

B.Tech-Biotechnology (4-Yr) Programme Course Structure for Odd Sem 2020

1st SEMESTER - BIOTECHNOLOGY (2018 Curricula)

S. No.	Course		Contact Hours				Credits
	Course Code	Title	L	T	P	Total	
1	15B11MA112	Basic Mathematics-1	3	1	-	4	4
2	18B11CI111	Fundamentals of Computers & Programming - I	3	1	-	4	4
3	15B11HS112	English	2	1	-	3	3
4	18B15CI111	Computer Programming Lab-I	-	-	4	4	2

3rd SEMESTER - BIOTECHNOLOGY (2018 Curricula)

Sr. No.	Course		Contact Hours				Credits
	Course Code	Title	L	T	P	Total	
1	15B11BT311	Thermodynamics and Chemical Processes	3	1	-	4	4
2	15B11EC211	Electrical Science-II	3	1	-	4	4
3	15B11HS211	Economics	2	1	-	3	3
4	19B13BT211	Environmental Studies	3	-	-	3	Qualifying

5th SEMESTER - BIOTECHNOLOGY (2018 Curricula)

Sr. No.	Course		Contact Hours				Credits
	Course Code	Title	L	T	P	Total	
1	Xxxxx	HSS Elective-2	3		-	3	3
2	Xxxxx	Discipline Elective -1	3	-	-	3	3
3	Xxxxx	Science Elective	3	-	-	3	3
4	15B11BT412	Molecular biology and Genetic Engineering	3		-	3	3
5	15B11BT511	Cell Culture Technology	3	1	-	4	4
6	20M13HS211	Indian Constitution & Traditional Knowledge	3	-	-	3	Qualifying
7	15B19BT591	Minor Project – 1			4	4	2

HSS Elective-2 for 5th Semester

S.No.	Course Code	Title	Count
1	16B1NHS435	Sociology of Media	60
2	17B1NHS531	Technology and Culture	120
3	19B12HS311	Entrepreneurial Development	120
4	16B1NHS433	Financial Management	180
5	16B1NHS532	Planning and Economic Development	120
6	16B1NHS434	Introduction to Contemporary forms of Literature	60

Discipline Elective-1 (For V Sem)

S.No.	Course Code	Title	Count
1	15B11BT413	Bioprocess Engineering	90

Science Elective (For V Sem)

S.No.	Course Code	Title	Count
1	16B1NPH535	Nuclear Science and Engineering	90
2	16B1NPH534	Biomaterial Science	90
3	16B1NMA531	Discrete mathematics	120
4	17B1NMA531	Basic numerical methods	120

7th SEMESTER - BIOTECHNOLOGY (2015 Curriculum)

Sr.N o.	Course		Contact Hours				Credits
	Course Code	Title	L	T	P	Total	
1	Xxxxx	BT Elective -3	3	1	-	4	4
2	Xxxxx	BT Elective -4	3	1	-	4	4
3	Xxxxx	BT Elective – 5	3	1	-	4	4

4	Xxxxx	Open Elective – 1	3		-	3	3
5	15B19BT791	Major Project Part-1	-	-			4
6	15B19BT792	Term Paper	-	-	-	-	3
7	15B19BT793	Summer Training Viva	-	-	-	-	2

Open Elective-1 for 7th Semester

S.No.	Course Code	Title	Count
1	17B1NPH732	Nanoscience and Technology	90
2	20B12PH411	Superconducting Materials, Magnets and Devices	90
3	17B1NMA732	APPLIED NUMERICAL METHODS	90
4	17B1NHS731	Customer Relationship Management	60
5	16B1NHS831	Gender Studies	60
6	18B12HS412	Human Resource Analytics	60
7	18B12HS211	Psychology of Personality	60

DE-3 for 7th Sem

S.No.	Course Code	Title	Count
1	17B1NBT734	Stem Cells and Healthcare	60
2	15B1NBT832	Biostatistics and Its Applications	60

DE-4 for 7th Sem

S.No.	Course Code	Title	Count
1	17B1NBT737	Enzymes in food processing	60
2	16B1NBT734	Advanced Cell Biology	60

DE-5 for 7th Sem

S.No.	Course Code	Title	Count
1	17B1NBT739	Biocomputing and Applications	60
3	17B1NBT731	Food biotechnology	60

B.Tech-CSE (4-Yr) Programme Course Structure

1st SEMESTER - CSE (2018 Curricula)

S. No.	Course Code	Title	Contact Hours				Credits
			L	T	P	Total	
1	15B11PH111	Physics-1	3	1	-	4	4
2	15B11CI111	Software Development Fundamentals-I	3	1	-	4	4
3	15B11HS112	English	2	1	-	3	3
4	15B17CI171	Software Development Lab-I	-	-	4	4	2

3rd SEMESTER - CSE (2018 Curricula)

Sr.N o.	Course Code	Title	Contact Hours				Credits
			L	T	P	Total	
1	15B11CI312	Database Systems and Web	3	1	-	4	4
2	15B11CI311	Data Structures	3	1	-	4	4
3	15B11EC211	Electrical Science-II	3	1	-	4	4
4	15B11HS211	Economics	2	1	-	3	3

5th SEMESTER - CSE (2018 Curricula)

Sr.N o.	Course Code	Title	Contact Hours				Credits
			L	T	P	Total	
1	Xxxxx	HSS Elective-2	3		-	3	3
2	Xxxxx	Discipline Elective -1	3	-	-	3	3

3	Xxxxx	Science Elective	3	-	-	3	3
4	15B11CI313	Computer Organisation and Architecture	3		-	3	3
5	15B11CI412	Operating Systems and Systems Programming	3	1	-	4	4
6	20M13HS211	Indian Constitution & Traditional Knowledge	3	-	-	3	Qualifying
7	15B19CI591	Minor Project – 1			4	4	2

HSS Elective-2 for 5th Semester

S.No.	Course Code	Title	Count
1	16B1NHS435	Sociology of Media	60
2	17B1NHS531	Technology and Culture	120
3	19B12HS311	Entrepreneurial Development	120
4	16B1NHS433	Financial Management	180
5	16B1NHS532	Planning and Economic Development	120
6	16B1NHS434	Introduction to Contemporary forms of Literature	60

Discipline Elective-1 (For V Sem)

S.No.	Course Code	Title	Count
1	20B12CS331	Fundamentals of Machine learning	90
2	20B12CS332	Fundamentals of Computer security	90
3	20B12CS333	Introduction to Big data and Data Analytics	90
4	20B12CS334	Object Oriented Analysis and Design using Java	90
5	20B12CS335	Image Processing and Computer Vision	90
6	20B12CS336	Automata Theory and its applications	90

Science Elective (For V Sem)

S.No.	Course Code	Title	Count
1	16B1NPH535	Nuclear Science and Engineering	90
2	16B1NPH531	Quantum Mechanics for Engineers	90
3	16B1NPH533	Laser Technology and Applications	120
4	16B1NPH532	Materials Science	60
5	16B1NMA533	MATRIX COMPUTATIONS	120
6	17B1NMA531	BASIC NUMERICAL METHODS	120

7th SEMESTER - CSE (2015 Curricula)

Sr.N	Course	Title	Contact Hours				Credits
			L	T	P	Total	
1	Xxxxx	CS Elective-4	3	1	-	4	4
2	Xxxxx	CS Elective-5	3	1	-	4	4
3	Xxxxx	CS Elective-6	3	1	-	4	4
4	Xxxxx	Open Elective - 1	3		-	3	3
5	15B19CI791	Major Project Part-1	-	-			4
6	15B19CI792	Term Paper	-	-	-	-	3
7	15B19CI793	Summer Training Viva	-	-	-	-	2

Open Elective-I for 7th Semester

S.No.	Course Code	Title	Count
1	17B1NBT732	Healthcare Marketplace	90
2	17B1NBT733	Stress: Biology, Behaviour and Management	90
3	17B1NPH732	Nanoscience and Technology	90
4	20B12PH411	Superconducting Materials, Magnets and Devices	90
5	17B1NMA732	APPLIED NUMERICAL METHODS	90
6	17B1NHS731	Customer Relationship Management	60
7	16B1NHS831	Gender Studies	60
8	18B12HS412	Human Resource Analytics	60
9	18B12HS211	Psychology of Personality	60

DE-4 for 7th Sem

S.No.	Course Code	Title	Count
2	18B12CS437	Large Scale Database Systems	90
3	17B1NCI731	Machine Learning and NLP	90
4	15B1NCI732	Social Network Analysis	90
5	17B1NCI732	Computer and Web security	90
6	17B1NCI747	Cloud Computing	90

DE-5 for 7th Sem

S.No.	Course Code	Title	Count
1	19B12CS422	Mathematical Foundations for Intelligent Systems	90
2	18B12CS434	Ethical Hacking	90
3	18B12CS436	Software Construction	90
4	19B12CS423	Computing for data science	90
5	16B1NCI733/10B1NCI731	Data Compression Algorithms	90

DE-6 for 7th Sem

S.No.	Course Code	Title	Count
1	19B12CS424	Industrial Automation using IoT	120
2	19B12CS426	IoT Analytics	120
3	19B12CS427	Introduction to DEVOPS	90
4	17B2NCI731	Computer Graphics	90

B.Tech-IT (4-Yr) Programme Course Structure for Odd Semester 2020**1st SEMESTER - IT (2018 Curricula)**

S. No.	Course Code	Title	Contact Hours				Credits
			L	T	P	Total	
1	15B11MA111	Mathematics-1	3	1	-	4	4
2	15B11CI111	Software Development Fundamentals-I	3	1	-	4	4
3	15B11HS112	English	2	1	-	3	3
4	15B17CI171	Software Development Lab-I	-	-	4	4	2

3rd SEMESTER - IT (2018 Curricula)

Sr.No.	Course Code	Title	Contact Hours				Credits
			L	T	P	Total	
1	15B11CI312	Database Systems and Web	3	1	-	4	4
2	15B11CI311	Data Structures	3	1	-	4	4
3	15B11EC211	Electrical Science-II	3	1	-	4	4
4	15B11HS211	Economics	2	1	-	3	3

5th SEMESTER - IT (2018 Curricula)

Sr.No.	Course Code	Title	Contact Hours				Credits
			L	T	P	Total	
1	18B11CS212	Computer Networks and Security	3		-	3	3
2	15B11CI412	Operating Systems and Systems Programming	3	1	-	4	4
3	Xxxxx	Discipline Elective -1	3	-	-	3	3
4	Xxxxx	HSS Elective-2	3		-	3	3
5	Xxxxx	Science Elective	3	-	-	3	3
6	20M13HS211	Indian Constitution & Traditional Knowledge	3	-	-	3	Qualifying
7	15B29CI591	Minor Project – 1			4	4	2

HSS Elective-2 for 5th Semester

S.No.	Course Code	Title	Count
1	16B1NHS435	Sociology of Media	60
2	17B1NHS531	Technology and Culture	120
3	19B12HS311	Entrepreneurial Development	120
4	16B1NHS433	Financial Management	180
5	16B1NHS532	Planning and Economic Development	120
6	16B1NHS434	Introduction to Contemporary forms of Literature	60

Discipline Elective-1 for 5th Semester

S.No.	Course Code	Title	Count
1	20B12CS331	Fundamentals of Machine learning	90
2	20B12CS332	Fundamentals of Computer security	90
3	20B12CS333	Introduction to Big data and Data Analytics	90
4	20B12CS334	Object Oriented Analysis and Design using Java	90
5	20B12CS335	Image Processing and Computer Vision	90
6	20B12CS336	Automata Theory and its applications	90

Science Elective-1 for 5th Semester

S.No.	Course Code	Title	Count
1	16B1NPH535	Nuclear Science and Engineering	90
2	16B1NPH531	Quantum Mechanics for Engineers	90
3	16B1NPH533	Laser Technology and Applications	120
4	16B1NPH532	Materials Science	60
5	16B1NMA533	MATRIX COMPUTATIONS	120
6	17B1NMA531	BASIC NUMERICAL METHODS	120

7th SEMESTER - IT (2015 Curricula)

Sr.N	Course	Title	Contact Hours				Credits
			L	T	P	Total	
1	Xxxxx	CS Elective-4	3	1	-	4	4
2	Xxxxx	CS Elective-5	3	1	-	4	4
3	Xxxxx	CS Elective-6	3	1	-	4	4
4	Xxxxx	Open Elective - 1	3		-	3	3
5	15B19CI791	Major Project Part-1	-	-			4
6	15B19CI792	Term Paper	-	-	-	-	3
7	15B19CI793	Summer Training Viva	-	-	-	-	2

Open Elective-I for 7th Semester

S.No.	Course Code	Title	Count
1	17B1NBT732	Healthcare Marketplace	90
2	17B1NBT733	Stress: Biology, Behaviour and Management	90
3	17B1NPH732	Nanoscience and Technology	90
4	20B12PH411	Superconducting Materials, Magnets and Devices	90
5	17B1NMA732	APPLIED NUMERICAL METHODS	90
6	17B1NHS731	Customer Relationship Management	60
7	16B1NHS831	Gender Studies	60
8	18B12HS412	Human Resource Analytics	60
9	18B12HS211	Psychology of Personality	60

DE-4 for 7th Sem

S.No.	Course Code	Title	Remarks
1	18B12CS437	Large Scale Database Systems	90
2	17B1NCI731	Machine Learning and NLP	90
3	15B1NCI732	Social Network Analysis	90
4	17B1NCI732	Computer and Web security	90
5	17B1NCI747	Cloud Computing	90

DE-5 for 7th Sem

S.No.	Course Code	Title	Count
1	19B12CS422	Mathematical Foundations for Intelligent Systems	90
2	18B12CS434	Ethical Hacking	90
3	18B12CS436	Software Construction	90
4	19B12CS423	Computing for data science	90
5	16B1NCI733/ 10B1NCI731	Data Compression Algorithms	90

DE-6 for 7th Sem

S.No.	Course Code	Title	Count
1	19B12CS424	Industrial Automation using IoT	120
2	19B12CS426	IoT Analytics	120
3	19B12CS427	Introduction to DEVOPS	90
4	17B2NCI731	Computer Graphics	90

B.Tech-ECE (4-Yr) Programme Course Structure for Odd Sem-2020**1st SEMESTER - ECE (2018 Curricula)**

S. No.	Course		Contact Hours				Credits
	Course Code	Title	L	T	P	Total	
1	15B11MA111	Mathematics-1	3	1	-	4	4
2	15B11CI111	Software Development Fundamentals-I	3	1	-	4	4
3	15B11HS112	English	2	1	-	3	3
4	15B17CI171	Software Development Lab-I	-	-	4	4	2

3rd SEMESTER - ECE (2018 Curricula)

Sr.N o.	Course		Contact Hours				Credits
	Course Code	Title	L	T	P	Total	
1	18B11EC214	Signals & Systems	3	1	-	4	4
2	15B11EC211	Electrical Science-II	3	1	-	4	4
3	15B11HS211	Economics	2	1	-	3	3
4	19B13BT211	Environmental Studies	3	-	-	3	Qualifying

5th SEMESTER - ECE (2018 Curricula)

Sr.N o.	Course		Contact Hours				Credits
	Course Code	Title	L	T	P	Total	
1	18B11EC312	Electromagnetic Field Theory	3	1	-	4	4
2	15B11CI518	Data Structures and Algorithms	3	-	-	3	3
3	20M13HS211	Indian Constitution & Traditional Knowledge	3	-	-	3	Qualifying
4	Xxxxx	HSS Elective-2	3	-	-	3	3
5	Xxxxx	Discipline Elective -1	3	-	-	3	3
6	Xxxxx	Science Elective	3	-	-	3	3
7	15B19EC591	Minor Project – 1	-	-	4	4	2

HSS Elective-2 for 5th Semester

S.No.	Course Code	Title	Count
1	16B1NHS435	Sociology of Media	60
2	17B1NHS531	Technology and Culture	120
3	19B12HS311	Entrepreneurial Development	120
4	16B1NHS433	Financial Management	180
5	16B1NHS532	Planning and Economic Development	120
6	16B1NHS434	Introduction to Contemporary forms of Literature	60

Discipline Elective-1 for 5th Semester

S.No.	Course Code	Title	Count
1	15B11EC313	Microprocessors and Microcontrollers	120
2	20B12EC211	Introduction to Digital Image and Video Processing	60
3	17B1NEC735	Information Theory and applications	60

Science Elective-1 for 5th Semester

S.No.	Course Code	Title	Count
1	16B1NPH535	Nuclear Science and Engineering	90
2	16B1NPH531	Quantum Mechanics for Engineers	90
3	16B1NPH533	Laser Technology and Applications	120
4	16B1NPH532	Materials Science	60
5	16B1NMA531	DISCRETE MATHEMATICS	120
6	16B1NMA533	MATRIX COMPUTATIONS	120
7	17B1NMA531	BASIC NUMERICAL METHODS	120

7th SEMESTER - ECE (2015 Curricula)

Sr.N	Course	Title	Contact Hours				Credits
			L	T	P	Total	
1	Xxxxx	FLEXI-CORE	3	1	-	4	4
2	Xxxxx	DE -1	3	1	-	4	4
3	Xxxxx	DE -2	3	1	-	4	4
4	Xxxxx	Open Elective – 1	3	-	-	3	3
5	15B19EC791	Major Project Part-1	-	-	-		4
6	15B19EC792	Term Paper	-	-	-		3
7	15B19EC793	Summer Training Viva	-	-	-	-	2

Flexi-core

S.No.	Course Code	Title	Count
1	17B11EC731	Mobile Communication (Not for students who have taken ARAN)	150
2	17B11EC733	Optical Communication	90

DE-1 & 2 for 7th Semester

S.No.	Course Code	Title	Count
DE-1			
1	17B1NEC735	Information Theory and applications	90
2	17B1NEC734	RF and Microwave Engg.	90
3	18B12EC412	Multimedia Communications	90
DE-2			
1	15B1NEC733	Fundamental of Embedded Systems	120
2	17B1NEC736	Essentials of VLSI Testing	120

Open elective-1

S.No.	Course Code	Title	Count
1	17B1NBT732	Healthcare Marketplace	90
2	17B1NBT733	Stress: Biology, Behaviour and Management	90
3	17B1NPH732	Nanoscience and Technology	90
4	20B12PH411	Superconducting Materials, Magnets and Devices	90
5	17B1NMA732	APPLIED NUMERICAL METHODS	90
6	17B1NHS731	Customer Relationship Management	60
7	16B1NHS831	Gender Studies	60
8	18B12HS412	Human Resource Analytics	60
9	18B12HS211	Psychology of Personality	60

CURRICULUM FOR 2020 ODD SEM - JIIT SECTOR - 128 CAMPUS**B.Tech-CSE (4-Yr) Programme Course Structure (JIIT-128 Campus)****1st SEMESTER - CSE (2018 Curricula)**

S. No.	Course		Contact Hours				Credits
	Course Code	Title	L	T	P	Total	
1	15B11PH111	Physics-1	3	1	-	4	4
2	15B11CI111	Software Development Fundamentals-I	3	1	-	4	4
3	15B11HS112	English	2	1	-	3	3
4	15B17CI171	Software Development Lab-I	-	-	4	4	2

3rd SEMESTER - CSE (2018 Curricula)

Sr.No.	Course		Contact Hours				Credits
	Course Code	Title	L	T	P	Total	
1	15B11CI312	Database Systems and Web	3	1	-	4	4
2	15B11CI311	Data Structures	3	1	-	4	4
3	15B11EC211	Electrical Science-II	3	1	-	4	4
4	15B11HS211	Economics	2	1	-	3	3

5th SEMESTER - CSE (2018 Curricula)

Sr.No.	Course		Contact Hours				Credits
	Course Code	Title	L	T	P	Total	
1	15B11CI313	Computer Organisation and Architecture	3		-	3	3
2	15B11CI412	Operating Systems and Systems Programming	3	1	-	4	4
3	20M13HS211	Indian Constitution & Traditional Knowledge	3	-	-	3	Qualifying
4	Xxxxx	HSS Elective-2	3		-	3	3
5	Xxxxx	Discipline Elective -1	3	-	-	3	3
6	Xxxxx	Science Elective	3	-	-	3	3
7	15B19CI591	Minor Project – 1			4	4	2

HSS Elective-2 for 5th Semester

S.No.	Course Code	Title	Count
1	16B1NHS433	Financial Management	160
2	15B1NHS434	Principles of Management	160

Discipline Elective-1 (For V Sem)

S.No.	Course Code	Title	Count
1	20B12CS331	Fundamentals of Machine learning	60
2	20B12CS332	Fundamentals of Computer security	60
3	20B12CS333	Introduction to Big data and Data Analytics	60
4	20B12CS334	Object Oriented Analysis and Design using Java	60

Science Elective (For V Sem)

S.No.	Course Code	Title	Count
2	16B1NPH533	Laser Technology and Applications	60
3	16B1NPH532	Materials Science	60
4	16B1NMA533	Matrix Computation	60
5	17B1NMA533	Statistical Information Theory with Applications	60
6	18B12MA312	Logical Reasoning and Inequalities	90
7	17B1NMA531	Basic Numerical Methods	60

7th SEMESTER - CSE (2015 Curricula)

Sr.N o.	Course Code	Title	Contact Hours				Credits
			L	T	P	Total	
1	Xxxxx	CS Elective-4	3	1	-	4	4
2	Xxxxx	CS Elective-5	3	1	-	4	4
3	Xxxxx	CS Elective-6	3	1	-	4	4
4	Xxxxx	Open Elective - 1	3		-	3	3
5	15B19CI791	Major Project Part-1	-	-			4
6	15B19CI792	Term Paper	-	-	-	-	3
7	15B19CI793	Summer Training Viva	-	-	-	-	2

Open Elective-1 for 7th Semester

S.No.	Course Code	Title	Count
1	16B1NPH732	Green Energy and Climate Modeling	120
2	17B1NPH731	Introduction to Quantum Information Processing	60
5	17B1NMA732	Applied Numerical Methods	60
6	19B12MA412	Generalized fuzzy set theory with Applications	60

DE-4 for 7th Sem

S.No.	Course Code	Title	Count
1	16B1NCI836	Interconnection Networks in Computer Architecture	60
2	16B1NCI733	Data Compression Algorithm	90
3	15B1NCI738	Social Network Analysis	60
4	17B2NCI731	Computer Graphics	60

DE-5 for 7th Sem

S.No.	Course Code	Title	Count
1	17B1NCI748	Graph Algorithms and Applications	60
2	19B12CS427	Introduction to DEVops	90
3	17B1NCI749	Mobile Computing	60
4	18B12CS314	Software Development and Management	60

DE-6 for 7th Sem

S.No.	Course Code	Title	Count
1	17B2NCI735	Advanced Databases	90
2	17B1NCI732	Computer and Web Security	60
3	16B1NCI831	Machine Learning	60
4	16B1NCI637	Meta Heuristic Algorithms	60

B.Tech-ECE (4-Yr) Programme Course Structure (JIIT-128 Campus)

1st SEMESTER - ECE (2018 Curricula)

S. No.	Course		Contact Hours				Credits
	Course Code	Title	L	T	P	Total	
1	15B11MA111	Mathematics-1	3	1	-	4	4
2	15B11CI111	Software Development Fundamentals-I	3	1	-	4	4
3	15B11HS112	English	2	1	-	3	3
4	15B17CI171	Software Development Lab-I	-	-	4	4	2

3rd SEMESTER - ECE (2018 Curricula)

S. No.	Course		Contact Hours				Credits
	Course Code	Title	L	T	P	Total	
1	18B11EC214	Signals & Systems	3	1	-	4	4
2	15B11EC211	Electrical Science-II	3	1	-	4	4
3	15B11HS211	Economics	2	1	-	3	3
4	19B13BT211	Environmental Studies	3	-	-	3	Qualifying

5th SEMESTER - ECE (2018 Curricula)

Sr.No.	Course		Contact Hours				Credits
	Course Code	Title	L	T	P	Total	
1	18B11EC312	Electromagnetic Field Theory	3	1	-	4	4
2	15B11CI518	Data Structures and Algorithms	3	-	-	3	3
3	20M13HS211	Indian Constitution & Traditional Knowledge	3	-	-	3	Qualifying
4	Xxxxx	HSS Elective-2	3	-	-	3	3
5	Xxxxx	Discipline Elective -1	3	-	-	3	3
6	Xxxxx	Science Elective	3	-	-	3	3
7	15B19EC591	Minor Project – 1			4	4	2

HSS Elective-2 for 5th Semester

S.No.	Course Code	Title	Count
1	16B1NHS433	Financial Management	160
2	15B1NHS434	Principles of Management	160

Discipline Elective-1 (For V Sem)

S.No.	Course Code	Title	Count
1	15B11EC313	Microprocessors and Microcontrollers	60
3	17B1NEC735	Information Theory and Application	60

Science Elective (For V Sem)

S.No.	Course Code	Title	Count
2	16B1NPH533	Laser Technology and Applications	60
3	16B1NPH532	Materials Science	60
4	16B1NMA533	Matrix Computation	60
5	17B1NMA533	Statistical Information Theory with Applications	60
6	18B12MA312	Logical Reasoning and Inequalities	90
7	17B1NMA531	Basic Numerical Methods	60

7th SEMESTER - ECE (2015 Curricula)

Sr.No.	Course		Contact Hours				Credits
	Course Code	Title	L	T	P	Total	
1	Xxxxx	FLEXI-CORE	3	1	-	4	4
2	Xxxxx	DE -1	3	1	-	4	4
3	Xxxxx	DE -2	3	1	-	4	4
4	Xxxxx	Open Elective – 1	3	-	-	3	3

5	15B19EC791	Major Project Part-1	-	-	-		4
6	15B19EC792	Term Paper	-	-			3
7	15B19EC793	Summer Training Viva	-	-	-	-	2

Flexi-core

S.No.	Course Code	Title	Count
1	17B11EC731	Mobile Communication (Not for students who have taken ARAN)	120
3	17B11EC733	Optical Communication	90

DE-1 & 2 for 7th Semester

S.No.	Course Code	Title	Count
DE-1			
1	17B1NEC734	RF and Microwave Engineering	60
3	18B12EC421	Image Analysis and Feature Extraction	90
	18B12EC420	Smart and Sustainable Systems	60
DE-2			
2	17B1NEC742	Introduction to Data Analysis with R	60
5	19B12EC413	Convergence and Next Generation Networks	60
6	19B12EC417	Machine learning and Statistical pattern recognition	90

Open elective-1

S.No.	Course Code	Title	Count
1	16B1NPH732	Green Energy and Climate Modeling	120
2	17B1NPH731	Introduction to Quantum Information Processing	60
5	17B1NMA732	Applied Numerical Methods	60
6	19B12MA412	Generalized fuzzy set theory with Applications	60
7	18B12CS424	Algorithm Analysis and AI	60