

## Analytics and Data Science Public Pathways Program

We have partnered with Nashua Community College to offer a Pathways Program that allows you to smoothly transition to UNH Manchester. This curriculum map shows you the NCC course sequence you should follow for seamless transfer into our B.S. in Analytics and Data Science degree program.

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	Elective credit
MATH 106 – Statistics I <sup>1</sup>	Discovery quantitative reasoning
CSCI 161 – Introduction to Programming	Elective credit
CSCI 175 – Programming in C++	COMP 425 – Computing Fundamentals
CSCI 140 – Essentials of Systems Analysis <sup>2</sup>	Elective credit
MATH 206 – Statistics II <sup>1</sup>	COMP 490 – Statistics in Computing and Engineering
Discovery-approved physical science course	Discovery physical science/DLAB course
BUS 101 – Introduction to Business	BUS 400 – Introduction to Business
MATH 210 – Calculus I	MATH 425 – Calculus I
CSCI 207 – Database Design & Management <sup>2</sup>	COMP 520 – Database Design & Management
CSCI 230 – Advanced Programming Using C++ <sup>3</sup>	Elective credit
ENGL 122 – Technical Writing	ENG 502 – Technical Writing
Discovery-approved social science course	Discovery social science course
MATH 211 – Calculus II	MATH 426 – Calculus II
CSCI 278 – Data Structures Using C++ <sup>3</sup>	COMP 525 – Data Structures Fundamentals
Discovery-approved humanities <b>or</b> fine arts course	Discovery humanities <b>or</b> fine and performing arts course
MATH 215 – Linear Algebra	MATH 545 – Introduction to Linear Algebra <b>or</b> MATH 645 – Linear Algebra for Applications

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

1. Major credit when paired with MATH 206 for COMP 490. Students must earn a grade of C or better in both MATH 106 and MATH 206 to earn credit for COMP 490.
2. 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.
3. 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:**

MATH 739 – Applied Regression

COMP 430 – System Fundamentals

COMP 525 – Data Structures Fundamentals

DATA 674 – Predictive and Prescriptive Analytics I

DATA 675 – Predictive and Prescriptive Analytics II

DATA 757 – Big Data

BUS 453 – Leadership for Managers

BUS 620 – Organizational Behavior

USMT 599 – Professional Development Seminar (1 credit)

DATA 690 – Internship Experience (4 credits)

DATA 790 – Capstone Project

**Discovery Program\* Course Requirements:**

Discovery biological science course

Discovery environment, technology and society course

Discovery historical perspectives course

Discovery world cultures course

Discovery humanities or 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 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 I

### 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 210N – The Making of England: 1215-1707  
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

POLS 101N – Intro to Political Science  
POLS 102N – American Gov't and Politics  
POLS 210N – State and Local Government  
POLS 215N – World Affairs  
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 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



### 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.