



Analytics and Data Science Public Pathways Program

We have partnered with Great Bay Community College to offer a Pathways Program that allows you to smoothly transition to UNH Manchester. This curriculum map shows you the GBCC 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 GBCC...	To fulfill these UNH degree requirements...
CIS 112 – Introduction to Object-Oriented Programming ¹	Elective Credit
MATH 230 – Calculus I	MATH 425 – Calculus I
BUS 110 – Introduction to Business	BUS 400 – Introduction to Business
FYE 101 – First Year Seminar	No transfer credit
ENGL 110 – College Composition I	Discovery writing skills course
ENGL 215 – Writing Technical Documents	ENGL 502 – Technical Writing
MATH 250 – Calculus II	MATH 426 – Calculus II
CIS 113 – Database Design and Management ²	Elective credit
CIS 148 – Introduction to Java Programming ¹	COMP 425 – Computing Fundamentals
Discovery-approved fine arts	Discovery fine and performing arts course
SOC 120 – Society and Technological Change	Discovery environment, technology and society course
CIS 177 – Python	Elective credit
MATH 235 – Statistics for Engineers and Scientists	COMP 490 – Statistics in Computing and Engineering
DATA 210 – Elements of Data Science	DATA 557 – Introduction to Data Science and Analytics
Discovery-approved physical science	Discovery physical science course
Discovery-approved history	Discovery historical perspectives course
CIS 210 – Data Structures with Elementary Algorithms ²	COMP 520 – Database Design and Development
MATH 245 – Linear Algebra	MATH 545 – Intro to Linear Algebra or MATH 645 – Linear Algebra for Applications
Discovery-approved biological science	Discovery biological science course
DATA 220 – Data Analysis w/R	Elective credit
DATA 225 – Analytics Capstone	Elective credit

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

1. Major credit when paired with CIS 148 for COMP 425. Students must earn a grade of C or better in both CIS 112 and CIS 148 to earn credit for COMP 425.
2. Major credit when paired with CIS 210 for COMP 520. Students must earn a grade of C or better in both CIS 113 and CIS 210 to earn credit for COMP 520.

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

If you have enrolled in the NH Dual Admission Program and/or plan to finish your associate degree at GBCC, 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 world cultures course

Discovery social science course

Discovery humanities course

University Degree Requirements:

Elective courses to fill remainder of 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 GBCC to be eligible for dual enrollment at UNH Manchester.

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

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

Writing Skills

ENGL 110G – College Composition I

Quantitative Reasoning

CIS 148G – Intro to Java Programming

CIS 158G – Introduction to C++

MATH 170G – Discrete Mathematics

MATH 215G – Finite Mathematics

MATH 225G – Probability & Statistics

MATH 230G – Calculus I

MATH 235G – Statistics for Engineers & Scientists

Biological Science/DLAB

BIOL 101G – Human Disease

BIOL 106G – Human Body

BIOL 108G – Biology I

BIOL 109G – Biology II

BIOL 110G – Human Anatomy & Physiology I

BIOL 120G – Human Anatomy & Physiology II

BIOL 150G – Nutrition

BIOL 160G – Intro to Environmental Science

BTEC 105G – Intro to Biotechnology

Physical Science

CHEM 110G – Introduction to Chemistry

CHEM 115G – General Chemistry

CHEM 116G – General Chemistry II

ECSI 110G – Earth Science

PHYS 135G – College Physics I

PHYS 136G – College Physics II

PHYS 290G – University Physics I

PHYS 295G – University Physics II

Environment, Technology & Society

BTEC 205G – Bioethics

NATR 105G – Sustainable Agriculture & Food Systems

NATR 229G – Contemporary Conservation Issues & Environmental Awareness

SOCI 120G – Society & Technological Change

Historical Perspectives

HIST 120G – Western Civilization thru 1500

HIST 130G – Western Civilization 1500-Pres

HIST 201G – History of New England

HIST 202G – US History thru 1870

HIST 204G – US History 1870 to Present

HIST 212G – US History since 1945

World Culture

ANTH 101G – Intro to Anthropology

HIST 210G – History of China

HIST 211G – Modern Middle East History

Fine and Performing Arts

ARTS 103G – Fundamentals of Acting

ARTS 105G – Introduction to Music

ARTS 117G – Art History I

ARTS 123G – Drawing I

ARTS 124G – Art, Design & Color

ARTS 125G – Visual Language

ARTS 127G – Art History II

ARTS 137G – Contemporary Art History

DGMT 115G – Intro to Graphic Design

Social Science

AMER 110G – Intro to American Studies

ECON 234G – Macroeconomics

ECON 235G – Microeconomics

GEOG 110G – World Geography

POLS 110G – American Government

POLS 210G – Intro to Political Science

PSYC 110G – Intro to Psychology

PSYC 210G – Human Growth & Development

SOCI 110G – Sociology

SOCI 135G – Sociology of Gender

SOCI 250G – Multi-Ethnic Cross

Cultural Relations

Humanities

ENGL 117G – Introduction to Literature

ENGL 120G – Introduction to African-American Literature & Culture

ENGL 200G – Film and Society

ENGL 209G – American Literature through the Civil War

ENGL 212G – Sociology of Gender

ENGL 220G – American Literature after the Civil War

ENGL 222G – Major Writers

ENGL 223G – British Literature to 1800

ENGL 224G – British Literature from 1800-Present

ENGL 225G – Plays of William Shakespeare

PHIL 110G – Introduction to Philosophy

PHIL 215G – World Religions

PHIL 240G – Ethics

Writing Intensive

ENGL 110G – College Composition I

ENGL 213G – Creative Writing

ENGL 214G – Introduction to Creative Nonfiction (formerly College Composition II)



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.