

IT - DATA AND ANALYTICS SPECIALIST

Overview

IT - Database and Analytics Specialist Associate of Applied Science Degree

Program Code: 10-156-3

For more information: www.wctc.edu/data-spec (<http://www.wctc.edu/data-spec/>)

Prepare for a variety of careers in the rapidly-growing field of data. Gain skills in data modeling, database development, report development, and data warehouse design and development. Explore the basics of programming, data visualization, statistical data analysis and data analytics.

The minimum required course grades and program grade point average (GPA) for students under this catalog are:

Core Courses = C

General Studies Courses = C

Program GPA = 2.0

Related Certificates that can be earned along the way.

- Business Systems Analyst Certificate (<https://catalog.wctc.edu/programs/business-systems-analyst/>)
- Database Server Administrator Certificate (<https://catalog.wctc.edu/programs/database-server-administrator/>)
- Database Developer Certificate (<https://catalog.wctc.edu/programs/database-developer/>)
- Report Analyst Certificate (<https://catalog.wctc.edu/programs/report-analyst/>)

Learning Outcomes

Program Outcomes

1. Create complex SQL queries.
2. Develop data driven reports.
3. Analyze data.
4. Develop database driven applications.
5. Design a database.
6. Develop ETL processes.
7. Manage database servers.
8. Model Real-World Processes as Data.

Critical Life Skills

To help our students prepare for success in a workplace and society that is **increasingly global, multi-cultural, and collaborative**, all students are given opportunities to develop and demonstrate Critical Life Skills, both in and out of the classroom. The following Critical Life Skills are learning outcomes for WCTC students.

- **Communication:** Demonstrate appropriate communication.
- **Critical Thinking/Problem Solving:** Demonstrate critical thinking skills to analyze situations and solve problems.

- **Relationships:** Demonstrate effective interpersonal skills.
- **Self-management:** Demonstrate responsible and respectful behavior.

Required Courses

Listed below are the required courses for the program. To view the recommended sequence for taking courses click on the plan of study tab(s) above. Work with your Academic Advisor to design a program plan!

View your Program Matrix (https://www.wctc.edu/_site-pdfs/course-offering-matrix/101563.pdf) to find out when each course will be offered (term and time of day).

Code	Title	Credits
Core Courses		
107-119	System Analysis Agile Methods	3
Approved Substitute: 107-118		
107-137	IT Internship	1
150-137	MS Server	3
150-190	Network Fundamentals	2
Approved Substitutes: 150-117 OR 150-175 OR 150-178		
152-101	Python Programming	1
Approved Substitute: 150-154		
152-112	Intro to Programming with C#	3
152-170	IS Project	4
156-102	Advanced SQL	3
156-103	Database Administration	3
156-106	Data Warehouse Development	4
156-107	Data Modeling	2
156-108	Intro to Databases & Reporting	1
Approved Substitute: 152-115		
156-109	Intro to SQL	2
Approved Substitute: 152-115		
156-110	Data Visualization & Reporting	2
Approved Substitute: 156-104		
156-111	Intro to Data Analytics	2
156-112	Predictive Analytics	2
Approved Substitute: 156-105		
156-113	Python Data Manipulation	2
156-117	Big Data Engineering	3
General Studies		
801-136	English Composition 1	3
Approved Substitute: 809-223		
801-197	Technical Reporting	3
Approved Substitute: 809-243		
804-133	Math & Logic	3
Approved Substitutes: 804-118 OR 804-116 OR 804-195 OR 804-198		
804-189	Introductory Statistics	3
809-195	Economics	3
Approved Substitutes: 809-143 OR 809-202		
809-199	Psychology of Human Relations	3
Approved Substitute: 809-198		

890-108	Employment Success	1
Total Credits		62

Full-time, Fall Start Plan

First Year		
Fall Term 1		Credits
152-101	Python Programming	1
156-108	Intro to Databases & Reporting	1
804-133	Math & Logic	3
Credits		5
Fall Term 2		
152-112	Intro to Programming with C#	3
156-109	Intro to SQL	2
156-107	Data Modeling	2
Credits		7
Winter Interim		
890-108	Employment Success	1
Credits		1
Spring Term 1		
156-102	Advanced SQL <small>This course will run 16 weeks.</small>	3
156-110	Data Visualization & Reporting	2
809-199	Psychology of Human Relations	3
Credits		8
Spring Term 2		
156-113	Python Data Manipulation	2
801-136	English Composition 1	3
Credits		5
Second Year		
Summer Term		
801-197	Technical Reporting	3
804-189	Introductory Statistics	3
Credits		6
Fall Term 1		
156-106	Data Warehouse Development <small>This course will run 16 weeks.</small>	4
156-111	Intro to Data Analytics	2
107-119	System Analysis Agile Methods	3
Credits		9
Fall Term 2		
150-190	Network Fundamentals	2
156-112	Predictive Analytics	2
Credits		4
Spring Term 1		
150-137	MS Server	3
152-170	IS Project <small>This course runs 16 weeks.</small>	4
156-117	Big Data Engineering	3
Credits		10
Spring Term 2		
156-103	Database Administration	3
Credits		3

Third Year		
Summer Term		
107-137	IT Internship	1
809-195	Economics	3
Credits		4
Total Credits		62

Full-Time, Spring Start Plan

The selected type was not found.