

## Computer Information Systems Public Pathways Program

We have partnered with Nashua Community College to offer a Pathways Program that allows you to smoothly transition your NCC associate degree to a bachelor's degree program at UNH Manchester. This document will help you turn your A.S. in Software Development from NCC into a B.S. in Computer Information Systems at UNH Manchester.

| Students must take these courses at NCC ...                 | To fulfill these UNH degree requirements...           |
|---|---|
| ENGL 101 – College Composition                              | Discovery writing skills course                       |
| CSCI 106 – Introduction to Software and Web Development     | Elective credit                                       |
| CSCI 102 – Website Development I <sup>1</sup>               | Elective credit                                       |
| CSCI 161 – Introduction to Programming <sup>2</sup>         | Elective credit                                       |
| MATH 110 – Algebra and Trigonometry                         | No transfer credit                                    |
| CSCI 140 – Essentials of Systems Analysis <sup>3</sup>      | Elective credit                                       |
| CSCI 175 – Intermediate Programming: Using C++ <sup>2</sup> | COMP 425 – Computing Fundamentals                     |
| CSCI 116 – Networking Basics                                | Major concentration course                            |
| MATH 170 – Discrete Mathematics                             | Discovery quantitative reasoning course               |
| CSCI 103 – Website Development II <sup>1</sup>              | COMP 405 – Introduction to Internet and Web Authoring |
| ENGL 230, 231, 240 or 241                                   | Discovery humanities course                           |
| CSCI 207 – Database Design and Management <sup>3</sup>      | COMP 520 – Database Design and Development            |
| CSCI 230 – Advanced Programming: Using C++                  | Major concentration course                            |
| Discovery-approved biological or physical science           | Discovery biological or physical science course       |
| Discovery-approved historical perspectives                  | Discovery historical perspectives course              |
| Elective in major   | Major concentration course                            |
| CSCI 278 – Data Structures: Using C++                       | COMP 525 – Data Structures Fundamentals               |
| CSCI 290 – Internship <b>or</b> CSCI 285 – Capstone         | Major concentration course                            |
| Discovery-approved social science                           | Discovery social science course                       |
| GEOG 110 – Cultural Anthropology                            | Discovery world cultures course                       |
| Elective in major   | Major concentration course                            |

**Note:** See page 3 for information about UNH's Discovery Program courses.

1. Students must earn a C or higher in both CSCI 102 and CSCI 103 to earn credit for COMP 405.
2. Students must earn a C or higher in both CSCI 161 and CSCI 175 to earn credit for COMP 425.
3. Students must earn a C or higher in both CSCI 140 and CSCI 207 to earn credit for COMP 520.

*Course titles, names and/or sequencing are subject to change.*

## Once you've finished your associate degree at NCC, complete the following requirements at UNH Manchester to receive your bachelor's degree.

### Major Course Requirements:

COMP 430 – System Fundamentals

COMP 530 – Machine and Network Architecture

COMP 550 – Networking Concepts

COMP 560 – Ethics and Law in the Digital Age

COMP 715 – Information Security

COMP 730 – Object-Oriented Software Development

COMP 685 – Professional Development Seminar (1 credit)

COMP 690 – Internship Experience (4 credit)

COMP 790 – Capstone Project

One Major concentration course

Three Major elective courses

### Discovery Program\* Course Requirements:

Discovery biological or physical science courses

Discovery fine and performing arts course

Discovery environment, technology and society course

### University Degree Requirements:

Elective courses to fill remaining credits required for bachelor's degree (128 total)

University writing requirement\*\*

\* See page 3 for information about UNH's Discovery program.

\*\* Bachelor degree candidates are required to complete four writing-intensive courses, which must include: English 401 – First Year Writing (or equivalent transfer English composition course) and three additional writing-intensive courses, one in the student's major and one at the 600-level or above.



An advisor at UNH Manchester will provide you with the best possible guidance for course selections each term.

### Please also note:

- UNH Manchester accepts a maximum of 64 credits in transfer from 2-year institutions. Only courses completed with a grade of C or better will be accepted as transfer credits.
- Students must earn a minimum overall grade point average of 2.50 at NCC to be eligible for dual enrollment at UNH Manchester.

*Course titles, names and/or sequencing are subject to change.*

## The NCC courses\* listed below fulfill UNH Manchester's Discovery Program course requirements:

### Writing Skills

ENGL 101N – College Composition  
ENGL 110N – Honors Expository Writing

### Quantitative Reasoning

CSCI 161N – Intro to Programming Using Visual Basic  
CSCI 175N – Intermediate Programming Using C++  
MATH 106N – Statistics I  
MATH 115N – Finite Mathematics  
MATH 170N – Discrete Mathematics  
MATH 206N – Statistics II  
MATH 210N – Calculus I  
MATH 214N – Honors Calculus I

### Biological Science

BIOL 105N – Biology in Focus I  
BIOL 106N – Biology in Focus II

### Biological Science/DLAB

BIOL 107N – Principles in Biology I  
BIOL 108N – Bio II: An Evolutionary Journey  
BIOL 111N – Basic Human Anatomy & Phys.  
BIOL 130N – Anatomy and Physiology I  
BIOL 131N – Anatomy and Physiology II  
BIOL 201N – Adv. Anatomy and Physiology I  
BIOL 202N – Adv. Anatomy and Physiology II  
BIOL 215N – Microbiology

### Physical Science/DLAB

ENVS 105N – Earth Science  
CHEM 110N – Intro to Chemistry  
CHEM 130N – General Chemistry I  
CHEM 131N – General Chemistry II  
CHEM 135N – Honors the Env. In Chemical Perspective  
PHYS 101N – Physical Science I  
PHYS 102N – Physical Science II  
PHYS 115N – Astronomy  
PHYS 116N – Meteorology  
PHYS 130N – Physics I  
PHYS 131N – Physics II  
PHYS 230N – Calculus-Based Physics I

PHYS 231N – Calculus-Based Physics II

### Environment, Technology & Society

ENVS 101N – Environmental Science  
SOCI 215N – Sociology of Technology

### Historical Perspectives

HIST 101N – Western Civ. Ancient to 17 Century  
HIST 102N – Western Civ. Since French Revolution  
HIST 110N – Ancient Civ. of the World  
HIST 140N – US History Colonial to Reconstruction  
HIST 141N – US History Since Reconstruction  
HIST 210N – History of Modern America  
HIST 232N – History of Modern Asia  
HIST 241N – American Constitutional History  
HIST 246N – Modern America  
HIST 260N – History of Multiculturalism  
HIST 265N – Latin Amer. History from Indep. to Pres.

### World Culture

ANTH 110N – Cultural Anthropology  
ANTH 263N – Intro to Chinese Culture & Society  
GEOG 110N – World Regional Geography  
SPAN 206N – Spanish IV

### Fine And Performing Arts

ARTS 101N – Intro to Drawing  
ENGL 220N – Contemporary Dramatic Literature  
HUMA 102N – Art Appreciation  
HUMA 103N – Music Appreciation  
HUMA 104N – Jazz and Its Roots  
HUMA 120N – Intro to Theatre

### Social Science

ANTH 108N – Intro to Archeology  
ECON 201N – Microeconomics  
ECON 202N – Macroeconomics  
GEOG 130N – Human Geography

POLS 101N – Intro to Political Science  
POLS 102N – American Gov't and Politics  
POLS 210N – State and Local Government  
POLS 220N – American Politics and Mass Media  
PSYC 101N – Intro to Psychology  
PSYC 130N – Human Relations  
PSYC 201N – Human Growth and Development  
SOCI 101N – Intro to Sociology  
SOCI 201N – Contemporary Social Problems  
SOCI 228N – Social Inequalities

### Humanities

ENGL 105N – Intro to Literature  
ENGL 215N – Literature by American Women  
ENGL 230N – British Literature I  
ENGL 231N – British Literature II  
ENGL 240N – American Literature I  
ENGL 241N – American Literature II  
ENGL 255N – Honors Human in Lit. and Other Media  
HIST 262N – Movies & Social History of USA  
HUMA 101N – Intro to the Humanities  
HUMA 107N – World Religions  
HUMA 140N – American Cinema  
HUMA 145N – American Popular Culture  
HUMA 220N – Classic Myths in Western Civilization  
PHIL 130N – Honors Ancient Greek Philosophy  
PHIL 109N – Intro to Philosophy

### Writing Intensive

ENGL 101N – College Composition I  
ENGL 102N – Writing About Literature  
ENGL 105N – Intro to Literature  
ENGL 235N – Poetry Workshop  
ENGL 250N – Honors Advance Creative Writing



### UNH Manchester Bachelor Degree Requirements

To graduate from UNH, students must fulfill course requirements in the following areas: **major** courses, University **Discovery** Program courses and **electives**, totaling 128 credits.

### Discovery Program Courses

UNH's Discovery Program builds each student's foundation in general education. To fulfill the Discovery Program, students must take the following courses: one inquiry course<sup>1</sup> (or INQ attribute course); one course in writing skills; one course in quantitative reasoning; as well as one 400- to 600-level course from each of the following Discovery Program categories: Biological Science (BS)<sup>2</sup>; Physical Science (PS)<sup>2</sup>; Environment, Technology and Society (ETS); Fine and Performing Arts (FPA); Historical Perspectives (HP); Humanities (HUMA); Social Science (SS) and World Cultures (WC)<sup>3</sup>

1. The Inquiry requirement shall be waived for students with 26 or more transfer credits.
2. One of these two courses must have a lab component.
3. Also may be satisfied by approved study abroad programs.