

Student Name:

Student ID #:

60-66 hrs

&gt;&gt;&gt;Check the college catalog for possible prerequisites before enrolling in classes&gt;&gt;&gt;

**General Education Required Courses (15 Hours)**

- CISQ 1103 Intro to Computer Information OR Computer Proficiency Exam
- ENGL 1013 English Composition I
- ENGL 1023 English Composition II
- MATH 1203 College Algebra
- XXXX XXX3 Social/Behavioral Science Elective\*

**General Business Required Courses (6 Hours)**

- ACCT 2013 Principles of Accounting I
- BLAW 2013 Legal Environment of Business I

**COMPUTER PROGRAMMING OPTION (39 hours)**

Required General Business Courses (6 hours)

- ECON 2013 Macroeconomics OR
- ECON 2023 Microeconomics
- OSIM 1103 Business Communications

**General Business Elective Courses (9 Hours)**

- ACCT 2023 Principles of Accounting II
- CISM 1223 Photoshop—(Required for Track B only)
- CISM 1313 Operating Systems (UNIX)
- CISM 1503 Spreadsheet Analysis (EXCEL)
- CISM 2503 Advanced Spreadsheet (EXCEL)
- NTWK 2014 Networking and Information Systems

**Computer Information Systems Required Courses (24 Hours)****Programming Core (12 Hours):**

- CISM 1433 SQL Concepts
- PROG 1003 Introduction to Programming Logic
- PROG 1203 C++ Programming OR
- PROG 1403 JAVA Programming \*Required for Track D
- BADM 2703 Internship Experience

**POSSIBLE PLACEMENT REQUIREMENTS**

These courses are for developing college level skills.

NWACC strongly recommends that students enroll in English and math preparatory courses within the first two semesters.

- MATH 0012 Foundations of Quantitative Literacy
- MATH 0013 Pre-algebra
- MATH 0023 Developmental Math
- MATH 0053 Beginning Algebra
- MATH 0063 Algebra I
- MATH 0073 Algebra II
- MATH 0103 Intermediate Algebra
- MATH 0214 Foundations of Algebra-STEM
- ENGA 0033 College Reading\*\*
- ENGA 0063 Intermediate Writing
- ENGA 0091 Academic Literacy Lab\*\*
- ENGC 0033 College Reading & Vocabulary\*\*
- ENGC 0043 Communication & Culture
- ENGC 0131 Comp Review

These hours will not fulfill any degree requirements at NWACC. These courses will not transfer to a four year institution

**Choose One of the Following Tracks:****Track A) Application Development (Choose 12 Hours total from groups 1 & 2):**

Group 1—6 Hours Required:

- PROG 1103 GUI Programming \*Required for Track A
- PROG 2203 C++ Programming II
- PROG 2413 JAVA Programming II

Group 2—6 Hours Required:

- PROG 1203 C++ Programming
- PROG 1403 JAVA Programming
- PROG 1503 COBOL Programming
- PROG 1603 Swift Programming
- PROG 2303 Web Server-Side Programming
- PROG 2603 Mobile App Dev.

**Track B) Web Development (Choose 12 Hours):**

- CISM 2123 Web Page Design I
- CISM 2213 Web Page Design II
- CISM 2223 Advanced Photoshop
- PROG 1303 Web Client-Side Programming
- PROG 2303 Web Server-Side Programming
- NTWK 2243 Securing Electronic-Commerce

**Track C) Mobile Applications Development (Choose 12 Hours):**

- PROG 1103 GUI Programming
- PROG 1403 JAVA Programming
- PROG 1603 Swift Programming
- PROG 2413 JAVA Programming II
- PROG 2603 Mobile App Development
- PROG 2613 Adv. Mobile App Development

**INFO MGMT & APPLICATIONS OPTION (39 Hours)**

- BADM 2703 Internship Experience —Required Course

**Required General Business Courses (6 hours)**

- ECON 2013 Macroeconomics OR
- ECON 2023 Microeconomics
- OSIM 1103 Business Communications

**General Business Electives (6 hours)**

- ACCT 2023 Principles of Accounting II OR
- ACCT 2043 Computerized Accounting
- OSIM 1013 Administrative Office Management

**Computer Support Courses****Choose 12 Hours:**

- CISM 2123 Web Page Design I
- CISM 2213 Web Page Design II
- CISM 2503 Advanced Spreadsheet (EXCEL)
- OSIM 2503 Computer Support & Project Management
- PROG 1003 Introduction to Programming Logic
- PROG 1103 GUI Programming
- NTWK 2014 Networking and Information Systems
- NTWK 2053 Microcomputer Hardware Support

**12 hours below:**

- CISM 1403 Database Management (ACCESS)
- CISM 1503 Spreadsheet Analysis (EXCEL)
- OSIM 2103 Business Presentations (PowerPoint)
- OSIM 2703 Business Application Integration

**Networking Required Courses (45 Hours)****Networking Core (36 Hours):**

- CISM 1313 Operating Systems (UNIX)
- NTWK 2014 Networking and Information Sys. (CCNA 1)
- NTWK 2023 Network Administration - Windows
- NTWK 2053 Microcomputer Hardware Support (A+)
- NTWK 2084 Network Hardware Sup. (CCNA 2)
- NTWK 2113 Network Security (COMP TIA Security +)
- NTWK 2203 Command Line Scripting
- NTWK 2214 Switching Basics & Inter. Routing (CCNA 3)
- OSIM 2503 Computer Support and Project Mgmt
- PROG 1003 Intro to Programming Logic, OR
- PROG 1013 Fundamental Prog. Concepts
- BADM 2703 Internship Experience

**Networking Electives (9 Hours):** **CISM 1433-SQL Concepts**

- NTWK 2073 Network Administration - UNIX
- NTWK 2103 Web Server Administration
- NTWK 2153 Microcomputer Software
- NTWK 2224 WAN Implementation & Support (CCNA 4)
- NTWK 2243 Secure Electronic-Commerce
- NTWK 2253 Computer Forensics
- NTWK 2263 Network Security Support (CCNA Security)
- OSIM 1103 Business Communications

**Notes:**

Honors and Global Studies courses will meet degree requirements where applicable.

\*Social/Behavioral Science Elective Options:  
ANTH 1023, CMJS 2013, CMJS 2363, ECON 2013, ECON 2023, GEOG 1003, GEOG 1123, HIST 1003, HIST 1013, HIST 1033, HIST 1043, HIST 2003, HIST 2013, PHIL 2003, PHIL 2033, PLSC 2003, PLSC 2203, PLSC 2803, PSYC 2003, PSYC 2103, SOCI 2013, SOCI 2033, SOCI 2043.

15 hours must be earned at NWACC to graduate.