



Academic Year 2018-2019

# **Computer Information Systems Public Pathways Program**

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 MCC course sequence you should follow for seamless transfer into our B.S. in Computer Information Systems degree program.

Students must take these courses at MCC	To fulfill these UNH degree requirements
CIS 105 – Introduction to Computer Science	COMP 430 – System Fundamentals
ENGL 101 – College Composition I	Discovery writing skills course
MATH 155 – College Algebra with Trigonometry	No transfer credit
FYE 100 – First Year Cornerstone	No transfer credit
CIS 107 – Introduction to Android Apps Development 1 <u>or</u> CIS 108 – Introduction to Windows Apps Development 1	Elective credit
CIS 113 – Database Design & Management Using SQL 2	Elective credit
MATH 171 – Pre-Calculus	Elective credit
ENGL 113 – Introduction to Public Speaking	Elective credit
CIS 118, 122, 148, or 158 – Programming Language elective 3	Elective credit
Discovery-approved social science course	Discovery social science course
CIS 126 – Introduction to Python 4	Elective credit
CIS 210 – Data Structures and Elementary Algorithms 4	COMP 525 – Data Structures Fundamentals
MATH 170 – Discrete Mathematics	Discovery quantitative reasoning
ENGL 206 – Professional Communication	Elective credit
CIS 233 - Oracle® Database Administration I 2	COMP 520 – Database Design and Development
CIS 124 – Web Programming 1	COMP 405 – Introduction to Internet and Web Authoring
CIS 274 – XML Programming I	Elective credit
CIS 291 – Capstone Senior Seminar	Elective credit
PHYS 210 – University Physics I	Discovery physical science course
CIS 220 – Object-Oriented Programming 3	COMP 425 – Computing Fundamentals
Discovery-approved biological science course	Discovery biological science/DLAB course

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

- 1. Major credit when paired with CIS 124 for COMP 405. Students must earn a C or better in both CIS 107 or CIS 108 and CIS 124 to earn credit for COMP 405.
- 2. Major credit when paired with CIS 233 for COMP 520. Students must earn a C or better in both CIS 113 and CIS 233 to earn credit for COMP 520.
- 3. Major credit when paired with CIS 220 for COMP 425. Students must earn a C or better in both CIS 118, 122, 148 or 158 and CIS 220 to earn credit for COMP 425.
- 4. Major credit when paired with CIS 210 for COMP 525. Students must earn a C or better in both CIS 126 and CIS 210 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 MCC, complete the following requirements at UNH Manchester to receive your bachelor's degree.

# **Major Course Requirements:**

COMP 530 - Machine and Network Architecture

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 690 - Internship Experience (4 credits)

COMP 790 - Capstone Project

UMST 582 – Internship and Career Planning Seminar (1 credit)

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 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 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

# **Biological Science**

BIOL 106M – Human Body BIOL 150M – Nutrition

MATH 204M - Calculus I

#### **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 115M - Current Issues in the Environment ENVS 125M - Introduction to Environmental Science

# **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

SOCI 109M – Contemporary Social Problems

SOCI 110M – Sociology SOCI 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 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)²; Physical Science (PS)²; Environment, Technology and Society (ETS); Fine and Performing Arts (FPA); Historical Perspectives (HP); Humanities (HUMA); Social Science (SS) and World Cultures (WC)³

- 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.