

COMPUTER SOFTWARE DEVELOPMENT, A.A.S.

Entry Time

Fall

Award

Associate of Applied Science degree
2 years (5 terms including summer)

Those who can be both creative and logical, who enjoy working with computers, and especially those who would like to learn how to produce their own solutions for business and other computing needs, should consider a career in Computer Software Development.

This degree helps graduates enter the growing and well-paid field of computer programming. Students learn various phases of software development including how to design, write, test and document computer programs with a variety of tools, using in-demand languages such as Java, C# and SQL. In addition to learning to program for desktop computers and other devices, students also explore Internet programming with technologies such as ASP, JSP, HTML, CSS and JavaScript.

Career Opportunities

- computer programmer
- software developer
- systems analyst
- web designer
- software tester
- client/server application developer
- internet programmer

Degree Requirements

Course	Title	Credit Hours
Term 1		
Select one of the following:		3
CIS-121	Introduction to Programming Logic ¹	
CIS-450	PLTW - Computer Science Principles ¹	
CSC-142	Computer Science ¹	
NET-130	Computer Concepts	3
NET-165	Network Plus	3
CIS-207	Fundamentals of Web Programming ²	3
Approved Math Course ³		4
Term Totals:		16
Term 2		
Select one of the following:		3
CIS-171	Java ¹	

CSC-142	Computer Science ¹	
CIS-335	Relational Database and SQL ²	3
CIS-622	.NET Development I ²	3
ENG-105	Composition I	3
Social Science Course		3
Term Totals:		15
Term 3		
Summer		
Humanities or History/Culture Course (https://creditcatalog.kirkwood.edu/aas-degree-humanities-requirement/)		3
Select one of the following:		3
SPC-101	Fundamentals of Oral Communication	
ENG-106	Composition II	
SPC-112	Public Speaking	
ENG-108	Composition II: Technical Writing	
Term Totals:		6
Term 4		
CIS-175	Java II ²	3
CIS-624	.NET Development II ²	3
CIS-504	Structured Systems Analysis ²	3
CIS-280	Client Side Scripting ²	3
WBL-110 or WBL-146	Employability Skills or Workplace Project Based Learning: Information Solutions	1
Technical/Business Elective		3
Term Totals:		16
Term 5		
CIS-181	Java III ²	3
CIS-626	.NET Development III ²	3
CIS-802	Software Development Capstone ²	3
CSC-153	Data Structures ²	4
Technical/Business Elective		3
Term Totals:		16
Program Totals:		69

¹ Earn a minimum C- in both CIS-121 Introduction to Programming Logic and CIS-171 Java. CIS-450 PLTW - Computer Science Principles taken in high school with a minimum C- can substitute for CIS-121 Introduction to Programming Logic. Other option: Earn a C- in CSC-142 Computer Science

² Minimum grade requirement of C- for graduation

³ MAT-138 College Algebra with Limits is recommended.

Technical/Business Electives

Code	Title	Credit Hours
BCA-290	Web Design Principles	3
CIS-249	Web Languages	3
CIS-326	Business Intelligence Tools	3
CIS-327	Applied Analytics and Reporting	3
CIS-342	PHP/Apache/MySQL II	3
CIS-334	PHP/Apache/MySQL	3
CIS-354	Data Analytics and Reporting Projects	3
CIS-370	Fundamentals of 2D Visualizations and Games	3
CIS-371	Developing 3D Simulations and Games	3
CSC-160	Software Design and Development	4
CSC-175	Computer Organization and Assembly Language Programming	4
MAT-136	Trigonometry and Analytic Geometry	5
MAT-140	Finite Math	3
MAT-150	Discrete Math	3
MAT-157	Statistics	4
MAT-162	Business Statistics	4
MAT-165	Business Calculus	3
MGT-121	Project Management Basics	3
WBL-306	Internship: Information Solutions	1-5
Any course with the following subject codes: ACC-, EGR-, FIN-, MDT, NET, PHY-		3