GATEWAY TECHNICAL COLLEGE

School of Manufacturing, Engineering, and Information Technology

IT – Software Developer (10-152-1)

Associate of Applied Science
Effective 2023/2024

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.).

R-D= Racine/days, F=Fall, S=Spring, SU=Summer

Term	Course #	Cr.	Course Title	Requisites (prereq- before/ coreq-with)	R-D
1	890-155	1	🔆 Gateway to Success (G2S)		F
1	*107-011	3	IT in Business[2]		F
1	*152-126	4	🎓 Intro to Prog. & Database Concepts		F
1	*152-105	2	🎓 IBM Enterprise System Concepts[2]	Coreq: 107-011	F
1	804-135 **OR** 804-115	3 **OR** 5	Quantitative Reasoning[1,2] **OR** College Technical Math 1[1,2]	Prereq: 834-109 **OR** Prereq: 834-110	F
2	*152-133	2	IBM Control Language	Prereq: 152-105	S
2	*152-141	3	🎓 Java Programming – IBM Systems	Prereq: 152-126; 152-105	S
2	*152-145	3	Internet Programming	Prereq: 152-126	S
2	*152-151	3	Microcomputer Prog. Advanced	Prereq: 152-126	S
2	801-136	3	English Composition 1[1,2]	Prereq: 831-103 OR 831-107	S
3	809-198	3	Psychology, Introduction to[1,2]	Prereq: 838-105 OR 831-107	SU
3	801-197	3	Technical Reporting	Prereq: 801-136	SU
4	*152-122	3	Computer Programming RPG/IV (ILE)	Prereq: 152-133; 152-126	F
4	*152-168	3	IBM and .NET Enterprise Programming	Prereq: 152-151	F
4	*152-093	3	IBM Advanced Java Programming	Prereq: 152-141; 152-145; 801-136; 804-135 OR 804-115	F
4	*152-164	3	Mobile Device Programming	Prereq: 152-126	F
4	XXX-XXX	3	Elective Course	Take 3 credits at the associate degree level. Suggested electives listed on back.	F
5	*152-125	3	Computer Program, RPG/IV (ILE) Adv.	Prereq: 152-122	S
5	*152-131	3	Systems Design / Development	Prereq: 152-122	S
5	*152-167	3	Zend (PHP) Application Programming	Prereq: 152-141	S
5	*152-158	3	DB2/UDB Programming	Prereq: 152-126; 152-105	S
5	809-195 **OR** 809-143	3	Economics[1,2] **OR** Microeconomics[1,2]	Prereq: 838-105 OR 831-107	S

Minimum Program Total Credits Required: 63

Notes associated with courses (identified by a superscript number at the end of the course title) are located on the back of the sheet.
🔆 Mastery of this course will put students on a path to achieve successful degree completion, on-time graduation, and enrich the college experience. Students are required to take this course in their first semester of enrollment. Please see an advisor for details.
🎓 = Milestone Course. Faculty have identified this course as providing a strong foundation for success throughout the program.
(*) indicates students must achieve a minimum of 2.0 ("C") or above for these major courses to meet graduation requirements.

IT – Software Developer (10-152-1)

IT-Software Developer covers the rapidly changing field of Information Technology with its multiple job opportunities; it may be completed in five semesters if taken full-time. The curriculum includes various types of programming, program analysis, and system software. Typical entry-level positions are entry-level programmer and computer operator.

Program Learning Outcomes

Graduates will be able to:
1. Design software systems.
2. Implement a team-based software development methodology.
3. Navigate in a software development environment.
4. Integrate data technologies.
5. Develop software applications.
6. Develop technical documentation.

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:

- Communication Competence
- Professionalism and Career Management
- Cultural Competence
- Critical Thinking and Problem Solving
- Teamwork and Collaboration
- 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.

Graduation Requirements

- Minimum 63 credits with an average of 2.0 or above.
- *Minimum of 2.0 ("C") or above for these major courses.
- 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

152-081 Programming in Python	152-124 Computer Programming C++
152-157 Game Programming I	809-196 Sociology, Intro to
801-198 Speech	809-172 Diversity Studies, Intro to
809-112 Principles of Sustainability	801-196 Oral/Interpersonal Communication

Notes

1. Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See and advisor for details.
2. A credit for prior learning assessment is available for this course. For more information, please contact cfpl@gtc.edu.
3. IT-Software Developer 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.