

Data Analytics

Bachelor of Science



CONCORD
UNIVERSITY

Semester 1

Course	Credits	Grade		✓
ENGL 101: Composition & Rhetoric I	3	C*	🚩	☐
MATH 103: College Algebra*	3		🚩	☐
BGEN 222: Business Productivity Software	3			☐
General Education or Track Course	3			☐
General Education Course	2-3			☐
UNIV 100: CU Foundations	1			☐

15-16

Semester 2

Course	Credits	Grade		✓
ENGL 102: Composition & Rhetoric II	3	C*	🚩	☐
CS 151: Introduction to Computer Science	3			☐
Track Course	3			☐
MATH 105: Elementary Statistics OR	3			☐
BGEN 202: Decision Sciences				
General Education Course	3			☐

15

Semester 3

Course	Credits	Grade		✓
CS 282: Database & Information Management	3			☐
Track Course	3			☐
General Education Course	3			☐
General Education Course	4			☐
General Education Course	3			☐

16

Semester 4

Course	Credits	Grade		✓
CS 261: Introduction to Intelligent Systems	3			☐
CS 283: Introduction to Data Analytics	3			☐
MATH 205: Statistical Modeling	3			☐
Track Course	3			☐
General Education Course	3			☐

15



The **Bachelor of Science in Data Analytics** provides students with the technical abilities and professional skills to gather, analyze and interpret data, facilitating decision-making. Students will be introduced to a wide range of data analysis concepts such as database

management and security, project management, machine learning, big data, data mining, data extraction, manipulation, analysis and visualization. Students will develop the skills to communicate analytical results and recommendations to technical and non-technical audiences. This program helps students develop the skills and knowledge to extract meaningful and useful information from raw data to make data-driven predictions or decisions. Students take a common core of courses, but then choose one of five elective concentrations: **Accounting, Finance, Mathematics, Geospatial Science, or Interdisciplinary**.

* Math 103 and/or 104 and/or MATH 107 may be waived for students establishing "equivalent proficiency" as defined by the Department of Mathematics and Computer Science.



MILESTONE COURSES

Courses marked as Milestone

Courses are crucial for staying on track to complete your degree in

four years. Take them in the recommended semester to stay on track! If you see a recommended minimum grade, this is the grade you need to earn to have the best chance for success in this degree! Grades marked with an asterisk are required to pass.

Helpful Hints

Students should take the following track classes:

Accounting: ACCT 205 (semester 2); ACCT 205 (semester 3); ACCT 316 (semester 4)

Finance: ACCT 205 (semester 2); FIN 311 (semester 3); FIN 402 (semester 4)

Math: MATH 104 (semester 2); MATH 253 (semester 3); MATH 219 (semester 4)

Geospatial: GEO 100 (semester 1); GEO 101 (semester 2)

Interdisciplinary: work with your advisor to identify a total of 15-16 hours in a field to take.

Semester 5

Course	Credits	Grade	✓
CS 363: Data Governance	3		☐
General Education or Track Course	3		☐
General Education Course	3		☐
General Education Course	3		☐
General Education Course	3		☐

Semester 6

Course	Credits	Grade	✓
CS 364: Data Visualization	3		☐
MATH 174: Mathematical Modeling OR	3		☐
BGEN 335: Decision Science II			
Track Course	3		☐
General Education Course	3		☐
General Education Course	3		☐

15

Semester 7



Course	Credits	Grade	✓
CS 456: Capstone Project I	3		☐
CS 365: Data Mining	3		☐
General Education or Track Course	3		☐
General Education Course	3		☐
General Education Course	3		☐

15

Semester 8



Course	Credits	Grade	✓
CS 465: Big Data	3		☐
CS 457: Capstone Project II	3		☐
General Education or Track Course	3		☐
General Education Course	3		☐
General Education Course	3		☐

15



ADVISING

When you choose to pursue this degree, you will be assigned an advisor who is an expert in the field of Data Analytics. This advisor can help you with course selection, career planning, resume building, and help you with tracking your path to degree

CAREERS

With a degree in Data Analytics, you will be trained for careers such as: Data Analyst, Environmental Resources Analyst, Technical Analyst, Programmer Analyst, Utilities Analyst, and Investment Analyst.

STUDENT ORGANIZATIONS

Hopper-Turing Society

COMPLEMENTARY MINORS

DA pairs well with most minors.



CAPSTONE

The Data Analytics degree culminates in a Capstone Project. Students will take CS 456 and 457 in their senior year to fulfill this requirement.

Helpful Hints

Students should take the following track courses during semesters 4-8:

Accounting: ACCT 318, BGEN 311 (semester 5); ACCT 215 (semester 7)

Finance: FIN 415 (semester 5); FIN 407 (semester 6)

Math: MATH 174 (option, semester 6); all others in previous semesters

Geospatial: GEO 311 (semester 5); GEO 411 (semester 6). GIS Certificate will be awarded to students with a 3.0 in these courses.

Interdisciplinary: work with your advisor to identify a total of 15-16 hours in one field to take.