



Computer Technology – Computer Programming

Associate in Applied Science

Recommended Course Sequence

First Semester – Fall

Fall 1

REQ GEN	Select from General Education (CPT 101 Recommended)	Credit: 3
CPT 114	Computers and Programming	Credit: 3

Fall 2

CPT 162	Introduction to Web Page Publishing	Credit: 3
CPT 167	Introduction to Programming Logic	<u>Credit: 3</u>

Total: 12

Second Semester - Spring

Spring 1

CPT 242	Database	Credit: 3
CPT 187	Object-Oriented Logic and Design	Credit: 3

Spring 2

**CPT 202	SQL Programming I	Credit: 3
IST 166	Network Fundamentals	<u>Credit: 3</u>

Total: 12

Third Semester - Summer

ENG 101	English Composition I	Credit: 3
MAT 110	College Algebra	Credit: 3

or

MAT 120	Probability and Statistics	Credit: 3
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or

MAT 155	Contemporary Mathematics	Credit: 3
**CPT 237	Advanced Java Programming	Credit: 3

IST 190	Linux Essentials	Credit: 3
IST 239	Datum and JavaScript	<u>Credit: 3</u>

Total: 15

Fourth Semester - Fall

Fall Full

REQ HUM	Select from Humanities	Credit: 3
PGM ELE	Computer Programming Elective 1	Credit: 3
ECO 210	Macroeconomics	Credit: 3

or

ECO 211	Microeconomics	<u>Credit: 3</u>
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Total: 9

Fifth Semester - Spring

Spring Full

PGM ELE	Computer Programming Elective 2	Credit: 3
PGM ELE	Computer Programming Elective 3	Credit: 3
PGM ELE	Computer Programming Elective 4	Credit: 3
CPT 275	Computer Technology Senior Project	<u>Credit: 3</u>
		Total: 12
TOTAL SEMESTER HOURS		60

Computer Programming Track Electives (12 credit hours)

Microcomputer Programming Option

CPT 180	Shell Scripting	Credit: 3
CPT 244	Data Structures	Credit: 3

Internet Programming Option

CPT 238	Internet Scripting	Credit: 3
CPT 262	Advanced Web Page Publishing	Credit: 3
CPT 283	PHP Programming I	Credit: 3

Database Administration Option

IST 272	Relational Database	Credit: 3
IST 274	Database Administration	Credit: 3

Cooperative Work Experience/Internship Option

CWE	Cooperative Work Experience (CWE hours vary)	Credit: *
IST 286	Technical Support Internship I	Credit: 3

Other Option

CPT 208	Special Topics in Computer Technology	Credit: 3
CPT 297	Big Data Analytics	Credit: 3
CPT 298	Introduction to Software as a Service (Saas)	Credit: 3
IST 235	Handheld Computer Programming	Credit: 3
IST 290	Special Topics in Information Sciences	Credit: 3

**It is suggested to take IST 239 or CPT 283 or IST 235 prior to CPT 237.

Student who have an industry certification (Security+, Network+, etc.) can get experiential credit. The Security + certification can be used as a sub for IST 293 (Elective). If the student has taken IST 293 it can be used to sub for CPT 282.

Prerequisites	
CPT 114 = MAT 033	CPT 180 = MAT 033, (CPT 114 or CPT 167), (IST 165 or IST 190)
CPT 162 = MAT 033	CPT 262 = (CPT 114 or CPT 167), (CPT 162 or ARV 227)
CPT 172 = MAT 033	CPT 270 = CPT 174, CPT 179, CPT 290
CPT 174 = MAT 033	CPT 283 = (CPT 114 or CPT 167), CPT 162
CPT 167 = CPT 114 w/'C'	IST 239 = (CPT 114 or CPT 167), (CPT 162 or ARV 227)
CPT 187 = CPT 167 w/'C'	IST 235 = IST 239 w/'C'
CPT 237 = CPT 187 w/'C'	IST 272 = CPT 202
CPT 244 = CPT 237 w/'C'	IST 274 = CPT 202
CPT 238 = IST 239	CPT 264 (Capstone for Info Sys) = ENG 101, (CPT 114 or CPT 167), CPT 162, CPT 242, IST 166
CPT 202 = CPT 242	CPT 275 (Capstone for Programming) = ENG 101, CPT 202, IST 239, CPT 237, (CPT 238 or CPT 283 or IST 235)



Computer Technology – Information Systems Specialist Associate in Applied Science

Recommended Course Sequence

First Semester - Fall

REQ GEN	Select from General Education (CPT 101 Recommended)	Credit: 3
CPT 114	Computers and Programming	Credit: 3
CPT 162	Introduction to Web Page Publishing	Credit: 3
CPT 174	Microcomputer Spreadsheets	<u>Credit: 3</u>
		Total: 12

Second Semester - Spring

ENG 101	English Composition I	Credit: 3
CPT 282	Information Systems Security	Credit: 3
CPT 172	Microcomputer Database	Credit: 3
IST 166	Network Fundamentals	<u>Credit: 3</u>
		Total: 12

Third Semester - Summer

CPT 242	Database	Credit: 3
CPT or IST ELE	Elective CPT or IST - Elective 1	Credit: 3
MAT 110	College Algebra	Credit: 3
or		
MAT 120	Probability and Statistics	Credit: 3
or		
MAT 155	Contemporary Mathematics	Credit: 3
CPT 209	Computer Systems Management	<u>Credit: 3</u>
		Total: 12

Fourth Semester - Fall

REQ HUM	REQ HUM Select from Humanities	Credit: 3
IST 190	Linux Essentials	Credit: 3
CPT 180	Shell Scripting	Credit: 3
CPT or IST ELE	Elective CPT or IST - Elective 2	<u>Credit: 3</u>
		Total: 12

Fifth Semester - Spring

ECO 210	Macroeconomics	Credit: 3
or		
ECO 211	Microeconomics	Credit: 3
CPT or IST ELE	Elective CPT or IST - Elective 3	Credit: 3
CPT or IST ELE	Elective CPT or IST - Elective 4	Credit: 3
CPT 264	Systems and Procedures	<u>Credit: 3</u>
		Total: 12

TOTAL SEMESTER HOURS**60****Information Systems Specialist Track Electives (12 credit hours)****Microcomputer Programming Option**

CPT 167	Introduction to Programming Logic	Credit: 3
CPT 187	Object-Oriented Logic and Design	Credit: 3
CPT 237	Advanced Java Programming	Credit: 3
CPT 244	Data Structures	Credit: 3

Business Applications Solutions Specialist Option

CPT 179	Microcomputer Word Processing	Credit: 3
CPT 270	Advanced Microcomputer Applications	Credit: 3
CPT 290	Microcomputer Multimedia Concepts and Applications	Credit: 3

Internet Programming Option

CPT 238	Internet Scripting	Credit: 3
IST 239	Datum and JavaScript	Credit: 3
CPT 262	Advanced Web Page Publishing	Credit: 3
CPT 283	PHP Programming I	Credit: 3

Database Administration Option

CPT 202	SQL Programming I	Credit: 3
IST 272	Relational Database	Credit: 3
IST 274	Database Administration	Credit: 3

Linux Systems Administration Option

IST 191	Linux Systems Administration	Credit: 3
IST 192	Linux Network Applications	Credit: 3
IST 198	Cloud Essentials	Credit: 3

Cisco Certified Network Associate Option

IST 201	Cisco Internetworking Concepts	Credit: 3
IST 202	Cisco Router Configuration	Credit: 3
IST 203	Advanced Cisco Router Configuration	Credit: 3

CompTIA Systems Specialist Option

IST 293	IT and Data Assurance	Credit: 3
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General Electives and CWE Option

ARV 217	Computer Imagery	Credit: 3
ARV 227	Website Design I	Credit: 3
CPT 208	Special Topics in Computer Technology	Credit: 3
CPT 297	Big Data Analytics	Credit: 3
CPT 298	Introduction to Software as a Service (SaaS)	Credit: 3
CWE	Cooperative Work Experience	Credit: *
IST 235	Handheld Computer Programming	Credit: 3
IST 290	Special Topics in Information Sciences	Credit: 3
IST 286	Technical Support Internship I	Credit: 3
CPT or IST	Any CPT or IST course not required in the career path.	Credit: 3