

REPORT: COMMITTEE ON CURRICULA AND COURSES

(For consideration by the Faculty Senate at its December 4, 2019 meeting.)

Appendices, any department which has a proposal being recommended by the Committee on Curricula and Courses must have a representative in attendance at the Faculty Senate meeting in which said proposal is to be recommended.

Please contact Chair Marianne Bickle (HRSM) in advance of Faculty Senate meeting if errors are noted, either by phone: 777-3805 or e-mail: bickle@hrsm.sc.edu.

(Please note: All new courses are effective upon approval. Other approvals are effective in the 2020-2021 Bulletin)

Full proposal details can be found on the Academic Program Proposal System (APPS) available at http://www.sc.edu/about/offices_and_divisions/provost/planning/academicprograms/proposals/index.php.

1. COLLEGE OF ARTS AND SCIENCES

a. Department of Aerospace Studies

Change Title,

From: AERO 401 National Security Affairs. (4)

To: AERO 401 National Security/Leadership Responsibilities/Commissioning Preparation. (4)

b. Department of Anthropology

Change to Major/Degree Program Anthropology, BA 120 Credit Hours

Existing Program/Major Requirements: Change Program/Major Requirements:

4. Major Requirements (27 hours)

A minimum grade of C is required in all major courses.

Major Courses (12 hours)

Select **one** course from **Biological Anthropology** (3 hours)

Select **one** course from **Archaeology** (3 hours)

Select **one** course from **Linguistic Anthropology** (3 hours)

Select **one** course from **Sociocultural Anthropology** (3 hours)

Major Electives (15 hours)

Select **one** course from the ANTH 500-level

Select an additional 12 hours from ANTH 200-level or above

Note: Selection of major courses must include at least one of the following courses: [ANTH 261](#), [319](#), [320](#), [355](#), [366](#), [371](#), [381](#), [518](#) or [581](#).

B.A. with Distinction (33 hours)

Departmental Undergraduate Research Track/Intensive Major is available to students majoring in Anthropology who wish to participate in significant research activities in collaboration with, or under the supervision of, a faculty mentor.

Major Courses (21 hours)

Select **one** course from **Biological Anthropology** (3 hours)

Select **one** course from **Archaeology** (3 hours)

Select **one** course from **Linguistic Anthropology** (3 hours)

Select **one** course from **Sociocultural Anthropology** (3 hours)

Select **one** **Fieldschool, Laboratory, Practicum, Qualitative Methodology or Quantitative Methodology** course (3 hours)

ANTH 201 **OR** an additional 500-level course (3 hours)

ANTH 498 (3 hours)

Major Electives (12 hours)

Select **two** courses from the ANTH 500-level (6 hours)

Select an additional 6 hours from ANTH 200-level or above

Note: Selection of major courses must include at least one of the following courses: [ANTH 261](#), [319](#), [320](#), [355](#), [366](#), [371](#), [381](#), [518](#) or [581](#).

Additional Requirements

A minimum major GPA of 3.30.

4. Major Requirements (27 hours)

A minimum grade of C is required in all major courses.

Major Courses (12 hours)

Select **one** course from **Biological Anthropology** (3 hours)

[ANTH 204](#)

[ANTH 221](#)

[ANTH 260](#)

[ANTH 261](#)

[ANTH 262](#)

[ANTH 361](#)

[ANTH 365](#)

[ANTH 366](#)

[ANTH 561](#)

[ANTH 565](#)

[ANTH 567](#)

[ANTH 568](#)

Select **one** course from **Archaeology** (3 hours)

[ANTH 219](#)

[ANTH 223](#)

[ANTH 224](#)

[ANTH 225](#)

[ANTH 226](#)

[ANTH 227](#)

[ANTH 229](#)

[ANTH 318](#)

[ANTH 319](#)

[ANTH 320](#)

[ANTH 321](#)

[ANTH 322](#)

[ANTH 324](#)

[ANTH 327](#)

[ANTH 328](#)

[ANTH 331](#)

[ANTH 333](#)

[ANTH 533](#)

[ANTH 534](#)

[ANTH 535](#)

[ANTH 536](#)

[ANTH 541](#)

[ANTH 542](#)

[ANTH 546](#)

[ANTH 550](#)

[ANTH 576](#)

Select **one** course from **Linguistic Anthropology** (3 hours)

[ANTH 270](#)

[ANTH 271](#)

[ANTH 355](#)

[ANTH 371](#)

[ANTH 373](#)

[ANTH 442](#)

A minimum cumulative GPA of 3.30.
Public presentation of the Senior Thesis in a venue approved by the faculty mentor, such as:
 Annual meeting of the Southern Anthropological Society (or another annual meeting of the appropriate professional organization)
 A regular or special session of the Department of Anthropology Colloquium Series
 USC Discovery Day
 Submission to a professional journal
A written sponsorship agreement from the faculty mentor to be placed on file in the Department of Anthropology office.

ANTH 553
ANTH 555
ANTH 556
ANTH 586

Select **one** course from **Sociocultural Anthropology** (3 hours)

ANTH 203
ANTH 206
ANTH 207
ANTH 209
ANTH 212
ANTH 213
ANTH 216
ANTH 230
ANTH 231
ANTH 232
ANTH 234
ANTH 236
ANTH 237
ANTH 238
ANTH 240
ANTH 241
ANTH 242
ANTH 243
ANTH 301
ANTH 305
ANTH 317
ANTH 318
ANTH 349
ANTH 353
ANTH 356
ANTH 359
ANTH 360
ANTH 381
ANTH 388
ANTH 512
ANTH 515
ANTH 516
ANTH 517
ANTH 518
ANTH 552
ANTH 557
ANTH 572
ANTH 579
ANTH 580
ANTH 581
ANTH 586

Major Electives (15 hours)

Select **one** course from the ANTH 500-level
Select an additional 12 hours from ANTH 200-level or above

Note: Selection of major courses must include at least one of the following courses: ANTH 261, 319, 320, 355, 366, 371, 381, 518 or 581.

	<p><i>B.A. with Distinction (33 hours)</i> Departmental Undergraduate Research Track/Intensive Major is available to students majoring in Anthropology who wish to participate in significant research activities in collaboration with, or under the supervision of, a faculty mentor.</p> <p>Major Courses (21 hours) Select one course from Biological Anthropology (3 hours) Select one course from Archaeology (3 hours) Select one course from Linguistic Anthropology (3 hours) Select one course from Sociocultural Anthropology (3 hours) Select one Fieldschool, Laboratory, Practicum, Qualitative Methodology or Quantitative Methodology course (3 hours) ANTH 201, <u>212</u> OR an additional 500-level course (3 hours) ANTH 498 (3 hours)</p> <p>Major Electives (12 hours) Select two courses from the ANTH 500-level (6 hours) Select an additional 6 hours from ANTH 200-level or above</p> <p>Note: Selection of major courses must include at least one of the following courses: ANTH 261, 319, 320, 355, 366, 371, 381, 518 or 581.</p> <p>Additional Requirements A minimum major GPA of 3.30. A minimum cumulative GPA of 3.30. Public presentation of the Senior Thesis in a venue approved by the faculty mentor, such as: <u>The South Carolina Anthropology Student Conference (SCASC)</u> Annual meeting of the Southern Anthropological Society (or another annual meeting of the appropriate professional organization) A regular or special session of the Department of Anthropology Colloquium Series USC Discovery Day Submission to a professional journal A written sponsorship agreement from the faculty mentor to be placed on file in the Department of Anthropology office.</p>
--	--

2. COLLEGE OF ENGINEERING AND COMPUTING

Department of Chemical Engineering

Change to Major/Degree Program BSE in Chemical Engineering 131 to 138 Credit Hours

Existing Program/Major Requirements:

Change Program/Major Requirements:

Engineering Electives (6 hours): A list of acceptable Engineering Elective courses is maintained in the department office and on its website. The list includes the following:

- [ENCP 200 - Statics OR ECIV 200 - Statics OR EMCH 200 - Statics](#)
- [ENCP 201 - Introduction to Applied Numerical Methods OR EMCH 201 - Introduction to Applied Numerical Methods](#)
- [ENCP 210 - Dynamics OR ECIV 210 - Dynamics OR EMCH 310 - Dynamics](#)
- [ENCP 260 - Introduction to the Mechanics of Solids OR ECIV 220 - Mechanics of Solids OR EMCH 260 - Introduction to the Mechanics of Solids](#)
- [ENCP 330 - Introduction to Vibrations OR EMCH 330 - Mechanical Vibrations](#)
- [ENCP 460 - Special Topics in Engineering and Computing](#)
- [ENCP 481 - Project Management](#)
- [ENCP 499 - Interdisciplinary Technical Elective](#)
- [ENCP 540 - Environmentally Conscious Manufacturing](#)
- [BMEN 211 - Computational Tools for Modeling Biomedical Systems](#)
- [BMEN 240 - Cellular and Molecular Biology with Engineering Applications](#)
- [BMEN 260 - Introduction to Biomechanics](#)
- [BMEN 271 - Introduction to Biomaterials](#)
- [BMEN 290 - Thermodynamics of Biomolecular Systems](#)
- **BMEN 300** and above, except **BMEN 301** and **BMEN 303**
- [CSCE 211 - Digital Logic Design](#)
- [CSCE 212 - Introduction to Computer Architecture](#)
- [CSCE 240 - Advanced Programming Techniques](#)
- [CSCE 313 - Embedded Systems](#)
- [CSCE 317 - Computer Systems Engineering](#)
- [CSCE 274 - Robotic Applications and Design](#)
- [ECHE 202 - Exploring the Chemical Engineering Workplace OR ECHE 203 - Research in Chemical Engineering](#)
- [ECHE 372 - Introduction to Materials](#)
- [ECHE 389 - Special Topics in Chemical Engineering](#)
- [ECHE 456 - Computational Methods for Engineering Applications](#)
- [ECHE 497 - Thesis Preparation](#)
- [ECHE 499 - Special Problems](#)

Engineering Electives (6 hours): A list of acceptable Engineering Elective courses is maintained in the department office and on its website. The list includes the following:

- [ENCP 200 - Statics OR ECIV 200 - Statics OR EMCH 200 - Statics](#)
- [ENCP 201 - Introduction to Applied Numerical Methods OR EMCH 201 - Introduction to Applied Numerical Methods](#)
- [ENCP 210 - Dynamics OR ECIV 210 - Dynamics OR EMCH 310 - Dynamics](#)
- [ENCP 260 - Introduction to the Mechanics of Solids OR ECIV 220 - Mechanics of Solids OR EMCH 260 - Introduction to the Mechanics of Solids](#)
- [ENCP 330 - Introduction to Vibrations OR EMCH 330 - Mechanical Vibrations](#)
- [ENCP 440 - Sustainable Development in Engineering](#)
- [ENCP 460 - Special Topics in Engineering and Computing](#)
- [ENCP 481 - Project Management](#)
- [ENCP 499 - Interdisciplinary Technical Elective](#)
- [ENCP 540 - Environmentally Conscious Manufacturing](#)
- [BMEN 211 - Computational Tools for Modeling Biomedical Systems](#)
- [BMEN 240 - Cellular and Molecular Biology with Engineering Applications](#)
- [BMEN 260 - Introduction to Biomechanics](#)
- [BMEN 271 - Introduction to Biomaterials](#)
- [BMEN 290 - Thermodynamics of Biomolecular Systems](#)
- **BMEN 300** and above, except **BMEN 301** and **BMEN 303**
- [CSCE 211 - Digital Logic Design](#)
- [CSCE 212 - Introduction to Computer Architecture](#)
- [CSCE 240 - Advanced Programming Techniques](#)
- [CSCE 274 - Robotic Applications and Design](#)
- [CSCE 313 - Embedded Systems](#)
- [CSCE 317 - Computer Systems Engineering](#)
- [CSCE 520 - Database System Design](#)
- [CSCE 567 - Visualization Tools](#)
- [CSCE 582 - Bayesian Networks and Decision Graphs](#)
- [CSCE 587 - Big Data Analytics](#)
- [ECHE 202 - Exploring the Chemical Engineering Workplace OR ECHE 203 - Research in Chemical Engineering](#)
- [ECHE 372 - Introduction to Materials](#)

- [ECHE 520 - Chemical Engineering Fluid Mechanics](#)
- [ECHE 571 - Corrosion Engineering](#)
- [ECHE 572 - Polymer Processing](#)
- [ECHE 573 - Next Energy](#)
- [ECHE 574 - Combustion](#)
- [ECHE 589 - Special Advanced Topics in Chemical Engineering](#)
- [ELCT 220 - Electrical Engineering for Non-Majors](#)
- [ELCT 221 - Circuits](#)
- [ELCT 222 - Signals and Systems](#)
- **ELCT 300** and above
- [ECIV 300 - Civil Engineering Measurements](#) and above, except [ECIV 360](#)
- **EMCH 300** and above, except [EMCH 354](#) and [EMCH 360](#)

Technical Electives (9 hours): A list of acceptable Technical Elective courses is maintained in the department office and on its website. The list includes the following:

- **All Engineering Electives**
- **Chemistry Electives**
- **Chemistry Lab Electives**
- [ENCP 102 - Introduction to Engineering II](#) OR [EMCH 111 - Introduction to Engineering Graphics and Visualization](#)
- [MATH 374 - Discrete Structures](#)
- **MATH 500** and above
- **STAT 500** and above, except [STAT 541](#) and [STAT 591](#)
- [BIOL 101 - Biological Principles I](#)
- [BIOL 101L - Biological Principles I Laboratory](#)
- [BIOL 102 - Biological Principles II](#)
- [BIOL 102L - Biological Principles II Laboratory](#)
- [BIOL 120 - Human Biology](#)
- [BIOL 120L - Laboratory in Human Biology](#)
- [BIOL 200 - Plant Science](#) and above
- **GEOL 300** and above
- **MSCI 300** and above
- **PHYS 300** and above
- [CSCE 145 - Algorithmic Design I](#)
- [CSCE 146 - Algorithmic Design II](#)
- [CSCE 210 - Computer Hardware Foundations](#)
- [CSCE 215 - UNIX/Linux Fundamentals](#)
- [CSCE 350 - Data Structures and Algorithms](#)

Liberal Arts Electives (3 hours): At least one course used to satisfy the Liberal Arts Elective or a Carolina Core AIU, CMS, GHS, GSS, VSR requirement must be either at a) the 300-level or above and in the same field of study as one of the other courses, or b) 270 or above

- [ECHE 389 - Special Topics in Chemical Engineering](#)
- [ECHE 456 - Computational Methods for Engineering Applications](#)
- [ECHE 497 - Thesis Preparation](#)
- [ECHE 499 - Special Problems](#)
- [ECHE 520 - Chemical Engineering Fluid Mechanics](#)
- [ECHE 571 - Corrosion Engineering](#)
- [ECHE 572 - Polymer Processing](#)
- [ECHE 573 - Next Energy](#)
- [ECHE 574 - Combustion](#)
- [ECHE 589 - Special Advanced Topics in Chemical Engineering](#)
- [ELCT 220 - Electrical Engineering for Non-Majors](#)
- [ELCT 221 - Circuits](#)
- [ELCT 222 - Signals and Systems](#)
- **ELCT 300** and above
- [ECIV 300 - Civil Engineering Measurements](#) and above, except [ECIV 360](#)
- **EMCH 300** and above, except [EMCH 354](#) and [EMCH 360](#)

Technical Electives (9 hours): A list of acceptable Technical Elective courses is maintained in the department office and on its website. The list includes the following:

- **All Engineering Electives**
- **Chemistry Electives**
- **Chemistry Lab Electives**
- [ENCP 102 - Introduction to Engineering II](#) OR [EMCH 111 - Introduction to Engineering Graphics and Visualization](#)
- [MATH 374 - Discrete Structures](#)
- **MATH 500** and above
- **STAT 500** and above, except [STAT 541](#) and [STAT 591](#)
- [BIOL 101 - Biological Principles I](#)
- [BIOL 101L - Biological Principles I Laboratory](#)
- [BIOL 102 - Biological Principles II](#)
- [BIOL 102L - Biological Principles II Laboratory](#)
- [BIOL 120 - Human Biology](#)
- [BIOL 120L - Laboratory in Human Biology](#)
- [BIOL 200 - Plant Science](#) and above
- ENVR 231 - Introduction to Sustainability Management and Leadership
- ENVR 321 - Environmental Pollution and Health
- ENVR 331 - Integrating Sustainability
- **GEOL 300** and above
- **MSCI 300** and above

in the field of ENGL. Liberal Arts Electives include the following:

- All approved **Carolina Core Courses** for AIU, CMS, GFL, GHS, GSS, and VSR
- [AERO 401 - National Security Affairs](#) -POC cadets only
- [AERO 402 - Preparation for Active Duty](#) -POC cadets only
- [AFAM 201 - Introduction to African American Studies: Social and Historical Foundations](#)
- [AFAM 202 - Introduction to African-American Studies: Arts and Cultural Foundations](#)
- [AFAM 335 - The American Civil Rights Movement](#)
- [ANTH 101 - Primates, People, and Prehistory](#)
- [ANTH 102 - Understanding Other Cultures](#)
- [ANTH 219 - Great Discoveries in Archaeology](#)
- **ANTH 300** and above except [399](#), [501](#)
- [ARTE 101 - Introduction to Art](#)
- [ARTH 105 - History of Western Art I](#)
- [ARTH 106 - History of Western Art II](#)
- **ARTH 300** and above except [399](#), [498](#), [499](#), [599](#)
- [ARMY 406 - American Military Experience](#) - Army cadets only
- [ARMY 407 - Evolution of Warfare](#) -Army cadets only
- **CPLT** any course; courses [270](#) and above count as 300-level
- [DANC 101 - Dance Appreciation](#)
- [ECON 221 - Principles of Microeconomics](#)
- [ECON 222 - Principles of Macroeconomics](#)
- [ECON 224 - Introduction to Economics](#)
- **ECON 300** and above except [399](#), [421](#), [499](#), [524](#), [595](#)
- **ENGL** any course above 102, except **460 through 467**
- **Foreign languages** 121 Elementary
- **Foreign languages** 300 and above except intensive reading courses or courses about teaching
- [GEOG 103 - Introduction to Geography](#)
- [GEOG 121 - Globalization and World Regions](#)
- **GEOG 300** and above except [399](#), [595](#)
- **HIST** any course
- [LASP 301 - Interdisciplinary Study of Latin America](#)
- [LASP 311 - Latin American Cultures](#)
- [LASP 315 - South American Indian Cultures](#)
- [LASP 322 - Mesoamerican Prehistory](#)
- [LASP 331 - Geography of Latin America](#)

- **PHYS 300** and above
- [CSCE 145 - Algorithmic Design I](#)
- [CSCE 146 - Algorithmic Design II](#)
- [CSCE 210 - Computer Hardware Foundations](#)
- [CSCE 215 - UNIX/Linux Fundamentals](#)
- [CSCE 350 - Data Structures and Algorithms](#)

Liberal Arts Electives (3 hours): At least one course used to satisfy the Liberal Arts Elective or a Carolina Core AIU, CMS, GHS, GSS, VSR requirement must be either at a) the 300-level or above and in the same field of study as one of the other courses, or b) 270 or above in the field of ENGL. Liberal Arts Electives include the following:

- All approved **Carolina Core Courses** for AIU, CMS, GFL, GHS, GSS, and VSR
- [AERO 401 - National Security Affairs](#) -POC cadets only
- [AERO 402 - Preparation for Active Duty](#) -POC cadets only
- [AFAM 201 - Introduction to African American Studies: Social and Historical Foundations](#)
- [AFAM 202 - Introduction to African-American Studies: Arts and Cultural Foundations](#)
- [AFAM 335 - The American Civil Rights Movement](#)
- [ANTH 101 - Primates, People, and Prehistory](#)
- [ANTH 102 - Understanding Other Cultures](#)
- [ANTH 219 - Great Discoveries in Archaeology](#)
- **ANTH 300** and above except [399](#), [501](#)
- [ARTE 101 - Introduction to Art](#)
- [ARTH 105 - History of Western Art I](#)
- [ARTH 106 - History of Western Art II](#)
- **ARTH 300** and above except [399](#), [498](#), [499](#), [599](#)
- [ARMY 406 - American Military Experience](#) - Army cadets only
- [ARMY 407 - Evolution of Warfare](#) -Army cadets only
- **CPLT** any course; courses [270](#) and above count as 300-level
- [DANC 101 - Dance Appreciation](#)
- [ECON 221 - Principles of Microeconomics](#)
- [ECON 222 - Principles of Macroeconomics](#)
- [ECON 224 - Introduction to Economics](#)
- **ECON 300** and above except [399](#), [421](#), [499](#), [524](#), [595](#)
- **ENGL** any course above 102, except **460 through 467**
- ENVR 322 - Environmental Ethics
- **Foreign languages** 121 Elementary

- [LASP 351 - Politics and Governments of Latin America](#)
- [LASP 398 - Special Topics in Latin American Studies](#)
- [LASP 425 - Prehistoric Archaeology of South America](#)
- [LASP 451 - International Relations of Latin America](#)
- [LING 300 - Introduction to Language Sciences](#)
- [LING 340 - Language, Culture, and Society](#)
- [LING 405 - Topics in Linguistics](#)
- [LING 505 - Interdisciplinary Topics in Linguistics](#)
- [LING 540 - Topics in Language and Culture](#)
- [LING 541 - Language and Gender](#)
- [LING 542 - Research in Language Conflict and Language Rights](#)
- [LING 543 - Discourse, Gender, and Politics of Emotion](#)
- [LING 545 - Anthropological Approaches to Narrative and Performance](#)
- [LING 567 - Psychology of Language](#)
- [LING 600 - Survey of Linguistics](#)
- [MUSC 110 - Introduction to Music](#)
- [MUSC 140 - Jazz and American Popular Music](#)
- [MUSC 145 - Introduction to Music Literature](#)
- **MUSC** any **music history** course at or above **300-level**
- [NAVY 303 - Evolution of the Art of War - Midshipmen only](#)
- [PHIL 102 - Introduction to Philosophy](#)
- **PHIL 300** and above
- [PSYC 101 - Introduction to Psychology](#)
- [PSYC 103 - Psychology of Adjustment](#)
- [PSYC 300](#) and above except **570 to 599**
- **POLI** any course except **379, 399**
- **RELG** any course
- [SOCY 101 - Introductory Sociology](#)
- [SOCY 300](#) and above except **399**
- [THEA 200 - Understanding and Appreciation of Theatre](#)
- [THEA 561 - History of the Theatre I](#)
- [THEA 562 - History of the Theatre II](#)
- [WGST 112 - Introduction to Women's and Gender Studies](#)
- [WGST 113 - Women's Health](#)
- [WGST 207 - Gender and Culture](#)
- [WGST 300 - Sex and Gender](#)
- [WGST 301 - Psychology of Marriage](#)

- **Foreign languages** 300 and above except intensive reading courses or courses about teaching
- [GEOG 103 - Introduction to Geography](#)
- [GEOG 121 - Globalization and World Regions](#)
- **GEOG 300** and above except **399, 595**
- **HIST** any course
- [LASP 301 - Interdisciplinary Study of Latin America](#)
- [LASP 311 - Latin American Cultures](#)
- [LASP 315 - South American Indian Cultures](#)
- [LASP 322 - Mesoamerican Prehistory](#)
- [LASP 331 - Geography of Latin America](#)
- [LASP 351 - Politics and Governments of Latin America](#)
- [LASP 398 - Special Topics in Latin American Studies](#)
- [LASP 425 - Prehistoric Archaeology of South America](#)
- [LASP 451 - International Relations of Latin America](#)
- [LING 300 - Introduction to Language Sciences](#)
- [LING 340 - Language, Culture, and Society](#)
- [LING 405 - Topics in Linguistics](#)
- [LING 505 - Interdisciplinary Topics in Linguistics](#)
- [LING 540 - Topics in Language and Culture](#)
- [LING 541 - Language and Gender](#)
- [LING 542 - Research in Language Conflict and Language Rights](#)
- [LING 543 - Discourse, Gender, and Politics of Emotion](#)
- [LING 545 - Anthropological Approaches to Narrative and Performance](#)
- [LING 567 - Psychology of Language](#)
- [LING 600 - Survey of Linguistics](#)
- [MUSC 110 - Introduction to Music](#)
- [MUSC 140 - Jazz and American Popular Music](#)
- [MUSC 145 - Introduction to Music Literature](#)
- **MUSC** any **music history** course at or above **300-level**
- [NAVY 303 - Evolution of the Art of War - Midshipmen only](#)
- [PHIL 102 - Introduction to Philosophy](#)
- **PHIL 300** and above
- [PSYC 101 - Introduction to Psychology](#)
- [PSYC 103 - Psychology of Adjustment](#)
- [PSYC 300](#) and above except **570 to 599**
- **POLI** any course except **379, 399**

- [WGST 304 - Race, Class, Gender, and Sexuality](#)
- [WGST 305 - Sociology of Families](#)
- [WGST 307 - Feminist Theory](#)
- [WGST 308 - African-American Feminist Theory](#)
- [WGST 310 - Psychology of Women](#)
- [WGST 351 - The Family in Cross-Cultural Perspective](#)
- [WGST 352 - Gender and Politics](#)
- [WGST 430 - Topics in Women's Studies](#)
- [WGST 454 - Women and the Law](#)
- [WGST 525 - The Psychology of the Midlife Woman](#)
- [WGST 554 - Women and Crime](#)
- [WGST 555 - Language and Gender](#)

Concentration in Biomolecular Engineering (15 hours)

- [BIOL 302 - Cell and Molecular Biology*](#) **OR** [BMEN 240 - Cellular and Molecular Biology with Engineering Applications](#)
- [CHEM 550 - Biochemistry](#)
- Select **one** of the following:
 - [BMEN 271 - Introduction to Biomaterials](#)
 - [BMEN 391 - Kinetics in Biomolecular Systems](#)
- Select **two** courses from the following:
 - [BIOL 303 - Fundamental Genetics](#)
 - [BIOL 460 - General Physiology](#)
 - [BIOL 505 - Developmental Biology](#)
 - [BIOL 530 - Histology](#)
 - [BIOL 665 - Human Molecular Genetics](#)
 - [BMEN 271 - Introduction to Biomaterials](#)
 - [BMEN 342 - Infectious Disease and Immunology for Biomedical Engineers](#)
 - [BMEN 389 - Special Topics in Biomedical Engineering for Undergraduates*](#)
 - [BMEN 391 - Kinetics in Biomolecular Systems](#)
 - [BMEN 392 - Fundamentals of Biochemical Engineering](#)
 - [BMEN 499 - Independent Research \(3 credit hours\)](#)
 - [BMEN 572 - Tissue Engineering](#)
 - [BMEN 589 - Special Topics in Biomedical Engineering*](#)

- **RELG** any course
- [SOCY 101 - Introductory Sociology](#)
- [SOCY 300](#) and above except [399](#)
- [THEA 200 - Understanding and Appreciation of Theatre](#)
- [THEA 561 - History of the Theatre I](#)
- [THEA 562 - History of the Theatre II](#)
- [WGST 112 - Introduction to Women's and Gender Studies](#)
- [WGST 113 - Women's Health](#)
- [WGST 207 - Gender and Culture](#)
- [WGST 300 - Sex and Gender](#)
- [WGST 301 - Psychology of Marriage](#)
- [WGST 304 - Race, Class, Gender, and Sexuality](#)
- [WGST 305 - Sociology of Families](#)
- [WGST 307 - Feminist Theory](#)
- [WGST 308 - African-American Feminist Theory](#)
- [WGST 310 - Psychology of Women](#)
- [WGST 351 - The Family in Cross-Cultural Perspective](#)
- [WGST 352 - Gender and Politics](#)
- [WGST 430 - Topics in Women's Studies](#)
- [WGST 454 - Women and the Law](#)
- [WGST 525 - The Psychology of the Midlife Woman](#)
- [WGST 554 - Women and Crime](#)
- [WGST 555 - Language and Gender](#)

Concentration in Biomolecular Engineering (15 hours)

- [BIOL 302 - Cell and Molecular Biology*](#) **OR** [BMEN 240 - Cellular and Molecular Biology with Engineering Applications](#)
- [CHEM 550 - Biochemistry](#)
- Select **one** of the following:
 - [BMEN 271 - Introduction to Biomaterials](#)
 - [BMEN 391 - Kinetics in Biomolecular Systems](#)
- Select **two** courses from the following:
 - [BIOL 303 - Fundamental Genetics](#)
 - [BIOL 460 - General Physiology](#)
 - [BIOL 505 - Developmental Biology](#)
 - [BIOL 530 - Histology](#)
 - [BIOL 665 - Human Molecular Genetics](#)
 - [BMEN 271 - Introduction to Biomaterials](#)
 - [BMEN 321 - Biomonitoring and Electrophysiology](#)

<p>*BIOL 101 and 102 are prerequisites for BIOL 302. Multiple distinct 389/589 courses may be counted.</p>	<ul style="list-style-type: none"> ○ BMEN 342 - Infectious Disease and Immunology for Biomedical Engineers ○ BMEN 345 - Human Anatomy and Physiology for Biomedical Engineers ○ BMEN 346 - Medical Microbiology for Biomedical Engineers ○ BMEN 389 - Special Topics in Biomedical Engineering for Undergraduates* ○ BMEN 391 - Kinetics in Biomolecular Systems ○ BMEN 392 - Fundamentals of Biochemical Engineering ○ BMEN 499 - Independent Research (3 credit hours) ○ BMEN 546 - Delivery of Bioactive Agents ○ BMEN 547 - Immunoengineering ○ BMEN 548 - Cardiovascular System: From Development to Disease ○ BMEN 565 - Advanced Biomechanics ○ BMEN 572 - Tissue Engineering ○ BMEN 589 - Special Topics in Biomedical Engineering* <p>*BIOL 101 and 102 are prerequisites for BIOL 302. Multiple distinct 389/589 courses may be counted.</p>
--	---

Department of Civil Engineering

Change to Major/Degree Program Civil Engineering, BSE 124 to 136 Credit Hours

Exist Program Introduction:

Change Optional Program Introduction:

<p style="text-align: center;"><u>Professional Development Requirement</u></p> <p>This requirement is satisfied by completing one or more program-accepted Carolina Core courses for CMS and VSR, by ENGL 462, ENGL 463, PHIL 323, PHIL 324, or SPCH 230.</p> <p style="text-align: center;"><u>Degree Requirements (130-144 hours)</u></p> <ol style="list-style-type: none"> 1. Carolina Core (34-46 hours) 2. College Requirements (0 hours) 3. Program Requirements (71-73 hours) 4. Major Requirements (25 hours) 	<p style="text-align: center;"><u>Communications and Ethics</u></p> <p>This requirement is satisfied by completing one or more program-accepted Carolina Core courses for CMS and VSR.</p> <p style="text-align: center;"><u>Degree Requirements (124-142 hours)</u></p> <ol style="list-style-type: none"> 1. Carolina Core (34-46 hours) 2. College Requirements (0 hours) 3. Program Requirements (65-67 hours) 4. Major Requirements (25 hours)
--	---

Existing Program/Major Requirements:

Change Program/Major Requirements:

3. Program Requirements (71-73 hours)

Supporting Courses (71-73 hours)

Foundational Courses (17 hours)

- [CHEM 112 - General Chemistry II](#)
- [CHEM 112L - General Chemistry II Laboratory](#)
- [MATH 241 - Vector Calculus](#)
- [MATH 242 - Elementary Differential Equations](#)
- [PHYS 212 - Essentials of Physics II](#)
- [PHYS 212L - Essentials of Physics II Lab](#)
- [STAT 509 - Statistics for Engineers](#)

Lower Division Engineering (19-21 hours)

- [ECIV 101 - Introduction to Civil Engineering OR ENCP 101 - Introduction to Engineering I](#)
- [ECIV 111 - Introduction to Engineering Graphics and Visualization OR ENCP 102 - Introduction to Engineering II](#)
- [ECIV 200 - Statics OR ENCP 200 - Statics - must be passed with a grade of C or higher](#)
- [ECIV 201 - Computational Methods for Civil Engineering OR ENCP 201 - Introduction to Applied Numerical Methods](#)
- [ECIV 210 - Dynamics OR ENCP 210 - Dynamics - must be passed with a grade of C or higher](#)
- [ECIV 220 - Mechanics of Solids OR ENCP 260 - Introduction to the Mechanics of Solids - must be passed with a grade of C or higher](#)
- [ECIV 360 - Fluid Mechanics OR ENCP 360 - Fluid Mechanics](#)

ECIV Laboratory Courses (2 hours): Select two of the following:

- [ECIV 303L - Civil Engineering Materials Laboratory](#)
- [ECIV 330L - Geotechnical Laboratory](#)
- [ECIV 340L - Transportation Engineering Laboratory](#)
- [ECIV 350L - Introduction to Environmental Engineering Laboratory](#)
- [ECIV 362L - Introduction to Water Resources Engineering Laboratory](#)

ECIV Distribution Courses (12 hours): Select one course from four of the following five areas:

- **Environmental Engineering**
 - [ECIV 551 - Elements of Water and Wastewater Treatment](#)
 - [ECIV 555 - Principles of Municipal Solid Waste Engineering](#)
 - [ECIV 556 - Air Pollution Control Engineering](#)

3. Program Requirements (65-71 hours)

Supporting Courses (65-67 hours)

Foundational Required Courses (6 hours)

- MATH 242 - Elementary Differential Equations
- STAT 509 - Statistics for Engineers or STAT 511 – Probability

Foundational Math Elective (3 credits):

- MATH 241 - Vector Calculus
- MATH 300 – Transition to Advanced Mathematics
- MATH 344 – Applied Linear Algebra

Foundational Math / Science Elective (3-4 credits):

- CHEM 112 & Lab - General Chemistry II
- PHYS 212 & Lab - Essentials of Physics II
- MATH 241 - Vector Calculus
- MATH 300 - Transition to Advanced Mathematics
- MATH 344 - Applied Linear Algebra

Lower Division Engineering (18 hours)

- [ECIV 101 - Introduction to Civil Engineering OR ENCP 101 - Introduction to Engineering I](#)
- [ECIV 111 - Introduction to Engineering Graphics and Visualization OR ENCP 102 - Introduction to Engineering II](#)
- [ECIV 200 - Statics OR ENCP 200 - Statics](#)
- [ECIV 201 - Computational Methods for Civil Engineering OR ENCP 201 - Introduction to Applied Numerical Methods](#)
- [ECIV 220 - Mechanics of Solids OR ENCP 260 - Introduction to the Mechanics of Solids](#)
- [ECIV 360 - Fluid Mechanics OR ENCP 360 - Fluid Mechanics](#)

ECIV Laboratory Courses (2 hours): Select two of the following:

- [ECIV 303L - Civil Engineering Materials Laboratory](#)
- [ECIV 330L - Geotechnical Laboratory](#)
- [ECIV 340L - Transportation Engineering Laboratory](#)
- [ECIV 350L - Introduction to Environmental Engineering Laboratory](#)
- [ECIV 362L - Introduction to Water Resources Engineering Laboratory](#)

ECIV Distribution Courses (12 hours): Select one course from four of the following five areas:

- **Environmental Engineering**
 - [ECIV 551 - Elements of Water and Wastewater Treatment](#)
 - [ECIV 555 - Principles of Municipal Solid Waste Engineering](#)

<ul style="list-style-type: none"> ○ ECIV 557 - Sustainable Construction for Engineers ○ ECIV 558 - Environmental Engineering Process Modeling ● Structural Engineering <ul style="list-style-type: none"> ○ ECIV 325 - Structural Steel Design ○ ECIV 327 - Reinforced Concrete Design ● Transportation Engineering <ul style="list-style-type: none"> ○ ECIV 540 - Transportation Systems Planning ○ ECIV 541 - Highway Design ○ ECIV 542 - Traffic Engineering ○ ECIV 580 - Railway Engineering I ● Geotechnical Engineering <ul style="list-style-type: none"> ○ ECIV 530 - Foundation Analysis and Design ○ ECIV 531 - Design of Earth Structures ● Water Resources Engineering <ul style="list-style-type: none"> ○ ECIV 560 - Open Channel Hydraulics ○ ECIV 562 - Engineering Hydrology ○ ECIV 563 - Subsurface Hydrology <p>ECIV Elective Courses (12 hours)</p> <ul style="list-style-type: none"> ● Four ECIV electives selected from ECIV courses 300-level and above <p>Science Electives (3 hours)</p> <ul style="list-style-type: none"> ● BIOL 101 - Biological Principles I ● BIOL 102 - Biological Principles II ● BIOL 110 - General Biology ● BIOL 250 - Microbiology ● BIOL 270 - Introduction to Environmental Biology ● BIOL 300 or above ● ENVR 321 - Environmental Pollution and Health ● GEOG 563 - Advanced Geographic Information Systems ● GEOL 201 - Observing the Earth ● GEOL 300 or above ● MSCI 300 and above <p>Engineering, Science, or Mathematics (ESM) Electives (6 hours)</p> <ul style="list-style-type: none"> ● BIOL 101 - Biological Principles I ● BIOL 102 - Biological Principles II ● BIOL 110 - General Biology ● BIOL 250 - Microbiology ● BIOL 300 and above ● CHEM above 112 ● CSCE 211 - Digital Logic Design and above 	<ul style="list-style-type: none"> ○ ECIV 556 - Air Pollution Control Engineering ○ ECIV 557 - Sustainable Construction for Engineers ○ ECIV 558 - Environmental Engineering Process Modeling ● Structural Engineering <ul style="list-style-type: none"> ○ ECIV 325 - Structural Steel Design ○ ECIV 327 - Reinforced Concrete Design ● Transportation Engineering <ul style="list-style-type: none"> ○ ECIV 540 - Transportation Systems Planning ○ ECIV 541 - Highway Design ○ ECIV 542 - Traffic Engineering ○ ECIV 580 - Railway Engineering I ● Geotechnical Engineering <ul style="list-style-type: none"> ○ ECIV 530 - Foundation Analysis and Design ○ ECIV 531 - Design of Earth Structures ● Water Resources Engineering <ul style="list-style-type: none"> ○ ECIV 560 - Open Channel Hydraulics ○ ECIV 562 - Engineering Hydrology ○ ECIV 563 - Subsurface Hydrology <p>Basic Science Elective (3-4 hours)</p> <ul style="list-style-type: none"> ● BIOL 110 - General Biology ● BIOL 270 - Introduction to Environmental Biology ● ENVR 101 - Introduction to the Environment ● ENVR 321 - Environmental Pollution and Health ● GEOL 101 - Introduction to the Earth ● GEOL 103 - Environment of the Earth ● MSCI 210 - Oceans and Society ● MSCI 215 - Coastal Environments of the Southeastern U.S <p>Engineering, Science, or Mathematics (ESM) Electives (12-14 hours)</p> <ul style="list-style-type: none"> ● BIOL 101 - Biological Principles I ● BIOL 102 - Biological Principles II ● BIOL 110 - General Biology ● BIOL 250 - Microbiology ● BIOL 211 and above ● BMEN 211 or above ● CHEM 112 or above ● CSCE 145, 146, 201, 206 or 211 ● ECHE 310 - Introductory Chemical Engineering Thermodynamics or above ● Additional ECIV courses 300-level and above. ● ELCT 221 or above
---	--

- [ECHE 310 - Introductory Chemical Engineering Thermodynamics](#) and above
- **Additional ECIV** courses from the **Distribution and Elective** categories
- ELCT above 201
- [EMCH 290 - Thermodynamic Fundamentals](#) or above (not 310 or 360)
- [ENCP 290 - Thermodynamic Fundamentals](#) or above (not 310 or 360)
- [ENVR 501 - Special Topics in the Environment](#)
- [GEOG 563 - Advanced Geographic Information Systems](#)
- GEOL 300 or above
- [MATH 521 - Boundary Value Problems and Partial Differential Equations](#)
- [MATH 544 - Linear Algebra](#)
- [MATH 550 - Vector Analysis](#)
- MSCI 300 and above
- [NAVY 201 - Naval Ships Systems I](#)
- [NAVY 202 - Naval Ships Systems II](#)
- [NAVY 301 - Navigation/Naval Operations I](#)
- PHYS above 212
- [STAT 511 - Probability](#)

4. Major Requirements (25 hours)

Major Courses

- [ECIV 303 - Civil Engineering Materials](#)
- [ECIV 320 - Structural Analysis I](#)
- [ECIV 330 - Introduction to Geotechnical Engineering](#)
- [ECIV 340 - Introduction to Transportation Engineering](#)
- [ECIV 350 - Introduction to Environmental Engineering](#)
- [ECIV 362 - Introduction to Water Resources Engineering](#)
- [ECIV 405 - Systems Applications in Civil Engineering](#)
- [ECIV 470 - Civil Engineering Design](#)

- [EMCH 290 - Thermodynamic Fundamentals](#) or above (not 360)
- [ENCP 290 - Thermodynamic Fundamentals](#) or above (not 360)
- [ENVR 501 - Special Topics in the Environment](#)
- [GEOG 563 - Advanced Geographic Information Systems](#)
- GEOL 302 or above
- ITEC 233 or above
- MATH 241 - Vector Calculus
- MATH 300 - Transition to Advanced Mathematics
- MATH 344 - Applied Linear Algebra
- MATH 520 - Ordinary Differential Equations
- [MATH 521 - Boundary Value Problems and Partial Differential Equations](#)
- [MATH 544 - Linear Algebra](#)
- [MATH 550 - Vector Analysis](#)
- MSCI 305 and above
- [NAVY 201 - Naval Ships Systems I](#)
- [NAVY 202 - Naval Ships Systems II](#)
- [NAVY 301 - Navigation/Naval Operations I](#)
- PHYS 212 or above
- [STAT 511 - Probability](#)
- STAT 512 – Mathematical Statistics
- STAT 513 – Theory of Statistical Inference
- STAT 516 – Statistical Methods
- STAT 520 – Forecasting and Time Series
- STAT 587 – Big Data Analytics

Other Electives (6-8 hours)

- Additional courses from the ESM Elective category
- ACCT 222 - Introduction to Accounting
- ECON 224 - Introduction to Economics
- FINA 333 - Finance and Markets
- MGMT 371 - Principles of Management
- MGSC 290 - Computer Information Systems in Business
- MKTG 350 - Principles of Marketing

4. Major Requirements (25 hours)

Major Courses

- [ECIV 303 - Civil Engineering Materials](#)
- ECIV 307 – Professional Development for Civil Engineers
- [ECIV 320 - Structural Analysis I](#)

- | | |
|--|--|
| | <ul style="list-style-type: none">• <u>ECIV 330 - Introduction to Geotechnical Engineering</u>• <u>ECIV 340 - Introduction to Transportation Engineering</u>• <u>ECIV 350 - Introduction to Environmental Engineering</u>• <u>ECIV 362 - Introduction to Water Resources Engineering</u>• <u>ECIV 470 - Civil Engineering Design</u> |
|--|--|