

**Student Name:**  
**Student ID #:**

**60 hrs**

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

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

**General Business Required Courses (12 Hours)**

- ACCT 2013 Principles of Accounting I
- BLAW 2013 Legal Environment of Business I
- 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 1303 Operating Systems (Windows)
- 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

**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 Apple Programming
  - PROG 2303 Web Server-Side Programming
  - PROG 2503 iOS App Development
  - PROG 2603 Android App Development
  - PROG 2803 Advanced Programming Topics

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

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

**Track C) Database Development (Choose 12 Hours):**

- CISM 1423 Database Management I
- CISM 2403 Database Management II
- CISM 2433 Data Warehousing

**Track D) Mobile Applications Development (12 Hours):**

- PROG 1403 JAVA Programming
- PROG 1603 Apple Programming
- PROG 2503 iOS Application Development
- PROG 2513 iOS Advanced Application Development
- PROG 2603 Android Application Development
- PROG 2613 Adv Android Application Development

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

**>>>Check the college catalog for possible prerequisites before enrolling in classes>>>**

**POSSIBLE PLACEMENT REQUIREMENTS**

These courses are for developing college level skills.  
 \*\*Students scoring 77 or below on the Accuplacer Classic Reading, 251 or below on the Accuplacer Next Generation Placement Test, or 18 or below on the ACT Reading Placement Test shall enroll into either ENGA 0033 or ENGA 0091 during their first or second semester in college and each subsequent semester, if necessary, until the course is successfully completed.

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 0064 Foundations of Math Reasoning
- 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 0063 Intermediate Writing

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

**Notes:** Honors courses will meet degree requirements where applicable.

**\*Social/Behavioral Science Elective Options:**  
 ANTH 1023, CMJS 2013, 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.**