 241	Intro to Afr-Am Studies II	HI/REL 320	Religion in American History
AFS 344	Leadership in Afr Am Communties	HI 346	Intro to Civil War and Reconstruction
AFS/ARS 346	Black Popular Cult	HI 360	U.S. Agricultural History
AFS/ENG 248	Surv of Afr-Am Lit	HI 366	Native Am Hist
AFS/ENG 448	African-American Literature	HI 446	Civil War & Reconstruction
AFS/HI 372	Afr-Am Hist Thr the Civil War, 1619-1865	HI/WGS 447	Hist of Am Women to 1900
AFS/HI 373	Afr-Am Hist Since 1865	HI/WGS 448	Am Women in the 20th Cent
AFS/HI 455	Hist of the Civil Rights Movement	HI 453	US-Latin Am Relations Since 1823
ECD 225	Foundations of Cultural Competence	HI 462	Social Hist of the New South
ENG 249	Native Am Lit	HON 346	Ethics & Gender
ENG/WGS 305	Women & Lit	REL 323	Rel Cults, Sects, & Min Faiths in America
ENG 265	Am Lit I	REL 423	Religion & Politics in America
ENG 266	Am Lit II		
ENG 267	LGBTQI - Literature in the U.S.	AFS/SOC 305	Racial & Ethnic Relations
ENG/WGS 305	Women & Lit	ANT 254	Lang & Culture
ENG 476	Southern Lit	ANT 310	Native Peoples & Cultures of N America
HI 254	Modern Am Hist	COM/HSS 392	Int'l & Crosscultural Comm
		PS 303	Race in U.S. Pol

Visual & Performing Arts

Survey of Fibers in Arts & Design

The Arts of a World Capital: London

Vienna in 1900

Arts and Cross Cultural Contacts

The Arts and the Sacred

History of Film to 1940

History of Film From 1940

Introduction to Film

Women & Film

Art and Society in France

The Heritage of French Cinema

New German Cinema

Hispanic Cinema

Understanding Music: Global Perspectives

Introduction to Music Literature I

Introduction to Music Literature II

Music of the 17th and 18th Centuries

Music of 19th Century Europe

Music of the Twentieth Century

Music Drama

World Music I: Music of Asia

Interdisciplinary Perspectives

Technology in Society and Culture

Water Resources

Seeds, Biotechnology & Societies

Introduction to Agroecology

Insects and Human Disease

Intro to Environmental Science

Climate Change & Sustainability

Energy & the Environment

French: Lang, Culture & Tech

German Lang, Culture, Science & Tech

[illegible][illegible][illegible]