ARTICULATION AGREEMENT

Anne Arundel Community College Associate of Applied Science Information Systems Security and Capitol College

Bachelor of Science in Information Assurance

2007 Entered into this day of (date) month)

Michael T. Wood, Ph. D., President Capitol College

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Marina I. Borovok Ph.D., Dean Business and Information Management Capitol College

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Kathleen Happ, Dean (/ School of Business, Computing and Technical Studies Anne Arundel Community College

Kelly Koermer, Director Computer Technologies Instructional Programs School of Business, Computing and Technical Studies

This agreement is effective with new Capitol College admits every semester. This agreement will be reviewed biennially

ARTICULATION AGREEMENT

Anne Arundel Community College, Associate of Applied Science in Information Systems Security and Capitol College's Bachelor's of Science in Information Assurance

Anne Arundel Community College (hereafter referred to as AACC), a community college in Anne Arundel County, Maryland, and Capitol College (CC) agree to offer articulated programs leading to the award of an A.A.S. in Information Systems Security (ISS) and a Bachelor of Science in Information Assurance (BSIA). They further agree that students from AACC, through this articulation policy, will be allowed to transfer credits earned for the ISS degree at AACC to CC, leading to the award of the Bachelor of Science degree in Information Assurance. The following general principles guide the operation of this Agreement:

- 1. The program is designed for graduates of the A.A.S. degree in ISS at AACC. A maximum of 70 credit hours from AACC will be allowed toward fulfillment of the 128 credit hours required for baccalaureate completion.
- 2. Courses meeting general education requirements at AACC will transfer to Capitol College as specified in the attached document.
- 3. Students must obtain a grade of C or better in order to transfer a course.
- 4. The maximum number of credits that will be accepted by CC toward degree requirements from non-direct classroom instruction (including CLEP, AP, and other nationally recognized standardized examination scores) is based on annually published national scores with recommended credits. Tech Prep credits do not transfer without validation exams. Credit awarded for experiential learning is not recognized by CC without verification through examination.
- 5. The student may start taking courses in the IAE program at Capitol College without completing the A.A.S should it make the transition work more smoothly. It is expected that the student will complete the A.A.S. program.
- 6. While AACC and CC do not presently have a dual enrollment program, this agreement will not preclude students from participation, should one be agreed to, and students may apply for and receive the benefits of dual enrollment. Those students would then be subject to the policies of said program should they apply.
- 7. AACC students who have completed the A.A.S. in ISS will be given every consideration for financial assistance and will be eligible to compete for academic scholarships at CC. Students who finish the A.A.S. degree with a GPA over 3.0 will be eligible for special larger scholarships should they choose to attend Capitol College full time.
- 8. This agreement becomes effective on the date set forth on the first page of this document. AACC and CC agree to publicize this program. They further agree to monitor the performance of this agreement and to revise it as necessary. The

agreement may be terminated by either party for due cause and after adequate notice to the other. Termination of the agreement will not affect any students currently enrolled at AACC.

9. CC will establish a mechanism to provide information on the academic progress of the AACC student enrolled as a result of this agreement.

PURPOSE OF AGREEMENT

This agreement is entered into to serve the instructional needs of AACC students and graduates. The general purpose of this agreement is to make clear the terms of this articulation agreement.

There are three specific goals under this agreement. First, it is the intent that this articulation agreement will facilitate a smooth transition from AACC's ISS program to the IAE program at CC as efficiently as possible. AACC graduates will understand how CC transfers the credits they earn at AACC, as well as the changes in requirements that may permit more flexible scheduling once the student has been admitted to and enrolled at CC. This agreement provides a systematic plan for students to continue their higher education beyond the A.A.S. degree from AACC.

Second, this agreement is a publication of a clear set of understandings and expectations for both institutions and programs. Making our expectations clear to students and between institutions not only contributes to the first goal, but also allows institutions to work collaboratively to meet the needs of AACC graduates. Like any policy agreement, this articulation agreement will need to be updated, revised and refined as instructional programs are revised.

Third, AACC encourages graduates to continue their educational pathway in Information Assurance for both personal and professional development, as well as career advancement the information assurance profession. This articulation agreement facilitates students' successful achievement of credentials in the field. The following sections describe the specifics of the agreement.

A.A.S. Degree in Information Systems Security to BS in Information Assurance

The ISS program at AACC is considered a career program. Therefore the ISS students who transfer to CC will have their coursework evaluated on a course-by-course basis to determine which CC general education requirements and discipline requirements have been met.

Overview and Summary

For students following this agreement, the steps are as follows:

<u>Step 1</u>: Complete the **ISS** at AACC. Indicate the contact person for developing the educational plan at AACC.

Step 2: Apply for admission to Capitol College indicating IA as the intended major. Applications for admission can be obtained by contacting: Darnell D. Edwards Director of Admissions 11301 Springfield Road Laurel, MD 20708 800-950-1992, ext. 3033

Indicate methods for applying:

Students may apply online through the Capitol College website (no application fee), or students may call the Admissions Office and request that an application be sent to them (\$25 application fee).

Indicate other steps necessary after transfer from AACC: Student will need official transcripts mailed to the Office of Admissions.

Students are encouraged to call and make an appointment with the college advisor to register for classes.

BSIA Course Transfer Table

The purpose of this articulation is to provide students of the Information Systems Security Program at AACC to determine the transfer credits available towards the Bachelor of Science in Information Assurance at Capitol College. (maximum of 70 credit hours)

BSIA courses at Capitol College	Transfer school equivalent	Possible Credits
Programming and Computer Courses 13 Credits		Ci vano
CS-130 Computer Science Fundamentals I	CSI -148 (4) with course prerequisite	4
(7) (S. 220 Database Management (2)	CSL 172	3
CT 115 Introduction to Programming (2)	0.01-172	3
CT-152 Introduction to Frogramming (5)	CSI 125 (2)	2
C1-152 Introduction to Unix (3)	CSI 155 (5)	3
information Assurance Courses 6 Credits		
IAE 201 Introduction to IA Concepts (3)	CSI 165 Network Security Fundamentals	3
IAE 301 Comprehensive Computer and Network Security Part 1 (3)	CSI 270	3
Mathematics Courses and Science Courses 7 Credits		
MA-114 Algebra and Trigonometry (4)	MAT 131 (3)	3
Science Elective W/LAB (3)	BIO or Physical Science (4)	4
Telecommunications and Networking Courses 9 Credits		
TC-110 Intro to Telecommunications (3)	CSI 157 Networking 1 (4)	3
CT-240 Internetworking w/Rters/Switches (3) plus Technical Elective (3)	CSI 158 Networking 2 (4), CSI 257 Networking (4)	6
English/Humanities/Social Sciences (15)		
Social Sciences electives (3)	Social Sc Elective (3)	3
Social Sciences electives (3)	HEA 111 or HEA 116	3
Humanities electives (3)	CSI 194/PHL 194 (3)	3
EN-101 English Communications I (3)	ENG 111	3
EN-102 English Communications II (3)	ENG 112	3
Internet and the Law 3 Credits		
MIT-208 Internet and the Law (3)	CSI 205 (3)	3
Technical Electives 15 credits		
	CSI 217 Hardening the Infrastructure (3)	3
	CSI 219 Network Defense and	
	Countermeasures (3)	3
	CSI 258 Networking (4)	3
	CSI 130	3
	CSI 265	3
Totale 68 Creadita		Total: 68 Credits
Total: 08 Credits		i vian vo Ci cuito

Bachelor of Science in Information Assurance Degree requirements

The purpose of this articulation is to provide students of the Information System Security Program at AACC to determine the transfer credits available towards the Bachelor of Science in Information Assurance at Capitol College (maximum of 70 credit hours)

BSIA courses at Capitol College	Transfer school equivalent Possible			
Programming and Computer Courses	AACC	Creuits		
13 Credits				
CS-130 Computer Science Fundamentals I	CSI -148 (4) with course prerequisite	4		
(4)	CSI 117 (replacing CSI 113)	3		
CS-220 Database Management (3)	CSI- 172 3			
CT-115 Introduction to Programming (3)				
CT-152 Introduction to Unix (3)	CSI 135 (3)	3		
Information Assurance Courses 6 Credits				
LAE 201 Introduction to IA Concepta (2)	CSI 165 Network Security	3		
TAE 201 Introduction to TA Concepts (3)	Fundamentals			
IAE 301 Comprehensive Computer and	CSI 270	3		
Network Security Part 1 (3)				
Mathematics Courses and Science Courses				
7 Credits	MAT 121 (4)	4		
Science Elective W/LAP (2)	PIO or Dhysical Saianaa	4		
Science Elective W/LAB (3)	BIO OF Filystear Science	5		
Courses 9 Credits				
TC-110 Intro to Telecommunications (3)	CSI 157 Networking 1 (4)	3		
CT-240 Internetworking w/Rters/Switches	CSI 158 Networking 2 (4), CSI 257	6		
(3) plus Technical Elective (3)	Networking (4)			
English/Humanities/Social Sciences (15)	8 ()			
Social Sciences electives (3)	Social Sc Elective (3)	3		
Social Sciences electives (3)	HEA 111 or HEA 116	3		
Humanities electives (3)	CSI 194/PHL 194 (3)	3		
EN-101 English Communications I (3)	ENG 111	3		
EN-102 English Communications II (3)	ENG 112	3		
Internet and the Law 3 Credits				
MIT-208 Internet and the Law (3)	CSI 205 (3)	3		
Technical Electives 15 credits				
	CSI 217 Hardening the Infrastructure(3)	3		
	CSI 219 Network Defense and			
	Countermeasures (3)	3		
	CSI 258 Networking (4)	3		
	CSI 130	3		
	CSI 265	3		
Total: 68 Credits		Total: 68 Credits		

Bachelor of Science in Information Assurance Degree requirements

NETWORK SECURITY

Effective Fall 2006

Bachelor of Science Degree

The Capitol College Bachelor of Science in Information Assurance (BSIA) Program is designed to meet current and anticipated needs for highlyskilled information assurance professionals, which we expect to increase as the number of security incidents steadily climbs, and as society becomes increasingly reliant on information in electronic form. The BSIA degree develops and builds upon the Students' mastery in computer science and information technology. The first two courses of the BSIA Concentration (IA 301, IA 302) prepare students for the CompTIA Security+ examination, and the combination of all five courses maps to the seven domains of the Systems Security Certified Professional (SSCP) certification. By attaining a combination of the BSIA degree, the Security+ certification and the SSCP certification, graduates of Capitol College will not only possess the professional knowledge required for a successful career in the information assurance discipline, but also have the credentials to prove it. Capitol College asserts that this combination provides our graduates with strong professional resumes and rewarding employment opportunities.

SUGGESTED PLAN OF STUDY

Course

Credits

Freshman Year			
1 st Semester (17 credits)		Course	redits
FS-100 Freshman Seminar	1		
CT-115 Introduction to Programming	3	Junior Year	
CT-152 Introduction to Unix	3	1 st Semester (16 credits)	
EN-101 English Communications I	3	CT-301 Website Construction	3
MA-114 Algebra and Trigonometry	4	MA-262 Calculus II	4
Social Science Elective	3	SE-301 Software Engineering	3
		IA 301 Comprehensive Comp and NetSec Part 1	3
2 nd Semester (16 credits)		Technical Elective	3
CS-130 Computer Science Fundamentals	4		
EN-102 English Communications II	3	2 nd Semester (18 credits)	
MA-124 Discrete Math or		HU-331 or HU-332 Arts and Ideas	3
MA-128 Introduction to Statistics	3	MIT-208 Internet and the Law	3
TC-110 Introduction to Telecommunications	3	IA 302 Comprehensive Comp and NetSec Part 2	3
History/Philosophy/Humanities Elective	3	Social Science Elective	3
		Technical Elective	3
Sophomore Year		Technical Elective	3
1 st Semester (15 credits)			
CS-220 Database Management	3		
CS-230 Computer Science Fundamentals II	3	Senior Year	
CT-240 Internetworking w/Routers and Switches	3	1 st Semester (15 credits)	
IA 201 Introduction to IA Concepts	3	CS-418 Operating Systems Security	3
MA-128 Introduction to Statistics or		EN-408 Writing Seminar in Tech Research	3
MA-124 Discrete Math	3	IA 315 Secure System Administ and Operation	3
		IA 325 Secure Data Communications and Cryptography	v 3
		Technical Elective	3
2 nd Semester (16 credits)			5
MA-261 Calculus I	4	2 nd Semester (15 credits)	
MIT-278 Principles of Management	3	CS-356 Web/CGI Programming using Perl	3
Technical Elective	3	SE-458 Senior Project	3
Science Elective	3	SS-351 Ethics	3
History/Philosophy/Humanities Elective	3	IA 402 Intro to Incident Handling and Malicious Code	3
		Technical Elective	3
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	27/128
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COURSE REQUIREMENTS FOR INFORMATION ASSURANCE Bachelor of Science (127/128 Credits) 40 credits must be taken at Capitol College

COURSE NUMBER, TITLE and NUMBER of CREDITS		COURSE NUMBER, TITLE and NUBMER of CREDITS		
Programming and Computer Courses	22 Credits Transferred Course	Eng	English and Social Sciences Courses 24/25 Credits Transferred Course	
CS-130 Computer Science Fundamentals I (4)			FS-100 Freshman Seminar (1)	
CS-220 Database Management (3)			EN-101 English Communications I (3)	
CS-230 Computer Science Fundamentals II (3)			EN-102 English Communications II (3)	
CT-115 Introduction to Programming (3)			HU-331 or HU-332 Arts & Ideas (3)	
CT-152 Introduction to Unix (3)			SS-351 Ethics (3)	
CT-301 Website Construction (3)			Social Science Elective (3)	
SE-301 Software Engineering (3)			Social Science Elective (3)	
Computer Security Courses	6 Credits		History/Philosophy/Humanities Elective (3)	
CS-356 Web/CGI Programming using Perl (3)			History/Philosophy/Humanities Elective (3)	
CS-418 Operating Systems Security (3)		Sen	ior Design and Writing Seminar	6 Credits
Information Assurance Courses	18 Credits		ENI 408 Muiting Comings in Tech Deach (2)	
IA 201 Introduction to IA Concepts (3)			EN-408 writing Seminar in Tech Resch (3)	
IA 301 Comprehensive Comp and NetSec Part 1 (3)			SE-458 Senior Project (3)	
IA 302 Comprehensive Comp and NetSec Part 2 (3)		Te	chnical Electives***	18 Credits
IA 315 Secure System Administ and Operation (3)				
IA 325 Secure Data Communications and Crypt (3)			1.	
IA 402 Intro to Incident Handling and Mal Code (3)				
Mathematics Courses	18 Credits		2.	
MA-114 Algebra and Trigonometry (4)			3.	
MA-124 Discrete Math (3)			4.	
MA-128 Introduction to Statistics (3)			5.	
MA-261 Calculus I (4)			6.	
MA-262 Calculus II (4)			-	
Science Elective	3 Credits			
Telecommunications and Networking Courses	6 Credits			
TC-110 Intro to Telecommunications (3)				
CT-240 Internetworking w/Rters/Switches (3)				
Management Courses 6 Credits		Scho	ols transferred in from:	
MIT-278 Principles of Management (3)		T ₁ =	T ₁ = T ₂ =	
MIT-208 Internet and the Law (3)		T ₃ = T ₄ =		
Evaluated by (list below):	Date:	Comments:		
1.				
2.				
3.				
Student First Name:	Middle Initial:			
Last Name:				

* Formerly CT-351 ** Formerly CT-352

T = Transferred Course: Course number should be shown-subscript indicates school; W = Waive: Student may take a course of equal or greater number in same subject area as approved by the department; \checkmark = Course or equivalent taken at Capitol College