Computer Engineering 2019-2020 (Class of 2023)

| | | Fall First Year | |
|-----|-----|---|----|
| CMJ | 103 | Fund of Public Communication Human Values/Social Context | 3 |
| ECE | 100 | ELE & CEN Eng Seminar | 1 |
| ECE | 101 | Intro to ELE & CEN Eng | 3 |
| MAT | 126 | Calculus I | 4 |
| PHY | 121 | Physics for Engineers 1 | 4 |
| | | | 15 |

| | Spring First Year | | |
|-----|-------------------|-----------------------------|----|
| ECE | 177 | Intro to Prog for Engineers | 4 |
| ENG | 101 | College Composition | 3 |
| MAT | 127 | Calculus II | 4 |
| PHY | 122 | Physics for Engineers II | 4 |
| | | | 15 |

| | Fall Sophomore | | |
|----------|---|----|--|
| COS 221 | Intro to Computer Science II | 3 | |
| ECE 210 | Electrical Networks I | 4 | |
| ECE 275 | Sequential Logic Systems | 3 | |
| MAT 228 | Calculus III | 4 | |
| Elective | HV & SC (1) Cultural Diversity & International Perspectives | 3 | |
| | | 17 | |

| Spring Sophomore | | |
|------------------|--|----|
| ECE 214 | Electrical Networks Lab | 3 |
| ECE 271 | Micro Arch & Applications | 4 |
| Elective | Generic Focus (1) | 3 |
| MAT 258 | Diff Eqn. & Linear Algebra | 4 |
| Elective | HV & SC (2) - Western Cultural Tradition | 3 |
| | | |
| | | |
| | | 17 |

| | Fall Junior | | | |
|-----|--------------|------------------------------------|---|--|
| | 316 332 | Random Signal Analysis Statistics | 3 | |
| ECE | 342 | Electronics I | 4 | |
| ECE | 473 | Computer Architecture & Org | 4 | |
| ECE | 314 | Signals and Systems | 3 | |
| | | | | |

| | Spring Junior | |
|-----------------------|---|---|
| ECE 331 COS 331 | Introduction to UNIX Systems Administration Operating Systems | 3 |
| ECE 405 | Design Project | 2 |
| ECE 477 Elective | Hardware Applications in C Computer Focus (1) | 3 |
| Elective | Computer Focus (2) | 3 |
| Elective | HV & SC (3) Population and the Environment | 3 |
| Elective | HV & SC (4) Artistic & Creative Expression | 3 |
| | | |

| | Fall Senior | |
|-----------------------|--|----|
| ECE 406 | Design Project II | 4 |
| ECE 471 Elective | Embedded Systems Computer Focus (1) | 3 |
| MAT 481 COS 250 | Discrete Mathematics Discrete Structures | 3 |
| Elective | Computer Focus (3) | 3 |
| Elective | ECE Technical Elective (1) | 3 |
| | | 16 |

| | Spring Senior | |
|----------|----------------------------|----|
| ECE 403 | Design Project III | 2 |
| ECE 486 | Digital Signal Processing | 4 |
| Elective | Computer Focus (4) | 1 |
| Elective | ECE Technical Elective (2) | 3 |
| Elective | HV & SC (5) Ethics | 3 |
| | | |
| | | |
| | | 13 |

| Total Credit Hours | 124 |
|--------------------|-----|
| | |

14

ECE
Math &
Science
English
Gen Ed

Computer Engineering with Honors 2019-2020 (Class of 2023)

15

| Fall First Year | | | |
|-----------------|-----|-------------------------|----|
| ECE | 100 | ELE & CEN Eng Seminar | 1 |
| ECE | 101 | Intro to ELE & CEN Eng | 3 |
| HON | 111 | Civilizations I | 4 |
| MAT | 126 | Calculus I | 4 |
| PHY | 121 | Physics for Engineers 1 | 4 |
| | | | |
| | | | 16 |

| Spring First Year | | | |
|-------------------|-----------------------------|----|--|
| ECE 177 | Intro to Prog for Engineers | 4 | |
| HON 112 | Civilizations II | 4 | |
| MAT 127 | Calculus II | 4 | |
| PHY 122 | Physics for Engineers II | 4 | |
| | | 16 | |

| | Fall Sophomore | | |
|-----|----------------|------------------------------|-----|
| COS | 221 | Intro to Computer Science II | 3 |
| ECE | 210 | Electrical Networks I | 4 |
| ECE | 275 | Sequential Logic Systems | 3 |
| HON | 211 | Civilizations III | 4 |
| MAT | 228 | Calculus III | 4 |
| | | | 1.0 |

| Spring Sophomore | | |
|------------------|---------------------------------|----|
| ECE 214 | Electrical Networks Lab | 3 |
| ECE 271 | Micro Arch & Applications | 4 |
| Elective | Generic Focus (1) - Math course | 3 |
| HON 212 | Civilizations IV | 4 |
| MAT 258 | Diff Eqn. & Linear Algebra | 4 |
| | | |
| | | |
| | | 18 |

| | Fall Junior | | |
|-----|--------------|------------------------------------|---|
| | 316 332 | Random Signal Analysis Statistics | 3 |
| ECE | 342 | Electronics I | 4 |
| ECE | 473 | Computer Architecture & Org | 4 |
| HON | 180 | A Cultural Odyssey | 1 |
| ECE | 314 | Signals and Systems | 3 |
| | | | |
| | | | |

| Spring Junior | | | |
|---------------------|---|----|--|
| HON 170 | Currents and Context | 1 | |
| ECE 331 COS 331 | Introduction to UNIX Systems Administration Operating Systems | 3 | |
| ECE 405 | Design Project | 2 | |
| ECE 477 Elective | Hardware Applications in C Computer Focus (1) | 3 | |
| HON 3XX | Honors Tutorial | 3 | |
| Elective | Computer Focus (2) | 3 | |
| HON 391 | Intro to Thesis Research | 1 | |
| | | 16 | |

| Fall Senior | | | |
|-----------------------|--|----|--|
| ECE 471 Elective | Embedded Systems Computer Focus (1) | 3 | |
| HON 498 | Honor Directed Study | 3 | |
| MAT 481 COS 250 | Discrete Mathematics Discrete Structures | 3 | |
| Elective | Computer Focus (3) | 3 | |
| Elective | ECE Technical Elective (1) | 3 | |
| | | | |
| | | 15 | |

| | Spring Senior | | |
|----------|----------------------------|----|--|
| ECE 486 | Digital Signal Processing | 4 | |
| HON 499 | Honors Thesis | 3 | |
| Elective | Computer Focus (4) | 1 | |
| Elective | ECE Technical Elective (2) | 3 | |
| | | | |
| | | | |
| | | 11 | |

| Total Credit Hours | 125 | • |
|--------------------|-----|---|
|--------------------|-----|---|

ECE
Math &
Science
Gen Ed
Honors

Electrical Engineering 2019-2020 (Class of 2023)

| | | Fall First Year | |
|-----|-----|---|----|
| CHY | 131 | Chemistry for Engineers | 3 |
| CHY | 133 | Chemistry for Engineers Lab | 1 |
| CMJ | 103 | Fund of Public Communication Human Values/Social Context | 3 |
| ECE | 100 | ELE & CEN Eng Seminar | 1 |
| ECE | 101 | Intro to ELE & CEN Eng | 3 |
| MAT | 126 | Calculus I | 4 |
| | | | |
| | | | 15 |

| | Spring First Year | | | |
|-----|-------------------|-----------------------------|----|--|
| ECE | 177 | Intro to Prog for Engineers | 4 | |
| ENG | 101 | College Composition | 3 | |
| MAT | 127 | Calculus II | 4 | |
| PHY | 121 | Physics for Engineers I | 4 | |
| | | | 15 | |

| | Fall Sophomore | | | |
|----------|---|----|--|--|
| ECE 210 | Electrical Networks I | 4 | | |
| ECE 275 | Sequential Logic Systems | 3 | | |
| Elective | HV & SC (1) Cultural Diversity & International Perspectives | 3 | | |
| MAT 228 | Calculus III | 4 | | |
| PHY 122 | Physics for Engineers II | 4 | | |
| | | | | |
| | | 18 | | |

| | Spring Sophomore | |
|----------|--|----|
| ECE 214 | Electrical Networks Lab | 3 |
| ECE 271 | Micro Arch & Applications | 4 |
| ECE 351 | Fields and Waves | 3 |
| MAT 258 | Diff Eqn. & Linear Algebra | 4 |
| Elective | HV & SC (2) - Western Cultural Tradition | 3 |
| | | |
| | | |
| | | 17 |

| | Fall Junior | | |
|----------------------|------------------------------------|----|--|
| ECE 316 STS 332 | Random Signal Analysis Statistics | 3 | |
| ECE 342 | Electronics I | 4 | |
| ECE 314 | Signals and Systems | 3 | |
| Elective | ECE Technical Elective (1) | 3 | |
| | | 13 | |

| Spring Junior | | |
|---------------|----------------------------|----|
| ECE 343 | Electronics II | 4 |
| ECE 401 | Design Project | 2 |
| ECE 486 | Digital Signal Processing | 4 |
| Elective | Electrical Focus (1) | 3 |
| Elective | ECE Technical Elective (2) | 3 |
| | | |
| | | |
| | | 16 |

| | Fall Senior | |
|----------|--|----|
| ECE 402 | Design Project II | 4 |
| Elective | Electrical Focus (2) | 3 |
| Elective | Generic Focus (2) | 3 |
| Elective | Generic Focus (1) | 3 |
| Elective | HV & SC (3) Population and the Environment | 3 |
| | | 16 |

| | Spring Senior | |
|----------|--|----|
| ECE 403 | Design Project III | 2 |
| ECE 414 | Feedback Control Systems | 3 |
| Elective | Electrical Focus (3) | 3 |
| Elective | HV & SC (4) Artistic & Creative Expression | 3 |
| Elective | HV & SC (5) Ethics | 3 |
| | | |
| | | |
| | | 14 |

| Total Credit Hours | 124 | |
|--------------------|-----|--|
| | | |

ECE
Math &
Science
English
Gen Ed

Electrical Engineering with Honors 2019-2020 (Class of 2023)

| | | Fall First Year | |
|-----|-----|-------------------------|----|
| ECE | 100 | ELE & CEN Eng Seminar | 1 |
| ECE | 101 | Intro to ELE & CEN Eng | 3 |
| HON | 111 | Civilizations I | 4 |
| MAT | 126 | Calculus I | 4 |
| PHY | 121 | Physics for Engineers I | 4 |
| | | | |
| | | | 16 |

| | Spring First Year | |
|---------|-----------------------------|----|
| ECE 177 | Intro to Prog for Engineers | 4 |
| HON 112 | Civilizations II | 4 |
| MAT 127 | Calculus II | 4 |
| PHY 122 | Physics for Engineers II | 4 |
| | | 16 |

| | | Fall Sophomore | |
|-----|-----|--------------------------|----|
| ECE | 210 | Electrical Networks I | 4 |
| ECE | 275 | Sequential Logic Systems | 3 |
| HON | 211 | Civilizations III | 4 |
| MAT | 228 | Calculus III | 4 |
| | | | 15 |

| | | Spring Sophomore | |
|-----|-----|----------------------------|---|
| ECE | 214 | Electrical Networks Lab | 3 |
| ECE | 271 | Micro Arch & Applications | 4 |
| ECE | 351 | Fields and Waves | 3 |
| HON | 212 | Civilizations IV | 4 |
| MAT | 258 | Diff Eqn. & Linear Algebra | 4 |
| | | | |

| | | Fall Junior | |
|------------|--------------|------------------------------------|----|
| CHY | 131 | Chemistry for Engineers | 3 |
| CHY | 133 | Chemistry for Engineers Lab | 1 |
| ECE STS | 316 332 | Random Signal Analysis Statistics | 3 |
| ECE | 342 | Electronics I | 4 |
| ECE | 314 | Signals and Systems | 3 |
| HON | 180 | A Cultural Odyssey | 1 |
| | | | |
| | | | |
| | | | 15 |

| | Spring Junior | |
|----------|---------------------------|----|
| ECE 343 | Electronics II | 4 |
| ECE 401 | Design Project | 2 |
| ECE 486 | Digital Signal Processing | 4 |
| HON 3XX | Honors Tutorial | 3 |
| Elective | Electrical Focus (1) | 3 |
| HON 170 | Currents and Context | 1 |
| HON 391 | Intro to Thesis Research | 1 |
| | | |
| | | 18 |

| | Fall Senior | | |
|----------|----------------------------|----|--|
| HON 498 | Honor Directed Study | 3 | |
| Elective | Electrical Focus (2) | 3 | |
| Elective | ECE Technical Elective (1) | 3 | |
| Elective | Generic Focus (2) | 3 | |
| Elective | Generic Focus (1) | 3 | |
| | | | |
| | | | |
| | | 15 | |

| Spring Senior | | |
|---------------|----------------------------|----|
| ECE 414 | Feedback Control Systems | 3 |
| HON 499 | Honors Thesis | 3 |
| Elective | Electrical Focus (3) | 3 |
| Elective | ECE Technical Elective (2) | 3 |
| | | |
| | | |
| | | 12 |

| Total Credit Hours | 125 |
|--------------------|-----|
|--------------------|-----|

ECE
Math &
Science
Honors
Gen Ed

Double Major 2019-2020 (Class of 2023)

| Fall First Year | | | |
|-----------------|-------|---|----|
| CHY | 131 | Chemistry for Engineers | 3 |
| CHY | 133 | Chemistry for Engineers Lab | 1 |
| CMJ | 103 | Fund of Public Communication Human Values/Social Context | 3 |
| ECE | 100 | ELE & CEN Eng Seminar | 1 |
| ECE | 101 | Intro to ELE & CEN Eng | 3 |
| MAT | 126 | Calculus I | 4 |
| Ele | ctive | HV & SC (1) Cultural Diversity & International Perspectives | 3 |
| | | | 18 |

| Spring First Year | | |
|-------------------|--|----|
| ECE 177 | Intro to Prog for Engineers | 4 |
| ENG 101 | College Composition | 3 |
| MAT 127 | Calculus II | 4 |
| PHY 121 | Physics for Engineers I | 4 |
| Elective | HV & SC (2) - Western Cultural Tradition | 3 |
| | | 18 |

| | Fall Sophomore | | | |
|-----|----------------|------------------------------|----|--|
| COS | 221 | Intro to Computer Science II | 3 | |
| ECE | 210 | Electrical Networks I | 4 | |
| ECE | 275 | Sequential Logic Systems | 3 | |
| MAT | 228 | Calculus III | 4 | |
| PHY | 122 | Physics for Engineers II | 4 | |
| | | | 18 | |

| Spring Sophomore | | | |
|------------------|--|----|--|
| ECE 214 | Electrical Networks Lab | 3 | |
| ECE 271 | Micro Arch & Applications | 4 | |
| ECE 351 | Fields and Waves | 3 | |
| MAT 258 | Diff Eqn. & Linear Algebra | 4 | |
| Elective | HV & SC (3) Population and the Environment | 3 | |
| | | | |
| | | | |
| | | 17 | |

| Fall Junior | |
|---|----|
| ECE 316 Random Signal Analysis Statistics | 3 |
| ECE 342 Electronics I | 4 |
| ECE 314 Signals and Systems | 3 |
| Elective Computer Focus (2) | 3 |
| ECE 471 Embedded Systems Computer Focus (1) | 3 |
| | 16 |

| | | Spring Junior | |
|--|----------|---------------------------|----|
| FCF 401/5 Design Project | ECE 343 | Electronics II | 4 |
| 202 101/ 5 2031gii 110 jeet | ECE 401/ | 75 Design Project | 2 |
| ECE 477 Hardware Applications in C Computer Focus Elective (1) | | • • • • • • | 3 |
| ECE 486 Digital Signal Processing | ECE 486 | Digital Signal Processing | 4 |
| Elective Electrical Focus (1) | Elective | e Electrical Focus (1) | 3 |
| | | | |
| | | | 16 |

| Fall Senior | | | |
|---------------------|--|----|--|
| ECE 402/6 | Design Project II | 4 | |
| ECE 473 | Computer Architecture & Org | 4 | |
| MAT 481 COS 250 | Discrete Mathematics Discrete Structures | 3 | |
| Elective | Electrical Focus (2) | 3 | |
| Elective | Computer Focus (3) | 3 | |
| Elective | Computer Focus (4) | 1 | |
| | | 18 | |

| Spring Senior | | | |
|----------------------|--|----|--|
| ECE 331 COS 331 | <pre>Introduction to UNIX Systems Administration Operating Systems</pre> | 3 | |
| ECE 403 | Design Project III | 2 | |
| ECE 414 | Feedback Control Systems | 3 | |
| Elective | Electrical Focus (3) | 3 | |
| Elective | HV & SC (4) Artistic & Creative Expression | 3 | |
| Elective | HV & SC (5) Ethics | 3 | |
| | | | |
| | | 17 | |

| Total Credit Hours 138 |
|------------------------|
|------------------------|

ECE
Math &
Science
English
Gen Ed

Either ECE 401/402 or ECE 405/406 are required, but not both for double major.

Double Major with Honors 2019-2020 (Class of 2023)

| | | Fall First Year | |
|-----|-----|-------------------------|----|
| ECE | 100 | ELE & CEN Eng Seminar | 1 |
| ECE | 101 | Intro to ELE & CEN Eng | 3 |
| HON | 111 | Civilizations I | 4 |
| MAT | 126 | Calculus I | 4 |
| PHY | 121 | Physics for Engineers I | 4 |
| | | | |
| | | | 16 |

| Spring First Year | | |
|-------------------|-----------------------------|----|
| ECE 177 | Intro to Prog for Engineers | 4 |
| HON 112 | Civilizations II | 4 |
| MAT 127 | Calculus II | 4 |
| PHY 122 | Physics for Engineers II | 4 |
| | | 16 |

| | Fall Sophomore | | | |
|-----|----------------|------------------------------|----|--|
| COS | 221 | Intro to Computer Science II | 3 | |
| ECE | 210 | Electrical Networks I | 4 | |
| ECE | 275 | Sequential Logic Systems | 3 | |
| HON | 211 | Civilizations III | 4 | |
| MAT | 228 | Calculus III | 4 | |
| | | | 18 | |

| Spring Sophomore | | | |
|------------------|-----|----------------------------|----|
| ECE | 214 | Electrical Networks Lab | 3 |
| ECE | 271 | Micro Arch & Applications | 4 |
| ECE | 351 | Fields and Waves | 3 |
| HON | 212 | Civilizations IV | 4 |
| MAT | 258 | Diff Eqn. & Linear Algebra | 4 |
| | | | |
| | | | |
| | | | 18 |

| Fall Junior | | |
|-----------------------|---------------------------------------|-----|
| ECE 316 STS 332 | Random Signal Analysis Statistics | 3 |
| ECE 342 | Electronics I | 4 |
| ECE 314 | Signals and Systems | 3 |
| ECE 471 Elective | Embedded Systems Computer Focus (1) | 3 |
| HON 180 | A Cultural Odyssey | 1 |
| | | 1.4 |

| Spring Junior | | | |
|---------------|----------------|---|----|
| ECE | 343 | Electronics II | 4 |
| ECE | 401/5 | Design Project | 2 |
| | 477 ctive | Hardware Applications in C Computer Focus (1) | 3 |
| ECE | 486 | Digital Signal Processing | 4 |
| HON | 3XX | Honors Tutorial | 3 |
| HON | 391 | Intro to Thesis Research | 1 |
| | | | 17 |

| Fall Senior | | |
|---------------------|--|----|
| ECE 473 | Computer Architecture & Org | 4 |
| HON 498 | Honor Directed Study | 3 |
| MAT 481 COS 250 | Discrete Mathematics Discrete Structures | 3 |
| Elective | Computer Focus (2) | 3 |
| Elective | Electrical Focus (1) | 3 |
| | | 16 |

| Spring Senior | | |
|----------------------|--|----|
| ECE 331 COS 331 | <pre>Introduction to UNIX Systems Administration Operating Systems</pre> | 3 |
| ECE 414 | Feedback Control Systems | 3 |
| HON 499 | Honors Thesis | 3 |
| Elective | Electrical Focus (3) | 3 |
| Elective | Computer Focus (3) | 1 |
| HON 170 | Currents and Context | 1 |
| | | |
| | | 14 |

| Fall Super Senior | | |
|-------------------|-----------------------------|----|
| CHY 131 | Chemistry for Engineers | 3 |
| CHY 133 | Chemistry for Engineers Lab | 1 |
| Elective | Computer Focus (4) | 3 |
| Elective | Electrical Focus (2) | 3 |
| | | |
| | | 10 |

| Total Credit Hours | 139 |
|--------------------|-----|
| Total Credit Hours | 139 |

ECE
Math &
Science
Honors
Gen Ed

Either ECE 401 or ECE 405 is required, but not both for double major. $\,$