

**Bachelor of Technology in Computer Science and Business Systems**  
**School of Computer Science and Engineering**

Programme Credit Structure		Credits							
<b>University Core Courses</b>		<b>70</b>			MAT1015	Introductory Topics in Statistics, Probability and Calculus	3	0	3
<b>Programme Core Courses</b>		<b>64</b>			MAT1016	Discrete Mathematics	3	0	3
<b>Programme Elective / Specialization Elective</b>		<b>20</b>			PHY1010	Fundamentals of Physics	3	2	4
<b>University Elective</b>		<b>06</b>			MAT2010	Linear Algebra	4	0	4
<b>Total Graded Credit Requirement</b>		<b>160</b>			MAT1017	Statistical Methods	3	2	4
<b>University Core</b>		<b>70</b>			EXCXXXX	Extracurricular Activities	0	0	2
<b>Course Code</b>	<b>Course Title</b>	<b>T</b>	<b>P</b>	<b>C</b>	<b>Programme Core</b>				<b>64</b>
BIC4002	Internship/CO-OP	0	0	12	CSE1013	Formal Language and Automata Theory	3	0	3
CAP4001	Capstone Project	0	0	6	ECE2013	Computer Organization and Architecture	3	0	3
ECS1001	Engineering Clinics - Arduino using Embedded C	0	4	2	CSE2015	Object Oriented Programming	3	2	4
ECS1002	Engineering Clinics - Python & Raspberry Pi	0	4	2	MAT2009	Computational Statistics	3	2	4
ECS2001/ ECS2002	Engineering Clinics - Robotics & Reverse Engineering (or) Engineering Clinics - System Design	0	4	2	CSE2016	Software Engineering	3	2	4
CSE1011	Fundamentals of Computer Science	3	2	4	CSE2017	Operating Systems	3	2	4
CSE2014	Data Structures and Algorithms	4	4	6	CSE2018	Database Management Systems	3	2	4
CSE1023	Python Scripting Basic Programming	0	4	2	CSE3014	Software Design with UML	2	2	3
XXXX	Induction Program (Non-Credit)	0	0	0	CSE3021	Design Thinking	2	2	3
ECE1009	Principles of Electrical Engineering	2	2	3	CSE3023	Design and Analysis of Algorithms	3	2	4
ECE2012	Principles of Electronics Engineering	2	2	3	CSE3024	Compiler Design	3	2	4
ENG1008	Business Communication and Value Science - I	1	2	2	CSE3025	Computer Networks	3	2	4
ENG1009	Business Communication and Value Science - II	2	0	2	CSE4032	Information Security	3	2	4
ENG2008	Business Communication and Value Science - III	1	2	2	CSE3026	Artificial Intelligence	3	2	4
HUM1001	Fundamentals of Economics	2	0	2	MGT1034	Introduction to Innovation, IP Management and Entrepreneurship	3	0	3
CHY1002	Environmental Sciences			P/F	MGT1033	Marketing Research and Marketing Management	2	0	2
LAW1004	Indian Constitution			P/F	MGT3002	Operation Research	2	2	3
LIB1009	Essence of Indian Traditional Knowledge			P/F	MGT3001	Services Science and Service Operational Management	2	2	3
XXXX	Indian Knowledge System (IKS)	2	0	2	MGT1031	Fundamentals of Management	2	0	2
XXXX	Universal Human Values	3	0	2	MGT2010	Business Strategy	2	0	2
					MGT2009	Financial Management	3	0	3
						Cloud, Microservices & Application	2	0	2
						Information Security+ Lab	2	2	3
						Operational Research	2	4	4
						Usability Design of Software Applications + Lab	0	2	1

XXXX	Human Resource Management	2	0	2	Business Strategy	4	0	4
MGT1035	Financial and Cost Accounting	2	0	2	Industrial Psychology	4	0	4
MGT1024	Human Resource Management	2	0	2	Marketing Research & Marketing Management	4	0	4
<b>Specialization Electives</b>				<b>20</b>	Finance Management	4	0	4
	Software testing and Quality assurance	3	2	4	Advanced Social, Text and Media Analytics	3	2	4
	Cryptology	3	2	4	Mobile Computing	3	2	4
	Artificial Intelligence + Lab	3	2	4	Information Retrieval	3	2	4
	Introduction to IoT	3	2	4	NLP	3	2	4
	Image Processing and Pattern Recognition	3	2	4	Enterprise Systems	3	2	4
	Deep Learning + Gen AI/				Quantum Computation & Quantum Information	3	2	4
	Cognitive Science & Analytics	3	2	4	Robotics and Embedded Systems	3	2	4
	Data Mining and Analytics	3	2	4	Compiler Design (PCC-CS 601) + Lab (LEX & YACC)	3	2	4
	Conversational Systems	3	2	4	<b>University Electives</b>			<b>06</b>
	Block Chain	3	2	4	Engineering   Sciences   Humanities   Social Sciences   Liberal arts   Economics   Finance   Management			