# Computer Information Systems
# Software Development and Database Administration
# Hybrid E-Degree Option

## Semester Course Outline • 2024 – 2025

**18 Months (4 Semesters)** • **Revised: 2/7/24**
**Associate of Applied Science (A.A.S.) Degree** • **Credits Required for Graduation: 70**

**Fall Semester – 2024**

| Course Number | Course Title | Clock Hours | Credits |
|---|---|---|---|
| CIS 115 | IT Essentials | 84 | 3 |
| CIS 133 | Intro to C Sharp | 45 | 3 |
| CIS 140 | Database Design and MySQL | 45 | 3 |
| CIS 141 | Web Design and Maintenance | 84 | 3 |
| CIS 171 | Project Management with Agile and Scrum | 84 | 3 |
| ● Selected Behavioral Science Course (Choose one)<br>PSYC 100 – Psychology of Human Relations<br>PSYC 101 – General Psychology * | | 45 | 3 |
| **Total** | | **387** | **18** |

**Spring Semester – 2025**

| Course Number | Course Title | Clock Hours | Credits |
|---|---|---|---|
| CIS 136 | Java Essentials | 84 | 3 |
| CIS 180 | Intro to C++ | 84 | 3 |
| CIS 238 | Full Stack JavaScript for Developers | 84 | 3 |
| CIS 276 | Web Applications – PHP | 84 | 3 |
| ● Selected Communications Course (Choose one)<br>COMM 101 – Communications and Career Strategies<br>ENGL 101 – Composition * (CSS 100 – Career Search Strategies .5 credit) | | 45 | 3 |
| ● Selected Mathematics Course (Choose one)<br>MATH 100 – Applied General Math<br>MATH 101 – Intermediate Algebra<br>MATH 114 – College Algebra * | | 45 | 3 |
| **Total** | | **426** | **18** |

**Fall Semester – 2025**

| Course Number | Course Title | Clock Hours | Credits |
|---|---|---|---|
| CIS 221 | Advanced JavaScript | 42 | 1.5 |
| CIS 222 | Intro to Python | 42 | 1.5 |
| CIS 240 | Java for Mobile Apps | 84 | 3 |
| CIS 272 | Client Server Programming | 84 | 3 |
| CIS 273 | Web Applications – ASP | 84 | 3 |
| CMST 101 | Foundations of Communication * | 45 | 3 |
| ● Selected Social Science Course  (Choose one) <br><br> ECON 105 – Leadership in the Global Workplace <br><br> ECON 201 – Principles of Microeconomics I * <br><br> SOC 100 – Introduction to Sociology * | | 45 | 3 |
| | **Total** | 426 | 18 |

**Spring Semester – 2026**

| Course Number | Course Title | Clock Hours | Credits |
|---|---|---|---|
| CIS 244 | Advanced Python | 84 | 3 |
| CIS 255 | Application Security | 84 | 3 |
| CIS 270 | Microsoft SQL | 84 | 3 |
| CIS 290 | System Analysis and Design | 84 | 3 |
| CIS 299 | Internship | 240 | 4 |
| | **Total** | 576 | 16 |

● Students will select a course in each of the areas listed to meet general education requirements.  Courses marked with an asterisk (*) can be transferred directly to the university system.  Students should speak with an advisor before doing so.