## CYBER SECURITY AND ASSURANCE DEGREE - M714 Associate of Applied Science (AAS)

## **CATALOG DESCRIPTION OF PROGRAM:**

The new 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 in understanding the threats and dangers, security assessments and analysis to a wide range of different businesses, and the steps that need to be taken to mitigate these vulnerabilities by using state-of-the-at technology. The program prepares students for vendor-specific or commercially available security certification.

COURSE	CURRENT SEQUENCE	CREDITS	PREREQUISITES	SEMESTER	GRADE
1 <sup>st</sup> Semester					
PRE 100	Preparation for Academic Achievement	1	None		
ITSA 125	Security Fundamentals, Principles and Ethics	3	None		
CISS 109	Principles of Computer Information Systems	3	Completion of all required dev. courses		
BCAP 104	Introduction to Operating Systems	3	None		
CISS 105	Introduction to UNIX Operating System	3	Completion of all required dev. courses		
ENG 101	English Writing	3	ENG 82 or RENG 92		
	Semester Credits	16			
2 <sup>nd</sup> Semester					
SP 101	Fundamentals of Speech Communication	3	ENG 82 or RENG 92		
ECO 201	The American Economy I: Macroeconomic Theory	3	ENG 82 or RENG 92		
MATH-Elective	Gen. Ed.: Mathematics Elective	3	Depends on course chosen		
ITNT 235	Networking with TCP/IP	3	None		
ITSA 233	Ethical Hacking	3	ITSA 125		
	Semester Credits	15			
3 <sup>rd</sup> Semester					
BCAP 270	Introduction to Help Desk Support	3	None		
ITSA 253	Operating Systems and Network Security	3	CISS 105, ITNT 235, ITSA 233		
CISS 201	Systems Analysis and Design	3	CISS 109		
MAT 107	Modern Elementary Statistics	3	MAT 86 or MAT 91 and RENG 92		
HLF-Elective	Health and Fitness	2	None		
	Semester Credits	14			
4 <sup>th</sup> Semester					
CRJ 101	Introduction to Criminal Justice	3	None		
ITSA 242	Computer Forensic and Investigation	3	ITSA 125, ITNT 235		
ITSA 245	Cyber Security Implementation	3	CISS 109, ITSA 125, ITSA 233		
ITSA 270	Business Continuity and Diaster Recovery	3	CISS 109, ITSA 125		
BPS-Elective	Biological and Physical Sciences	3	Depends on course chosen		
	Semester Credits	15			
	PROGRAM TOTAL	60			

CIS APPROVED ELECTIVES		
BCAP 270	Introduction to Help Desk	3
CSC 108	Programming in C	3
CISS 118	Programming with Visual Basic	3
CISS 231	Java Programming for Business Applications	3
ITDB 246	Oracle Database Administration	3
ITDB 247	Oracle Database Developer & Programming	3
ITNT 235	Networking with TCP/IP	3
ITSA 125	Security Fundamentals, Principles and Ethics	3
ITSA 233	Ethical Hacking	2
ITSA 242	Computer Forensics and Investigation	3
ITSA 245	Cyber Security Implementation	3

Advisor Signature:	Date:	
Student Signature:	Date:	

## **Pre-Requisites for Students in Developmental Courses**

CURRENT SEQUENCE	CREDITS	<b>PREREQUISITES</b>	SEMESTER	GRADE
Intensive Program Writing	4 hrs.	Placement Test		
Composition Skills I	4 hrs.	Placement Test or RENG 90		
Composition Skills II	4 hrs.	Placement Test or RENG 91		
Arithmetic	3 hrs.	Placement Test		
Integrated Pre-Algebra and Introductory Algebra	5 hrs.	Placement Test or MAT 80		
Integrated Elementary and Intermediate Algebra		Students who complete MAT 80 with an A or B within a one year period: Students who recently (within one year) failed and need to repeat MAT 91; students whose ACUPLACER placement score on Elementary Algebra falls within the range 52-62.		
Elementary Algebra	4 hrs.	Placement Test or MAT 80		
Intermediate Algebra	4 hrs.	Placement Test or MAT 91		
	Intensive Program Writing  Composition Skills II  Composition Skills II  Arithmetic  Integrated Pre-Algebra and Introductory Algebra  Integrated Elementary and Intermediate Algebra  Elementary Algebra	Intensive Program Writing 4 hrs.  Composition Skills II 4 hrs.  Composition Skills II 4 hrs.  Arithmetic 3 hrs.  Integrated Pre-Algebra and Introductory Algebra  Integrated Elementary and Intermediate Algebra  Elementary Algebra 4 hrs.	Intensive Program Writing  4 hrs. Placement Test or RENG 90  Composition Skills II  4 hrs. Placement Test or RENG 91  Arithmetic  3 hrs. Placement Test or RENG 91  Integrated Pre-Algebra and Introductory Algebra  Integrated Elementary and Intermediate Algebra  Students who complete MAT 80 with an A or B within a one year period: Students who recently (within one year) failed and need to repeat MAT 91; students whose ACUPLACER placement score on Elementary Algebra falls within the range 52-62.  Elementary Algebra  Intermediate Algebra  4 hrs. Placement Test or MAT	Intensive Program Writing  4 hrs. Placement Test  Composition Skills II  4 hrs. Placement Test or RENG 90  Composition Skills III  4 hrs. Placement Test or RENG 91  Arithmetic  3 hrs. Placement Test or MAT 80  Integrated Pre-Algebra and Introductory Algebra  Integrated Elementary and Intermediate Algebra  Students who complete MAT 80 with an A or B within an one year period: Students who recently (within one year) failed and need to repeat MAT 91; students whose ACUPLACER placement score on Elementary Algebra falls within the range 52-62.  Elementary Algebra  4 hrs. Placement Test or MAT 80  Intermediate Algebra  4 hrs. Placement Test or MAT