

Outline of the New Syllabus

Level 1

Level 1 – Semester I			
Course Code	Module Name	Theory/Practical	No of Credits
Information technology			
ICT1112	Fundamentals of ICT and Information Systems	T (30h)	2
ICT1121	Introduction to Multimedia Technologies	P (30h)	1
ICT1132	Fundamentals of Computer Programming	T (30h)	2
ICT1142	Programming Practicum	P (60h)	2
ICT1152	Computer Architecture	T (30h)	2
ICT1163	Computer Networks	T (30h) + P (30h)	3
Mathematics and Statistics			
TMS1113	Foundation of Mathematics	T(45h)	3
Complementary Studies			
ENG1114	English I	T(60h)	NGPA
Total			15

Level 1 – Semester II			
Course Code	Module Name	Theory/Practical	No of Credits
Information technology			
ICT1212	Database Management Systems	T (30h)	2
ICT1222	Database Management Systems Practicum	P (60h)	2
ICT1232	Web Development	T (30h)	2
ICT1242	Web Development Practicum	P (60h)	2
ICT1252	Operating Systems Concepts and Application	T (30h)	2
ICT1261	System Programming Fundamentals and Linux	P (30h)	1
Mathematics and Statistics			
TMS1222	Discrete Mathematics	T(30h)	2
Complementary Studies			
ENG1212	English II	T(30h)	NGPA
TCS1212	Fundamentals of Management	T(30h)	2
Total			15

Level 2

Level 2 – Semester I			
Course Code	Module Name	Theory/Practical	No of Credits
Information technology			
ICT2113	Data Structures and Algorithms	T (30h) + P (30h)	3
ICT2122	Object Oriented Programming	T (30h)	2
ICT2132	Object Oriented Programming Practicum	P (60h)	2
ICT2142	E-Business Systems	T (15h) + P (30h)	2
ICT2152	Object Oriented Analysis and Design	T (30h)	2
ICT2162	Management Information Systems	T (30h)	2
Complementary Studies			
TCS2112	Business Economics	T(30h)	2
TCS2121	Soft Skills	T(15h)	1
ENG2112	English III	T(30h)	NGPA
Total			16

Level 2 – Semester II			
Course Code	Module Name	Theory/Practical	No of Credits
Information technology			
ICT2212	Software Engineering	T (30h)	2
ICT2222	Professional Issues in IT	T (30h)	2
ICT2233	Software Testing Methods and Tools	T (30h) +P (30h)	3
ICT2242	Human Computer Interaction	T (30h)	2
ICT2253	Mobile Application Development	T (30h) + P (60h)	3
Mathematics and Statistics			
TMS2212	Probability and Statistics	T(15h)+P(30h)	2
Complementary Studies			
TCS2212	Accounting for Technologists	T(30h)	2
Total			16

Level 3

Level 3 – Semester I			
Course Code	Module Name	Theory/Practical	No of Credits
Information technology			
ICT3112	Advanced Programming	T (30h)	2
ICT3122	Advanced Programming Practicum	P (60h)	2
ICT3133	Distributed Systems	T (30h) + P (30h)	3
ICT3141	Business Analysis Essentials	T (15h)	1
ICT3152	IT Project Management	T(30h)	2
ICT3163	Data Science and Analytics	T (45h)	3
Complementary Studies			
TCS3131	Human Resources Management	T (15h)	1
Total			14

Level 3 – Semester II			
Course Code	Module Name	Theory/Practical	No of Credits
Information technology			
ICT3212	Advanced Database Management Systems	T (30h)	2
ICT3222	Advanced Database Management Systems Practicum	P (60h)	2
ICT3233	Network, Computer and Application Security	T (30h) + P (30h)	3
ICT3243	Cloud Computing	T (30h) + P (30h)	3
ICT3253	Group Project	P (90h)	3
ICT3262	Release Engineering and DevOps	T (30h)	2
Complementary Studies			
ENG 3212	Scientific Writing and Research Methodologies	T(30h)	2
Total			17

Level 4

Level 4 – Semester I			
Course Code	Module Name	Theory/Practical	No of Credits
Information technology			
IT4010	Research project	P (90h)	0
ICT4122	Artificial Intelligence	T (30h)	2
ICT4133	Machine Learning	T (30h) + P (30h)	3
ICT4143	Natural Language Processing	T (30h) + P (30h)	3
ICT4153	Internet of Things	T (30h) + P (30h)	3
ICT4163	Image Processing & Computer vision	T (30h) + P (30h)	3
Complementary Studies			
TCS4112	Entrepreneurship Development	T(30h)	2
Total			16

Level 4 – Semester 2		
Course Code	Module Name	No. of Credits
ICT4216	Research project	6
ICT4225	Industrial Training	5
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