

IT – AI Data Specialist (10-156-3)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at <https://www.gtc.edu/data>. Please see your academic advisor for additional information.

O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	Requisites (prereq- before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*156-106	3	Introduction to Generative AI			F
1	*152-081	3	Programming in Python		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*156-100	3	Data Analytics 1	Prereq: 152-081		S
2	*156-102	3	Intro to Artificial Intelligence	Prereq: 152-081		S
2	804-189	3	Statistics	Prereq: 804-134		S
3	*152-080	3	Databases		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	SU
3	*156-103	3	Intro to Machine Learning	Prereq: 152-081;		SU
3	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
4	*156-101	3	Data Analytics 2	Prereq: 156-100; 152-080		F
4	*156-104	3	Natural Language Processing	Prereq: 156-102; 156-103		F
4	*156-120	3	Programming in R	Prereq: 156-100; 804-189		F

(*) Students must achieve a minimum of 2.0 ("C") or above for this major course to meet graduation requirements.

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Term	Course Number	Credits	Course Title	Requisites (prereq- before/ coreq-with)	Notes	O
5	*156-105	3	AI for Computer Vision	Prereq: 156-102; 156-103		S
5	*156-125	3	Business Intelligence and Visualization	Prereq: 156-101; 156-120 Coreq: 801-136		S
5	*156-130	3	Data Analytics Capstone	Prereq: 156-101; 156-120 Coreq: 156-125		S
6	*152-103	3	Advanced Programming in Python	Prereq: 152-081		SU
6	809-198	3	Psychology, Intro to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
6	809-195 OR 809-143	3	Economics OR Microeconomics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
7	XXX-XXX	3	Elective Course	Take 3 credits at the associate degree level. Suggested electives listed on back.		F
7	801-196 OR 801-198	3	Oral/Interpersonal Communication OR Speech			F

Minimum Program Total Credits Required: 61

(*) Students must achieve a minimum of 2.0 ("C") or above for this major course to meet graduation requirements.

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The *IT – AI Data Specialist* program trains students to identify, utilize, and interpret data from various sources, and to visualize that data to resolve business questions that impact data-driven decisions. Topics will include using current technologies to work with large data sets, securing data from various sources, database technologies, computer programming in Python and R, statistical analysis of data, creating visualizations and business intelligence, and completing real-world projects. Typical entry-level positions for this training opportunity include Operations Research Analyst, Computer Systems Analyst, Database Specialist, Data Analyst, and Junior Data Scientist.

Program Learning Outcomes

Graduates will be able to:

- 1 Analyze data.
- 2 Query data.
- 3 Perform data extraction, transformation and loading (ETL).
- 4 Create reports.
- 5 Communicate with stakeholders.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

- 1 Communication Competence
- 2 Critical Thinking and Problem Solving
- 3 Professionalism and Career Management
- 4 Teamwork and Collaboration
- 5 Cultural Competence
- 6 Technology Competence

Admission Requirements

- 1 Students must submit an application and pay \$30 fee.
- 2 Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

Graduation Requirements

- 1 Minimum 61 credits with a cumulative GPA of 2.0 or above.
- 2 *Minimum of 2.0 ("C") or above for these major courses.
- 3 Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or [Graduation Requirements](#).

Suggested Electives

152-182 Web Programming 1	152-097 JavaScript
152-184 Java Programming 1	150-106 Intrusion Detection Systems
138-118 International Bizsquad	152-106 Swift Programming 1
152-107 Swift Programming 2	

Notes

- 1 Gateway has many articulation agreements with four-year colleges and universities. If you are planning on transferring to a four-year institution, please review this information online at gtc.edu/transfer. If an institution is not listed, please contact them directly to see which courses transfer. You may also contact your advisor for more information.
- 2 IT- AI Data Specialist is a laptop program. Students will need a Windows-based computer (with a hard drive) for use in the program. Please note MAC computers are not compatible with some of the required software.