Part-Time Pathway to Success
School of Manufacturing, Engineering, and Information Technology

## IT - Software Developer (10-152-1)

## Associate of Applied Science Effective 2024/2025

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.).

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

| Term | Course \# | Cr. | Course Title | Requisites (prereq- before/ coreq-with) | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 890-155 | 1 | (9) Gateway to Success (G2S) |  | F |
| 1 | *107-011 | 3 | IT in Business ${ }^{2}$ |  | F |
| 1 | *152-126 | 4 | FIntro to Prog. \& Database Concepts |  | F |
| 1 | *152-105 | 2 | FIBM Enterprise System Concepts ${ }^{2}$ | Coreq: 107-011 | F |
| 2 | *152-151 | 3 | Microcomputer Prog. Advanced | Prereq: 152-126 | S |
| 2 | 804-135 <br> 804-115 |  | Quantitative Reasoning ${ }^{1,2}$ OR College Technical Math 1,2 | Prereq: 834-109 <br> Prereq: 834-110 | S |
| 2 | *152-133 | 2 | IBM Control Language | Prereq: 152-105 | S |
| 3 | 801-136 | 3 | English Composition 11,2 | Prereq: 831-103 OR 851-757 | SU |
| 3 | *152-141 | 3 | FJava Programming - IBM Systems | Prereq: 152-126; 152-105 | SU |
| 3 | *152-145 | 3 | Internet Programming | Prereq: 152-126 | SU |
| 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 |
| 5 | *152-158 | 3 | DB2/UDB Programming | Prereq: 152-126; 152-105 | S |
| 5 | *152-167 | 3 | Zend (PHP) Application Programming | Prereq: 152-141 | S |
| 5 | 801-197 | 3 | Technical Reporting | Prereq: 801-136 | S |
| 6 | 809-198 | 3 | Psychology, Introduction to ${ }^{1,2}$ | Prereq: 838-105 OR 851-757 | SU |
| 6 | XXX-XXX | 3 | Elective Course | Take 3 credits at the associate degree level. Suggested electives listed on back. | SU |
| 7 | *152-122 | 3 | Computer Programming RPG/IV (ILE) | Prereq: 152-133; 152-126 | F |
| 7 | 809-195 <br> 809-143 | 3 | Economics ${ }^{1,2}$ OR <br> Microeconomics ${ }^{1,2}$ | Prereq: 838-105 OR 851-757 | F |
| 8 | *152-125 | 3 | Computer Program, RPG/IV (ILE) Adv. | Prereq: 152-122 | S |
| 8 | *152-131 | 3 | Systems Design / Development | Prereq: 152-122 | 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.
${ }^{9}$ 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.
$\sigma=$ Milestone Course. Faculty have identified this course as providing a strong foundation for success throughout the program. $\left(^{*}\right)$ 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 eight semesters if taken part-ime. 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 technology.
3. Navigate in a software development environment.
4. Integrate data technologies.
5. Develop soffware 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 a cumulative GPA 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 <br> Programming C++ |
| :--- | :--- |
| 152-157 Game Programming I | $809-196$ Sociology, Intro to |
| 801-198 Speech | $809-172$ Diversity Studies, Intro <br> to |
| 809-112 Principles of <br> Sustainability | $801-196$ Oral/Interpersonal <br> Communication |

## Notes

1. Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.
2. A credit for prior learning assessment is available for this course. For more information, please contact cffo@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.

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. Occasionally, the District may offer a particular course out of published sequence. By doing so, the District does not obligate itself to offer succeeding courses out of published sequence.

