



# Computer Information Systems

## Software Development and Database Administration • E-Degree Semester Course Outline • 2025 – 2026

18 Months (4 Semesters) • Revised: 9/12/25

Associate of Applied Science (A.A.S.) Degree • Credits Required for Graduation: 70

### Fall Semester – 2025

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	45	3
CIS 171	Project Management with Agile and Scrum	45	3
<ul style="list-style-type: none"> <li>Selected Behavioral Science Course (Choose one)</li> <li>PSYC 100 – Psychology of Human Relations</li> <li>PSYC 101 – General Psychology *</li> </ul>		45	3
<b>Total</b>		309	18

### Spring Semester – 2026

Course Number	Course Title	Clock Hours	Credits
CIS 136	Java Essentials	45	3
CIS 180	Intro to C++	45	3
CIS 238	Full Stack JavaScript for Developers	84	3
CIS 276	Web Applications – PHP	45	3
<ul style="list-style-type: none"> <li>Selected Communications Course (Choose one)</li> <li>COMM 101 – Communications and Career Strategies</li> <li>ENGL 101 – Composition * (CSS 100 – Career Search Strategies .5 credit)</li> </ul>		45	3
<ul style="list-style-type: none"> <li>Selected Mathematics Course (Choose one)</li> <li>MATH 100 – Applied General Math</li> <li>MATH 101 – Intermediate Algebra</li> <li>MATH 114 – College Algebra *</li> </ul>		45	3
<b>Total</b>		309	18



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## Software Development and Database Administration • E-Degree

### Semester Course Outline • 2025 – 2026 • Revised: 9/12/25

#### Fall Semester – 2026

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	45	3
CMST 101	Foundations of Communication *	45	3
● Selected Social Science Course (Choose one) ECON 105 – Leadership in the Global Workplace ECON 201 – Principles of Microeconomics I * SOC 100 – Introduction to Sociology *		45	3
<b>Total</b>		<b>387</b>	<b>18</b>

#### Spring Semester – 2027

Course Number	Course Title	Clock Hours	Credits
CIS 244	Advanced Python	45	3
CIS 255	Application Security	84	3
CIS 270	Microsoft SQL	45	3
CIS 290	System Analysis and Design	45	3
CIS 299	Internship	240	4
<b>Total</b>		<b>459</b>	<b>16</b>

- 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.