	COURSE STRUCTURE		
	YEAR 1		
	SEMESTER 1		
CODE	DESCRIPTION	UNITS	
COM 110	Introduction to computer & computing		3
PHY 110	Basic physics 1		4
COM 111	Computer application 1		3
COM 113	Mathematics fro computer science 1		3
MAT 110	Basic calculas		3
IRD 100	Communication skills 1		3
IRD 101	Quantitative skills 1		3
	TOTAL		22
	SEMESTER 2		
CODE	DESCRIPTION	UNITS	
PHY 111	Basic physics 2	UNITS	4
MAT 111	Geometry & elementary applied mathematics		3
COM 120	System hardware		3
COM 121	procedural programming 1		3
COM 123	Mathematics for computer science 2		3
IRD 102	Communication skills 2		3
	TOTAL		19
	YEAR 2		
	SEMESTER 1		
CODE	DESCRIPTION	UNITS	
COM 213	Procedural programming 2		3
COM 211	System software		3
COM 212	Digital electronics 1		3
COM 215	Electrical circuits		3
COM 217	Electronics 1		3
IRD 204	Quantitative skills 2		3
COM 216	Internet fundamentals		3
	TOTAL		21
CODE	SEMESTER 2	LINUTC	
CODE	DESCRIPTION Software against 1	UNITS	
COM 220 COM 221	Software engineering 1		3
PHY 210	computer organizaton Electricity & magnetism		3
COM 222	Internet application		3
COM 223	Operating systems & networks		3
COM 224	Data structures		3
STA 205	Statistics & probability		3
31A 203	TOTAL		21
	TOTAL		

	YEAR 3		
	SEMESTER 1		
	CORE COURSES		
CODE	DESCRIPTION	UNITS	
COM 310	Computer architecture		3
COM 311	Computer science project 1		3
COM 312	Software engineering 2		3
COM 313	Electronics 2		3
COM 315	Algorithms		3
	Intermediate hyper text mark-up language one elective software		
COM 330	or hardware option		3
	TOTAL		18
	SOFTWARE OPTION		
CODE	DESCRIPTION	UNITS	
COM 316E	Numerical computation		3
COM 318E	Database systems		3
COM 319E	Artificial inteligence		3
	HARDWARE OPTION		
CODE	DESCRIPTION	UNITS	
COM 309E	Digital & analogue communication systems		3
COM 314E	Digital electronics 2		3
COM 317E	Data communication & computer network		3
	SEMESTER 2		
	CORE COURSES		
CODE	DESCRIPTION	UNITS	_
COM 320	Digital system design		3
COM 321	Compiler design		3
COM 326	software development		3
COM 329	Field/indusrial attachment		6
	Two electives from software or hardware option		6
	TOTAL		21
	SOFTWARE OPTION		
CODE	DESCRIPTION SOFTWARE OPTION	UNITS	
COM 322E	Computational techniques of operation research1	ONITS	3
COM 323E	Information systems security	-	3
COM 325E	Computer application 2		3
COIVI 323E			3
	HARDWARE OPTION		
CODE	DESCRIPTION	UNITS	
COM 324E	Microelectronics		3
COM 327E	Digital electronics 3		3
COM 328E	Electronics 3		3

	YEAR 4	1	
	SEMESTER 1		
	CORE COURSES		
CODE	DESCRIPTION	UNITS	
COM 410	User interface design		3
COM 413	Object oriented programming		3
COM 415	Human factors in computer & information systems		3
COM 419	Computer systems design		3
	Three electives from software or hardware option		9
	TOTAL		21
	COFTWARE ORTION		
6005	SOFTWARE OPTION	LINUTC	
CODE	DESCRIPTION	UNITS	
COM 408E	Metrics & measurement in software development		3
COM 409E COM 412E	Distributed systems		3
	Computational techniques of opertion research 2		3
COM 417E	Compter graphics		3
COM 418E	Expert systems		3
COM 432E	Design techniques for web sites		3
	HARDWARE OPTION		
CODE	DESCRIPTION	UNITS	
COM 411E	Signal processing 1		3
COM 414E	Semiconductor devices		3
COM 416E	Analogue & digital modulation		3
	SEMESTER 2		
	CORE COURSES		-
CODE	DESCRIPTION CORE COOKSES	UNITS	_
COM 421	Engineering & software law	ONT	3
COM 422	Electronic circuits & microprocessors		3
COM 423	Computer science project 2		3
COM 426	Simulation & modelling		3
COIN 420	Three electives from software or hardware option		9
	TOTAL		21
	SOFTWARE OPTION		
CODE	DESCRIPTION	UNITS	
COM 420E	Advanced computer graphics		3
COM 424E	Neutral networks		3
COM 425E	Advanced artificial inteligence		3
COM 431E	Human-computer interface design		3
6005	HARDWARE OPTION		
CODE	DESCRIPTION	UNITS	
COM 427E	Data communication, antennas & propagation		3
COM 428E	Signal processing 2		3

COM 429E	Measurement & instrumentation	3
COM 430E	Advanced computer systems architecture	3