

Programming Specialization Associate of Applied Science

Program Summary Certifications Associate of Applied Science

Information Technology is one of the fastest growing industries in the nation. The Computer Science Program provides quality, in-depth training for individuals interested in software design, hardware, cybersecurity, media applications, and general computer maintenance. Students are trained with industry-standard hardware and software through digital labs and in-person communication. Hill College is designated as a National Center of Academic Excellence in Cyber Defense Education for Associate of Applied Science (AAS) in Computer Science, Networking Cybersecurity through 2024. The curriculum path prepares students to complete nationally recognized industry certification exams such as Microsoft's networking administration, CompTIA's A+, Security+, and Network+.

MC 4187 Programming Application AAS		60/61 Hours	TSI Required
Technical Core Certificate (18 hours)			
CC 4110	Certificate of Completion	TSI Waived	
ITNW 1308	Implementing and Supporting Client Operating Systems	3	
ITNW 1309	Fundamentals of Cloud Computing	3	
ITNW 1358	Network+	3	
ITSC 1325	Personal Computer Hardware	3	
ITSE 1329	Programming Logic and Design	3	
ITSY 1342	Information Technology Security	3	

Programming Specialization Certificate (27 Hours)		
MC 4188	Certificate of Technology Ψ	TSI Required
COSC 1436	Program Fundamentals I	4
ITSE 2409	Database Programming	4
ITSE 2413	Web Authoring	4
ITSC 1316	Linux Installation and Configuration	3
COSC 1437	Program Fundamentals II	4
ITSE 2417	JAVA Programming	4
ITSE 2421	Object-Oriented Program	4

Programming Associate of Applied Science (15/16 Hours)		
MC 4187	Associate of Applied Science $\Psi \Psi$	TSI Required
BCIS 1305	Business Computer Applications	3
ENGL 1301	Composition I	3
	Creative Arts* or Language, Philosophy and Culture*	3
	Mathematics*	3/4
	Social and Behavioral Sciences*	3

*See Core Curriculum for course options

Ψ Prerequisite CC 4110

Ψ See Course Description for elective options

$\Psi \Psi$ Prerequisite MC 4188



Programming Specialization Certifications (Sequenced)

Program Summary

Certifications

Associate of Applied Science

Technical Core Certification

Year 1: Semester 1

Course	Semester Credit Hours
ITNW 1308 Implementing and Supporting Client Operating Systems	3
ITNW 1309 Fundamentals of Cloud Computing	3
ITNW 1358 Network+	3
ITSC 1325 Personal Computer Hardware	3
ITSE 1329 Programming Logic and Design	3
ITSY 1342 Information Technology Security	3
Total	18

+ Capstone Experience

Certificate of Technology

Year 1: Semester 1

Course	Semester Credit Hours
ITNW 1308 Implementing and Supporting Client Operating Systems	3
ITNW 1309 Fundamentals of Cloud Computing	3
ITNW 1358 Network+	3
ITSC 1325 Personal Computer Hardware	3
ITSE 1329 Programming Logic and Design	3
ITSY 1342 Information Technology Security	3
Total	18

Year 1: Semester 2

Course	Semester Credit Hours
COSC 1436 Program Fundamentals I	4
ITSC 1316 Linux Installation and Configuration	3
ITSE 2409 Database Programming	4
ITSE 2413 Web Authoring	4
Total	15

Year 2: Semester 1

Course	Semester Credit Hours
COSC 1437 Program Fundamentals II	4
ITSE 2417 JAVA Programming	4
ITSE 2421 Object-Oriented Program	4
Total	12

+ Capstone Experience



Programming Specialization Associate of Applied Science

Program Summary

Certifications

Associate of Applied Science

Year 1: Semester 1

Course	Semester Credit Hours
ITNW 1308 Implementing and Supporting Client Operating Systems	3
ITNW 1309 Fundamentals of Cloud Computing	3
ITNW 1358 Network+	3
ITSC 1325 Personal Computer Hardware	3
ITSE 1329 Programming Logic and Design	3
ITSY 1342 Information Technology Security	3
Total	18

Year 1: Semester 2

Course	Semester Credit Hours
COSC 1436 Program Fundamentals I	4
ITSC 1316 Linux Installation and Configuration	3
ITSE 2409 Database Programming	4
ITSE 2413 Web Authoring	4
Total	15

Year 2: Semester 1

Course	Semester Credit Hours
COSC 1437 Program Fundamentals II	4
ITSE 2417 JAVA Programming	4
ITSE 2421 Object-Oriented Program	4
Total	12

Year 2: Semester 2

Course	Semester Credit Hours
BCIS 1305 Business Computer Applications	3
ENGL 1301 Composition I	3
Creative Arts* or Language, Philosophy and Culture*	3
Mathematics* (rec: MATH, 1314, 1316, 1324, 1325, 2413 or 2414)	3/4
Social and Behavioral Sciences*	3
Total	15/16

+ Capstone Experience

*See Core Curriculum for course options