DATA ANALYTICS (DAT)

Visit the <u>Course Schedule Search website</u> to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

DAT 510 - Introduction to Data Analytics

Credits: 4

Data analytics is defined as a scientific process that produces actionable insights. Students will be introduced to the concepts of data analysis, what the role of a data analyst will do, and the tools that are used to perform daily functions. This course will cover data analytics and data governance where students will learn about the fundamentals of data gathering, data mining, and how the decision-making process can be affected. This course also addresses the skills that are required to effectively communicate data to co-workers, leadership, and stakeholders. Excel proficiency is expected prior to enrollment in this course. Students should consider completing CMPL 402 Excel if they have not completed an Excel course in transfer.

Equivalent(s): DATA 510G

Mutual Exclusion: No credit for students who have taken BUS 515.

Grade Mode: Letter Grading

DAT 535 - Data Mining, Cleaning, and Visualization

Credits: 4

This course immerses students in virtual lab environments for hands-on experience with concepts in data modeling, data cleaning, data mining, and data visualization. Students will use industry-standard applications like Power BI to prepare data for customized dashboards and graphical representations using various data types. The applications will focus on creative, personalized data storytelling in culminating presentations.

Prerequisite(s): DAT 510 with a minimum grade of D- or DATA 510G with a minimum grade of D- or BUS 675 with a minimum grade of D-.

Equivalent(s): DATA 520G Grade Mode: Letter Grading

DAT 610 - Data Analytics and Technologies

Credits: 4

Students will have the opportunity to explore contemporary systems and technologies impacting the field of data analytics, including the cloud, AI, and machine learning. This course will also explore areas of technology that provide opportunities for future professional specialization, such as emerging Big Data technologies that support the work of data analysts, and the role of Information Technology (IT).

Prerequisite(s): DAT 535 with a minimum grade of D- or DATA 520G with

a minimum grade of D-. **Equivalent(s):** DATA 610G **Grade Mode:** Letter Grading

DAT 620 - Data Analytics in Business Intelligence

Credits: 4

This course will examine the role of data analysis through the lens of multiple business disciplines such as business, health care, and marketing. Students will have the opportunity to explore key areas in the analytical process, including how data are created, stored, and accessed. The course covers how businesses and organizations work with data to create environments in which analytics can drive effective and efficient decision making.

Prerequisite(s): DAT 610 with a minimum grade of D- or DATA 610G with

a minimum grade of D-. **Equivalent(s):** DATA 620G **Grade Mode:** Letter Grading

DAT 670 - Advanced Data Analytics

Credits: 4

Students will have the opportunity to explore more advanced data analytics methods such as collaborating on hypothesis testing and performing root cause analysis and practice presenting visualizations of data analysis that highlight the insights gained from analysis. The handling of imperfect data will also be covered.

Prerequisite(s): (DAT 620 with a minimum grade of D- or DATA 620G with

a minimum grade of D-). **Equivalent(s):** DATA 630G **Grade Mode:** Letter Grading