Curriculum for Honours Degree of Bachelor of Science in Information Technology and Management

Level 1

Module Name	Type	Credits	Min	Max
Structured Programming I	C	2.5		
Digital Systems and Digital Computers	C	3		
Multimedia Technologies and Web Design	C	3		
Principles of Management	C	2.5		
Elements of Mathematics	C	2.5		
Structured Programming II	C	2.5		
Microcontroller based ICT Project	C	3		
Fundamentals of Databases	C	2.5		
Business Foundation	C	2.5		
Industry Reconnaissance and Engagement	C	2		
Elements of Probability and Statistics	C	2.5	**28.5**	
		Total compulsary GPA	**28.5**	
English (Non GPA)	C	3	3	
		Total compulsary Non-GPA	**3**	

Level 2

Fundamentals of Object Oriented Programming	C	3		
Web Programming	C	2.5		
Software Engineering	C	3		
Software Development Project	C	4		
Object Oriented Analysis and Design	C	2.5		
Principles of Marketing and Consumer Solutions	C	2.5		
Fundamentals of Accounting and Finance	C	2.5		
Statistical Inference	C	2.5		
Graphic Design and Development	C	2.5		
Database Systems	C	2.5		
Essentials of Computer Organization and Architecture	C	2.5		
Data Structures and Algorithms I	C	2.5		
Essentials of Business Law and Taxation	C	2		
Economic Applications in Business	C	2.5		
Foundation of Mathematical Methods	C	2.5	**39.5**	
		Total compulsary GPA	**39.5**	

Level 3 and Level 4

Operating Systems	C	2.5		
Data Communication & Computer Networks	C	2.5		
Artificial Intelligence	C	2.5		
Automata Theory	C	2.5		
Software Management	C	2.5		
IT Project Management	C	2.5		
IT Quality Assurance	C	2.5		
Professional Practice	C	2.5		
Corporate Information Security Management	C	2.5		
Scientific Communication	C	2.5		
Research Methodology	C	2		
Management Information Systems	C	2.5		
Individual Project on Business Solution	C	2.5		
Comprehensive Group Project	C	10	**42**	
		Total compulsary GPA	**42**	

Industrial Training (Non GPA)	C	6		
Communication Skills and Professional Conduct (Non GPA)	C	2	**8**	
	Total compulsary Non-GPA		**8**	
Human Computer Interaction	E	2.5		
Enterprise Application Development	E	2.5		
Embedded Systems	E	2.5		
Data Mining and Data Warehousing	E	2.5		
UI/UX Engineering	E	2.5		
Mobile Applications Development	E	2.5		
Wireless Communication & Mobile Networks	E	2.5		
Information Security	E	2.5		
Cloud Computing	E	2.5		
Ubiquitous and Wearable Computing	E	2.5		
Business Analytics	E	2.5		
Advanced Database Management Systems	E	2.5		
Multimedia Communications	E	2.5		
Geographic Information Systems	E	2.5		
Software Architecture and Design Patterns	E	2.5		
Multimedia Systems	E	2.5		
Location-Based Services and Systems	E	2.5		
Digital Resource Archiving & Information Retrieval	E	2.5		
Big Data Analytics	E	2.5		
Internet of Things	E	2.5		
Computational Methods	E	2.5		
Statistical Computing	E	2.5		
Logic Programming & Artificial Cognitive Systems	E	2.5		
Fundamentals of Bioinformatics	E	2.5		
Introduction to Numerical Optimization	E	2.5		
Advanced Topics in Statistics	E	2.5		
Theory of Computability & Complexity	E	2.5		
Theory of Compilers	E	2.5		
Artificial Neural Networks & Evolutionary Computing	E	2.5		
Complex Systems and Agent Technology	E	2.5		
Semantic Web and Ontological Modelling	E	2.5		
Natural Language Processing	E	2.5		
Fuzzy logic	E	2.5		
Robotics	E	2.5		
Machine Learning and Pattern Recognition	E	2.5		
Deep Learning Architectures	E	2.5		
Advanced Topics in Bioinformatics	E	2.5		
Formal Methods and Software Verification	E	2.5		
Reinforcement Learning	E	2.5		
Operational Research	E	2.5	**7.5**	**15**
Information Systems Management	E	2.5		
Management of Sensitive Projects	E	2.5		
Digital Business Management	E	2.5		
Supply Chain Management	E	2.5		
Cloud Infrastructure Management	E	2.5		
Knowledge Representation and Management	E	2.5		
Organizational Behaviour	E	2.5		
Management Accounting	E	2.5		
Social Aspects of IT	E	2.5		
Social Entrepreneurship	E	2.5		
Educational Technology	E	2.5		
Business Intelligence	E	2.5		
Talent Management	E	2.5		
International Business	E	2.5		
Forensic Accounting and Fraud Investigations	E	2.5		

Corporate Governance and Social Responsibility	E	2.5		
Financial Engineering	E	2.5		
Fundamentals of Behavioural Genetics	E	2.5		
Advanced Topics in Behavioural Genetics	E	2.5		
Fundamentals of Behavioural Science	E	2.5		
Applied Behavioural Science	E	2.5		
Human Communication & Language Structures	E	2.5		
Accounting Information Systems	E	2.5		
Information Technology Law	E	2.5		
Strategic Management	E	2.5		
Financial Analysis and Management	E	2.5		
Management Science	E	2.5		
Risk and Portfolio Management	E	2.5		
Business Scenario Planning	E	2.5		
Business Change and Process Management	E	2.5		
Consumer Solutions Designing and Management	E	2.5		
Cognitive Psychology of Consumer Decisions	E	2.5		
Marketing Management	E	2.5		
Product Management	E	2.5		
Applied Market Research Methods	E	2.5		
Business Architecture Modelling	E	2.5	**15**	**17.5**
Total Elective (GPA) Credits			25	
Total GPA Credits			135	
Total Compulsory Non GPA Credits			11	
Required Elective Non GPA Credits			4	