## **Southern University Department of Computer Science Bachelor of Science in Computer Science** 2016-2018 Balance Sheet

STUDENT NAME		SID	ADVISOR	
CONCENTRATION:	Cybersecurity	Information Systems	Scientific	Mobile

CONCENTRATION: Cybe	rsecurity		-	111	погша	ion Systems
COURSE TITLE	CS NO				YR	со
COMPUTER SCIENCE C	ORE C	OUI	RSE	S (41	HRS)	
CMPS Seminar I	110B	3				BIOL(104 or 105)/SBIC
CMPS Seminar II	111B	3				BIOL Lab(106 or 107)/
Programming I	190B	3				General Physics I Lec (I
Programming II	191B	3				General Physics I Lab (I
Discrete Structures	200B	3				General Physics II (PHY
Data Structures	201B	3				General Physics II Lab (
Java Programming	271B	3				
Program Languages	300B	3				Linear Algebra
Computer Organization	302B	3				Anal. Geom & Cal I (
Digital Data Networks	334B	3				Anal Geom & Cal II (
Object-Oriented Program	370B	3				Statistics
Software Engineering	378B	3				UNI
Operating Systems	400B	3				African American Studi
Database Management	420B	3				(Will meet with Eng Li
Capstone project I	450B	1				Volunteerism
Capstone project II	451B	2				Writing Proficiency
CONCENTRATION IN CY	BERSI	ECU	RIT	Y (18	HRS)	Department Comprehen
Cyber Forensics	355B	3		,		Î
Legal Issues in Info Tech	385B	3				English Composition
Network Security	425B	3				English Composition
Computers, Info & Society	365B	3				English Literature(EN
Disaster Recovery	485B	3				· · ·
CS Elective		3				Economics (ECON 200
CONCENTRATION IN I	NFORM	IAT	ION	(18 H	RS)	SSOC
CS Systems Analysis	415B	3				
Principles of Mgmt	300B	3				History I (HIST 114B
Quant. Analysis in Bus	306B	3				History II (HIST 115)
BUS Elec I- (312, 341, 410)		3				HUMN
BUS Elec II-(441, 445, 446)		3				
CS Elective		3				
CONCENTRATION IN	SCIEN	_	IC (1	8 HR	S)	
Scientific Programming	360B	3			Ī,	
Computer Architecture	402B					
Theory of Computing	412B	3				HEAL
Numerical Methods	407B	3				Health
CS Elec I	1071	3				Ticuitii
CS Elec II		3				Physical Activity I
CONCENTRATION IN	MOBIL		PP (	18 HF	25)	Physical Activity II
Mobile Client Dev	393B	3	· · ·	10	\ <u>\</u>	OTHER
Mobile Deployment	394B	3				
Web Development	350B	3		<del>                                     </del>		
Cloud Computing	372B	3		<del>                                     </del>		
CS Elective I	3120	3				
CS Elective II		3		<del>                                     </del>		
English 203 will satisfy both rec	lliraman	•	ricor	Ameri	can Stu	dies and English Literature
	quiremen					ules and English Literature

Approved

Systems	Scientific Mo	bile	-			
	COURSE TITLE	CS NO	HR	GR	SEM	YR
	SCIENCE (12 HRS					
BIOL(104 or 105	5)/SBIO(101B or 102B)		3			
BIOL Lab(106 o	r 107)/SBIO(101LB or 102LB)		1			
General Physics	I Lec (PHYS 221B/SPHY 213B)		3			
General Physics	I Lab (PHYS 223B/SPHY 213LB)		1			
General Physics	II (PHYS 222B/SPHY 215B)		3			
General Physics	II Lab (PHYS 224B/SPHY 214LB)		1			
	MATHEMATICS (14 F					
Linear Algebra		233B	3			
Anal. Geom &	Cal I (MATH 264B/SMAT 211B)		4			
Anal Geom & 0	Cal II (MATH 265B/SMAT 212B)		4			
Statistics		276B	3			
	UNIVERSITY REQUIREMEN	TS (6 H	RS)			
African America	n Studies (ENGL 203B/SENL 240B)		3			
(Will meet with	Eng Lit 203)	Eng				
Volunteerism		400B	3			
Writing Profici	ency	1B	0			
Department Com	•	000B	0			
	ENGLISH (9 HRS	)	•			
English Compo	osition I (ENGL 110B/SENL 101E	3)	3			
	osition II (ENGL 111B/SENL 102F		3			
	ure(ENGL 203B/SENL 240B)		3			
	SOCIAL SCIENCES (6	HRS)	•			
Economics (ECC	ON 200 or 205/SECO 221B or 211B)		3			
SSOC			3			
	HUMANITIES (9 HF	RS)	•			
History I (HIS7	Γ 114B/SHIS 111B)	ĺ	3			
	T 115B/SHIS 112B)		3			
HUMN	,		3			
	ARTS ELECTIVES (3	HRS)				
	,		3			
	FOREIGN LANGUAGES	(6 HRS	)			
		1	3			
			3			
ŀ	HEALTH or PHYSICAL EDUCA	TION (2		S)		1
Health			2			
	OR	•				1
Physical Activi			1			
Physical Activi			1			
	THER ELECTIVES OR TRANS	FER CI	RED	ITS		1

Foreige Language must be in sequence (e.g. 100 and 101) of the same languages. Computer Science Elective(s): check with advisor for list. Note: This Balance Sheet supersedes the 2016-2018 University Catalog. \_\_\_\_\_ Date\_\_\_\_\_ Approved: \_\_\_\_\_ \_\_\_\_\_ Date \_\_\_\_\_ Approved \_ Advisor, Computer Science Chair, Computer Science \_\_\_\_\_ Date \_\_\_ \_\_\_\_ Date\_\_\_\_

Approved: \_\_\_\_ Dean, College of Sciences & Engineering Undergraduate Coordinator

## **COMPUTER SCIENCE ELECTIVES**

To satisfy degree requirements the student may select from any of these listed courses to satisfy the electives for selected concentration area. Any computer science courses offered which is not specified as a required course for either concentration can also be used . For more detail concerning electives contact your advisor.

	Information	Systems	
CMPS 250	Business Applications with COBOL	CMPS 365	Computers, Information and Society
CMPS 285	System Administration and Maintenance	CMPS 388	Human-Computer Interaction
CMPS 315	Information Systems	CMPS 415	Systems Analysis and Design
CMPS 350	Web Based Programming	CMPS 433	Telecommunications
	Cybersec	urity	
CMPS 355	Cyber Forensics	CMPS 485	Disaster Recovery
CMPS 372	Cloud Computing	CMPS 493	Foundations of Crypthography
CMPS 375	Information Security	CMPS 494	Cyptographic Protocols
CMPS 385	Legal Issues in Information Technology	CMPS 495	<b>Enterprise Security Management</b>
CMPS 426	Network Security	CMPS 496	Internet Security Protocols
	Scientific and Softwa	re Development	
CMPS 307	Numerical Analysis	CMPS 425	Robotics
CMPS 335	Wireless Sensor Networks	CMPS 434	Networks and Graph Theory
CMPS 360	Scientific Programming	CMPS 435	Introduction to Neural Networks
CMPS 386	Modeling & Simulation	CMPS 436	Parallel Computing and Application
CMPS 402	Computer Architecture	CMPS 470	Computer Graphics
CMPS 407	Numerical Methods	CMPS 480	Artificial Intelligence
CMPS 412	Theory of Computing		
	Mobile Application	on Electives	
CMPS 305	Social Networking	CMPS 375	Information Security
CMPS 310	Game Programming	CMPS 387	Object Oriented Design Patterns
CMPS 318	Computer Animation	CMPS 415	Systems Analysis and Design
	Common El	ectives	
CMPS 240	Practical Experience I	CMPS 440	Practical Experience III
CMPS 340	Practical Experience II	CMPS 455	Special Projects
CMPS 371	Advanced Object-Oriented Programming		

## Note:

Some computer science courses are designed primarily for non-majors and cannot be used as electives (CMPS 105, CMPS 270, and CMPS 290.