

# BACHELOR OF SCIENCE IN COMPUTER SCIENCE

### **Bachelor of Science in Computer Science**

The Bachelor of Science in Computer Science at Kentucky State University provides students with a strong foundation in programming, software development, and computer systems, while emphasizing problem-solving, critical thinking, and innovation. The program integrates theoretical knowledge with practical application, preparing graduates for careers in technology, government, business, or for further study in graduate programs. Through hands-on projects, research opportunities, and industry-relevant coursework, students gain the skills needed to thrive in a rapidly evolving digital landscape.

Our computer science tracks are Game Development (https://kysupublic.courseleaf.com/undergraduate/business-engineering-technology/ school-of-math-and-computer-sciences/game-development-bs/), Computer Information Systems (https://kysu-public.courseleaf.com/ undergraduate/business-engineering-technology/school-of-math-andcomputer-sciences/information-systems-bs/), Mathematics (https:// kysu-public.courseleaf.com/undergraduate/business-engineeringtechnology/school-of-math-and-computer-sciences/mathematics-bs/). Computer Information Security (https://kysu-public.courseleaf.com/ undergraduate/business-engineering-technology/school-of-math-andcomputer-sciences/information-security-bs/), and Network Engineering (https://kysu-public.courseleaf.com/undergraduate/businessengineering-technology/school-of-math-and-computer-sciences/networkengineering-bs/), each designed to equip students with specialized knowledge and practical skills in high-demand areas of the tech industry. These tracks allow students to tailor their education to match their career goals—whether it's creating immersive digital experiences, managing enterprise IT systems, advancing in cybersecurity, or mastering the mathematical foundations of computing.

Students majoring in Computer Science must complete a minimum of 120 semester credit hours, including General Education and Supporting Course Requirements.

Computer Science Core Courses are:

Code	Title	Hours
COS 107	Prob Solving, Logic & Design	3
COS 108	Prin Computer Science I	4
COS 109	Prin Computer Sci II	4
COS 281	Introduction to Info. Sec. & A	3
DGE 300	Software Eng Computing Games	3
or COS 300	System Design/Development	
COS 301	Computer Organization	4
COS 302	Operating Systems	3
COS 310	Discrete Computing Structures	3

COS 340	Data Struc Algorithm Analy	3
COS 410	Database Management Systems	3
COS 495	Interactive Gaming Project	3

### Computer Science Bachelor of Science -Computer Information Security Track

Course Year 1	Title	Hours
Term 1 (Fall)		
FYE 118	First Year Experience	3
ENG 101	English Comp I	3
MAT 115	College Algebra	3
COS 107	Prob Solving, Logic & Design	3
Natural Science Elective		3
CHE 101 or BIO 101 or BIO 111 or CHE 109 or CHE 209 or PHS 201	General Chemistry I (must take with CHE 110 ) or Life Science or Principles of Biology or Chemistry in Context or Survey Gen/Organic/Biochemi or Physical Sciences I	
	Hours	15
Term 2 (Spring)		
ENG 102	English Comp II	3
MAT 125	Business Calculus and Matrices	3
COS 108	Prin Computer Science I	4
Social or Behavioral Elect		3
FIN 101 or ECO 201 or PSY 200 or SOC 203	Financial Literacy or Prin of Economics I or General Psychology or Principles of Sociology	
Guided Elective		3
	Hours	16
Year 2		
Term 3 (Fall)		
COM 103	Interpersonal Communication	3
COS 109	Prin Computer Sci II	4
Social or Behavioral Elect	tive	3
SOC 203 or FIN 101 or PSY 200 or ECO 201	Principles of Sociology or Financial Literacy or General Psychology or Prin of Economics I	
Arts		
ART 130 or MUS 130 or THE 130 or ENG 211	Introduction to Art or Introduction to Music or Introduction to Theatre or Intro to Literature	3
Free Elective		1
	Hours	14
Term 4 (Spring)		
ENG 216	Technical Writing	3
COS 200	Computer Information Systems	3
COS 281	Introduction to Info. Sec. & A	3
COS 340	Data Struc Algorithm Analy	3
Humanities Elective		
BUA 120 or EDU 204 or HIS 103 or HIS 108	Business and Society or Cultural Responsiveness or Western Civilization or Intro to African American Hist	3
	Hours	15
Year 3		
Term 5 (Fall)		
COS 275	Game Programming Foundation I	4
COS 300	System Design/Development	3

	Total Hours	120
	Hours	12
COS 300/400 Elective		3
COS/CIT 200 Elective		3
COS 435	Advanced Topics in Cyber Secur	3
COS 410	Database Management Systems	3
Term 8 (Spring)		
	Hours	15
COS 495	Interactive Gaming Project	3
COS 484	Intro to Network Security	3
COS 470	Networking/Telecommun	3
COS 332	Management Information Securit	3
COS 303	Human Perspective on Computing	3
Term 7 (Fall)		
Year 4	Hours	16
Guided Elective		3
or POS 101	or American Government	
or POS 361	or World Politics	
or ASP 303	or American Civil Rights Movement	
AFE 117	Global Perspect Ag/Food/Env	
Global/Civic		3
COS 364	Data Storage and Data Mining	3
COS 334	Computer Forensics	4
COS 302	Operating Systems	3
Term 6 (Spring)	Hours	17
Guided Elective		3
COS 310	Discrete Computing Structures	3
COS 301	Computer Organization	4
	· · ·	4
or DGE 300 Software En	g Computing Games	

# **Computer Science Bachelor of Science - Game Development Track)**

Course	Title	Hours
Year 1		
Term 1 (Fall)		
FYE 118	First Year Experience	3
COS 107	Prob Solving, Logic & Design	3
ENG 101	English Comp I	3
MAT 115	College Algebra	3
Natural Science Elective		3
CHE 101 or BIO 101 or BIO 111 or CHE 109 or CHE 209 or PHS 201	General Chemistry I (must be taken with CHE 110) or Life Science or Principles of Biology or Chemistry in Context or Survey Gen/Organic/Biochemi or Physical Sciences I	
	Hours	15
Term 2 (Spring)		
COS 108	Prin Computer Science I	4
ENG 102	English Comp II	3
MAT 125	Business Calculus and Matrices	3
Social or Behavioral Electiv	/e	3
FIN 101 or PSY 200 or SOC 203 or ECO 201	Financial Literacy or General Psychology or Principles of Sociology or Prin of Economics I	
Guided Elective		3
	Hours	16

COS 109         Prin Computer Sci II         4           COS 275         Game Programming Foundation I         4           Arts         1         3           ART 130         Introduction to Art or Introduction to Music or THE 130         or Introduction to Music or Introduction to Theatre or Introduction to Theatre           Image:		Hours	12	
ENG 216 Technical Writing 3 COM 103 Interpersonal Communication 3 COM 109 Prin Computer Sci II 4 COS 275 Game Programming Foundation I 4 COS 275 Game Programming Foundation I 4 ART 130 Introduction to Art or Introduction to Music or THE 130 or Introduction to Music or THE 130 or Introduction to Music or ENG 211 or Introduction to Music or ENG 211 or Introduction to Music or Service I 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
ENG 216 Technical Writing 3 Interpersonal Communication 3 COM 103 Interpersonal Communication 3 COM 109 Prin Computer Sci II 4 COS 275 Game Programming Foundation I 4 Arts 3  ART 130 Introduction to Art or Introduction to Music or Introduction to Music or Introduction to Theatre or Introduction to Theatre or Introduction to Theatre or Introduction to Theatre or Introduction to Info Cos 201 or Introduction to Info Cos 28 Introduction to Info Sec. 8 A 3 COS 200 Computer Information Systems 3 COS 281 Introduction to Info, Sec. 8 A 3 COS 340 Data Struc Algorithm Analy 3 COS 375 Game Programming Foundation II 3 Humanities Elective BUA 120 Business and Society or EDU 204 or Cultural Responsiveness or Introduction or Introduction to Info Cos 201 Or Introduction or Introduction or Introduction	Guided Elective			
ENG 216 Technical Writing 3  COM 103 Interpersonal Communication 3  COM 109 Prin Computer Sci II 4  COS 275 Game Programming Foundation I 4  Arts 3  ART 130 Introduction to Art or Introduction to Music or Introduction to Music or Introduction to Music or Introduction to Theatre or THE 130 or Introduction to Theatre or THE 130 or Introduction to Theatre or Introduction to Info. Sec. & A 3  COS 200 Computer Information Systems 3  COS 221 Introduction to Info. Sec. & A 3  COS 340 Data Struc Algorithm Analy 3  GOS 375 Game Programming Foundation II 3  Humanities Elective Business and Society or EDU 204 or Cultural Responsiveness or Introduction or Introduction Introductio				
ENG 216   Technical Writing   3   3   1   1   3   1   1   3   3   1   1		ive		
ENG 216 Technical Writing 3 COM 103 Interpersonal Communication 3 COS 109 Prin Computer Sci II 4 Arts 3 ART 130 Introduction to Art 3 or MUS 130 or Introduction to Music 3 or THE 130 or Introduction to Music 3 or THE 130 or Introduction to Music 3 or THE 130 or Introduction to Theatre 3 or ENG 211 or Introduction to Theatre 3 ORS 200 Computer Information Systems 3 COS 281 Introduction to Info. Sec. & A 3 COS 340 Data Struc Algorithm Analy 3 COS 375 Game Programming Foundation II 3 Humanities Elective BUA 120 or Cultural Responsiveness 3 OF HIS 103 or Western Civilization 3 Or HIS 103 or Western Civilization 3 Or HIS 103 or Western Civilization 4 COS 301 Computer Organization 4 COS 303 Human Perspective on Computing 3 COS 310 Discrete Computing Structures 3 COS 310 Discrete Computing Structures 3 COS 310 Discrete Computing Games 3 COS 303 Human Perspective on Computing 3 COS 310 Discrete Computing Games 3 COS 310				
ENG 216   Technical Writing   3   3   1   1   3   1   1   1   1   1	Term 8 (Spring)			
ENG 216 Technical Writing 3 COM 103 Interpersonal Communication 3 COS 109 Prin Computer Sci II 4 Arts		Hours	12	
ENG 216   Technical Writing   3   3   1   1   1   1   1   1   1   1	COS/CIT 200 Elective		3	
ENG 216   Technical Writing   3   3   1   1   3   1   1   1   1   1	COS 495	Interactive Gaming Project	3	
ENG 216   Technical Writing   3   3   1   1   3   1   1   3   3   1   1	COS 470	Networking/Telecommun	3	
ENG 216 Technical Writing 3 COM 103 Interpersonal Communication 3 COS 109 Prin Computer Sci II 4 COS 275 Game Programming Foundation I 4 Arts	COS 300	System Design/Development	3	
ENG 216   Technical Writing   3   3   1   1   3   1   1   1   1   1	Term 7 (Fall)			
ENG 216 Technical Writing 3 COM 103 Interpersonal Communication 3 COS 109 Prin Computer Sci II 4 COS 275 Game Programming Foundation I 4 Arts	Year 4		10	
ENG 216 Technical Writing 3 COM 103 Interpersonal Communication 3 COS 109 Prin Computer Sci II 4 COS 275 Game Programming Foundation I 4 Arts	2 Sided Elective	Hours		
ENG 216 Technical Writing 3 COM 103 Interpersonal Communication 3 COS 109 Prin Computer Sci II 4 COS 275 Game Programming Foundation I 4 Arts 3  ART 130 Introduction to Art 5 Or MUS 130 Or Introduction to Music 7 Or THE 130 Or Introduction to Music 7 Or THE 130 Or Introduction to Music 7 Or ENG 211 Or Introduction to Theatre 7 Or ENG 211 Or Introduction to Interduce 7  Term 4 (Spring) COS 200 Computer Information Systems 3 COS 281 Introduction to Info. Sec. & A 3 COS 340 Data Struc Algorithm Analy 3 COS 375 Game Programming Foundation II 3 Humanities Elective BUA 120 Business and Society 7 Or EDU 204 Or Cultural Responsiveness 7 Or HIS 108 Or Intro to African American Hist Free Elective 1  Hours 16  Year 3 Term 5 (Fall) COS 301 Computer Organization 4 COS 303 Human Perspective on Computing 3 COS 310 Discrete Computing Structures 3 Global/Civic 3 AFE 117 Global Perspect Ag/Food/Env 7 Or ASP 303 Or American Civil Rights Movement 7 Or ASP 303 Or American Government 8 Hours 16  Term 6 (Spring) COS 302 Operating Systems 3 COS 305 Game Design and Development 3 Social or Behavioral Elective 3 Social or Behavioral Elective 3 Social or Behavioral Elective 3 Social or FIN 101 Or Financial Literacy 7 Or General Psychology		or Prin of Economics I	- 3	
ENG 216   Technical Writing   3				
ENG 216				
ENG 216         Technical Writing         3           COM 103         Interpersonal Communication         3           COS 109         Prin Computer Sci II         4           COS 275         Game Programming Foundation I         4           Arts         3           ART 130         Introduction to Art         or Introduction to Music           or THE 130         or Introduction to Theatre           or ENG 211         or Introduction to Theatre           or ENG 211         runtroduction to Theatre           or ENG 221         or Introduction to Theatre           or ENG 220         Computer Information Systems         3           COS 281         Introduction to Info. Sec. & A         3           COS 375         Game Programming Foundation II         3           Humanities Elective         3           BUA 120         Business and Society         3           or EDU 204         or Cultural Responsiveness         1           or HIS 103         or Western Civilization         1           or HIS 108         or Intro to African American Hist           Free Elective         1           Hours         16           Year 3           Term 5 (Fall)<				
ENG 216         Technical Writing         3           COM 103         Interpersonal Communication         3           COS 109         Prin Computer Sci II         4           COS 275         Game Programming Foundation I         4           Arts         3           ART 130         Introduction to Art         3           or MUS 130         or Introduction to Music         5           or ENG 211         or Introduction to Theatre         17           Term 4 (Spring)         17           Term 4 (Spring)         3           COS 200         Computer Information Systems         3           COS 200         Computer Information Systems         3           COS 340         Data Struc Algorithm Analy         3           COS 340         Data Struc Algorithm Analy         3           COS 375         Game Programming Foundation II         3           Humanities Elective         3           BUA 120         or Cultural Responsiveness           Or EUU 204         or Cultural Responsiveness           Or Hus 120         or Mestern Civilization           Or Hus 120         or Mestern Civilization <td></td> <td></td> <td></td>				
ENG 216         Technical Writing         3           COM 103         Interpersonal Communication         3           COS 109         Prin Computer Sci II         4           COS 275         Game Programming Foundation I         4           Arts         3           ART 130         Introduction to Art           or MUS 130         or Introduction to Music           or THE 130         or Introduction to Theatre           or ENG 211         or Introduction to Info. Sec. & A         3           COS 200         Computer Information Systems         3           COS 340         Data Struc Algorithm Analy         3           COS 340         Data Struc Algorithm Analy         3           COS 375         Game Programming Foundation II         3           Humanities Elective         3           BUA 120         Business and Society           or EDU 204         or Cultural Responsiveness           or HIS 103         or Western Civilization           or HIS 108         or Intro to African American Hist           Frem 5 (Fall) </td <td></td> <td></td> <td></td>				
ENG 216         Technical Writing         3           COM 103         Interpersonal Communication         3           COS 109         Prin Computer Sci II         4           COS 275         Game Programming Foundation I         4           Arts         3           ART 130         Introduction to Art           or MUS 130         or Introduction to Music           or THE 130         or Introduction to Theatre           or ENG 211         or Introduction to Theatre           or ENG 211         or Introduction to Theatre           or ENG 211         or Introduction to Info. Sec. & A         3           COS 200         Computer Information Systems         3           COS 281         Introduction to Info. Sec. & A         3           COS 340         Data Struc Algorithm Analy         3           COS 375         Game Programming Foundation II         3           Humanities Elective         3           BUA 120         Business and Society           or EDU 204         or Cultural Responsiveness           or HIS 103         or Western Civilization           or HIS 108         or Intro to African American Hist           Free Elective         1           Hours         16				
ENG 216 Technical Writing 3  COM 103 Interpersonal Communication 3  COS 109 Prin Computer Sci II 4  COS 275 Game Programming Foundation I 4  Arts 3  ART 130 Introduction to Art or MUS 130 or Introduction to Music or THE 130 or Introduction to Theatre or ENG 211 or Intro to Literature 4  Hours 17  Term 4 (Spring)  COS 200 Computer Information Systems 3  COS 281 Introduction to Info. Sec. & A 3  COS 340 Data Struc Algorithm Analy 3  COS 375 Game Programming Foundation II 3  Humanities Elective 8  BUA 120 Business and Society or EDU 204 or Cultural Responsiveness or HIS 103 or HIS 108 or Intro to African American Hist  Free Elective 1  Hours 16  Year 3  Term 5 (Fall)  COS 301 Computer Organization 4  COS 303 Human Perspective on Computing 3  GOS 310 Discrete Computing Structures 3  Global/Civic 3  AFE 117 Global Perspect Ag/Food/Env or ASP 303 or American Civil Rights Movement or American Government 4  Hours 16		Operating Systems	વ	
ENG 216 Technical Writing 3 COM 103 Interpersonal Communication 3 COS 109 Prin Computer Sci II 4 COS 275 Game Programming Foundation I 4 Arts 3 ART 130 Introduction to Art or MUS 130 or Introduction to Music or THE 130 or Introduction to Theatre or ENG 211 or Intro to Literature 17  Hours 17 Term 4 (Spring) COS 200 Computer Information Systems 3 COS 281 Introduction to Info. Sec. & A 3 COS 340 Data Struc Algorithm Analy 3 COS 375 Game Programming Foundation II 3 Humanities Elective 8 BUA 120 Business and Society or EDU 204 or Cultural Responsiveness or HIS 103 or Western Civilization or HIS 108 or Intro to African American Hist Free Elective 1  Hours 16 Year 3 Term 5 (Fall) COS 301 Computer Organization 4 COS 303 Human Perspective on Computing 3 COS 310 Discrete Computing Structures 3 Global/Civic 3 AFE 117 Global Perspect Ag/Food/Env or ASP 303 or American Government 3	Term 6 (Spring)	nours	16	
ENG 216 Technical Writing 3  COM 103 Interpersonal Communication 3  COS 109 Prin Computer Sci II 4  Arts 3  ART 130 Introduction to Art 3  or MUS 130 or Introduction to Music 3  or ENG 211 or Introduction to Theatre 3  or Introduction to Theatre 3  or Introduction to Theatre 3  or ENG 211 Introduction to Info. Sec. & A 3  COS 281 Introduction to Info. Sec. & A 3  COS 340 Data Struc Algorithm Analy 3  COS 375 Game Programming Foundation II 3  Humanities Elective 3  BUA 120 Business and Society 3  or EDU 204 or Cultural Responsiveness 3  or HIS 103 or Western Civilization 3  or HIS 108 or Intro to African American Hist 5  Free Elective 1  Hours 16  Year 3  Term 5 (Fall)  COS 301 Computer Organization 4  COS 303 Human Perspective on Computing 3  GOS 310 Discrete Computing Structures 3  Global/Civic AFE 117 Global Perspect Ag/Food/Env 3  or ASP 303 or American Civil Rights Movement 3  or POS 361 or World Politics	01 202 101		16	
ENG 216         Technical Writing         3           COM 103         Interpersonal Communication         3           COS 109         Prin Computer Sci II         4           COS 275         Game Programming Foundation I         4           Arts         3           ART 130         Introduction to Art         or Introduction to Music           or THE 130         or Introduction to Theatre           or ENG 211         or Introduction to Theatre           or ENG 211         or Introduction to Theatre           or ENG 211         or Introduction to Info. Sec. & A           3         3           COS 200         Computer Information Systems         3           COS 281         Introduction to Info. Sec. & A         3           COS 340         Data Struc Algorithm Analy         3           COS 375         Game Programming Foundation II         3           Humanities Elective         3         3           BUA 120         Business and Society         3           or HIS 103         or Western Civilization         1           or HIS 103         or Intro to African American Hist           Free Elective         1           Hours         16           Year 3         16				
ENG 216         Technical Writing         3           COM 103         Interpersonal Communication         3           COS 109         Prin Computer Sci II         4           COS 275         Game Programming Foundation I         4           Arts         3           ART 130         Introduction to Art         0           or MUS 130         or Introduction to Music         0           or THE 130         or Introduction to Theatre         0           or ENG 211         or Introduction to Theatre         17           Term 4 (Spring)           COS 200         Computer Information Systems         3           COS 281         Introduction to Info. Sec. & A         3           COS 340         Data Struc Algorithm Analy         3           COS 375         Game Programming Foundation II         3           Humanities Elective         3           BUA 120         Business and Society         3           or EDU 204         or Cultural Responsiveness         3           or HIS 103         or Western Civilization           or HIS 108         or Intro to African American Hist           Free Elective         1 <td co<="" td=""><td></td><td>or American Civil Rights Movement</td><td></td></td>	<td></td> <td>or American Civil Rights Movement</td> <td></td>		or American Civil Rights Movement	
ENG 216         Technical Writing         3           COM 103         Interpersonal Communication         3           COS 109         Prin Computer Sci II         4           COS 275         Game Programming Foundation I         4           Arts         3           ART 130         Introduction to Art         0           or MUS 130         or Introduction to Music           or THE 130         or Introduction to Theatre           or ENG 211         or Introduction to Theatre           FEM 4 (Spring)         3           COS 200         Computer Information Systems         3           COS 281         Introduction to Info. Sec. & A         3           COS 340         Data Struc Algorithm Analy         3           COS 375         Game Programming Foundation II         3           Humanities Elective         3           BUA 120         Business and Society         3           or HIS 103         or Western Civilization         3           or HIS 108         or Intro to African American Hist           Free Elective         1           Hours         16           Year 3         Term 5 (Fall)           COS 301         Computer Organization         4		Global Perspect Ag/Food/Env		
ENG 216         Technical Writing         3           COM 103         Interpersonal Communication         3           COS 109         Prin Computer Sci II         4           COS 275         Game Programming Foundation I         4           Arts         3           ART 130         Introduction to Art         0           or MUS 130         or Introduction to Music         0           or THE 130         or Introduction to Theatre         17           Term 4 (Spring)         17           Term 4 (Spring)         3           COS 200         Computer Information Systems         3           COS 281         Introduction to Info. Sec. & A         3           COS 281         Introduction to Info. Sec. & A         3           COS 375         Game Programming Foundation II         3           Humanities Elective         3           BUA 120         Business and Society         3           or HIS 103         or Western Civilization         4           or HIS 108         or Intro to African American Hist         1           Free Elective         1           Hours         16 <td col<="" td=""><td>Global/Civic</td><td>· -</td><td>3</td></td>	<td>Global/Civic</td> <td>· -</td> <td>3</td>	Global/Civic	· -	3
ENG 216   Technical Writing   3				
ENG 216 Technical Writing 3  COM 103 Interpersonal Communication 3  COS 109 Prin Computer Sci II 4  COS 275 Game Programming Foundation I 4  Arts 3  ART 130 Introduction to Art or INTRODUCTION OF INTRODUCTION TO Heatre or Introduction to Theatre or Introduction to Theatre or Introduction to Introduction to Theatre or Introduction to Info. Sec. & A 3  COS 200 Computer Information Systems 3  COS 281 Introduction to Info. Sec. & A 3  COS 340 Data Struc Algorithm Analy 3  COS 375 Game Programming Foundation II 3  Humanities Elective 3  BUA 120 Business and Society or EDU 204 or Cultural Responsiveness or Western Civilization or HIS 103 or HIS 103 or Intro to African American Hist  Free Elective 1  Hours 16  Year 3  Term 5 (Fall)  COS 301 Computer Organization 4				
ENG 216 Technical Writing 3  COM 103 Interpersonal Communication 3  COS 109 Prin Computer Sci II 4  COS 275 Game Programming Foundation I 4  Arts 3  ART 130 Introduction to Art or IMUS 130 or Introduction to Music or THE 130 or Introduction to Theatre or ENG 211 or Introduction to Theatre or ENG 211 or Introduction to Systems 3  COS 200 Computer Information Systems 3  COS 281 Introduction to Info. Sec. & A 3  COS 340 Data Struc Algorithm Analy 3  COS 375 Game Programming Foundation II 3  Humanities Elective 3  BUA 120 Business and Society or EDU 204 or Cultural Responsiveness or Western Civilization or HIS 103 or HIS 103 or HIS 103 or Intro to African American Hist  Free Elective 1  Hours 16  Year 3  Term 5 (Fall)	COS 303	· •		
ENG 216   Technical Writing   3   3   1   1   1   1   1   1   1   1		Computer Organization	4	
ENG 216   Technical Writing   3   3   1   1   1   1   1   1   1   1				
ENG 216   Technical Writing   3	Year 3	· round	10	
ENG 216   Technical Writing   3	Tree Licetive	Hours		
ENG 216         Technical Writing         3           COM 103         Interpersonal Communication         3           COS 109         Prin Computer Sci II         4           COS 275         Game Programming Foundation I         4           Arts         3           ART 130         Introduction to Art           or MUS 130         or Introduction to Music           or THE 130         or Introduction to Theatre           or ENG 211         or Introduction to Theatre           or ENG 211         or Introduction to Literature           Term 4 (Spring)           COS 200         Computer Information Systems         3           COS 281         Introduction to Info. Sec. & A         3           COS 340         Data Struc Algorithm Analy         3           COS 375         Game Programming Foundation II         3           Humanities Elective         3           BUA 120         Business and Society           or EDU 204         or Cultural Responsiveness           or Western Civilization		2	1	
ENG 216         Technical Writing         3           COM 103         Interpersonal Communication         3           COS 109         Prin Computer Sci II         4           COS 275         Game Programming Foundation I         4           Arts         3           ART 130         Introduction to Art           or MUS 130         or Introduction to Music           or THE 130         or Introduction to Theatre           or ENG 211         or Introduction to Theatre           Or ENG 211         or Introduction to Systems           COS 200         Computer Information Systems         3           COS 281         Introduction to Info. Sec. & A         3           COS 340         Data Struc Algorithm Analy         3           COS 375         Game Programming Foundation II         3           Humanities Elective         3           BUA 120         Business and Society           or EDU 204         or Cultural Responsiveness				
ENG 216         Technical Writing         3           COM 103         Interpersonal Communication         3           COS 109         Prin Computer Sci II         4           COS 275         Game Programming Foundation I         4           Arts         3           ART 130         Introduction to Art           or MUS 130         or Introduction to Music           or THE 130         or Introduction to Theatre           or ENG 211         or Introduction to Theatre           Or ENG 211         or Introduction to Literature           Term 4 (Spring)           COS 200         Computer Information Systems         3           COS 281         Introduction to Info. Sec. & A         3           COS 340         Data Struc Algorithm Analy         3           COS 375         Game Programming Foundation II         3           Humanities Elective         3           BUA 120         Business and Society		•		
ENG 216         Technical Writing         3           COM 103         Interpersonal Communication         3           COS 109         Prin Computer Sci II         4           COS 275         Game Programming Foundation I         4           Arts         3           ART 130         Introduction to Art           or MUS 130         or Introduction to Music           or THE 130         or Introduction to Theatre           or ENG 211         or Introduction to Theatre           Or ENG 211         or Introduction to Literature           Hours         17           Term 4 (Spring)           COS 200         Computer Information Systems         3           COS 281         Introduction to Info. Sec. & A         3           COS 340         Data Struc Algorithm Analy         3           COS 375         Game Programming Foundation II         3				
ENG 216         Technical Writing         3           COM 103         Interpersonal Communication         3           COS 109         Prin Computer Sci II         4           COS 275         Game Programming Foundation I         4           Arts         3           ART 130         Introduction to Art           or MUS 130         or Introduction to Music           or THE 130         or Introduction to Theatre           or ENG 211         or Introduction to Theatre           Term 4 (Spring)         17           Term 4 (Spring)         3           COS 200         Computer Information Systems         3           COS 281         Introduction to Info. Sec. & A         3           COS 340         Data Struc Algorithm Analy         3	Humanities Elective		3	
ENG 216         Technical Writing         3           COM 103         Interpersonal Communication         3           COS 109         Prin Computer Sci II         4           COS 275         Game Programming Foundation I         4           Arts         3           ART 130         Introduction to Art           or MUS 130         or Introduction to Music           or THE 130         or Introduction to Theatre           or ENG 211         or Intro to Literature           Hours         17           Term 4 (Spring)           COS 200         Computer Information Systems         3           COS 281         Introduction to Info. Sec. & A         3	COS 375	Game Programming Foundation II	3	
ENG 216         Technical Writing         3           COM 103         Interpersonal Communication         3           COS 109         Prin Computer Sci II         4           COS 275         Game Programming Foundation I         4           Arts         3           ART 130         Introduction to Art or Introduction to Music or Introduction to Music or Introduction to Theatre or ENG 211         117           Term 4 (Spring)           COS 200         Computer Information Systems         3	COS 340	Data Struc Algorithm Analy	3	
ENG 216         Technical Writing         3           COM 103         Interpersonal Communication         3           COS 109         Prin Computer Sci II         4           COS 275         Game Programming Foundation I         4           Arts         3           ART 130         Introduction to Art           or MUS 130         or Introduction to Music           or THE 130         or Introduction to Theatre           or ENG 211         or Intro to Literature           Hours         17           Term 4 (Spring)	COS 281	Introduction to Info. Sec. & A	3	
ENG 216         Technical Writing         3           COM 103         Interpersonal Communication         3           COS 109         Prin Computer Sci II         4           COS 275         Game Programming Foundation I         4           Arts         3           ART 130         Introduction to Art           or MUS 130         or Introduction to Music           or THE 130         or Introduction to Theatre           or ENG 211         or Intro to Literature           Hours         17	COS 200	Computer Information Systems	3	
ENG 216         Technical Writing         3           COM 103         Interpersonal Communication         3           COS 109         Prin Computer Sci II         4           COS 275         Game Programming Foundation I         4           Arts         3           ART 130         Introduction to Art or Introduction to Music or THE 130         or Introduction to Music or Introduction to Theatre or ENG 211	Term 4 (Spring)			
ENG 216         Technical Writing         3           COM 103         Interpersonal Communication         3           COS 109         Prin Computer Sci II         4           COS 275         Game Programming Foundation I         4           Arts         3           ART 130         Introduction to Art or Introduction to Music or THE 130         or Introduction to Theatre			17	
ENG 216         Technical Writing         3           COM 103         Interpersonal Communication         3           COS 109         Prin Computer Sci II         4           COS 275         Game Programming Foundation I         4           Arts         3           ART 130         Introduction to Art				
ENG 216         Technical Writing         3           COM 103         Interpersonal Communication         3           COS 109         Prin Computer Sci II         4           COS 275         Game Programming Foundation I         4           Arts         3				
ENG 216         Technical Writing         3           COM 103         Interpersonal Communication         3           COS 109         Prin Computer Sci II         4           COS 275         Game Programming Foundation I         4		Introduction to Art		
ENG 216         Technical Writing         3           COM 103         Interpersonal Communication         3           COS 109         Prin Computer Sci II         4	Arts			
ENG 216 Technical Writing 3 COM 103 Interpersonal Communication 3		·		
ENG 216 Technical Writing 3				
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Term 3 (Fall)		Technical Writing	3	
Year 2	Term 3 (Fall)			

# Computer Science Bachelor of Science - Information Systems Track Course Title He

Course	Title	Hours
Year 1		
Term 1 (Fall)		
FYE 118	First Year Experience	3
ENG 101	English Comp I	3
MAT 115	College Algebra	3
COS 107	Prob Solving, Logic & Design	3
Natural Science Elective		3
CHE 101	General Chemistry I (must be taken with CHE 110)	
or BIO 101	or Life Science	
or BIO 111	or Principles of Biology	
or CHE 109 or CHE 209	or Chemistry in Context or Survey Gen/Organic/Biochemi	
or PHS 201	or Physical Sciences I	
	Hours	15
Term 2 (Spring)		
ENG 102	English Comp II	3
MAT 125	Business Calculus and Matrices	3
COS 108	Prin Computer Science I	4
Arts	· im comparer colence ·	3
ART 130	Introduction to Art	-
or MUS 130	or Introduction to Music	
or THE 130	or Introduction to Theatre	
or ENG 211	or Intro to Literature	
Guided Elective		3
	Hours	16
Year 2		
Term 3 (Fall)		
ACC 201	Principles of Accounting I	3
ENG 216	Technical Writing	3
COM 103	Interpersonal Communication	3
COS 109	Prin Computer Sci II	4
Humanities Elective (BUA	120 is recommended)	3
BUA 120	Business and Society	
or EDU 204	or Cultural Responsiveness	
or HIS 103 or HIS 108	or Western Civilization or Intro to African American Hist	
011113 100	Hours	16
Term 4 (Spring)	nouis	10
BUA 320	Business Statistics	3
COS 200	Computer Information Systems	3
COS 281	Introduction to Info. Sec. & A	3
COS 340	Data Struc Algorithm Analy	3
	ive (ECO 201 is recommended)	3
ECO 201	Prin of Economics I	
or FIN 101	or Financial Literacy	
or PSY 200	or General Psychology	
or SOC 203	or Principles of Sociology	
	Hours	15
Year 3		
Term 5 (Fall)		
COS 275	Game Programming Foundation I	4
COS 300	System Design/Development	3
or DGE 300 Software Eng		
COS 301	Computer Organization	4
COS 310	Discrete Computing Structures	3
Free Elective		2
	Hours	16
Term 6 (Spring)		
ECO 321	Quantitative Methods Dec Mak	3
COS 302	Operating Systems	3

## **Computer Science Bachelor of Science -- Mathematics Track**

Course	Title	Hours
Year 1		
Term 1 (Fall)		
FYE 118	First Year Experience	3
ENG 101	English Comp I	3
MAT 115	College Algebra	3
COS 107	Prob Solving, Logic & Design	3
Natural Science Elective		3
CHE 101 or BIO 101 or BIO 111 or CHE 109 or CHE 209 or PHS 201	General Chemistry I (must be taken with CHE 110) or Life Science or Principles of Biology or Chemistry in Context or Survey Gen/Organic/Biochemi or Physical Sciences I	
	Hours	15
Term 2 (Spring)		
ENG 102	English Comp II	3
MAT 120	Precalculus	4
COS 108	Prin Computer Science I	4
Arts		3
ART 130 or MUS 130 or THE 130 or ENG 211	Introduction to Art or Introduction to Music or Introduction to Theatre or Intro to Literature	
Guided Elective		3
	Hours	17
Year 2		
Term 3 (Fall)		
ENG 216	Technical Writing	3
MAT 131	Calculus/Analy Geom I	5

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COM 103	Interpersonal Communication	3
COS 109	Prin Computer Sci II	4
	Hours	15
Term 4 (Spring)		
MAT 132	Calculus/Analy Geom II	5
COS 200	Computer Information Systems	3
COS 281	Introduction to Info. Sec. & A	3
COS 300/400 Elective		3
	Hours	14
Year 3		
Term 5 (Fall)		
COS 300	System Design/Development	3
or DGE 300 Software E		
COS 301	Computer Organization	4
COS 310	Discrete Computing Structures	3
Natural Science Electiv		3
BIO 101	Life Science	3
or BIO 111 or CHE 109 or CHE 101 or PHY 211 or PHY 212	or Principles of Biology or Chemistry in Context or General Chemistry I or General Physics I or General Physics II	
Social or Behavioral So		3
SOC 203 or FIN 101 or PSY 200 or ECO 201	Principles of Sociology or Financial Literacy or General Psychology or Prin of Economics I	
	Hours	16
Term 6 (Spring)		
COS 302	Operating Systems	3
COS 340	Data Struc Algorithm Analy	3
Natural Science Electiv	ve	3
BIO 111 or PHY 212 or BIO 101 or CHE 209 or CHE 109	Principles of Biology or General Physics II or Life Science or Survey Gen/Organic/Biochemi or Chemistry in Context	
Social or Behavioral So	cience Elective	3
FIN 101 or ECO 201 or PSY 200 or SOC 203	Financial Literacy or Prin of Economics I or General Psychology or Principles of Sociology	
Free Elective		3
Year 4 Term 7 (Fall)	Hours	15
MAT 321	Probability/Statistics I	3
COS 303	Human Perspective on Computing	3
COS 470	Networking/Telecommun	3
COS 490	Seminar in Computer Science	3
or COS 495 Interactive	Gaming Project	
Humanities Elective		3
BUA 120 or EDU 204 or HIS 103 or HIS 108	Business and Society or Cultural Responsiveness or Western Civilization or Intro to African American Hist	
	Hours	15
Term 8 (Spring)		
COS 410	Database Management Systems	3
COS/MAT 300/400 Ele	ctive	3
COS/MAT 300/400 Ele	ctive	3
Global/Civic		3

	Tatal Hausa	100
	Hours	13
Free Elective		1
or POS 101	or American Government	
or POS 361	or World Politics	
or ASP 303	or American Civil Rights Movement	
AFE 117	Global Perspect Ag/Food/Env	

# **Computer Science Bachelor of Science -- Network Engineering Track**

Course	Title	Hours
Year 1		
Term 1 (Fall)		
FYE 118	First Year Experience	3
ENG 101	English Comp I	3
MAT 115	College Algebra	3
CIT 111	Network Fundamentals	3
COS 107	Prob Solving, Logic & Design	3
	Hours	15
Term 2 (Spring)		
ENG 102	English Comp II	3
MAT 125	Business Calculus and Matrices	3
CIT 112	Router Theory and Config	3
COS 108	Prin Computer Science I	4
Guided Elective		3
	Hours	16
Year 2		
Term 3 (Fall)		
ENG 216	Technical Writing	3
COM 103	Interpersonal Communication	3
CIT 200	Network Operating Systems	3
CIT 211	LAN Switching and Wireless	3
or COS 314 Network Pr	· ·	
COS 109	Prin Computer Sci II	4
	Hours	16
Term 4 (Spring)		
CIT 212	Intro to WAN Technology	3
COS 281	Introduction to Info. Sec. & A	3
Arts		3
ART 130	Introduction to Art	J
or MUS 130	or Introduction to Music	
or THE 130	or Introduction to Theatre	
or ENG 211	or Intro to Literature	
Social or Behavioral Ele	ective	3
FIN 101	Financial Literacy	
or PSY 200	or General Psychology	
or SOC 203 or ECO 201	or Principles of Sociology or Prin of Economics I	
Free Elective	of Fill of Economics (	2
Tree Liective	Hours	14
Year 3	nouis	14
Term 5 (Fall)		
BIO 101	Life Science	3
or CHE 109 Chemistry i		3
		2
CIT 311	Advanced Routing	3
COS 301	Computer Organization	4
COS 310	Discrete Computing Structures	3
Social or Behavioral Ele	ective	3

COS 484	1	Intro to Network Security  Hours	13
COS 484		Intro to Network Security	J
			3
COS 334		Computer Forensics	4
		Computer Science	
		echnology Internship	
or COS 4	197 Indep Study i	n Computer Science	
CIT 481		IT Independent Study	3
Term 8 (\$	Spring)	Optimizing Converged Networks	3
		Hours	15
0	117 or ASP 303 or POS 361 or POS 101	Global Perspect Ag/Food/Env or American Civil Rights Movement or World Politics or American Government	
Global/C	Civic		3
COS 303		Human Perspective on Computing	3
or MIS 30	00 Management	Info Systems	
or COS 4	64 Mgmt of Com	nputer Info Systems	
CIT 370		Information Tech Project Mgt	3
or COS 4	199 Topics in Info	Technology	
CIT 497		Topics in Info. Technology	3
CIT 453	i aii,	Network Management	3
Year 4 Term 7 (F	Fall)		
		Hours	15
Guided E	Elective		3
0	120 or EDU 204 or HIS 103 or HIS 108	Business and Society or Cultural Responsiveness or Western Civilization or Intro to African American Hist	
Humanit	ties Elective		3
COS 410		Database Management Systems	3
COS 302		Operating Systems	3
CIT 312	Spirity)	Advanced LAN Switching	3
Term 6 (S	Caring)	Hours	16
	or FIN 101 or ECO 201	or Financial Literacy or Prin of Economics I	
SOC	203 or PSY 200	Principles of Sociology or General Psychology	