Associate in Science Degree	Bachelor of Science Degree
Northern Oklahoma College	**Northwestern Oklahoma State University**
Division of Business	*School of Arts and Sciences*

Computer Science, Pre-Professional	**Computer Science: Information System Option**
The Associate in Science degree program in Computer Science consists of 60 hours designed to provide the student with the first two years of general education and program requirements for transfer seamlessly to the Bachelor of Science degree in Computer Science at Northwestern Oklahoma State University.	Transfer students who have completed an Associate in Science degree in Computer Science from Northern Oklahoma College will have met the NWOSU General Education Requirements.

PROGRAM REQUIREMENTS

Credit Hours

GENERAL EDUCATION -- 37
ENGLISH COMPOSITION
 ENGL 1113 English Composition I ----------------------------------- 3_____
 ENGL 1213 English Composition II ----------------------------------- 3_____
HISTORY AND GOVERNMENT
 HIST 1483 American History to 1865 (or)
  HIST 1493 American History since 1865 ----------------------------- 3_____
 POLI 1113 American National Government -------------------------- 3_____
HUMANITIES
 PHIL 2213 Ethics (or) -- 3_____
  PHIL 2223 Business Ethics and
   one course to be chosen from those listed with
 International Dimension-- 3_____
MATHEMATICS
 MATH 1513 College Algebra or higher ------------------------------- 3_____
SCIENCE
 Two sciences with lab --- 8_____
COMPUTER SCIENCE
 CS 1113 Computer Concepts -- 3_____
ORIENTATION
 ORNT 1101 Freshman Orientation ------------------------------------- 1_____
GENERAL EDUCATION ELECTIVES -------------------------------- 4_____
 SPCH 1713 Intro to Oral Communication ---------------------------- 3_____

PROGRAM REQUIREMENTS -- 18-20
 ACCT 2103 Accounting I-Financial ---------------------------------- 3_____
 CS 1013 Visual Basic Programming --------------------------------- 3_____
 ECON 2123 Microeconomic Principles (or)
  ECON 2113 Macroeconomic Principles ------------------------------ 3_____
 MATH 2103 Elementary Calculus (or)
  MATH 2145 Calculus I (or)
   MATH 2023 Elementary Statistics -------------------------------3-5_____
 CS 2313 Programming with C++ ------------------------------------- 3_____
 CS 2303 Java Programming -- 3_____

RECOMMENDED PROGRAM ELECTIVES -------------------------------- 5-6
 ACCT 2203 Accounting II-Managerial -------------------------------- 3_____
 CS 2123 Business Tech & Applications ------------------------------- 3_____
 ECON 2123 Microeconomic Principles (or)
  ECON 2113 Macroeconomic principles ------------------------------- 3_____
 MATH 2023 Elementary Statistics ------------------------------------- 3_____
 MATH 2155 Calculus II -- 5_____

TOTAL CREDIT HOURS-- 60

PROGRAM REQUIREMENTS

Credit Hours

MAJOR REQUIREMENTS ---45
 CMSC 2003 Programming Concepts ------------------------3_____
 CMSC 2103 Computer Programming I ----------------------3_____
 CMSC 3003 Data Management Systems --------------------3_____
 CMSC 3093 Telecommunications ----------------------------3_____
 Choose 2 of 4: --- 6_____
  CMSC 3033 Object-Orientated Programming in Java
  CMSC 3043 Intro to COBOL
  CMSC 3053 Visual Basic Programming
  CMSC 3063 Python Programming
 CMSC 3203 Computer Programming II --------------------3_____
 CMSC 3313 Human Interface Design -----------------------3_____
 CMSC 4013 Systems Analysis & Design -------------------3_____
 *ACCT2123 Financial Accounting--------------------------3_____
 *ACCT 2133 Managerial Accounting ----------------------3_____
 ACCT 3153 Cost Accounting I -------------------------------3_____
 Advanced Electives in Computer Science -------------------9_____

*Students who complete these courses at NOC are not required to repeat them at NWOSU.