

#### **MEMORANDUM**

TO:

Curriculum Committee

FROM:

Jack Kirby

DATE:

April 29, 2013

SUBJECT:

Curriculum Proposal #12-13-64, REVISION #2

BS Computer Science, Computer Security

Final Faculty Senate Approval 4/23/2013

I recommend approval of the attached REVISION #2 of Curriculum Proposal #12-13-64 from the College of Science and Technology, Department of Computer Science, Mathematics, and Physics. This is the final draft of the proposal.





#### **MEMORANDUM**

TO: Curriculum Committee

FROM: Jack Kirby P.

DATE: April 17, 2013

SUBJECT: Curriculum Proposal #12-13-64, REVISION #1

BS Computer Science, Computer Security

I recommend approval of the attached REVISION #1 of Curriculum Proposal #12-13-64 from the College of Science and Technology, Department of Computer Science, Mathematics, and Physics. The proposal is now ready for Faculty Senate.





#### **MEMORANDUM**

TO:

Curriculum Committee

FROM:

Jack Kirby

DATE:

April 1, 2013

SUBJECT:

Curriculum Proposal #12-13-64

BS Computer Science, Computer Security

I recommend approval of the attached Curriculum Proposal #12-13-64 from the College of Science and Technology, Department of Computer Science, Mathematics, and Physics.

This proposal reduces the degree hours for the BS in Computer Science with major in Computer Security from 128 to 120 hours and incorporates the new General Studies requirements.

c: Dr. Christina Lavorata

Dr. Anthony Gilberti

Dr. Mahmood Hossain

Ms. Evie Brantmayer

Ms. Leslie Lovett



THIS "SHORT" FORM IS FOR LIMITED USE TO FACILITATE TRANSITION TO THE 120 HOUR BACHELOR DEGREE REQUIREMENT OR 60 HOUR ASSOCIATE DEGREE REQUIREMENT. IT WILL ONLY BE AVAILABLE FOR USE DURING ACADEMIC YEAR 2012-2013.

#### ABBREVIATED CURRICULUM PROPOSAL FORM

NOTE: Submit one hard copy and an electronic copy to the Associate Provost <u>AT LEAST ONE WEEK PRIOR</u> to the Curriculum Committee meeting when your proposal is to be reviewed.

Proposal Number:	12-13-64		
School/Department/Program:	Science and Technology/CSMP/Computer Security		
Preparer/Contact Person:	Dr. Mahmood Hossain/Dr. Anthony F. Gilberti		
Telephone Extension:	4967/4642		
Date Originally Submitted:	March 31, 2013		
Revision (Indicate date and label it Revision #1, #2, etc.):	REVISION #2, 04/29/2013		
Implementation Date Requested:	Fall 2013		
proposal.	ding 100 words, which describes the overall content of the m 128 to 120 and incorporates the new General Studies		
Deletion of course(s) or credit(s) from programs 8 credit hours of free electives	(s) were deleted from the program of study.		
	Total hours 8 deleted.		
Addition of existing course(s) or credit(s) to pro	gram(s)		
	Total hours 0 added		

### B.S. Degree in Computer Science with major in Computer Security Current Program

Required Major Courses		HRS		
COMP 1100	Introduction to Computing *		3	
COMP 1102	Principles of Programming I		3	
COMP 1108	Principles of Programming II		3	
COMP 2200	Object-Oriented Programming		3	
COMP 2201	Machine Organization		3	
COMP 2220	Fundamentals of Computer Security		3	
COMP 2230	Network Programming		3	
COMP 2270	Data Structures		3	
COMP 3340	Operating Systems		3	
COMP 3380	Cryptography in Computer Security		4	
COMP 3390	Network Security Technology	**************************************	4	
COMP 3395	Ethical Issues in Computing		3	
COMP 4410	Database Management		3	
COMP 4415	Vulnerability Assessment	MAAAAAAAAAAAAAAAAAAAAAA	4	
COMP 4495	Computer Security Internship		3	
INFO 2250	Networking Fundamentals	***************************************	3	
MATH 1170	Introduction to Mathematical Analysis *		4	
MATH 1190	Calculus I	**************************************	4	
MATH 2200	Mathematical Logic		3	
MATH 2216	Introduction to Discrete Mathematics		3	
TOTAL HOURS FOR MAJOR				65
Required General Studies Courses			N By	
First Year Experience		200022000000000000000000000000000000000		
ENGL 1104	Written English I	3		
ENGL 1108	Written English II	3		
MATH 1170	Introduction to Mathematical Analysis *			
COMP 1100	Introduction to Computing *			
COMM 2200	Introduction to Human Communication	3		
Scientific Discovery		8		
Cultural/Civilization Exploration		9		
Society/Human Interactions		6		
Artistic/Creative Expression		6		
TOTAL GENERAL STUDIES HOURS				38
TOTAL FREE ELECTIVES				25

<sup>\*</sup>Hours counted in major area coursework.

## B.S. Degree in Computer Science with major in Computer Security Proposed Program

Required Major Courses		HRS
COMP 1100	Introduction to Computing	3
COMP 1102	Principles of Programming I	3
COMP 1108	Principles of Programming II	3
COMP 2200	Object-Oriented Programming	3
COMP 2201	Machine Organization	3
COMP 2220	Fundamentals of Computer Security	3
COMP 2230	Network Programming	3
COMP 2270	Data Structures	3
COMP 3340	Operating Systems	3
COMP 3380	Cryptography in Computer Security	4
COMP 3390	Network Security Technology	4
COMP 3395	Ethical Issues in Computing	3
COMP 4410	Database Management	3
COMP 4415	Vulnerability Assessment	4
COMP 4495	Computer Security Internship	3
INFO 2250	Networking Fundamentals	3
MATH 1170	Introduction to Mathematical Analysis	4
MATH 1190	Calculus I *	4
MATH 2200	Mathematical Logic	3
MATH 2216	Introduction to Discrete Mathematics	3
TOTAL HOURS F	OR MAJOR	65

<sup>\*</sup>Hours counted in General Studies

Required General Studies Courses	TOTAL STREET
Attribute IA – Critical Analysis	
ENGL 1108 Written English II	3
Attribute IB – Quantitative Literacy	X
MATH 1190 Calculus I	
Attribute IC – Written Communication	3
ENGL 1104 Written English I	***************************************
Attribute ID - Teamwork	X
Met in IG with COMM 2200	
Attribute IE – Information Literacy	X
Met in IA with ENGL 1108	944AA 1444 1444AAAAAAAAAA
Attribute IF – Technology Literacy	3
TECH 1100 Technology and Society or Choice	THE OPPOSE OF THE PROPERTY OF
Attribute IG – Oral Communication	3
COMM 2200 Introduction to Human Communication	
Attribute III – Citizenship	3
Any Course	SPERTMENT STEEL SAMES SELF PROMANDA A SESSIONAL SAMENANDA, S 900 00000000000000000000000000000000
Attribute IV – Ethics	3
Any Course	
Attribute V - Health	2-3
PHED 1100 Fitness and Wellness or Choice	
Attribute VI – Interdisciplinary and Lifelong Learning	3
Any Course	
Attribute VIIA – Fine Arts	3
Any Course	
Attribute VIIB – Humanities	3
Any Course	
Attribute VIIC – Social Sciences	3
Any Course	
Attribute VIID - Natural Science	4-5
Any Course	
Attribute VIII – Cultural Awareness and Human Dignity	3
Any Course	
Additional General Studies hours	***************************************
TOTAL GENERAL STUDIES HOURS	39-41
TOTAL FREE ELECTIVES	14-16
TOTAL HOURS	120

# Proposed Model Schedule B.S. in Computer Science (Major in Computer Security) (Starting Fall 2013)

Freshman First Semester COMP 1100 Introduction to Computing COMP 1102 Principles of Programming I ENGL 1104 Written English I PHED 1100 Fitness and Wellness or choice General Studies – Natural Science	3 3 3 2 4 15
Freshman Second Semester COMP 1108 Principles of Programming II MATH 1170 Introduction to Mathematical Analysis ENGL 1108 Written English II COMM 2200 Introduction to Human Communication General Studies	3 4 3 3 3 16
Sophomore First Semester COMP 2200 Object-Oriented Programming COMP 2270 Data Structures MATH 1190 Calculus I MATH 2216 Introduction to Discrete Mathematics INFO 2250 Networking Fundamentals	3 3 4 3 3
Sophomore Second Semester COMP 2201 Machine Organization COMP 2230 Network Programming MATH 2200 Mathematical Logic General Studies	3 3 3 6 15
Junior First Semester COMP 2220 Fundamentals of Computer Security COMP 3340 Operating Systems General Studies Free Electives	3 3 3 6 15
Junior Second Semester COMP 3390 Network Security Technology COMP 3395 Ethical Issues in Computing General Studies Free Electives	4 3 3 3 13
Senior First Semester COMP 3380 Cryptography in Computer Security COMP 4410 Database Management General Studies Free Electives	4 3 3 6 16
Senior Second Semester COMP 4415 Vulnerability Assessment COMP 4495 Computer Security Internship Free Electives	4 3 7 14