

Bachelor of Technology in Computer Science and Engineering

School of Computer Science and Engineering

Programme Credit Structure		Credits				BACSE105	Data Structures and Algorithms	3	0	2	4
						BACSE106	Operating Systems	3	0	2	4
University Core Courses		60				BACSE201	Models of Computation	3	1	0	4
Professional Core Courses		60				BACSE202	Database Systems	3	0	2	4
Programme Core		40				BACSE203	Computer Networks	3	0	2	4
Concentration		20				BACSE204	Software Engineering	3	0	2	4
Open Elective Courses		40				BACSE205	Fundamentals of Artificial Intelligence and Machine Learning	3	0	2	4
Total Graded Credit Requirement		160				BAMAT205	Discrete Mathematics and Linear Algebra	3	1	0	4
University Core Courses		60				Concentration					
			L	T	P	C	Systems Engineering				
BAPHY100	Physics*	4									20
BACHY100	Chemistry*	4									
BAMAT101	Multivariable Calculus and Differential Equations	3	0	2	4						
BAMAT200	Mathematics II*	4				BACSE303	Deep Learning	3	0	2	4
BAEEE101	Basic Engineering	3	0	2	4	BACSE319	Cryptography and Network Security	3	0	2	4
BACSE101	Problem Solving Using Python	0	0	4	2	BACSE324	Embedded Systems Architecture	3	0	2	4
BACSE102	Problem Solving Using Java	0	0	4	2	BACSE325	Full Stack Development	2	0	4	4
BAENG101	Technical English Communication	3	0	2	4	BACSE326	Distributed System Design	3	0	2	4
BASTS101	Qualitative and Quantitative Skills Practice I	3	0	0	1	Open Elective Courses					
BASTS102	Qualitative and Quantitative Skills Practice II	3	0	0	1	40					
BAFLC100	Foreign Language	1	0	2	2	Engineering Sciences Humanities Social Sciences Liberal Arts Economics Finance Management					
BAHSM100	Humanities, Social Science and Management	3	0	0	3	Ancillary (20 credits) - Students can opt for "Ancillary" in other disciplines by earning 20 credits from the courses listed in the Ancillary options under Open Elective. Ancillary details will be mentioned only on the transcript.					
BAHUM101	India Studies	1	0	0	1	Additional Concentration (20 credits) - Students can opt for "Additional Concentrations" in their own discipline by earning 20 credits from the courses listed in the Concentration options under Open Elective. Concentration details will be mentioned only on the transcript.					
BACHY101	Environmental Sciences	2	0	0	2	Minor (additional 20 credits) - Students can opt for a "Minor Degree" in other disciplines 20 credits in addition to the minimum credit requirement of the Undergraduate Degree from the courses listed in the Minor options					
BAHUM100	Ethics and Values*	2				Honours (additional 20 credits) - Students can opt for an "Honours Degree" in the same discipline by earning 20 credits in addition to the minimum credit requirement of the Undergraduate Degree from the courses listed in the Honours options.					
BAMGT101	Entrepreneurship	3	0	0	3	Second Major (additional 40 credits) - Students can opt for a "Second Major" in other disciplines by earning 40 credits in addition to the minimum credit requirement of the Undergraduate Degree from the courses listed in the Second Major options.					
BACSE191	Basic Multidisciplinary Project	0	0	4	2						
BACSE291	Innovative Design Project	0	0	4	2						
BACSE391	Research / Design Project	0	0	6	3						
BACSE491	Technical Answers for Real World Problems	1	0	4	3						
BACSE399	Internship I	0	0	2	1						
BACSE499	Internship II / Capstone Project	0	0	12	6						
BAENG100	Effective English Communication (NCC)	0	0	4	2						
BAEXC100	Extracurricular Activities (NCCM)	0	0	4	2						
*-Basket Details											
BAPHY105	Engineering Physics	3	0	2	4						
BACHY105	Applied Chemistry	3	0	2	4						
BAMAT207	Probability and Statistics	3	0	2	4						
BAHUM103	Ethics and Values	2	0	0	2						
Programme Core Courses		40									
BACSE103	Computation Structures	3	0	2	4						
BACSE104	Structured and Object-Oriented Programming	2	0	4	4						