

B.A. in Computer Systems Technology (0714)

Major Requirements (63 sh)

SUMMARY OF MAJOR REQUIREMENTS

- 21 – 51 sh of Foundational Courses
 - 12 – 42 sh of Upper-Level and Capstone Courses
-
- 63 sh total

FOUNDATIONAL COURSES

Course #	Course Name	Course Attributes / Notes	Sem/Yr	Grade	Credits
CS 01104	Introduction to Programming and Problem Solving	Python required			3
	Technology specific courses from CUGS (see below)				18 - 48 ³
					Subtotal: 21 - 51

UPPER-LEVEL AND CAPSTONE COURSES

Course #	Course Name	Course Attributes / Notes	Sem/Yr	Grade	Credits
	Technology specific courses from CUGS (see below)				12 - 42 ³
					Subtotal: 12 - 42

SUMMARY OF GRADUATION REQUIREMENTS

- 63 sh of Program Requirements
 - 24 sh of Rowan Core
 - 9 sh of Rowan Experience
 - 18 sh of Non-Program Courses
 - 6 sh of Free Electives
-
- 120 sh total

³ General range, depending on which CUGS students select for the major course of study.

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CUGS for this Major/Degree (60 sh)

Students should select and complete any 5 CUGS in their entirety.

In case of overlap (i.e., a course that is part of multiple CUGS), students must select additional courses such that the total unique credits equal 60

Database Fundamentals					
Course #	Course Name	Course Attributes / Notes	Sem/Yr	Grade	Credits
CST 02110	Implementations of SQL I	FOUNDATIONAL COURSE			3
CST 02210	Implementations of SQL II	FOUNDATIONAL COURSE			3
CST 02220	Database Administration I	FOUNDATIONAL COURSE			3
CST 02320	Database Administration II	UPPER LEVEL COURSE			3
Database Development					
Course #	Course Name	Course Attributes / Notes	Sem/Yr	Grade	Credits
CST 02230	Database Development	FOUNDATIONAL COURSE			3
CST 02250	Database Security	FOUNDATIONAL COURSE			3
CST 02330	Database Programming	UPPER LEVEL COURSE			3
CST 02400	Database Warehouse Principles	UPPER LEVEL COURSE			3
Cybersecurity in Information Technology					
Course #	Course Name	Course Attributes / Notes	Sem/Yr	Grade	Credits
CST 01110	Information Technology Foundations	FOUNDATIONAL COURSE			3
CST 01111	Computer Hardware and Operations	FOUNDATIONAL COURSE			3
CST 03201	Security+	FOUNDATIONAL COURSE			3
CST 03410	Cyber Defense	UPPER LEVEL COURSE			3
Ethical Hacking					
Course #	Course Name	Course Attributes / Notes	Sem/Yr	Grade	Credits
CST 03215	Penetration Testing Fundamentals	FOUNDATIONAL COURSE			3
CST 03218	Ethical Hacking Fundamentals	FOUNDATIONAL COURSE			3
CST 03315	Advanced Penetration Testing	UPPER LEVEL COURSE			3
CST 03418	Advanced Topics in Ethical Hacking	UPPER LEVEL COURSE			3
Digital Forensics					
Course #	Course Name	Course Attributes / Notes	Sem/Yr	Grade	Credits
CST 03252	Foundations of Computer Forensics	FOUNDATIONAL COURSE			3
CST 03253	Applications for Computer Forensics	FOUNDATIONAL COURSE			3
CST 03352	Digital Incident Handling	UPPER LEVEL COURSE			3
CST 03452	Advanced Digital Forensics Investigation	UPPER LEVEL COURSE			3
Intrusion Detection / Prevention					
Course #	Course Name	Course Attributes / Notes	Sem/Yr	Grade	Credits
CST 03270	Introduction to Intrusion Detection	FOUNDATIONAL COURSE			3
CST 03370	IDS/IPS Administration	UPPER LEVEL COURSE			3
CST 03372	Knowledge Management in IDS/IPS	UPPER LEVEL COURSE			3
CST 03472	IDS/IPS for Cloud	UPPER LEVEL COURSE			3
Operating Systems Fundamentals					
Course #	Course Name	Course Attributes / Notes	Sem/Yr	Grade	Credits
CST 06220	Linux/Unix Essentials	FOUNDATIONAL COURSE			3
CST 06225	Linux/Unix Administration	FOUNDATIONAL COURSE			3
CST 06230	Microcomputer Operating Systems I: Workstation	FOUNDATIONAL COURSE			3
CST 06235	Microcomputer Operating Systems II: Server Systems	FOUNDATIONAL COURSE			3
Linux Systems Administration					
Course #	Course Name	Course Attributes / Notes	Sem/Yr	Grade	Credits
CST 09210	Introduction to Computer Networks And Data Communications	FOUNDATIONAL COURSE			3
CST 06220	Linux/Unix Essentials	FOUNDATIONAL COURSE			3
CST 06225	Linux/Unix Administration	FOUNDATIONAL COURSE			3
CST 06240	Linux System and Services	UPPER LEVEL COURSE			3

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Azure Fundamentals					
Course #	Course Name	Course Attributes / Notes	Sem/Yr	Grade	Credits
CST 02110	Implementations of SQL I	FOUNDATIONAL COURSE			3
CST 06340	Introduction to Azure Cloud Services	UPPER LEVEL COURSE			3
CST 06343	Azure Management Tools and Security	UPPER LEVEL COURSE			3
CST 06440	Azure Security, Compliance, and Identity	UPPER LEVEL COURSE			3
Network Fundamentals					
Course #	Course Name	Course Attributes / Notes	Sem/Yr	Grade	Credits
CST 01111	Computer Hardware and Operations	FOUNDATIONAL COURSE			3
CST 09210	Introduction to Computer Networks And Data Communications	FOUNDATIONAL COURSE			3
CST 09290	Intermediate Networking	FOUNDATIONAL COURSE			3
CST 09310	Network Support and Troubleshooting	UPPER LEVEL COURSE			3
Advanced Network Technology					
Course #	Course Name	Course Attributes / Notes	Sem/Yr	Grade	Credits
CST 09320	Network Architectures, Models, and Protocols	UPPER LEVEL COURSE			3
CST 09325	Network Communication and Configuration	UPPER LEVEL COURSE			3
CST 09430	Switching, Routing, and Wireless Essentials	UPPER LEVEL COURSE			3
CST 09435	Enterprise Networking, Security, and Automation	UPPER LEVEL COURSE			3
Management Information Systems					
Course #	Course Name	Course Attributes / Notes	Sem/Yr	Grade	Credits
BUS 01105	Business Perspectives	FOUNDATIONAL COURSE			3
MIS 02234	Management Information Systems	FOUNDATIONAL COURSE			3
<i>And any two courses from:</i>					
CS 01211 or MIS 02315	Principles of Information Security	UPPER LEVEL COURSE			3
MIS 02301	Emerging Technologies I	UPPER LEVEL COURSE			3
MIS 02302	Emerging Technologies II	UPPER LEVEL COURSE			3
MIS 02322	Principles of System Design	UPPER LEVEL COURSE			3
Project Management					
Course #	Course Name	Course Attributes / Notes	Sem/Yr	Grade	Credits
<i>Required Courses (12 credits)</i>					
MIS 02325	Project Management	FOUNDATIONAL COURSE			3
MIS 02328	Agile Project Management	UPPER LEVEL COURSE			3
MIS 02329	Project Management Associate Exam Prep	UPPER LEVEL COURSE			3
MGT 06300	Organizational Behavior	UPPER LEVEL COURSE			3
Subtotal: 60 sh					

Total Program Credits Required for this Major / Degree: 120 SH