SOUTHERN CMPS

Southern University Department of Computer Science
Bachelor of Science in Computer Science
2018-2021 Balance Sheet

STUDENT NAME _____   ADVISOR _____

CONCENTRATION: Cybersecurity ___   Information Systems ___   Scientific ___   Mobile ____

COURSE TITLE	CS NO	HR	GR	SEM	YR
COMPUTER SCIENCE CORE COURSES (47 HRS)					
CMPS Seminar I	110B	1			
CMPS Seminar II	111B	1			
Prog. Tech. And Alg. Dev. I	190B	3			
Prog. Tech. And Alg. Dev. II	191B	3			
Discrete Structures	200B	3			
Data Structures	201B	3			
Java Programming	271B	3			
Program Languages	300B	3			
Computer Organization	302B	3			
Social Networking	305B	3			
Digital Data Networks	334B	3			
Information Security	375B	3			
Software Engineering	378B	3			
Operating Systems	400B	3			
Database Mgmt Systems	420B	3			
Paralell and Distr. Proc.	445B	3			
Capstone project I	450B	1			
Capstone project II	451B	2			
CYBERSECURITY (18 HRS)					
Cyber Forensics	355B	3			
Computers, Info. and Society	365B	3			
Legal Issues in Info Tech	385B	3			
Network Security	426B	3			
Disaster Recovery	485B	3			
CS Elective		3			
INFORMATION SYSTEMS (18 HRS)					
Systems Analysis and Design	415B	3			
Principles of Management	300B	3			
Quant. Analysis in Bus	306B	3			
BUS Elec I- (312, 341, 410)		3			
BUS Elec II-(441, 445, 446)		3			
CS Elective		3			
DATA ANALYTIC & SCIENCES (18 HRS)					
Scientific Programming	360B	3			
Cloud Computing	372B	3			
Computer Architecture	402B	3			
Theory of Computing	412B	3			
Introduction to Big Data	422B	3			
CS Elective		3			
MOBILE/APP DEVELOPMENT (18 HRS)					
Web-Based Programming	350B	3			
Cloud Computing	372B	3			
Mobile Client Development	393B	3			
Mobile Deployment	394B	3			
CS Elective I		3			
CS Elective II		3			

COURSE TITLE	CS NO	HR	GR	SEM	YR
SCIENCE (8 HRS)					
BIOL(104 or 105)/SBIO(101B or 102B)		3			
BIOL Lab(106 or 107)/SBIO(101LB or 102LB)		1			
General Physics I Lec (PHYS 221B/SPHY 213B)		3			
General Physics I Lab (PHYS 223B/SPHY 213LB)		1			
MATHEMATICS (14 HRS)					
Linear Algebra	233B	3			
Anal. Geom & Cal I (MATH 264B/SMAT 211B)		4			
Anal Geom & Cal II (MATH 265B/SMAT 212B)		4			
Statistics	276B	3			
UNIVERSITY REQUIREMENTS (6 HRS)					
African American Studies (ENGL 203B/SENL 240B) (**Will meet with Eng Lit 203**)	Eng	3			
Volunteerism	400B	3			
Writing Proficiency	001B	0			
Department Comprehensive	000B	0			
ENGLISH (9 HRS)					
English Composition I (ENGL 110B/SENL 101B)		3			
English Composition II (ENGL 111B/SENL 102B)		3			
English Literature(ENGL 203B/SENL 240B)		3			
SOCIAL SCIENCES (6 HRS)					
Economics (ECON 200 or 205/SECO 221B or 211B)		3			
		3			
HUMANITIES (9 HRS)					
History I (HIST 114B/SHIS 111B)		3			
History II (HIST 115B/SHIS 112B)		3			
		3			
ARTS ELECTIVES (3 HRS)					
		3			
FOREIGN LANGUAGES (6 HRS)					
		3			
		3			
HEALTH or PHYSICAL EDUCATION (2 HRS)					
Health	110B	2			
OR					
Physical Activity I		1			
Physical Activity II		1			
OTHER ELECTIVES OR TRANSFER CREDITS					

English 203 will satisfy both requirements for African American Studies and English Literature. Foreign Languages 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 2018-2020 University Catalog**

Approved _____ Date _____
  Advisor, Computer Science

Approved _____ Date _____
  Undergraduate Coordinator

Approved _____ Date _____
  Chair, Computer Science

Approved _____ Date _____
  Dean, College of Sciences & Engineering

COMPUTER SCIENCE ELECTIVES

To satisfy degree requirements the student may select from any of these listed courses to satisy 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

Cybersecurity

CMPS 355	Cyber Forensics	CMPS 485	Disaster Recovery
CMPS 372	Cloud Computing	CMPS 493	Foundations of Cryptography
CMPS 375	Information Security	CMPS 494	Cyptographic Protocols
CMPS 385	Legal Issues in Information Technology	CMPS 495	Enterprise Security Management
CMPS 426	Network Security	CMPS 496	Internet Security Protocols

Data Analytic & Sciences

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 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 Electives

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.