

Kenya Methodist University

School of Science and Technology

Department of Pure and Applied Sciences

Bachelor of Science in Mathematics and Computer Science

Student's Name: _____

Registration number: _____

S/No.	Course Code	Course Title	Credits	Old Code	Equivalent
TRIMESTER 1					
1	COMP 101	Introduction to Computer Science	3		CISY 101
2	COMP 110	Introduction to Programming	3		CISY 110
3	MATH 102	Foundations of Mathematics	3		
4	MATH 103	Calculus I	3		
5	SOST 131	Introduction to Sociology	3		
6	THEO 111	Christian Beliefs	3		
			18		
TRIMESTER 2					
1	COMM 111	Communication Skills	3		
2	COMP 104	Analogue Electronics	3	PHYS 100	CISY 104
3	COMP 111	Structured Programming	3		CISY 111
4	MATH 104	Calculus II	3		
5	MATH 110	Linear Algebra I	3		
6	MATH 132	Probability and Statistics I	3		
			18		
TRIMESTER 3					
1	COMP 131	Introduction to Computer Networks	3	COMP 341	CISY 131
2	COMP 211	Object Oriented Programming	3		CISY 210
3	COMP 231	Telecommunication Networks	3		CISY 231
4	MATH 200	Calculus III	3		
5	MATH 210	Linear Algebra II	3		
6	MATH 230	Probability and Statistics II	3		
			18		
TRIMESTER 4					
1	COMP 201	Computer Organization and Architecture	3		CISY 201
2	COMP 210	Data Structures	3		CISY 212
3	COMP 220	System Analysis and Design	3		CISY 222
4	HSCI 225	HIV/AIDS	3		
5	MATH 211	Discrete Structures	3		
6	MATH 220	Ordinary Differential Equations I	3		
			18		
TRIMESTER 5					
1	COMP 300	Operating Systems	3		CISY 300
2	COMP 302	Digital Electronics	3		CISY 204
3	COMP 340	Database Management System	3		CISY 221
4	ENVI 201	Environmental Science	3		
5	MATH 221	Vector Analysis	3		
6	MATH 310	Real Analysis I	3		
			18		
TRIMESTER 6					
1	BUSS 114	Fundamentals of Entrepreneurship	3		

2	COMP 303	Computer Hardware and Maintenance	3		CISY 303
3	COMP 304	Research Methodology	3		CISY 302
4	MATH 320	Numerical Analysis I	3		
5	MATH 331	Operation Research I	3		
6	PHYS 310	Electrical Circuits	3		
			18		
TRIMESTER 7					
1	COMP 400	Internship	3		
			3		
TRIMESTER 8					
1	COMP 311	Internet Applications and Programming	3		CISY 311
2	COMP 422	Automata and Formal Language	3		CISY 402
3	MATH 410	Complex Variable Theory I	3		
3	COMP 444	Network Hardware and Configuration	3		CISY 332
5	MATH 420	Partial Differential Equations I	3		
6	One Course in Option		3		
			18		
TRIMESTER 9					
1	COMP 445	Information Systems Security	3		CISY 431
2	MATH 430	Operation Research II	3		
3	COMP 401	Research Project	6		MATH 401
4	One Course in Option		3		
5	One Course in Option		3		
			18		
ELECTIVE (OPTION) COURSES					
MATHEMATICS					
a.	APPLIED MATHEMATICS				
1	MATH 321	Classical Mechanics	3		
2	MATH 322	Ordinary Differential Equations II	3		
3	MATH 421	Partial Differential Equations II	3		
4	MATH 422	Methods of Mathematical Physics	3		
5	MATH 423	Fluid Mechanics I	3		
6	MATH 424	Fluid Mechanics II			
7	MATH 425	Dynamics			
8	MATH 426	Numerical Analysis II			
b.	STATISTICS				
1	MATH 332	Theory of Estimation	3		
2	MATH 333	Sample Surveys	3		
3	MATH 419	Measure Theory	3		
4	MATH 431	Test of Hypotheses	3		
5	MATH 432	Time Series	3		
6	MATH 433	Design and Analysis of Experiment	3		
7	MATH 434	Non-Parametric Methods	3		
8	MATH 435	Econometrics	3		
9	MATH 436	Probability and Stochastic Processes	3		
C.	PURE MATHEMATICS				
1	MATH 311	Real Analysis II	3		
2	MATH 414	General Topology	3		
3	MATH 415	Functional Analysis	3		
4	MATH 432	Theory of Estimation	3		
5	MATH 412	Algebraic Structures	3		

2.0 COMPUTER SCIENCE				
a. SOFTWARE ENGINEERING				
1	COMP 311	Advanced Programming	3	CISY 310
2	COMP 312	Management Information Systems	3	CISY 421
3	COMP 420	Software Engineering Principles	3	CISY 321
4	COMP 421	Simulation and Modeling	3	CISY 403
5	COMP 430	Mobile Computing	3	CISY 412
6	COMP 440	Artificial Intelligence	3	CISY 422
7	COMP 441	Advanced Database Systems	3	CISY 423
8	BBIT 314	Human Computer Interaction	3	
b. COMPUTER NETWORKS				
1	COMP 442	Object Oriented Analysis and Design	3	CISY 411
2	COMP 443	Distributed Systems	3	CISY 432
3	COMP 446	Wireless Communication	3	CISY 333
4	COMP 431	Digital Signal Processing	3	CISY 434
5	COMP 447	Cryptography and Network Security	3	CISY 433
6	COMP 448	Client Server Systems and Computing	3	CISY 436
7	COMP 449	Network Performance and Optimization	3	CISY 437
8		Multimedia Systems	3	CISY 426
9		Network Administration I		CISY 331
		Total Covered		
		TC		
		Total Required	147	
		Balance		