# **Business Data Analyst**

#### **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**

- 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 meth-
- Graduates will work various departments within an organization to validate, review and correct data discrepancies
- Graduates will use computer software programs and applications for inputting, verifying, organizing, storing, retrieving, transforming (changing, updating, and deleting), and extracting informa-
- Graduates will develop data visualizations and ad-hoc reports through collaboration with leadership to identify and define metrics that drive performance.

# **Industry and Career Outlook**

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

Wage information is available from the Minnesota Department of Employment and Economic Development.

#### **Program Start Dates**

Fall Semester.....August, October Spring Semester ...... January, March

#### **Course Prerequisites**

Some courses in this program may require a prerequisite. Please see course descriptions for more details.

#### **Program Sequence Fall Start**

Fall Semester		.15
□ BDAT 1005	Data Analysis Fundamentals	2
☐ ITEC 1003	Networking Fundamentals	2
☐ ITEC 1011	Programming Logic & Design	4
☐ ITEC 1016	Web Programming Technologies	4
☐ TLIT 1005	Technology Fundamentals	3
Spring Semeste	er	9
□ BDAT 1000	Business Concepts	2
□ BDAT 1010	Integrated Business Software	3
☐ ITEC 2120	DB Design & SQL	4
Fall Semester		11
□ BDAT 1025	Data Preparation for Analytics	3
□ BDAT 1030	Data Analysis	4
☐ ITEC 2700	Artificial Intelligence	4
Spring Semeste	er	10
☐ BDAT 2140	Business Intelligence	
□ BDAT 2145	Special Topics in Analytics	
☐ ITEC 1025	Project Management	

# **Program Sequence Spring Start**

<b>Spring Semester15</b>				
☐ BDAT 1005	Data Analysis Fundamentals	2		
☐ ITEC 1003	Networking Fundamentals	2		
☐ ITEC 1011	Programming Logic & Design	4		
☐ ITEC 1016	Web Programming Technologies	4		
☐ TLIT 1005	Technology Fundamentals	3		
Fall Semester		11		
☐ BDAT 1025	Data Preparation for Analytics			
□ BDAT 1030	Data Analysis	4		
☐ ITEC 2700	Artificial Intelligence			
Spring Semester9				
□ BDAT 1000	Business Concepts	2		
□ BDAT 1010	Integrated Business Software	3		
☐ ITEC 2120	DB Design & SQL	4		
Fall Semester		10		
□ BDAT 2140	Business Intelligence	3		
☐ BDAT 2145	Special Topics in Analytics	3		
☐ ITEC 1025	Project Management	4		



# (continued)

2023-2024

# **Business Data Analyst**

Diploma

#### **Graduation Requirements**

Students must earn a cumulative 2.0 GPA or higher to be eligible for graduation from this program.

# **Faculty Contact**

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

