We have partnered with Manchester Community College to offer a Pathways Program that allows you to smoothly transition to UNH Manchester. This curriculum map shows you the **Software Development** course sequence you should follow for seamless transfer into our B.S. in Computer Information Systems at UNH Manchester.

<table>
<thead>
<tr>
<th>Students must take these courses at NCC …</th>
<th>To fulfill these UNH degree requirements…</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 – College Composition</td>
<td>Discovery writing skills course</td>
</tr>
<tr>
<td>CSCI 106 – Introduction to Software and Web Development</td>
<td>Elective credit</td>
</tr>
<tr>
<td>CSCI 102 – Website Development ¹</td>
<td>Elective credit</td>
</tr>
<tr>
<td>CSCI 161 – Introduction to Programming ²</td>
<td>Elective credit</td>
</tr>
<tr>
<td>MATH 110 – Algebra and Trigonometry</td>
<td>No transfer credit</td>
</tr>
<tr>
<td>CSCI 140 – Essentials of Systems Analysis ³</td>
<td>Elective credit</td>
</tr>
<tr>
<td>CSCI 116 – Networking Basics</td>
<td>Major concentration course</td>
</tr>
<tr>
<td>MATH 170 – Discrete Mathematics</td>
<td>Discovery quantitative reasoning course</td>
</tr>
<tr>
<td>CSCI 103 – Website Development II ¹</td>
<td>COMP 405 – Introduction to Internet and Web Authoring</td>
</tr>
<tr>
<td>ENGL 230, 231, 240 or 241</td>
<td>Discovery humanities course</td>
</tr>
<tr>
<td>CSCI 207 – Database Design and Management ³</td>
<td>COMP 520 – Database Design and Development</td>
</tr>
<tr>
<td>CSCI 230 – Advanced Programming: Using C++ ⁴</td>
<td>Elective credit</td>
</tr>
<tr>
<td>Discovery-approved biological or physical science</td>
<td>Discovery biological or physical science course</td>
</tr>
<tr>
<td>Discovery-approved historical perspectives</td>
<td>Discovery historical perspectives course</td>
</tr>
<tr>
<td>Elective in major</td>
<td>Major concentration course</td>
</tr>
<tr>
<td>CSCI 278 – Data Structures: Using C++ ⁴</td>
<td>COMP 525 – Data Structures Fundamentals</td>
</tr>
<tr>
<td>CSCI 290 – Internship or CSCI 285 – Capstone</td>
<td>Major concentration course</td>
</tr>
<tr>
<td>Discovery-approved social science</td>
<td>Discovery social science course</td>
</tr>
<tr>
<td>GEOG 110 – World Geography</td>
<td>Discovery world cultures course</td>
</tr>
<tr>
<td>Elective in major</td>
<td>Major concentration course</td>
</tr>
</tbody>
</table>

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

1. Major credit when paired with CSCI 103 for COMP 405. Students must earn a grade of C or better in both CSCI 102 and CSCI 103 to earn credit for COMP 405.
2. Major credit when paired with CSCI 175 for COMP 425. Students must earn a grade of C or better in both CSCI 161 and CSCI 175 to earn credit for COMP 425.
3. Major credit when paired with CSCI 207 for COMP 520. Students must earn a grade of C or better in both CSCI 140 and CSCI 207 to earn credit for COMP 520.
4. Major credit when paired with CSCI 278 for COMP 525. Students must earn a grade of C or better in both CSCI 230 and CSCI 278 to earn credit for COMP 525.

*Course titles, names and/or sequencing are subject to change.*
If you are enrolled in the NH Dual Admission Program and/or plan to finish 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**

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* 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.

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Please also note:

- UNH Manchester accepts a maximum of 72 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 Nashua Community College 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 107N – Honors Statistics I
- MATH 115N – Finite Mathematics
- MATH 170N – Discrete Mathematics
- MATH 206N – Statistics II
- MATH 210N – Calculus I
- MATH 214N – Honors Calculus II

**Biological Science/DLAB**
- BIOL 101N – Germs 101
- BIOL 105N – Biology in Focus I
- BIOL 106N – Biology in Focus II
- BIOL 107N – Principles of Biology I
- BIOL 108N – Principles of Biology II
- 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 210N – Medical 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 Environment 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 215N – New Hampshire History
- 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 Independence to the Present

**World Culture**
- ANTH 110N – Cultural Anthropology
- ANTH 263N – Intro to Chinese Culture & Society
- GEOG 110N – World Regional Geography
- SPAN 205N – Spanish III
- SPAN 206N – Spanish IV

**Fine and Performing Arts**
- ARTS 101N – Intro to Drawing
- 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
- COMM 101N – Intro to Media Studies
- COMM 102N – Principles of Communication
- ECON 201N – Microeconomics
- ECON 202N – Macroeconomics
- GEOG 130N – Human Geography

**Humanities**
- ENGL 105N – Intro to Literature
- ENGL 215N – Literature by American Women
- ENGL 220N – Honors Contemporary Dramatic Literature
- ENGL 230N – British Literature I
- ENGL 231N – British Literature II
- ENGL 240N – American Literature I
- ENGL 241N – American Literature II
- ENGL 255N – Honors Humor in Literature 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
- ENGL 102N – Writing About Literature
- ENGL 105N – Intro to Literature
- ENGL 235N – Poetry Workshop
- ENGL 250N – Honors Advance Creative Writing

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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 course1 (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); Physical Science (PS); Environment, Technology and Society (ETS); Fine and Performing Arts (FPA); Historical Perspectives (HP); Humanities (HUMA); Social Science (SS) and World Cultures (WC)2

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.

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

October 28, 2016