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| <u>General Education and Major Coursework:</u><br>ENGL 110C<br>MATH 211 (4 credits)<br>ENGN 110 (2 credits)<br><br>CHEM 121N and 122N (4 credits)<br><a href="#">Oral Communication: COMM 101R preferred</a> | <u>VCCS Equivalency:</u><br>ENG 111*<br>MTH 173, 263 or 273*<br>EGR 121 or 120*<br><br>CHM 111*<br><a href="#">CST 100, 105 or 110</a> | <u>General Education and Major Coursework:</u><br>CHEM 123N and 124N (4 credits)<br>MATH 212 (4 credits)<br>PHYS 261N, 231N, or 226N<br><br>ECE 111 | <u>VCCS Equivalency:</u><br>CHM 112*<br>MTH 174, 264, or 274*<br>See note below*<br><br>ITE 119 OR 120 |
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| <u>General Education and Major Coursework:</u><br>ENGL 211C or 231C<br>ECE 201<br>MATH 307 or 280<br>PHYS 262N, 232N, or 227N (4 credits)<br><br>ENGN 150 | <u>VCCS Equivalency:</u><br>ENG 115 or 131*<br>EGR 260 or 271*<br>MTH 267 or 279*<br>See note below*<br>EGR 126 or ITP 132 (all VCCS) or<br>CSC 201 (only accepted from TCC,<br>TNCC, PHCC or PDCCC)* | <u>General Education and Major Coursework:</u><br>MATH 312 or 285 (4 credits)<br>PHYS 319<br>ECE 241<br>PHYS 262N (4 credits)<br><br>ECE 287 (2 credits)<br><br>ECE 202 | <u>VCCS Equivalency:</u><br>MTH 265 or 277*<br><br>EGR 270 or 277*<br>See note below*<br><br>EGR 262*<br><br>EGR 261 or 272* |
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| <u>Major Coursework:</u><br>PHYS 323<br>PHYS 355<br>PHYS 425<br>ECE 302<br>ECE 303 | <u>VCCS Equivalency:</u> | <u>Major Coursework:</u><br>PHYS 453 or ECE 323**<br>ECE 313 (4 credits)<br>ECE 381<br>PHYS 411, 415, 416, or 417**<br><a href="#">Literature</a> | <u>VCCS Equivalency:</u><br><br><br><br><br><a href="#">Transfer Equivalency Guide</a> |
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| <u>Major Coursework:</u><br>ENMA 480 (Meets Philosophy and Ethics requirement)<br>PHYS 452<br><br>ECE 304<br>ECE 332<br>ECE Technical Elective I** |  | <u>Major Coursework:</u><br>PHYS 413<br>PHYS 456<br>PHYS 499W or 489W & 490W**<br>ECE 387<br><a href="#">Human Behavior</a> | <u>VCCS Equivalency:</u><br><br><br><br><br><a href="#">Transfer Equivalency Guide</a> |
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| <u>Major Coursework:</u><br>PHYS 420<br>ECE Technical Elective II**<br>ECE 485W<br>ECE 486 (2 credits)<br>ECE 304<br><a href="#">Human Creativity</a> | <u>VCCS Equivalency:</u><br><br><br><br><br><a href="#">Transfer Equivalency Guide</a> | <u>Major Coursework:</u><br>PHYS 454<br>ECE 487 (2 credits)<br>ECE Technical Elective III**<br>ECE Technical Elective IV**<br><br><a href="#">Interpreting the Past</a> | <u>VCCS Equivalency:</u><br><br><br><br><br><a href="#">Transfer Equivalency Guide</a> |
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The Upper Division General Education will be satisfied by completion of the dual majors.

5-year, dual degree program in physics and electrical engineering. Students will receive a B.S. and B.S.E.E. upon graduation. Major provides the highest level of preparation for both graduate school and positions in industry.

*Note: PHYS 261N and 262N have no VCCS equivalency. However, if you must take Physics courses for the AS degree, you should take PHY 221, 231 or 241 and PHY 222, 232 or 242. These courses transfer as PHYS 231N and PHYS 232N. The Department will assess student's proficiency and substitute for PHYS 261N and 262N if eligible.*

*This five-year plan is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.*