

COMPUTER SCIENCE, PRE-PROFESSIONAL

(Note: Program requirements for this degree are offered on NOC Enid and NOC Tonkawa campus only.

At the beginning of each course listing, the four letter abbreviation indicates the department and the four digits indicate the course code used for enrollment. The total course hour value follows each.)

| PROGRAM REQUIREMENTS | | SUGGESTED COURSE SEQUENCE | |
|---|--------------------------------|---|--------------------------------|
| GENERAL EDUCATION COURSES | Credit Hours 37 TOTAL HOURS | FIRST SEMESTER | Credit Hours 16 TOTAL HOURS |
| ENGLISH COMPOSITION COURSES | | ENGL 1113 English Composition I | 3 hours |
| ENGL 1113 English Composition I | 3 hours | MATH 1513 College Algebra (OR) | |
| ENGL 1213 English Composition II | 3 hours | MATH 1613 Plane Trigonometry | 3 hours |
| HISTORY AND GOVERNMENT COURSES | | ORNT 1101 Freshman Orientation | 1 hour |
| HIST 1483 American History to 1877 (OR) HIST 1493 American History Since 1877 | 3 hours | CS 2203 Python Programming | 3 hours |
| POLI 1113 American Government | 3 hours | POLI 1113 American Government Computer Science Elective | 3 hours |
| HUMANITIES COURSES | | SECOND SEMESTER | 13-15 TOTAL HOURS |
| PHIL 2213 Ethics (OR) | | ENGL 1213 English Composition II | 3 hours |
| PHIL 2223 Business Ethics | 3 hours | MATH 2103 Elementary Calculus (OR) MATH 2145 Calculus I (OR) | |
| One course to be chosen from those listed with the International Dimension. | 3 hours | MATH 2023 Elementary Statistics | 3-5 hours |
| MATHEMATICS COURSES | | CS 2303 Java Programming | 3 hours |
| MATH 1513 College Algebra (OR) | | Science Elective | 4 hours |
| MATH 1613 Plane Trigonometry | 3 hours | THIRD SEMESTER | 16 TOTAL HOURS |
| <i>(Note: Plane Trigonometry is strongly recommended because it must be taken as a pre-requisite before taking Calculus I.)</i> | | Science Elective (Biological or Physical) | 4 hours |
| SCIENCE COURSES | | CS 2313 Programming with C++ | 3 hours |
| Two Sciences with Lab | 8 hours | ACCT 2103 Accounting I-Financial | 3 hours |
| COMPUTER SCIENCE COURSES | | ECON 2123 Macroeconomics (or Microeconomic Principles) | 3 hours |
| CS 1113 Computer Concepts (OR) | | Program/Gen Ed Elective | 3 hours |
| BSAD 1113 Digital/Financial Literacy (or other approved computer course) | 3 hours | FOURTH SEMESTER | 16 TOTAL HOURS |
| ORIENTATION COURSES | | CS 1013 Visual Basic Programming | 3 hours |
| ORNT 1101 Freshman Orientation | 1 hour | HIST 1483 American History to 1877 (OR) HIST 1493 American History Since 1877 | 3 hours |
| GENERAL EDUCATION ELECTIVE COURSES | 4 hours | PHIL 2213 Ethics (OR) | |
| *Taking math class from recommended program electives can reduce hours here to graduate with 61 credits, or gen ed can be selected from courses in: Language Arts, Natural Sciences, Foreign Languages, Fine Arts, Humanities, Mathematics, Behavioral Science, or Social Sciences. | | PHIL 2223 Business Ethics | 3 hours |
| PROGRAM REQUIREMENT COURSES | 22-24 TOTAL HOURS | International Humanities Elective | 3 hours |
| ACCT 2103 Accounting I-Financial | 3 hours | *Program/Gen Ed Electives | 3 hours |
| **CS 1013 Visual Basic Programming | 3 hours | PRDV 2321 Professional Development | 1 hour |
| **CS 2203 Python Programming | 3 hours | | |
| **CS 2303 Java Programming | 3 hours | This is a suggested sequence timeline only. A student may require more than four semesters to complete an Associate in Science degree. | |
| **CS 2313 Programming with C++ | 3 hours | **These program courses are typically offered only once a year. See course descriptions for fall or spring designations and plan accordingly. | |
| ECON 2113 Macroeconomic Principles (OR) | | | |
| ECON 2123 Microeconomic Principles | 3 hours | | |
| MATH 2023 Elementary Statistics (OR) | 3-5 hours | | |
| **MATH 2103 Elementary Calculus (OR) | | | |
| **MATH 2145 Calculus I | | | |
| PRDV 2321 Professional Development | 1 hour | | |
| <i>Programming Language substitutions may be made with prior approval.</i> | | | |
| RECOMMENDED PROGRAM ELECTIVE COURSES | *(3) TOTAL HOURS | | |
| ACCT 2203 Accounting II-Managerial | 3 hours | | |
| CS 2123 Business Tech & Applications | 3 hours | | |
| ECON 2113 Macroeconomic Principles (OR) | 3 hours | | |
| ECON 2123 Microeconomic Principles | | | |
| MATH 2023 Elementary Statistics | 3 hours | | |
| **MATH 2155 Calculus II | 5 hours | | |
| TOTAL CREDIT HOURS | 61-63 | | |

The Associate in Science degree in Computer Science is designed to provide the basic requirements for the first two years of the bachelor's degree in the area of computer science or information systems. The suggested curriculum is outlined to the left. Alternate courses and electives should be selected carefully only after the student and the major faculty academic advisor have consulted the catalog of the selected transfer college.

The Business Division and this degree program are accredited by the Accreditation Council of Business Schools and Programs (ACBSP).

Outstanding Business students are invited to join Kappa Beta Delta, the business honor society recognized by ACBSP.

Career Opportunities

- Programmer
- Systems Analyst

NOC evaluates students for placement into either foundational or college-level courses, whichever will lead to the greatest possibility of student success. Academic placement is determined either by A.C.T. test scores or by Accuplacer test scores. These tests are administered in the Testing Center at NOC. Based upon the scores, students may be required to take one or more courses for remediation in English, Math, or Reading, either prior to or concurrent with credit courses. See the NOC testing web page by clicking on the following link: ACT | Northern Oklahoma College (<http://www.noc.edu/act>) for placement guidelines.