| PROGRAM ARTICULATION DEGREE PLAN | | | | | |
|---|---|---|---|---|---|
| ***Waubonsee Community College 2022-2023*** | | | ***Southern Illinois University Carbondale*** | | |
| Associate in Engineering Science (AES) - 60+ hrs | | | BS Computer Engineering (CEGR) - 120 hrs | | |
| | | | **University Core Curriculum (UCC) - 41 hrs** | | |
| | | **Hrs** | | | **Hrs** |
| | | | UCOL 101 | Foundations of Inquiry | NA |
| ENG 101 | First-Year Composition I | 3 | ENGL 101 | English Composition I | T |
| ENG 102 | First-Year Composition II | 3 | ENGL 102 | English Composition II | T |
| COM 100 | Fund of Speech Communication | 3 | CMST 101 | Intro:Oral Communication | T |
| MTH 131 | Calculus & Analytical Geometry I | 4 | MATH 150 (Required for BS degree) | Calculus I | T |
| ECN 201 | Principles of Microeconomics | 3 | ECON 240 | Microeconomics | T |
| | *IAI Social Science | 3 | SOCIAL SCIENCE | *(See SIUC Equivalency Guide)* | T |
| | *IAI Humanities | 3 | HUMANITIES | *(See SIUC Equivalency Guide)* | T |
| | | | HUMANITIES | | NA |
| CHEM 121 | General Chemistry | 4 | CHEM 200/201 (Required for BS degree) | Intro to Chemical Principles/Lab | T |
| PHY 221 | General Physics I | 5 | PHYS 205/255A (Required for BS degree) | University Physics/Lab | T |
| | | | FINE ARTS | | 3 |
| | | | BIOL 202 (Required for BS degree) | Human Genetics and Human Health | 2 |
| | | | MULTICULTURAL | | 3 |
| | | **31** | | | **8** |
| **One course satisfying degree requirements must have a non-Western (N) or diversity (D) emphasis.* | | | | | |
| | | | | | |
| **Program Requirements** | | | **Program Requirements** | | |
| CIS 115 | Introduction to Programming | 3 | **Any course not articulated will be used to satisfy general credit** | | |
| EGR 101 | Engineering Graphics | 4 | | | |
| CHEM 122 | Chemistry & Qualitative Analysis | 4 | CHEM 210/211 (Required for BS degree) | General & Inorganic Chemistry/Lab | T |
| CIS 130 -and- 230 | C++ Programing -and- Advanced C++ | 6 | ECE 222 | Intro to Digital Computation | T |
| MTH 132 | Calculus & Analytical Geometry II | 4 | MATH 250 (Required for BS degree) | Calculus II | T |
| MTH 233 | Calculus & Analytical Geometry III | 4 | MATH 251 (Required for BS degree) | Calculus III | T |
| MTH 240 | Differential Equations | 3 | MATH 305 (Required for BS degree) | Intro to Differential Equations I | T |
| PHY 222 | General Physics II | 5 | PHYS 205/255B (Required for BS degree) | University Physics/Lab | T |
| | | **33** | | | |
| | | | ECE 235/235L | Electric Circuits/Lab | 4 |
| | | | ECE 296/296L | Software Tools for Robotics/Lab | 4 |
| | | | ECE 315 | Math Methods in ECE | 4 |
| | | | ECE 321/321L | Intro Software Engineering/Lab | 4 |
| | | | ECE 327/327L | Digital Circuit Design with HDL/Lab | 4 |
| | | | ECE 329/329L | Computer Organization & Design/Lab | 4 |
| | | | ECE 345/345L | Electronics/Lab | 4 |
| | | | ECE 355/355L | Signals & Systems/Lab | 4 |
| | | | ECE 495C | ECE Senior Design I | 3 |
| | | | ECE 495D | ECE Senior Design II | 3 |
| | | | ECE Electives | At least 20 hours from the following list: ECE 412-432, two approved CS courses from CS 3XX or 4XX level (except CS 300, 393, or 493) | 23 |
| | | | | | **61** |
| | | | | | |
| **Total semester hrs completed with AES degree:** | | **64** | **Total semester hrs completed with BS degree:** | | **69** |
| | | | | | |
| | | | **Total to BS degree:** | | **133** |
| *Degree Plan created by SW 10/19/21* | | | | | |