

BS in Computer Engineering

Computer Engineering is the application of science to the design, implementation, and maintenance of hardware/software components of: i) computers and ii) systems that include computers (i.e., embedded systems). This program prepares students to practice Computer Engineering and enter graduate programs in various disciplines of science and engineering.

Graduates acquire core knowledge in the following areas:

1. circuits and electronics
2. software design (including data structures and algorithms)
3. digital design
4. computer architecture and organization
5. embedded systems
6. computer networks
7. signal processing
8. systems resource management

Marketable Skills

This subject matter will provide students with skills that are in high demand in the labor market, including but not limited to:

1. Software development
2. Digital Design
3. Data Analysis
4. Communication network design and management
5. Computer and network security analysis
6. Cybersecurity

Educational Objectives

1. Our graduates should apply their knowledge and skills to computer engineering practice or to pursue advanced education successfully as demonstrated by some of the following:
 - a. Completion of certificates, graduate degrees, or professional licensing
 - b. Sustained employment and/or full-time graduate school in electrical/computer engineering or related area
 - c. Advancement and/or recognition in employment
2. Our graduates should demonstrate creativity, leadership, and entrepreneurial thinking in the practice of engineering as demonstrated by some of the following:
 - a. Leadership roles in their organizations, their profession, and/or in society
 - b. Effective participation in disciplinary and multidisciplinary teams
 - c. Successful development and/or improvement of products, processes, and/or systems
3. Our graduates should engage successfully in professional communication as demonstrated by some of the following:
 - a. Publication of technical articles, engineering reports, and/or proposals
 - b. Effective participation in disciplinary and multidisciplinary teams
 - c. Presentation of their work at professional meetings or conferences
4. Our graduates should exhibit social and professional responsibility in the practice of engineering as demonstrated by some of the following:
 - a. Involvement in community service
 - b. Evidence of commitment to lifelong learning
 - c. Membership in professional organizations

Student Outcomes

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as, global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgements, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgement to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Degree Requirements

The BS Degree in Computer Engineering consists of 128 semester credit hours divided into a lower division, providing diverse courses over a broad base of technical subjects, and an upper division providing more-specialized courses. The Degree culminates in a capstone design project.

Degree Plan

BS in Computer Engineering with Concentration

Required Credits: 128

| Code | Title | Hours |
|--|---|-------|
| University Core Curriculum | | |
| Complete the University Core Curriculum requirements. (p. 4) | | 42 |
| Computer Engineering Designated Core (All courses require a grade of C or better) | | |
| Required Courses: | | |
| CE 2326 | Econ for Engrs & Scientists | |
| CS 1320 | Computer Programming Sci/Engr | |
| MATH 1508 | Precalculus | |
| or MATH 1310 | Trigonometry and Conics | |
| or MATH 1411 | Calculus I | |
| PHYS 2320 & PHYS 2120 | Introductory Mechanics and Laboratory for PHYS 2320 | |
| or PHYS 2420 | Introductory Mechanics | |
| PHYS 2321 & PHYS 2121 | Introductory Electromagnetism and Laboratory for PHYS 2321 | |
| or PHYS 2421 | Introductory Electromagnetism | |
| Math/Science Core | | |
| Required: | | |
| MATH 1411 | Calculus I | 4 |
| MATH 1312 | Calculus II | 3 |
| MATH 2313 | Calculus III | 3 |
| MATH 2326 | Differential Equations | 3 |
| MATH 2300 | Discrete Mathematics | 3 |
| MATH 3323 | Matrix Algebra | 3 |
| Electrical/Computer Engineering Core | | |
| Required: | | |
| ECE 1300 | Intro to Electr/Comp Eng | 3 |
| ECE 1100 | Lab for ECE 1300 | 1 |
| ECE 2301 | Electric Circuits I | 3 |
| ECE 2302 | Electric Circuits II | 3 |
| ECE 2102 | Lab for ECE 2302 | 1 |
| ECE 3341 | Electronics I | 3 |
| ECE 3141 | Lab for ECE 3341 | 1 |
| ECE 3331 | Discrete Time Signals & Sys | 3 |
| ECE 3332 | Prob with App Elect/Comp Eng | 3 |
| ECE 3100 | Junior Prof. Orientation | 1 |
| Computer Engineering Core | | |
| Required: | | |
| ECE 2303 | Digital Systems Design I | 3 |
| ECE 2103 | Lab for ECE 2303 | 1 |

| | | |
|----------|--------------------------|---|
| ECE 2300 | Software Design I | 3 |
| ECE 3350 | Software Design II | 3 |
| ECE 2304 | Microprocessor Systems I | 3 |
| ECE 2104 | Lab for ECE 2304 | 1 |
| ECE 3351 | Computer Architecture | 3 |
| ECE 3352 | Operating System Design | 3 |

Senior Capstone

Required:

| | | |
|----------|-----------------------------|---|
| ECE 4201 | CpE Capstone Project Lab I | 2 |
| ECE 4202 | CpE Capstone Project Lab II | 2 |

Select two Computer Engineering Electives with Lab 8

| | |
|------------------------|---|
| ECE 3370 & ECE 3170 | Intro to Communication Netwks and Lab for ECE 3370 |
| ECE 4353 & ECE 4153 | Digital Systems Design II and Lab for ECE 4353 |
| ECE 4354 & ECE 4154 | Microprocessor Systems II and Lab for ECE 4354 |

Elective Courses

Required: 8

Experiential Learning

X1XX

X1XX

Electives

ECE X3XX

ECE X3XX

Students must select one Concentration 6**Total Hours 129****General Computer Engineering**

| Code | Title | Hours |
|---------------------------|-------|-------|
| Select two courses below: | | 6 |
| ECE 33XX or ECE 43XX | | |
| ECE 33XX or ECE 43XX | | |

Digital Design

| Code | Title | Hours |
|-------------------------------------|---------------------------|-------|
| Required: | | 6 |
| ECE 4353 or ECE 33XX OR ECE 43XX | Digital Systems Design II | |
| ECE 4355 | VLSI Design | |

Embedded Systems

| Code | Title | Hours |
|------------------------------|---------------------------|-------|
| Select two of the following: | | 6 |
| ECE 4354 | Microprocessor Systems II | |
| ECE 4353 | Digital Systems Design II | |
| ECE 33XX or ECE 43XX | | |

Communication Networks

| Code | Title | Hours |
|-----------|-------------------------------|-------|
| Required: | | 6 |
| ECE 3370 | Intro to Communication Netwks | |
| ECE 4390 | Special Topics | |

Machine Learning

| Code | Title | Hours |
|-------------------------|--|-------|
| Required | | 6 |
| ECE 4360 | Foundations of Deep Learning | |
| ECE 4361 or ECE 4362 | Fuzzy Logic and Engineering Computer Vision | |

Information Security

| Code | Title | Hours |
|-----------|-------------------------------|-------|
| Required: | | 6 |
| ECE 4370 | Introduction to Cybersecurity | |
| ECE 4390 | Special Topics | |

University Core Curriculum

The department may make specific suggestions for courses which are most applicable towards your major.

All courses require a C or better

I. Communication (six hours)

| Code | Title | Hours |
|---|--------------------------------|----------|
| Courses in this category focus on developing ideas and expressing them clearly, considering the effect of the message, fostering understanding, and building the skills needed to communicate persuasively. Courses involve the command of oral, aural, written, and visual literacy skills that enable people to exchange messages appropriate to the subject, occasion, and audience. | | |
| Select six hours of the following: | | 6 |
| For students whose secondary education was in English: | | |
| COMM 1611 | Written and Oral Communication | |
| ENGL 1313 | Writing About Literature | |
| RWS 1301 | Rhetoric & Composition I | |
| RWS 1302 | Rhetoric & Composition 2 | |
| RWS 1601 | Rhetoric, Composition & Comm | |
| For students whose secondary education was not in English: | | |
| ESOL 1311 | Expos Engl Compos-Spkr Esl | |
| ESOL 1312 | Res & Crit Writng Spkr Esl | |
| Total Hours | | 6 |

II. American History (six hours)

| Code | Title | Hours |
|--|----------------------------|----------|
| Courses in this category focus on the consideration of past events and ideas relative to the United States, with the option of including Texas History for a portion of this component area. Courses involve the interaction among individuals, communities, states, the nation, and the world, considering how these interactions have contributed to the development of the United States and its global role. | | |
| HIST 1301 | History of U.S. to 1865 | 3 |
| HIST 1302 | History of U.S. Since 1865 | 3 |
| Total Hours | | 6 |

III. Language, Philosophy & Culture (three hours)

| Code | Title | Hours |
|--|-------|-------|
| Courses in this category focus on how ideas, values, beliefs, and other aspects of culture express and affect human experience. Courses involve the exploration of ideas that foster aesthetic and intellectual creation in order to understand the human condition across cultures. | | |

Select one of the following: 3

| | |
|-----------|--------------------------------|
| AFST 2300 | Intro-African Amer Studies |
| CHIC 2302 | Latina/o Presence in the U.S. |
| ENGL 2311 | English Literature |
| ENGL 2312 | English Literature |
| ENGL 2313 | Intro to American Fiction |
| ENGL 2314 | Intro to American Drama |
| ENGL 2318 | Intro to American Poetry |
| FREN 2322 | Making of the "Other" Americas |
| HIST 2301 | World History to 1500 |
| HIST 2302 | World History Since 1500 |
| PHIL 1301 | Introduction to Philosophy |
| PHIL 2306 | Ethics |
| RS 1301 | Introduct to Religious Studies |
| SPAN 2340 | Seeing & Naming: Conversations |
| WS 2300 | Introduction to Womens Studies |
| WS 2350 | Global Feminisms |

Total Hours 3

IV. Mathematics (three hours)

| Code | Title | Hours |
|------|-------|-------|
|------|-------|-------|

Courses in this category focus on quantitative literacy in logic, patterns, and relationships. Courses involve the understanding of key mathematical concepts and the application of appropriate quantitative tools to everyday experience.

Select one of the following: 3

| | |
|-----------|--------------------------------|
| MATH 1309 | College Algebra |
| MATH 1310 | Trigonometry and Conics |
| MATH 1319 | Math in the Modern World |
| MATH 1320 | Math for Social Sciences I |
| MATH 1411 | Calculus I |
| MATH 1508 | Precalculus ^{1,2} |
| MATH 2301 | Math for Social Sciences II |
| STAT 1380 | Statistical Literacy |
| STAT 2480 | Elementary Statistical Methods |

1 A higher-level course in the calculus sequence can be substituted.

2 TCCN MATH 1314 will also satisfy this requirement.

Total Hours 3

V. Life & Physical Sciences (six hours)

| Code | Title | Hours |
|------|-------|-------|
|------|-------|-------|

Courses in this category focus on describing, explaining, and predicting natural phenomena using the scientific method. Courses involve the understanding of interactions among natural phenomena and the implications of scientific principles on the physical world and on experiences.

Select one of the following: 1-4

| | |
|-----------|-------------------------------|
| ASTR 1107 | Astronomy Lab I |
| ASTR 1307 | Elem Astronomy-Solar System |
| ASTR 1308 | Elem Astr Stars & Galaxies |
| BIOL 1103 | Introductory Biology Lab |
| BIOL 1104 | Human Biology Laboratory |
| BIOL 1107 | Topics in Study of Life I |
| BIOL 1108 | Organismal Biology Laboratory |
| BIOL 1203 | Introductory Biology |
| BIOL 1304 | Human Biology |
| BIOL 1305 | General Biology |
| BIOL 1306 | Organismal Biology |

| | |
|-----------|--------------------------------|
| BIOL 2111 | Human Anat/Physio Lab I |
| BIOL 2113 | Human Anat/Physio Lab II |
| BIOL 2311 | Human Anat/Physiology I |
| BIOL 2313 | Human Anat/Physiology II |
| CHEM 1105 | Laboratory for CHEM 1305 |
| CHEM 1106 | Laboratory for CHEM 1306 |
| CHEM 1107 | Intro General Chemistry Lab |
| CHEM 1108 | Intro Organic & Biochem Lab |
| CHEM 1305 | General Chemistry |
| CHEM 1306 | General Chemistry |
| CHEM 1307 | Intro to General Chemistry |
| CHEM 1308 | Intro Organic & Biochemistry |
| ESCI 1101 | Environmental Sci. Lab |
| ESCI 1102 | Non-major Lab for ESCI 1301 |
| ESCI 1202 | Intro to Environment Science 2 |
| ESCI 1301 | Intro to Environmental Sci |
| GEOG 1106 | Laboratory for GEOG 1306 |
| GEOG 1306 | Physical Geography |
| GEOL 1103 | Lab for GEOL 1313 |
| GEOL 1104 | Lab for GEOL 1314 |
| GEOL 1111 | Principles of Earth Sci - Lab |
| GEOL 1112 | Laboratory for Geology 1212 |
| GEOL 1211 | Principles of Earth Sciences |
| GEOL 1212 | Principles of Earth Science |
| GEOL 1230 | The Blue Planet |
| GEOL 1231 | Natural Hazards |
| GEOL 1313 | Intro to Physical Geology |
| GEOL 1314 | Intro to Historical Geol |
| HSCI 2302 | Fundamentals of Nutrition |
| HSCI 2303 | Wellness Dynamics |
| MICR 2330 | Microorganisms and Disease |
| PHYS 1403 | General Physics I |
| PHYS 1404 | General Physics II |
| PHYS 2120 | Laboratory for PHYS 2320 |
| PHYS 2121 | Laboratory for PHYS 2321 |
| PHYS 2320 | Introductory Mechanics |
| PHYS 2321 | Introductory Electromagnetism |

Total Hours**6****VI. Political Science (six hours)**

| Code | Title | Hours |
|---|---------------------------|--------------|
| Courses in this category focus on consideration of the Constitution of the United States and the constitutions of the states, with special emphasis on that of Texas. Courses involve the analysis of governmental institutions, political behavior, civic engagement, and their political and philosophical foundations. | | |
| Required Courses: | | |
| POLS 2310 | Introduction to Politics | 3 |
| POLS 2311 | American Gover & Politics | 3 |
| Total Hours | | 6 |

VII. Social and Behavioral Sciences (three hours)

| Code | Title | Hours |
|--|--------------------------------|----------|
| Courses in this category focus on the application of empirical and scientific methods that contribute to the understanding of what makes us human. Courses involve the exploration of behavior and interactions among individuals, groups, institutions, and events, examining their impact on the individual, society, and culture. | | |
| Select one of the following: | | 3 |
| ANTH 1301 | Intro-Phys Anth/Archeolog | |
| ANTH 1302 | Intro-Cultural Anthropology | |
| ANTH 1310 | Cultural Geography | |
| ANTH 2320 | Intro to Linguistics | |
| CE 2326 | Econ for Engrs & Scientists | |
| CHIC 2311 | Intro to Chicano Studies | |
| ASIA 2300 | Asian American Studies | |
| COMM 2350 | Interpersonal Communication | |
| COMM 2372 | Mass Media and Society | |
| ECON 2303 | Principles of Macroeconomics | |
| ECON 2304 | Principles of Microeconomics | |
| EDPC 1301 | Introduction to Ed Psychology | |
| EDU 1342 | Action Research in Classrooms | |
| ENGL 2320 | Introduction to Linguistics | |
| GEOG 1310 | Cultural Geography | |
| LEAD 2300 | Leadership in Action | |
| LING 2320 | Introduction to Linguistics | |
| LING 2340 | Lang. Inside & Out: Sel Topics | |
| PSYC 1301 | Introduction to Psychology | |
| SOCI 1301 | Introduction to Sociology | |
| SOCI 1310 | Cultural Geography | |
| Total Hours | | 3 |

VIII. Creative Arts (three hours)

| Code | Title | Hours |
|---|-------------------------------|----------|
| Courses in this category focus on the appreciation and analysis of creative artifacts and works of the human imagination. Courses involve the synthesis and interpretation of artistic expression and enable critical, creative, and innovative communication about works of art. | | |
| Select one of the following: | | 3 |
| ART 1300 | Art Appreciation | |
| ARTH 1305 | History of Art I | |
| ARTH 1306 | History of Art II | |
| CHIC 1311 | Chicana/o Fine Arts Appreciat | |
| DANC 1304 | Introduction to Dance | |
| FILM 1390 | Intro-Art of Motion Pict. | |
| MUSL 1324 | Music Appreciation | |
| MUSL 1327 | Jazz to Rock | |
| MUSL 2321 | Music, Culture, and Society | |
| THEA 1313 | Introduction to Theatre | |
| Total Hours | | 3 |

IX. Component Area Option (six hours)

| Code | Title | Hours |
|--|--------------------------|-------|
| a. A minimum of 3 SCH must meet the definition and corresponding Core Objectives specified in one of the foundational component areas. b. As an option for up to 3 semester credit hours of the Component Area Option, an institution may select course(s) that: (i) Meet(s) the definition specified for one or more of the foundational component areas; and (ii) Include(s) a minimum of three Core Objectives, including Critical Thinking Skills, Communication Skills, and one of the remaining Core Objectives of the institution's choice. | | |
| BUSN 1301 | Intro to Global Business | |

| | |
|-----------|--------------------------------|
| COMM 1301 | Public Speaking |
| COMM 1302 | Business/Profession Comm |
| CS 1310 | Intro-Computational Thinking |
| CS 1320 | Computer Programming Sci/Engr |
| EL 1301 | Eng Innovation and Leadership |
| ENGR 1302 | Engineering Design Experience |
| ENGR 1303 | Applied Engineering Analysis |
| LEAD 1300 | Introduction to Leadership |
| SCI 1301 | Inquiry in Math & Science |
| SPLP 1312 | Comm. Var. Across the Lifespan |
| UNIV 1301 | Seminar/Critical Inquiry |

Total Hours**0****4-Year Sample Degree Plan****BS Computer Engineering (Starting with Pre-calculus)**

| Code | Title | Hours |
|--|---|--------------|
| Bachelor of Science in Computer Engineering | | |
| Summer | | |
| (If needed) | | |
| MATH 1508 or MATH 1310 | Precalculus Trigonometry and Conics | 3-5 |
| FRESHMAN | | |
| Fall | | |
| MATH 1411 | Calculus I | 4 |
| ECE 1300 | Intro to Electr/Comp Eng | 3 |
| ECE 1100 | Lab for ECE 1300 | 1 |
| CS 1320 | Computer Programming Sci/Engr | 3 |
| RWS 1301 | Rhetoric & Composition I | 3 |
| UNIV 1301 | Seminar/Critical Inquiry | 3 |
| Spring | | |
| MATH 1312 | Calculus II | 3 |
| ECE 2303 | Digital Systems Design I | 3 |
| ECE 2103 | Lab for ECE 2303 | 1 |
| PHYS 2320 & PHYS 2120 | Introductory Mechanics and Laboratory for PHYS 2320 | 4 |
| RWS 1302 | Rhetoric & Composition 2 | 3 |
| HIST 1301 | History of U.S. to 1865 | 3 |
| SOPHMORE | | |
| Fall | | |
| MATH 2326 | Differential Equations | 3 |
| ECE 2301 | Electric Circuits I | 3 |
| ECE 2300 | Software Design I | 3 |
| CE 2326 | Econ for Engrs & Scientists | 3 |
| PHYS 2321 & PHYS 2121 | Introductory Electromagnetism and Laboratory for PHYS 2321 | 4 |
| Spring | | |
| MATH 2313 | Calculus III | 3 |
| ECE 2302 | Electric Circuits II | 3 |
| ECE 2102 | Lab for ECE 2302 | 1 |
| ECE 2304 | Microprocessor Systems I | 3 |
| ECE 2104 | Lab for ECE 2304 | 1 |
| MATH 2300 | Discrete Mathematics | 3 |

| | | |
|-----------------------------------|------------------------------|---|
| HIST 1302 | History of U.S. Since 1865 | 3 |
| Junior | | |
| Fall | | |
| MATH 3323 | Matrix Algebra | 3 |
| ECE 3331 | Discrete Time Signals & Sys | 3 |
| ECE 3341 | Electronics I | 3 |
| ECE 3141 | Lab for ECE 3341 | 1 |
| ECE 3350 | Software Design II | 3 |
| ECE 3351 | Computer Architecture | 3 |
| Spring | | |
| ECE 3100 | Junior Prof. Orientation | 1 |
| ECE 3332 | Prob with App Elect/Comp Eng | 3 |
| ECE 3352 | Operating System Design | 3 |
| CpE Elective | | 3 |
| CpE Elective Lab | | 1 |
| Creative Arts Component | | 3 |
| Senior | | |
| Fall | | |
| Experiential Learning | | 1 |
| ECE 4201 | CpE Capstone Project Lab I | 2 |
| CpE Elective | | 3 |
| CpE Elective Lab | | 1 |
| CpE Concentration or ECE Elective | | 3 |
| Core Curriculum Course | | 3 |
| POLS 2310 | Introduction to Politics | 3 |
| Spring | | |
| Experiential Learning | | 1 |
| ECE 4202 | CpE Capstone Project Lab II | 2 |
| CpE Concentration or ECE Elective | | 3 |
| ECE Elective | | 3 |
| ECE Elective | | 3 |
| POLS 2311 | | |

BS Computer Engineering (Starting with Calculus)

| Code | Title | Hours |
|--|--|-------|
| Bachelor of Science in Computer Engineering | | |
| FRESHMAN | | |
| Fall | | |
| MATH 1411 | Calculus I | 4 |
| ECE 1300 | Intro to Electr/Comp Eng | 3 |
| ECE 1100 | Lab for ECE 1300 | 1 |
| CS 1320 | Computer Programming Sci/Engr | 3 |
| RWS 1301 | Rhetoric & Composition I | 3 |
| UNIV 1301 | Seminar/Critical Inquiry | 3 |
| Spring | | |
| MATH 1312 | Calculus II | 3 |
| ECE 2303 | Digital Systems Design I | 3 |
| ECE 2103 | Lab for ECE 2303 | 1 |
| PHYS 2320 & PHYS 2120 | Introductory Mechanics and Laboratory for PHYS 2320 | 4 |
| RWS 1302 | Rhetoric & Composition 2 | 3 |
| HIST 1301 | History of U.S. to 1865 | 3 |

SOPHMORE

| | | |
|-----------------------------------|---|---|
| Fall | | |
| MATH 2326 | Differential Equations | 3 |
| ECE 2301 | Electric Circuits I | 3 |
| ECE 2300 | Software Design I | 3 |
| CE 2326 | Econ for Engrs & Scientists | 3 |
| PHYS 2321 & PHYS 2121 | Introductory Electromagnetism and Laboratory for PHYS 2321 | 4 |
| Spring | | |
| MATH 2313 | Calculus III | 3 |
| ECE 2302 | Electric Circuits II | 3 |
| ECE 2102 | Lab for ECE 2302 | 1 |
| ECE 2304 | Microprocessor Systems I | 3 |
| ECE 2104 | Lab for ECE 2304 | 1 |
| MATH 2300 | Discrete Mathematics | 3 |
| HIST 1302 | History of U.S. Since 1865 | 3 |
| Junior | | |
| Fall | | |
| MATH 3323 | Matrix Algebra | 3 |
| ECE 3331 | Discrete Time Signals & Sys | 3 |
| ECE 3341 | Electronics I | 3 |
| ECE 3141 | Lab for ECE 3341 | 1 |
| ECE 3350 | Software Design II | 3 |
| ECE 3351 | Computer Architecture | 3 |
| Spring | | |
| ECE 3100 | Junior Prof. Orientation | 1 |
| ECE 3332 | Prob with App Elect/Comp Eng | 3 |
| ECE 3352 | Operating System Design | 3 |
| CpE Elective | | 3 |
| CpE Elective Lab | | 1 |
| Creative Arts Component | | 3 |
| Senior | | |
| Fall | | |
| Experiential Learning | | 1 |
| ECE 4201 | CpE Capstone Project Lab I | 2 |
| CpE Elective | | 3 |
| CpE Elective Lab | | 1 |
| CpE Concentration or ECE Elective | | 3 |
| Core Curriculum Course | | 3 |
| POLS 2310 | Introduction to Politics | 3 |
| Spring | | |
| Experiential Learning | | 1 |
| ECE 4202 | CpE Capstone Project Lab II | 2 |
| CpE Concentration or ECE Elective | | 3 |
| ECE Elective | | 3 |
| ECE Elective | | 3 |
| POLS 2311 | American Gover & Politics | 3 |