Computer Information Systems

Software Development and Database Administration 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)			
PSYC 100 – Psychology of Human Relations		45	3
PSYC 101 – General Psychology *			
	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)			
COMM 101 – Communications and Career Strategies		45	3
ENGL 101 – Composition * (CSS 100 – Career Search Strategies .5 credit)			
Selected Mathematics Course (Choose one)			
MATH 100 – Applied General Math		45	3
MATH 101 – Intermediate Algebra			
MATH 114 – College Algebra *			
	Total	426	18

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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)			
ECON 105 – Leadership in the Global Workplace		45	3
ECON 201 – Principles of Microeconomics I *			
SOC 100 – Introduction to Sociology *			
	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.