# IT: Software Development (A25590SD)
## *A.A.S. Degree (Full-Time)*
### PROGRAM PLANNING GUIDE

**New: Fall 2026**

**Courses taken more than 5 yrs. ago may not receive transfer credit. Consult your advisor.**

| | | | Hours Per Week | | |
|---|---|---|---|---|---|
| | | | Class | Lab | Credits |
| **FALL SEMESTER** | | | | | |
| CTI | 110 | IT Foundations | 2 | 2 | 3 |
| CSC | 120 | Computing Fundamentals I | 3 | 2 | 4 |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 3 |
| CTS | 115 | Info Sys Business Concepts | 3 | 0 | 3 |
| | | Mathematics Elective | 3 | 2 | 3 |
| | | | | | |
| **SPRING SEMESTER** | | | | | |
| CSC | 121 | Python Programming | 2 | 3 | 3 |
| CTI | 120 | Network & Sec Foundations | 2 | 2 | 3 |
| DBA | 120 | Database Programming I | 2 | 2 | 3 |
| WEB | 115 | Web Markup and Scripting | 2 | 3 | 3 |
| | | Programming Concentration Area | - | - | 3 |
| | | | | | |
| **SUMMER SEMESTER** | | | | | |
| CSC | 113 | Artificial Intelligence Fundamentals | | | 3 |
| | | English and Communications Elective | 3 | 0 | 3 |
| | | | | | |
| **FALL SEMESTER** | | | | | |
| CSC | 154 | Software Development | 2 | 2 | 3 |
| | | Programming Concentration Area | - | - | 6 |
| CSC | 114 | Artificial Intelligence I | 2 | 3 | 3 |
| CSC | 256 | Software Quality Assurance | 2 | 2 | 3 |
| | | | | | |
| **SPRING SEMESTER** | | | | | |
| CSC | 227 | Cloud Application Development | 2 | 2 | 3 |
| | | Social and Behavioral Sciences Electives | - | - | 3 |
| | | Humanities and Fine Arts Electives | - | - | 3 |
| | | Project Elective | - | - | 2 |
| | | Major Elective | | | 3 |

**GRADUATION REQUIREMENT**                    **Credit Hours**        **66**

# IT: Software Development (A25590SD)
## *A.A.S. Degree (Full-Time)*

| **General Electives** | | | | | |
|---|---|---|---|---|---|

| **English and Communication Electives** | | | | | |
|---|---|---|---|---|---|
| (choose 3 credit hours from the following courses) | | | | | |
| COM | 110 | Intro to Communication | 3 | 0 | 3 |
| COM | 120 | Intro Interpersonal Com | 3 | 0 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |

| **Humanities and Fine Arts Electives** | | | | | |
|---|---|---|---|---|---|
| (choose 3 credit hours from the following courses) | | | | | |
| HUM | 110 | Technology and Society | 3 | 0 | 3 |
| HUM | 115 | Critical Thinking | 3 | 0 | 3 |
| PHI | 240 | Introduction to Ethics | 3 | 0 | 3 |

| **Mathematics Electives** | | | | | |
|---|---|---|---|---|---|
| (choose 3 credit hours from the following courses) | | | | | |
| MAT | 121 | Algebra/Trigonometry I | 2 | 2 | 3 |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 3 |
| MAT | 152 | Statistical Methods I | 3 | 2 | 4 |
| MAT | 171 | Precalculus Algebra | 3 | 2 | 4 |
| MAT | 172 | Precalculus Trigonometry | 3 | 2 | 4 |
| MAT | 271 | Calculus I | 3 | 2 | 4 |
| MAT | 272 | Calculus II | 3 | 2 | 4 |

| **Social and Behavioral Sciences Electives** | | | | | |
|---|---|---|---|---|---|
| (choose 3 credit hours from the following courses) | | | | | |
| ECO | 151 | Survey of Economics | 3 | 0 | 3 |
| ECO | 251 | Principles of Microeconomics | 3 | 0 | 3 |
| ECO | 252 | Prin of Macroeconomics | 3 | 0 | 3 |
| POL | 120 | American Government | 3 | 0 | 3 |
| PSY | 118 | Interpersonal Psychology | 3 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| SOC | 210 | Introduction to Sociology | 3 | 0 | 3 |

# IT: Software Development (A25590SD)
## *A.A.S. Degree (Full-Time)*
Program Planning Guide

| Required Major Electives | | | | | |
|---|---|---|---|---|---|

**Concentration Area (Select 1 option grouping below)**

| Option 1 - Java Development (9 Credit Hrs., take in order listed) | | | | | |
|---|---|---|---|---|---|
| CSC | 151 | Java Programming | 2 | 3 | 3 |
| CSC | 249 | Data Structure & Algorithms | 2 | 3 | 3 |
| CSC | 251 | Advanced Java Programming | 2 | 3 | 3 |

| Option 2 - C++ Development (9 Credit Hrs., take in order listed) | | | | | |
|---|---|---|---|---|---|
| CSC | 134 | C++ Programming | 2 | 3 | 3 |
| CSC | 249 | Data Structure & Algorithms | 2 | 3 | 3 |
| CSC | 234 | Advanced C++ Programming | 2 | 3 | 3 |

| Option 3 - Full Stack Development (9 Credit Hrs., take in order listed) | | | | | |
|---|---|---|---|---|---|
| WEB | 110 | Web Development Fundamentals | 2 | 3 | 3 |
| WEB | 125 | Responsive Web Frameworks | 2 | 3 | 3 |
| WEB | 215 | Advanced Web Markup and Scripting | 2 | 3 | 3 |

| Major Elective | | | | | |
|---|---|---|---|---|---|
| (choose a minimum of 3 credit hrs. from the following courses) | | | | | |
| CSC | 122 | Python Application Development | 2 | 2 | 3 |
| CSC | 221 | Advanced Python Programming | 2 | 2 | 3 |
| DBA | 130 | Intro to noSQL Databases | 2 | 2 | 3 |
| DBA | 240 | Database Analysis/Design | 2 | 3 | 3 |
| DME | 125 | User Experience Fundamentals | 2 | 3 | 3 |

| Project Electives | | | | | |
|---|---|---|---|---|---|
| (choose a minimum of 2 credit hrs. from the following courses) | | | | | |
| CSC | 289 | Programming Capstone | 1 | 4 | 3 |
| WBL | 111MI | Work-Based Learning I-CSC | 0 | 10 | 1 |
| WBL | 112MI | Work-Based Learning I-CSC | 0 | 20 | 2 |
| WBL | 121MI | Work-Based Learning II-CSC | 0 | 10 | 1 |
| WBL | 122MI | Work-Based Learning II-CSC | 0 | 20 | 2 |

*Work-Based Learning is an elective. WBL courses completed for one program may not count toward the completion of another program. Contact your academic advisor or WBL faculty coordinator for verification. Students must have approval from the department head and pre register with the Computer Technologies Division office. As an alternative to CSC 289, 2 credit hours of Work-Based Learning can be taken. The Work-Based Learning work period may be taken as WBL 112, or over two semesters as WBL-111 and WBL-112.