

CYBER SECURITY AND ASSURANCE DEGREE – M714

Associate of Applied Science (AAS)

CATALOG DESCRIPTION OF PROGRAM:

The degree program in Cyber Security and Assurance at BCCC emphasizes on the need to build a wall between our information and those that want to exploit it. The recurring events such as virus and worm attacks and the success of criminal attackers, illustrate the weaknesses in current information technologies and the need to heighten security of these systems. Students will gain practical experience with tools to diagnose security threats and dangers, perform security assessments, conduct network analysis for cyberattacks for a wide range of different businesses. In addition, students will conduct the steps to mitigate these vulnerabilities by using state-of-the-art technology. The program prepares students for vendor-specific or commercially available security certifications.

COURSE	CURRENT SEQUENCE	CREDITS	PREREQUISITES	SEMESTER	GRADE
1st Semester					
PRE 100	Preparation for Academic Achievement	1	None		
CIS 109	Principles of Computer Information Systems	3	Completion of all required dev. courses		
BCA 104	Introduction to Operating Systems	3	None		
CIS 105	Introduction to UNIX Operating System	3	Completion of all required dev. courses		
ENG 101	English Writing	3	REN 092 or appropriate course waivers or Accuplacer score		
MAT 107	Modern Elementary Statistics	3	MAT 086 or MAT 092 and REN 092 or appropriate course waivers or Accuplacer score		
Semester Credits		16			
2nd Semester					
SP 101	Fundamentals of Speech Communication	3	REN 092 or appropriate course waivers or Accuplacer score		
BPS-Elective	Biological and Physical Sciences	3	Depends on course chosen		
MATH-Elective	Gen. Ed.: Mathematics Elective	3	Depends on course chosen		
CRJ Elective	Criminal Justice	3	Depends on course chosen		
CYA 125	Security Fundamentals, Principles and Ethics	3	None		
Semester Credits		15			
3rd Semester					
CYA 230	Introduction to Help Desk Support	3	BCA 104 and successful completion of a minimum 12 credit hours of BCA and/or CIS courses or permission of Coordinator		
CYA 233	Ethical Hacking	3	CYA 125		
CYA 235	Networking with TCP/IP	3	BCA 104		
CYA 253	Operating Systems and Network Security	3	CIS 105		
HLF-Elective	Health and Fitness	2	None		
Semester Credits		14			
4th Semester					
CIS 201	Systems Analysis and Design	3	CIS 109		
SBS Elective	Social and Behavioral Sciences	3	ENG 082 or RENG 092		
CYA 242	Computer Forensics and Investigation	3	CYA 125, CYA 235		
CYA 245	Cyber Security Implementation	3	CIS 109, CYA 125, CYA 233		
CYA 270	Business Continuity and Disaster Recovery	3	CIS 109, CYA 125		
Semester Credits		15			
PROGRAM TOTAL		60			

Advisor Signature: _____ Date: _____

Student Signature: _____ Date: _____

Pre-Requisites for Students in Developmental Courses

COURSE	CURRENT SEQUENCE	CREDITS	PREREQUISITES	SEMESTER	GRADE
REN 091	Composition Skills I	4 hrs.	Placement Test or REN 090		
REN 092	Composition Skills II	4 hrs.	Placement Test or REN 091		
MAT 086	Integrated Pre-Algebra and Introductory Algebra	5 hrs.			
MAT 092	Intermediate Algebra	4 hrs.	Placement Test or MAT 086		