

**ANNA UNIVERSITY, CHENNAI**  
**AFFILIATED INSTITUTIONS**  
**R-2013**  
**B.TECH INFORMATION TECHNOLOGY**  
**I - VIII SEMESTERS CURRICULUM AND SYLLABUS**

**SEMESTER I**

SL. No.	COURSE CODE	COURSE TITLE	L	T	P	C
<b>THEORY</b>						
1.	HS6151	<u>Technical English – I</u>	3	1	0	4
2.	MA6151	<u>Mathematics – I</u>	3	1	0	4
3.	PH6151	<u>Engineering Physics – I</u>	3	0	0	3
4.	CY6151	<u>Engineering Chemistry – I</u>	3	0	0	3
5.	GE6151	<u>Computer Programming</u>	3	0	0	3
6.	GE6152	<u>Engineering Graphics</u>	2	0	3	4
<b>PRACTICALS</b>						
7.	GE6161	<u>Computer Practices Laboratory</u>	0	0	3	2
8.	GE6162	<u>Engineering Practices Laboratory</u>	0	0	3	2
9.	GE6163	<u>Physics and Chemistry Laboratory - I</u>	0	0	2	1
<b>TOTAL</b>			<b>17</b>	<b>2</b>	<b>11</b>	<b>26</b>

**SEMESTER II**

SL. No.	COURSE CODE	COURSE TITLE	L	T	P	C
<b>THEORY</b>						
1.	HS6251	Technical English – II	3	1	0	4
2.	MA6251	Mathematics – II	3	1	0	4
3.	PH6251	<u>Engineering Physics – II</u>	3	0	0	3
4.	CY6251	<u>Engineering Chemistry – II</u>	3	0	0	3
5.	CS6201	<u>Digital Principles and System Design</u>	3	0	0	3
	CS6202	<u>Programming and Data Structures I</u>	3	0	0	3
<b>PRACTICALS</b>						
7.	GE6262	<u>Physics and Chemistry Laboratory - II</u>	0	0	2	1
8.	IT6211	<u>Digital Laboratory</u>	0	0	3	2
9.	IT6212	<u>Programming and Data Structures Laboratory I</u>	0	0	3	2
<b>TOTAL</b>			<b>18</b>	<b>2</b>	<b>8</b>	<b>25</b>

**SEMESTER III**

SL. No.	COURSE CODE	COURSE TITLE	L	T	P	C
<b>THEORY</b>						
1.	MA6351	<u>Transforms and Partial Differential Equations</u>	3	1	0	4
2.	CS6301	<u>Programming and Data Structures II</u>	3	0	0	3
3.	CS6302	<u>Database Management Systems</u>	3	0	0	3
4.	CS6303	<u>Computer Architecture</u>	3	0	0	3
5.	CS6304	<u>Analog and Digital Communication</u>	3	0	0	3
6.	GE6351	<u>Environmental Science and Engineering</u>	3	0	0	3
<b>PRACTICAL</b>						
7.	IT6311	<u>Programming and Data Structures Laboratory II</u>	0	0	3	2
8.	IT6312	<u>Database Management Systems Laboratory</u>	0	0	3	2
9.	IT6313	<u>Digital Communication Laboratory</u>	0	0	3	2
<b>TOTAL</b>			<b>18</b>	<b>1</b>	<b>9</b>	<b>25</b>

**SEMESTER IV**

SL. No.	COURSE CODE	COURSE TITLE	L	T	P	C
<b>THEORY</b>						
1.	MA6453	<u>Probability and Queuing Theory</u>	3	1	0	4
2.	EC6504	<u>Microprocessor and Microcontroller</u>	3	0	0	3
3.	CS6402	<u>Design and Analysis of Algorithms</u>	3	0	0	3
4.	CS6401	<u>Operating Systems</u>	3	0	0	3
5.	CS6403	<u>Software Engineering</u>	3	0	0	3
<b>PRACTICAL</b>						
6.	IT6411	<u>Microprocessor and Microcontroller Laboratory</u>	0	0	3	2
7.	IT6412	<u>Operating Systems Laboratory</u>	0	0	3	2
8.	IT6413	<u>Software Engineering Laboratory</u>	0	0	3	2
<b>TOTAL</b>			<b>15</b>	<b>1</b>	<b>9</b>	<b>22</b>

**SEMESTER V**

SL. No.	COURSE CODE	COURSE TITLE	L	T	P	C
<b>THEORY</b>						
1.	CS6551	<u>Computer Networks</u>	3	0	0	3
2.	IT6501	<u>Graphics and Multimedia</u>	3	0	0	3
3.	CS6502	<u>Object Oriented Analysis and Design</u>	3	0	0	3
4.	IT6502	Digital Signal Processing	3	1	0	4
5.	IT6503	Web Programming	3	1	0	4
6.	EC6801	Wireless Communication	3	0	0	3
<b>PRACTICAL</b>						
7.	IT6511	<u>Networks Laboratory</u>	0	0	3	2
8.	IT6512	<u>Web Programming Laboratory</u>	0	0	3	2
9.	IT6513	<u>Case Tools Laboratory</u>	0	0	3	2
<b>TOTAL</b>			<b>18</b>	<b>2</b>	<b>9</b>	<b>26</b>

**SEMESTER VI**

SL. No.	COURSE CODE	COURSE TITLE	L	T	P	C
<b>THEORY</b>						
1.	CS6601	<u>Distributed Systems</u>	3	0	0	3
2.	IT6601	<u>Mobile Computing</u>	3	0	0	3
3.	CS6659	<u>Artificial Intelligence</u>	3	0	0	3
4.	CS6660	<u>Compiler Design</u>	3	0	0	3
5.	IT6602	<u>Software Architectures</u>	3	0	0	3
6.		Elective I	3	0	0	3
<b>PRACTICAL</b>						
7.	IT6611	<u>Mobile Application Development Laboratory</u>	0	0	3	2
8.	IT6612	<u>Compiler Laboratory</u>	0	0	3	2
9.	GE6674	<u>Communication and Soft Skills - Laboratory Based</u>	0	0	4	2
<b>TOTAL</b>			<b>18</b>	<b>0</b>	<b>10</b>	<b>24</b>

### SEMESTER VII

SL. No.	COURSE CODE	COURSE TITLE	L	T	P	C
<b>THEORY</b>						
1.	IT6701	<u>Information Management</u>	3	0	0	3
2.	CS6701	<u>Cryptography and Network Security</u>	3	0	0	3
3.	IT6702	<u>Data Ware Housing and Data Mining</u>	3	0	0	3
4.	CS6703	<u>Grid and Cloud Computing</u>	3	0	0	3
5.		Elective II	3	0	0	3
<b>PRACTICAL</b>						
6.	IT6711	<u>Data Mining Laboratory</u>	0	0	3	2
7.	IT6712	<u>Security Laboratory</u>	0	0	3	2
8.	IT6713	<u>Grid and Cloud Computing Laboratory</u>	0	0	3	2
<b>TOTAL</b>			<b>15</b>	<b>0</b>	<b>9</b>	<b>21</b>

### SEMESTER VIII

SL. No.	COURSE CODE	COURSE TITLE	L	T	P	C
<b>THEORY</b>						
1.	IT6801	Service Oriented Architecture	3	0	0	3
2.		Elective III	3	0	0	3
3.		Elective IV	3	0	0	3
		Elective V	3	0	0	3
<b>PRACTICAL</b>						
4.	IT6811	Project Work	0	0	12	6
<b>TOTAL</b>			<b>12</b>	<b>0</b>	<b>12</b>	<b>18</b>

**TOTAL NO. OF CREDITS: 187**

### LIST OF ELECTIVES

#### SEMESTER VI – ELECTIVE I

S.NO.	COURSE CODE	COURSE TITLE	L	T	P	C
1.	IT6001	Advanced Database Technology	3	0	0	3
2.	IT6002	Information Theory and Coding Techniques	3	0	0	3
3.	CS6001	C# and .Net Programming	3	0	0	3
4.	GE6757	Total Quality Management	3	0	0	3
5.	CS6012	Soft Computing	3	0	0	3
6.	GE6084	Human Rights	3	0	0	3

**SEMESTER VII – ELECTIVE II**

S.NO.	CODE NO.	COURSE TITLE	L	T	P	C
1.	IT6003	Multimedia Compression Techniques	3	0	0	3
2.	IT6004	Software Testing	3	0	0	3
3.	IT6005	Digital Image Processing	3	0	0	3
4.	CS6003	Ad hoc and Sensor Networks	3	0	0	3
5.	IT6006	Data Analytics	3	0	0	3

**SEMESTER VIII – ELECTIVE III**

S.NO.	CODE NO.	COURSE TITLE	L	T	P	C
1.	IT6007	Free and Open Source Software	3	0	0	3
2.	IT6008	Network Programming and Management	3	0	0	3
3.	GE6075	Professional Ethics in Engineering	3	0	0	3
4.	CS6503	Theory of Computation	3	0	0	3
5.	IT6009	Web Engineering	3	0	0	3
6.	GE6083	Disaster Management	3	0	0	3

**SEMESTER VIII – ELECTIVE IV**

S.NO.	CODE NO.	COURSE TITLE	L	T	P	C
1.	BM6005	Bio Informatics	3	0	0	3
2.	CS6004	Cyber Forensics	3	0	0	3
3.	CS6702	Graph Theory and Applications	3	0	0	3
4.	CS6010	Social Network Analysis	3	0	0	3
5.	IT6010	Business Intelligence	3	0	0	3
6.	CS6013	Foundation Skills in Integrated Product Development	3	0	0	3

**SEMESTER VIII - ELECTIVE V**

S.NO.	CODE NO.	COURSE TITLE	L	T	P	C
1.	IT6011	Knowledge Management	3	0	0	3
2.	IT6012	TCP/ IP Design and Implementation	3	0	0	3
3.	CS6008	Human Computer Interaction	3	0	0	3
4.	IT6013	Software Quality Assurance	3	0	0	3
5.	MG6088	Software Project Management	3	0	0	3