



## Computer Information Systems Public Pathways Program

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

Students must take these courses at MCC...	To fulfill these UNH degree requirements...
ENGL 101 – College Composition	Discovery writing skills course
FYC 100 – First Year Seminar	No transfer credit
CIS 107 or 108 – Apps elective <sup>1</sup>	Major concentration course
MATH 155 – College Algebra with Trigonometry	No transfer credit
CIS 105 – Introduction to Computer Science	COMP 430 – System Fundamentals
CIS 118, 122, 148, or 158 – Programming Language elective <sup>2</sup>	Major concentration course
CIS 113 – Database Design & Management Using SQL <sup>3</sup>	Major concentration course
MATH 170 – Discrete Math	Discovery quantitative reasoning course
ENGL 206 – Professional Communication	Elective credit
Discovery-approved lab science – biological science	Discovery biological science
CIS 210 – Data Structures Fundamentals	COMP 525 – Data Structures Fundamentals
MATH 171 – Pre-Calculus	Major concentration course
CIS 233 – Oracle Database Administration <sup>3</sup>	COMP 520 – Database Design and Development
CIS 124 – Web Programming <sup>1</sup>	COMP 405 – Introduction to Internet and Web Authoring
CIS 220 – Object-Oriented Programming <sup>2</sup>	COMP 425 – Computing Fundamentals
ENGL 113 – Introduction to Public Speaking	Elective credit
CIS 274 – XML Programming	Major concentration course
CIS 291 – Capstone Seminar	Major elective course
CIS 126 – Introduction to Python	Major concentration course
PHYS 210 – University Physics	Discovery physical science course
Discovery-approved social science	Discovery social science course

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

1. Students must earn a C or better in both CIS 107 or CIS 108 and CIS 124 to earn credit for COMP 405.
2. Students must earn a C or better in both CIS 118, 122, 148 or 158 and CIS 220 to earn credit for COMP 425.
3. Students must earn a C or better in both CIS 113 and CIS 233 to earn credit for COMP 520.

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

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

### Major Course Requirements:

COMP 530 – Machine and Network Architecture

COMP 525 – Data Structures Fundamentals

COMP 550 – Networking Concepts

COMP 560 – Ethics and Law in the Digital Age (also fulfills Discovery humanities course)

COMP 730 – Object-Oriented Software Development

COMP 715 – Information Security

COMP 685 – Professional Development Seminar (1 credit)

COMP 690 – Internship Experience (4 credits)

COMP 790 – Capstone Project

Three major elective courses

### Discovery Program\* Course Requirements:

Discovery environment, technology and society course

Discovery historical perspectives course

Discovery world cultures course

Discovery fine and performing arts 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 MCC to be eligible for dual enrollment at UNH Manchester.

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

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

### Writing Skills

ENGL 110M – College Composition I

### Quantitative Reasoning

CIS 118M – Visual Basic Net Programming  
CIS 148M – Java Programming  
CIS 158M – C# Programming  
MATH 170M – Discrete Mathematics  
MATH 200M – Finite Math  
MATH 202M – Probability & Statistics  
MATH 204M – Calculus I

### Biological Science

BIOL 106M – Human Body  
BIOL 150M – Nutrition

### Biological Science/DLAB

BIOL 101M – General Concepts in Biology  
BIOL 102M – Introduction to Botany  
BIOL 107M – Human Body Lab  
BIOL 108M – College Biology I  
BIOL 109M – College Biology II  
BIOL 110M – Human Anatomy & Physiology I  
BIOL 120M – Human Anatomy & Physiology II  
BIOL 151M – Nutrition Lab  
BIOL 201M – Principles of Genetics

### Physical Science

PHYS 105M – Astronomy

### Physical Science/DLAB

CHEM 115M – General Chemistry I  
CHEM 116M – General Chemistry II  
ESCI 110M – Earth Science  
PHYS 110M – Physical Science I  
PHYS 120M – Physical Science II

PHYS 135M – College Physics I  
PHYS 136M – College Physics II  
PHYS 210M – University Physics I  
PHSY 220M – University Physics II

### Environment, Technology & Society

ENVS 125M – Current Issues in the Environment

### Historical Perspectives

HIST 120M – Western Civ. through 1500  
HIST 130M – Western Civ. 1500 to Present  
HIST 202M – US History to 1870  
HIST 204M – US History 1870 to Present  
HIST 205M – History of Russia

### World Culture

ANTH 101M – Intro to Anthropology  
HIST 210M – History of China  
HIST 211M – Modern Middle Eastern History

### Fine and Performing Arts

ARTS 117M – Art History I  
ARTS 123M – Drawing I  
ARTS 130M – Intro to Art  
ARTS 217M – Art History II  
ENGL 202M – Intro to Drama  
HUMA 105M – Intro to Music  
HUMA 106M – History of American Popular Music

### Social Science

ANTH 102M – Intro to Archeology  
BUS 120M – Intro to Communications Media  
ECON 134M – Macroeconomics  
ECON 135M – Microeconomics

GEOG 110M – Geography  
POLS 110M – American Government  
POLS 210M – Intro to Political Science  
PSYC 110M – Intro to Psychology  
PSYC 210M – Human Growth & Development  
SOC 109M – Contemporary Social Problems  
SOC 110M – Sociology  
SOC 250M – Multiculturalism

### Humanities

ENGL 200M – Topics in Literature  
ENGL 201M – Survey of Poetry  
ENGL 204M – Children's Literature  
ENGL 207M – Intro to Literary Analysis  
ENGL 218M – Short Story  
ENGL 223M – British Literature I  
ENGL 224M – British Literature II  
ENGL 225M – Shakespeare  
ENGL 230M – American Literature I  
ENGL 235M – American Literature II  
HIST 215M – World Religions  
HUMA 126M – Intro to Film  
HUMA 200M – Film & American Culture  
HUMA 220M – Love in the Western Tradition  
PHIL 110M – Intro to Philosophy  
PHIL 240M – Ethics

### Writing Intensive

ENGL 110M – College Composition I  
ENGL 120M – College Composition II  
ENGL 203M – Intro to Journalism  
ENGL 213M – Creative Writing  
ENGL 214M – Creative Nonfiction



### 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.