REGULATIONS 2015 (CBCS)
B.TECH. INFORMATION TECHNOLOGY
CURRICULUM - SYLLABUS
SEMESTER I

Code No.	Course Title	L	T	P	C
Theory					
BEN101	Technical English – I	3	0	0	3
BMA101	Mathematics -I	3	0	0	3
BPH101	Engineering Physics -I	3	0	0	3
BCH101	Engineering Chemistry - I	3	0	0	3
BCS101	Fundamentals of Computing and Programming	3	0	0	3
BFI101	Foreign Indian Language	3	0	0	3
BME102	Engineering Graphics	3	0	0	3
BEE101	Basic Electrical and Electronics Engineering	3	0	0	3
Practical					
BCS1L1	Computer Practice Lab	0	0	3	1
BEE1L1	Basic Electrical and Electronics Engg.. Practices Lab	0	0	3	1
	NCC/NSS/Yoga(Optional) to be conducted during week ends				

Total Credits: 26

SEMESTER II

Code No.	Course Title	L	T	P	C
Theory					
BEN201	English-II	3	0	0	3
BMA201	Mathematics -II	3	1	0	4
BPH201	Engineering Physics -II	3	0	0	3
BCH201	Engineering Chemistry - II	3	0	0	3
BCS201	Internet Programming	3	0	0	3
BBA201	Personality Development	2	0	0	2
BBT202	Biology for Engineers	2	0	0	2
BME203	Basic Mechanical Engineering	2	0	0	2
BCE201	Basic Civil Engineering	2	0	0	2
Practical					
BCS2L1	Internet Practices lab	0	0	3	1
BCM2L1	Basic Civil & Mechanical Engg.. Practices Lab	0	0	3	1
BPC2L1	Physics and Chemistry Laboratory	0	0	3	1

SEMESTER III

SUB.CODE	SUBJECT NAME	L	T	P	C
Theory					
BMA301	Probability and queuing model	3	1	0	4
BEC307	Principles of Communication	3	0	0	3
BIT301	Database Management Systems	3	0	0	3
BIT302	Computer Organization and Architecture	3	0	0	3
BIT303	Object Oriented Analysis and Design	3	0	0	3
BIT304	Data Structure and Algorithms	3	0	0	3
Practical					
BIT3L1	Database Management System Laboratory	0	0	4	2
BIT3L2	Data Structure & Algorithm Laboratory	0	0	4	2
BIT3L3	Object Oriented Programming using C++ Lab	0	0	4	2
BIT3S1	Technical Seminar-I	0	0	3	1
Total Credits-26					

SEMESTER IV

SUB.CODE	SUBJECT NAME	L	T	P	C
Theory					
BMA401	Discrete Mathematics	3	1	0	4
BEC401	Embedded Systems	3	0	0	3
BEC406	Environmental Studies	3	0	0	3
BIT402	Operating Systems	3	0	0	3
BIT403	Web Programming	3	0	0	3
BIT404	Software Engineering	3	0	0	3
Practical					
BEC4L1	Embedded Laboratory	0	0	4	2
BIT4L1	Operating Systems Laboratory	0	0	4	2
BIT4L2	Web Programming Laboratory	0	0	4	2
Total Credits-25					

SEMESTER V

SUB.CODE	SUBJECT NAME	L	T	P	C
Theory					
BIT502	Statistics and Linear Programming	3	1	0	4
BIT501	Software Project Management	3	0	0	3
BIT503	Semantic Web	3	0	0	3
BIT504	Computer Networks	3	0	0	3
BIT505	Distributed Systems	3	0	0	3
	Core/Major Elective I	3	0	0	3
Practical					

SUB.CODE	SUBJECT NAME				
BIT5L1	Networks Laboratory	0	0	4	2
BIT3L2	Case Tools Laboratory	0	0	4	2
BIT5L3	Multimedia Systems Laboratory	0	0	4	2
BIT5S1	Technical Seminar-II	0	0	3	1
Total Credits-26					

SEMESTER VI

SUB.CODE	SUBJECT NAME	L	T	P	C
Theory					
BIT601	Machine Learning	3	0	0	3
BIT603	Grid and Cloud Computing	3	0	0	3
BIT604	Artificial Intelligence & Expert Systems	3	0	0	3
BIT605	Free/Open Source Software	3	0	0	3
	Elective II	3	0	0	3
	Non Major Elective-I	3	0	0	3
Practical					
BIT6L1	Grid and Cloud Computing Lab	0	0	4	2
BIT6L2	Machine Learning Laboratory	0	0	4	2
BIT6L3	Free and Open Source Software Lab	0	0	4	2
Total Credits-24					

SEMESTER VII

SUB.CODE	SUBJECT NAME	L	T	P	C
Theory					
BIT602	Wireless Networks	3	0	0	3
BIT702	Cryptography and Security	3	0	0	3
PBA701	Principles of Management	3	0	0	3
BIT801	Soft Computing	3	0	0	3
	Open/Industrial Elective I	3	0	0	3
	Non Major Elective II	3	0	0	3
Practical					
BIT7L1	Software Testing Laboratory	0	0	4	2
BIT7L2	Security Laboratory	0	0	4	2
BIT7P3	Mini Project	0	0	2	2
Total Credits-24					

SEMESTER VIII

SUB.CODE	SUBJECT NAME	L	T	P	C
Theory					
	Core Elective-III	3	0	0	3
	Non Major Elective-III	3	0	0	3
	Open/Industrial Elective-II	3	0	0	3
Practical					

BIT8P1	Project Work and Viva Voce	0	0	18	12
Total Credits-21					

TOTAL CREDITS FOR THE PROGRAMME: 199

LIST OF MAJOR /CORE ELECTIVES

SUB.CODE	SUBJECT NAME	L	T	P	C
MAJOR ELECTIVE- I					
BIT021	Soft computing	3	0	0	3
BIT022	Neural Networks	3	0	0	3
BIT023	Fuzzy and genetic algorithm	3	0	0	3
BIT024	Natural Language Processing	3	0	0	3
BIT025	Speech Technology	3	0	0	3
MAJOR ELECTIVE -II					
BIT026	Distributed Operating System	3	0	0	3
BIT027	Parallel Computing	3	0	0	3
BIT028	Real Time System	3	0	0	3
BIT029	Embedded Systems	3	0	0	3
BIT030	Client Server Computing	3	0	0	3
MAJOR ELECTIVE- III					
BIT031	Component Based System Design	3	0	0	3
BIT032	Unified Modeling Language	3	0	0	3
BIT033	Software Architecture	3	0	0	3
BIT034	Software Quality Management	3	0	0	3
BIT035	Software Reliability and Software Testing	3	0	0	3

LIST OF OPEN /INDUSTRIAL ELECTIVES

SUB.CODE	SUBJECT NAME	L	T	P	C
OPEN /INDUSTRIAL ELECTIVE –I					
BIT036	TCP / IP Principles and Architecture	3	0	0	3
BIT037	Performance Evaluation in Computer Systems	3	0	0	3
BIT038	Advanced Computer Networks	3	0	0	3
BIT039	Mobile Communication	3	0	0	3
BIT040	High Speed networks	3	0	0	3
OPEN /INDUSTRIAL ELECTIVE -II					
BIT041	PHP Programming	3	0	0	3
BIT042	Virtual Reality	3	0	0	3
BIT043	E Commerce	3	0	0	3
BIT044	Advanced Web Design	3	0	0	3
BIT045	Object Oriented Database Design	3	0	0	3

LIST OF NON MAJOR ELECTIVES

SUB.CODE	SUBJECT NAME	L	T	P	C
NON- MAJOR ELECTIVE- I					
BET301	Principles of Analog and Digital System	3	0	0	3
BEC405	Linear Integrated Circuits	3	0	0	3
BETE502	Satellite Communication	3	0	0	3
BBM055	Telemedicine	3	0	0	3
BGE 404	Genomics and Proteomics	3	0	0	3
NON- MAJOR ELECTIVE- II					
BET407	Digital Signal Processing	3	0	0	3
BET702	Cellular Mobile Communication	3	0	0	3
BGE701	Bio Safety, Bio Ethics, IPR Patents	3	0	0	3
BBM405	Biosensors and Transducer	3	0	0	3
BIT012	Bioinformatics	3	0	0	3
NON- MAJOR ELECTIVE- III					
BET603	Telecommunication Switching Systems	3	0	0	3
BET703	Telecommunication System Modelling	3	0	0	3
BGE012	Bio Process Principles	3	0	0	3
BBM701	Digital and Medical Image Processing	3	0	0	3
BBM054	Medical Informatics	3	0	0	3