

Integrated Master of Technology in Computer Science and Engineering

(Collaboration with Virtusa)

School of Computer Science and Engineering

Programme Credit Structure		Credits				
University Core Courses		72	IACSI202	Digital Logic and Computer Design	3	0 2 4
Professional Core Courses		80	IACSI203	Advanced Computer Architecture and Organization	3	1 0 4
Professional Elective Courses		28	IACSI204	Database Systems Design	3	0 2 4
Open Elective Courses		20	IACSI205	Operating System Fundamentals	3	0 2 4
Total Graded Credit Requirement		200	IACSI206	Internet and Web Programming	2	0 4 4
			IACSI301	Microprocessors and Microcontrollers	3	0 2 4
University Core Courses		72	IACSI302	Data Communication and Computer Networks	3	0 2 4
	L T P C		IACSI303	IoT and Embedded Systems	3	0 2 4
IACHY102	Engineering Chemistry	3 0 2 4	IACSI304	Cryptography and Cyber Security	3	0 2 4
IAPHY101	Engineering Physics	3 0 2 4	IACSI305	Artificial Intelligence and Machine Learning	3	0 2 4
IAMAT101	Multivariable Calculus and Differential Equations	3 0 2 4	IACSI306	Software Engineering Principles and Practices	3	0 2 4
IAMAT201	Applied Linear Algebra	3 1 0 4	IACSI307	Front End Design and Testing	3	0 2 4
IAMAT202	Discrete Mathematics and Graph Theory	3 1 0 4	IACSI308	Formal Languages and Automata Theory	3	1 0 4
IAMAT203	Probability and Statistics	3 0 2 4	IACSI309	Advanced Server Side Programming	3	0 2 4
IAEEE101	Basic Electrical and Electronics Engineering	3 0 2 4	IACSI401	Cloud Computing Technologies	3	0 2 4
IACSE101	Problem Solving Using Python	0 0 4 2	IACSI402	Application Development and Deployment Architecture	3	0 2 4
IACSE102	Problem Solving Using Java	0 0 4 2	IACSI403	Software Application Architecture	3	1 0 4
IACSE201	Structured and Object-Oriented Programming	2 0 4 4	Professional Elective Courses			28
IASTS101	Qualitative and Quantitative Skills Practice I	3 0 0 1	IACSI310	Natural Language Processing	3	0 2 4
IASTS102	Qualitative and Quantitative Skills Practice II	3 0 0 1	IACSI311	Foundations of Blockchain Technology	3	0 2 4
IASTS201	Qualitative and Quantitative Skills Practice III	3 0 0 1	IACSI312	Blockchain Architecture	3	1 0 4
IASTS202	Qualitative and Quantitative Skills Practice IV	3 0 0 1	IACSI313	GPU Architectures and Programming	3	1 0 4
IAFLC100	Foreign Language	1 0 2 2	IACSI314	Software Defined Networking	3	1 0 4
IAHUM101	India Studies	1 0 0 1	IACSI404	Deep Learning	3	0 2 4
IACHY101	Environmental Sciences	2 0 0 2	IACSI405	MLOPs	3	0 2 4
IAHSM100	Humanities, Social Science and Management	3 0 0 3	IACSI406	Gen AI and Large Language Models	3	0 2 4
IAENG101	Technical English Communication	3 0 2 4	IACSI407	Agentic AI	3	0 2 4
IACSI399	Summer Industrial Internship	0 0 4 2	IAMDI405	Machine Learning for Data Science	3	0 2 4
IACSI498	Project - I	0 0 16 8	IAMDI406	Distributed Systems	3	1 0 4
IACSI499	Project - II / Capstone	0 0 20 10	IAMDI407	Exploratory Data Analysis	3	0 2 4
IAENG100	Effective English Communication (NCC)	0 0 4 2	IAMDI408	Statistical Inference	3	0 2 4
IAEXC100	Extracurricular Activities (NCCM)	0 0 4 2	IAMDI409	Predictive Analytics	3	1 0 4
Professional Core Courses		80	IAMDI410	Healthcare Data Analytics	3	1 0 4
IAMAT204	Complex Variables and Integral Transforms	3 1 0 4	IAMDI411	Financial Data Analytics	3	0 2 4
IACSI101	Data Structures and Algorithms	3 0 2 4	IAMDI412	Advanced Data Visualization Techniques	3	0 2 4
IACSI201	Design and Analysis of Algorithms	3 0 2 4	IAMDI413	Advanced Data Compression Techniques	3	0 2 4
			IAMDI414	Computer Vision	3	0 2 4

Open Elective Courses **20**
Engineering | Sciences | Humanities | Social Sciences | Eco-
nomics | Finance | Management