

**2015-16**  
**I YEAR I SEMESTER COURSE STRUCTURE**

Sl. No	Code	Subject	L	T	P/D	C	Max. Marks	
							Int.	Ext.
1.	5H101	English-I	2	-	-	2	25	75
2.	5H111	Engineering Mathematics – I	3	1	-	3	25	75
3.	5H121	Engineering Physics – I	3	1	-	3	25	75
4.	5H131	Engineering Chemistry	2	1	-	2	25	75
5.	5F101	Computer Programming	3	1	-	3	25	75
6.	5B101	Engineering Drawing – I	1	1	4	3	25	75
7.	5H171	English Language Communication Skills Lab	-	-	2	1	25	75
8.	5H181	Engineering Physics Lab-I	-	-	2/2	1	25	75
9.	5H186	Engineering Chemistry Lab	-	-	2/2	1	25	75
10.	5F171	Computer Programming Lab	-	-	3	2	25	75
11.	5B171	Engineering workshop-I	-	-	2/2	1	25	75
12.	5F172	IT Workshop – I	-	-	2/2	1	25	75
13.	5F191	Seminar on Current Affairs/ Technical Topic	-	-	2	1	100	-
<b>Total :</b>			<b>14</b>	<b>5</b>	<b>15</b>	<b>24</b>	<b>400</b>	<b>900</b>

**I YEAR II SEMESTER COURSE STRUCTURE**

Sl. No.	Code	Subject	L	T	P/D	C	Max. Marks	
							Int.	Ext.
1.	5H202	English – II	2	2	-	2	25	75
2.	5H213	Engineering Mathematics – II	3	1	-	3	25	75
3.	5H222	Engineering Physics – II	3	1	-	3	25	75
4.	5E201	Data Structures and C++	3	1	-	3	25	75
5.	5B202	Engineering Drawing – II	1	1	2	2	25	75
6.	5H232	Environmental Chemistry and Ecology	2	1	-	2	25	75
7.	5BC04	Elements of Mechanical Engineering	3	1	-	3	25	75
8.	5H233	Gender Sensitization, Values and Ethics	1	1	-	1	25	75
9.	5E271	Data structure and C++Lab	-	-	3	2	25	75
10.	5H282	Engineering Physics Lab – II	-	-	2/2	1	25	75
11.	5F273	IT Workshop - II	-	-	2/2	1	25	75
12.	5F292	Seminar on Science and its impact	-	-	2	1	100	-
<b>Total :</b>			<b>18</b>	<b>9</b>	<b>09</b>	<b>24</b>	<b>375</b>	<b>825</b>

## II YEAR I SEMESTER COURSE STRUCTURE

Sl. No	Code	Subject	L	T	P/D	C	Max. Marks	
							Int.	Ext.
1.	5H315	Engineering Mathematics III	3	1	-	3	25	75
2.	5C347	Elements of Electronics Engineering	3	1	-	3	25	75
3.	5DC10	Digital Logic Design and Computer Organization	3	1	-	3	25	75
4.	5AC41	Elements of Electrical Engineering	3	1	-	3	25	75
5.	5E302	Object Oriented Programming through Java	3	1	-	3	25	75
6.	5F302	Mathematical Foundations of Computer Science	3	1	-	3	25	75
7.	5H373	Functional Communicative Written English (FCWE)	1	2	-	1	25	75
8.	5AC91	Electrical Engineering Lab	-	-	3/2	1	25	75
9.	5C381	Electronics Engineering Lab	-	-	3/2	1	25	75
10.	5E372	Object Oriented Programming through Java Lab	-	-	3	2	25	75
11.	5F393	Seminar on Technology and its Impact	-	-	2	1	100	-
<b>Total :</b>			<b>19</b>	<b>8</b>	<b>08</b>	<b>24</b>	<b>350</b>	<b>750</b>

## II YEAR II SEMESTER COURSE STRUCTURE

Sl. No	Code	Subject	L	T	P/D	C	Max. Marks	
							Int.	Ext.
1.	5FC04	Design and Analysis of Algorithms	3	1	-	3	25	75
2.	5ZC01	Managerial Economics and Financial Analysis	2	1	-	2	25	75
3.	5FC03	Database Management Systems	3	1	-	3	25	75
4.	5C448	Data Communications	3	1	-	3	25	75
5.	5FC06	Linux Programming	3	1	-	3	25	75
6.	5HC17	Probability and Statistics	3	1	-	3	25	75
7.	5H474	Effective English Communication (EEC)	-	1	2	1	25	75
8.	5F473	Comprehensive Viva Voce - I	-	-	-	1	50	50
9.	5F474	Data Base Management Systems Lab	-	-	3	2	25	75
10.	5F475	Linux Programming Lab	-	-	3	2	25	75
11.	5F494	Technical Seminar	-	-	2	1	100	-
<b>Total :</b>			<b>17</b>	<b>7</b>	<b>10</b>	<b>24</b>	<b>375</b>	<b>725</b>

## B.Tech (IT) R15 Course Structure

### III YEAR I SEMESTER COURSE STRUCTURE

Sl. No	Code	Subject	L	T	P/D	C	Max. Marks	
							Int.	Ext.
1.		Professional Elective - I	3	1	-	3	25	75
2.		Professional Elective - II	3	1	-	3	25	75
3.	5FC07	Software Engineering and OOAD	2	1	-	2	25	75
4.	5EC03	Operating systems	3	1	-	3	25	75
5.	5E517	Theory of Computation	3	1	-	3	25	75
6.	5FC09	Web Technologies	3	1	-	3	25	75
7.	5HC75	Quantitative Aptitude	-	-	2	1	25	75
8.	5F582	Group Project	-	-	2	1	25	75
9.	5F577	Operating Systems and Case tools Lab	-	-	4	2	25	75
10.	5FC80	Web Technologies Lab	-	-	4	2	25	75
11.	5F589	Internship						
12.	5F595	Technical Literature Review and Seminar – I	-	-	2	1	100	-
<b>Total :</b>			<b>17</b>	<b>6</b>	<b>14</b>	<b>24</b>	<b>350</b>	<b>750</b>

Stream	Subject Code	Professional Elective -I (3-1)	Subject Code	Professional Elective -II (3-1)
Advanced Courses	5FC08	Python Programming	5DC55	Internet of Things (IOT)
Software Engineering	5EC05	Software Requirements and Estimation (SRE)	5EC08	Software Project Management (SPM)
Database Streams	5FC13	Distributed Databases (DD)	5FC15	Information Retrieval Systems (IRS)
Computer Languages	5DC12	Principles of Programming Language (PPL) (ECM Board)	5FC16	C# and .Net Framework
Machine Learning	5FC10	Computer Graphics	5FC30	Introduction to Machine Learning
Industry Elective Stream (Cloud Computing)	5EC30	Introduction to Virtualization and Cloud	5EC33	Cloud Computing Architecture and Deployment Models
Industry Elective Stream (Big Data Analytics )	5FC25	Cloud Computing for Business Analytics	5FC26	Business Intelligence (Tableau based Exercise)

### III YEAR II SEMESTER COURSE STRUCTURE

Sl. No	Code	Subject	L	T	P/D	C	Max. Marks	
							Int.	Ext.
1.		Professional Elective - III	3	1	-	3	25	75
2.		Professional Elective – IV	3	1	-	3	25	75
3.	5EC06	Computer Networks	3	1	-	3	25	75
4.	5E607	Compiler Design	3	1	-	3	25	75
5.	5FC05	Data Warehousing and Data Mining	3	1	-	3	25	75
6.		Open Elective- I	2	1	-	2	25	75
7.	5H677	Logical Reasoning	-	-	2	1	25	75
8.	5F587	Comprehensive Viva-Voce II	-	-	-	1	50	50
9.	5F581	Compiler Design and Computer Networks Lab	-	-	4	2	25	75
10.	5F779	Data Warehousing and Data Mining Lab	-	-	4	2	25	75
12	5F596	Technical Literature Review and Seminar – II	-	-	2	1	100	-
		<b>Total :</b>	<b>17</b>	<b>6</b>	<b>12</b>	<b>24</b>	<b>350</b>	<b>750</b>

Stream	Subject Code	Professional Elective –III (3-2)	Subject Code	Professional Elective –IV (3-2)
Advanced Courses	5FC17	Big Data Analytics	5FC14	Cloud Computing
Software Engineering	5EC13	Software Architecture and Design Patterns (SADP)	5EC12	Service Oriented Architecture (SOA)
Database Streams	5FC21	Database Security (DS)	5FC24	Advanced Database Systems
Computer Languages	5EC20	Scripting Languages (SL)	5FC19	Multimedia and Application Development
Machine Learning	5EC15	Artificial Intelligence	5EC16	Image processing
Industry Elective Stream (Cloud Computing)	5EC31	Management and Security in Cloud	5EC32	Social, Web and Mobile Analytics
Industry Elective Stream (Big Data Analytics)	5FC27	Hadoop and Big Data Analytics	5EC32	Social, Web and Mobile Analytics

Open Elective - 1		
Stream	Code	Subject
Management	5ZC03/5ZC20/ 5ZC05	Banking Operations, Insurance and Risk Management (BOIRM)/ Product and Services (PS)/ General Management and Entrepreneurship (GME)
Electronics	5CC53	Electronic Circuit Analysis and Design
Mechanical	5BC61	Fundamentals of Smart Materials
Biotechnology	5GC46	Applied Biology
Electrical	5AC46	Control Systems Engineering
Foreign Languages	5HC46	German
SAP Stream	5EC26	SAP-I : SAP ABAP Workbench Fundamentals

### IV YEAR I SEMESTER COURSE STRUCTURE

Sl. No.	Code	Subject	L	T	P/D	C	Max. Marks	
							Int.	Ext.
1		Open Elective- II	2	1	-	2	25	75
2		Open Elective- III	2	1	-	2	25	75
3	5FC12	Mobile Application Development	3	1	-	3	25	75
4	5GC49	Intellectual Property Rights	1	1	-	1	25	75
5		Professional Elective - V	3	1	-	3	25	75
6	5EC11	Software Automation and Testing	3	1	-	3	25	75
7	5FC11	Information Security	3	1	-	3	25	75
8	5F783	Project – I	-	1	3	3	100	-
9	5F784	Industry Oriented Mini Project	-	-	-	2	25	75
10	5EC75	Software Testing and Information Security Lab	-	-	4	2	25	75
11	5F578	Mobile Application Development Lab	-	-	4	2	25	75
12	5F797	Technical Literature Review and Seminar – III	-	-	2	1	100	-
<b>Total :</b>			<b>17</b>	<b>7</b>	<b>13</b>	<b>27</b>	<b>450</b>	<b>550</b>

Open Elective –II		
Stream	Code	Subjects
Management	5ZC19	Entrepreneurship, Project Management and Structured Finance/
Electronics	5CC49	Fundamentals of Communication Engineering
Mechanical	5BC63	Principles of Operations Research
Biotechnology	5GC47	Fundamentals of Bio Informatics
Electrical	5AC44	Fundamentals of Measurements and Instrumentation
Foreign Language	5HC41	French
SAP Stream	5EC27	SAP-II: SAP ABAP Workbench Concepts

Open Elective – III		
Stream	Code	Subjects
Management	5ZC08	Enterprise Resource Planning
Electronics	5CC50	Fundamentals of VLSI and Embedded Systems
Mechanical	5BC62	Basic Manufacturing Processes
Biotechnology	5GC50	Computational Biology
Electrical	5AC45	Fundamentals of Renewable Energy Sources
Foreign Language	5HC51	Spanish

Professional Elective -V		
Stream	Code	Subjects
Advanced Courses	5FC29	Data Sciences
Software Engineering	5EC24	Agile Software Development
Computer Languages	5EC22	Semantic Web & Social Networks (SWSN)
Machine Learning	5EC21/ 5EC25	Neural Networks (NN) / Soft Computing
SAP/ Database Stream	5FC17	Big Data Analytics (BDA)

#### IV YEAR II SEMESTER COURSE STRUCTURE

Sl.No.	Code	Subject	L	T	P/D	C	Max.	
							Int.	Ext.
1	5EC17	Human Computer Interface	4	-	-	4	25	75
2	5ZC02	Management Science	3	1	-	3	25	75
3	5F885	Project– II	-	-	20	12	50	150
4	5F888	Comprehensive Viva-Voce III	-	-	-	1	50	50
5	5F898	Technical Literature Review and Seminar – IV	-	-	2	1	100	-
		<b>Total :</b>	<b>7</b>	<b>-</b>	<b>22</b>	<b>21</b>	<b>225</b>	<b>375</b>

Note: All End Examinations (Theory and Practical) are of **Three** hours duration.

**T – Tutorial**

**L- Theory**

**P/D – Practical/Drawing**

**C- Credits**

**Int. - Internal Exam**

**Ext. - External Exam**