**Program Information**

The Data Analyst graduate will receive the knowledge and skills necessary for employment and growth in entry-level business intelligence and data analyst professions. They will assist in the process of inspecting, cleansing, testing, and transforming data. Graduates will help interpret and visualize the data using various software tools and techniques to provide support in all decision making phases. Graduates will gain a solid understanding of information technology and applications used to support decision making. The Data Analyst graduate will have the opportunity to interact and work with various functional managers in all parts of the company.

**Program Learning Outcomes**

1. Graduates will have knowledge and understanding of data analysis tools used in organizations.
2. Graduates will have ability to prepare data and visualizations to help management in making decisions.
3. Graduates will have knowledge and understanding of relational database, data retrieval, data quality and data preparation methods.
4. Graduates will work various departments within an organization to validate, review and correct data discrepancies.
5. Graduates will use computer software programs and applications for inputting, verifying, organizing, storing, retrieving, transforming (changing, updating, and deleting), and extracting information.
6. Graduates will develop data visualizations and ad-hoc reports through collaboration with leadership to identify and define metrics that drive performance.

**Course Prerequisites**

Some courses may require appropriate test score or completion of basic math, basic English and/or reading courses with a “C” or better.

- **BDAT 1005**, **ITEC 1003**, **ITEC 1011**, **ITEC 1016**, and **TLIT 1005** are first semester courses and prerequisite to other courses in this major.
- **ENGL 2105** prerequisites ENGL 0102 or ENGL 0960 and READ 0900 or READ 0960 or appropriate test score.
- **MATH 1550** prerequisite MATH 0900, or 0950 or 1080 or 1400 or appropriate test score.

**Graduation Requirements**

All Anoka Technical College students seeking an Associate in Applied Science (AAS), diploma, or certificate must meet the cumulative grade point average (GPA) of 2.0 or higher.

**Transfer Opportunities**

To see how credits from this program may transfer into other Anoka Technical College programs or into a program at another college, visit:
- [Minnesota Transfer](#)
- [Anoka Technical College transfer student](#)

Businesses are investing big-time in data analysis. Spending on big data and analytics will increase from $10 billion in 2012 to more than $32 billion in 2017, according to International Data Corporation. In context, that’s about six times the growth rate of the overall information and communication technology market. Source: Minnesota Business Magazine.

- Data Scientist 80-20 rule- 80% of the time is data mining, and setting up the data to be analyzed, and 20% of the time is doing the analytical forecasting.
- Creates an entry to the workforce; Middle Skill Big Data Workers (MSBDW)
- Closest occupational field is Data Analyst, which is expected to grow 20-28 percent. As markets become more competitive, firms will need to use resources more efficiently. (U.S. Department of Labor, 2012)
- Job title examples: Data Analyst, Business Data Analyst, Information Specialist, Business Intelligence Analyst, Operations Data Analyst, Marketing Research Analyst, Information Clerk

**Wages/Outlook/Advancement**

Wage information is available from the [Minnesota Department of Employment and Economic Development](#).

**Start Dates**

- Fall Semester: August, October
- Spring Semester: January, March

**General Education/MnTC Requirements: 15 Credits**

Fifteen (15) general education credits of [Minnesota Transfer Curriculum (MnTC)](#) are required from three different goal areas. Student is required to take one transferable course from MnTC Goal Area 4 and the following courses:

- [ENGL 2105] Business and Technical Writing
- [MATH 1550] Introduction to Statistics
- [PHIL 1200] Technology, Ethics and Society
- [General Education/MnTC](#)

**Note:** MnTC credits are not listed in your program sequence plan. Please see your faculty advisor or enrollment services for help in planning when to complete your MnTC credits.

**Program Sequence**

- **First Semester**
  - BDAT 1005 Data Analysis Fundamentals
  - ITEC 1003 Networking Fundamentals
  - ITEC 1011 Programming Logic & Design
  - ITEC 1016 Web Programming Technologies
  - TLIT 1005 Technology Fundamentals
  - Total Credits: 15

- **Second Semester**
  - BDAT 1000 Business Concepts
  - ITEC 2120 DB Design & SQL
  - ITEC 2700 Artificial Intelligence
  - MATH 1550 Introduction to Statistics
  - Total Credits: 14

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### Third Semester

- BDAT 1025 Data Preparation for Analytics: 3 units
- BDAT 1030 Data Analysis: 4 units
- ITEC 1025 Project Management: 4 units
- PHIL 1200 Technology, Society, and Ethics: 3 units
- MnTC General Education Elective: 4 units

### Fourth Semester

- BDAT 1010 Integrated Business Software: 3 units
- BDAT 2140 Business Intelligence: 3 units
- BDAT 2145 Special Topics in Analytics: 3 units
- ENGL 2105 Business and Technical Writing: 4 units

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**Faculty Contact**

Vicki Baumgartner ....................................................... 763-576-4146

For information on how to apply, to schedule a tour, or for service during summer hours, contact Enrollment Services at 763-576-7710 or EnrollmentServices@anokatech.edu

*Also see AAS degrees and/or diplomas in: Business Data Analyst, Network Management and Security, Software Development, Web Design & Development, and IT Support certificate*