

Bachelor of Technology in Computer Science and Engineering (Bioinformatics)

School of Computer Science and Engineering

Programme Credit Structure		Credits	Programme Core Courses		40
University Core Courses		60	BACSE103	Computation Structures	3 0 2 4
Professional Core Courses		60	BACSE104	Structured and Object-Oriented Programming	2 0 4 4
Programme Core		40	BACSE105	Data Structures and Algorithm Analysis	3 0 2 4
Concentration		20	BACSE106	Operating Systems	3 0 2 4
Open Elective Courses		40	BACSE201	Models of Computation	3 1 0 4
Total Graded Credit Requirement		160	BACSE202	Database Systems	3 0 2 4
University Core Courses		60	BACSE203	Computer Networks	3 0 2 4
	L T P C		BACSE204	Software Engineering	3 0 2 4
BAPHY100	Physics*	4	BACSE205	Fundamentals of Artificial Intelligence and Machine Learning	3 0 2 4
BACHY100	Chemistry*	4	BAMAT205	Discrete Mathematics and Linear Algebra	3 1 0 4
BAMAT101	Multivariable Calculus and Differential Equations	3 0 2 4	Concentration		
BAMAT200	Mathematics II*	4	Bioinformatics		
BAEEEE101	Basic Engineering	3 0 2 4	BABIT101	Biochemistry	3 0 2 4
BACSE101	Problem Solving Using Python	0 0 4 2	BABIT103	Cell and Molecular Biology	3 0 2 4
BACSE102	Problem Solving Using Java	0 0 4 2	BABIT202	Fundamentals of Bioinformatics	2 1 2 4
BAENG101	Technical English Communication	3 0 2 4	BABIT304	Structural Bioinformatics	2 1 2 4
BASTS101	Qualitative and Quantitative Skills Practice I	3 0 0 1	BABIT306	Systems Biology	3 1 0 4
BASTS102	Qualitative and Quantitative Skills Practice II	3 0 0 1	Open Elective Courses		
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	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.		
BAMGT101	Entrepreneurship	3 0 0 3			
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			
BABIT100	Biology (NCC)	3 0 0 3			
BAMAT100	Foundations of Mathematics (NCC)	3 0 0 3			
*-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			