

**St. Xavier's Catholic College of Engineering  
Nagercoil. 629003.**

**Curriculum/Syllabus of courses that include experiential learning through project work/field work/internship during the year**

**ANNA UNIVERSITY, CHENNAIAFFILIATED INSTITUTIONS  
B.TECH INFORMATION TECHNOLOGY REGULATIONS – 2017  
CHOICE BASED CREDIT SYSTEM  
I - VIII SEMESTERS CURRICULA AND SYLLABI**

Sl. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	HS8151	Communicative English	HS	4	4	0	0	4
2.	MA8151	Engineering Mathematics - I	BS	4	4	0	0	4
3.	PH8151	Engineering Physics	BS	3	3	0	0	3
4.	CY8151	Engineering Chemistry	BS	3	3	0	0	3
5.	GE8151	Problem Solving and Python Programming	ES	3	3	0	0	3
6.	GE8152	Engineering Graphics	ES	6	2	0	4	4
<b>PRACTICALS</b>								
7.	GE8161	Problem Solving and Python Programming Laboratory	ES	4	0	0	4	2
8.	BS8161	Physics and Chemistry Laboratory	BS	4	0	0	4	2
<b>TOTAL</b>				<b>31</b>	<b>19</b>	<b>0</b>	<b>12</b>	<b>25</b>

Sl. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	HS8251	Technical English	HS	4	4	0	0	4
2.	MA8251	Engineering Mathematics - II	BS	4	4	0	0	4
3.	PH8252	Physics for Information Science	BS	3	3	0	0	3
4.	BE8255	Basic Electrical, Electronics and Measurement Engineering	ES	3	3	0	0	3
5.	IT8201	Information Technology Essentials	PC	3	3	0	0	3
6.	CS8251	Programming in C	PC	3	3	0	0	3
<b>PRACTICALS</b>								
7.	GE8261	Engineering Practices Laboratory	ES	4	0	0	4	2

8.	CS8261	C Programming Laboratory	PC	4	0	0	4	2
9.	IT8211	Information Technology Essentials Laboratory	PC	2	0	0	2	1
<b>TOTAL</b>				<b>30</b>	<b>20</b>	<b>0</b>	<b>10</b>	<b>25</b>

SI. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA8351	Discrete Mathematics	BS	4	4	0	0	4
2.	CS8351	Digital Principles and System Design	ES	4	4	0	0	4
3.	CS8391	Data Structures	PC	3	3	0	0	3
4.	CS8392	Object Oriented Programming	PC	3	3	0	0	3
5.	EC8394	Analog and Digital Communication	PC	3	3	0	0	3
<b>PRACTICALS</b>								
6.	CS8381	Data Structures Laboratory	PC	4	0	0	4	2
7.	CS8383	Object Oriented Programming Laboratory	PC	4	0	0	4	2
8.	CS8382	Digital Systems Laboratory	ES	4	0	0	4	2
9.	HS8381	Interpersonal Skills/Listening & Speaking	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>31</b>	<b>17</b>	<b>0</b>	<b>14</b>	<b>24</b>

SI. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA8391	Probability and Statistics	BS	4	4	0	0	4
2.	CS8491	Computer Architecture	PC	3	3	0	0	3
3.	CS8492	Database Management Systems	PC	3	3	0	0	3
4.	CS8451	Design and Analysis of Algorithms	PC	3	3	0	0	3
5.	CS8493	Operating Systems	PC	3	3	0	0	3
6.	GE8291	Environmental Science and Engineering	HS	3	3	0	0	3
<b>PRACTICALS</b>								
7.	CS8481	Database Management Systems Laboratory	PC	4	0	0	4	2
8.	CS8461	Operating Systems Laboratory	PC	4	0	0	4	2
9.	HS8461	Advanced Reading and Writing	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>29</b>	<b>19</b>	<b>0</b>	<b>10</b>	<b>24</b>

SI. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA8551	Algebra and Number Theory	BS	4	4	0	0	4
2.	CS8591	Computer Networks	PC	3	3	0	0	3

3.	EC8691	Microprocessors and Microcontrollers	PC	3	3	0	0	3
4.	IT8501	Web Technology	PC	3	3	0	0	3
5.	CS8494	Software Engineering	PC	3	3	0	0	3
6.		Open Elective I	OE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	EC8681	Microprocessors and Microcontrollers Laboratory	PC	4	0	0	4	2
8.	CS8581	Networks Laboratory	PC	4	0	0	4	2
9.	IT8511	Web Technology Laboratory	PC	4	0	0	4	2
<b>TOTAL</b>				<b>31</b>	<b>19</b>	<b>0</b>	<b>12</b>	<b>25</b>

SI. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	IT8601	Computational Intelligence	PC	3	3	0	0	3
2.	CS8592	Object Oriented Analysis and Design	PC	3	3	0	0	3
3.	IT8602	Mobile Communication	PC	3	3	0	0	3
4.	CS8091	Big Data Analytics	PC	3	3	0	0	3
5.	CS8092	Computer Graphics and Multimedia	PC	3	3	0	0	3
6.		Professional Elective I	PE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	CS8662	Mobile Application Development Laboratory	PC	4	0	0	4	2
8.	CS8582	Object Oriented Analysis and Design Laboratory	PC	4	0	0	4	2
9.	IT8611	Mini Project	EEC	2	0	0	2	1
10.	HS8581	Professional Communication	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>30</b>	<b>18</b>	<b>0</b>	<b>12</b>	<b>24</b>

SI.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MG8591	Principles of Management	HS	3	3	0	0	3
2.	CS8792	Cryptography and Network Security	PC	3	3	0	0	3
3.	CS8791	Cloud Computing	PC	3	3	0	0	3
4.		Open Elective II	OE	3	3	0	0	3
5.		Professional Elective II	PE	3	3	0	0	3
6.		Professional Elective III	PE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	IT8711	FOSS and Cloud Computing Laboratory	PC	4	0	0	4	2
8.	IT8761	Security Laboratory	PC	4	0	0	4	2
<b>TOTAL</b>				<b>26</b>	<b>18</b>	<b>0</b>	<b>8</b>	<b>22</b>

Sl. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.		Professional Elective IV	PE	3	3	0	0	3
2.		Professional Elective V	PE	3	3	0	0	3
<b>PRACTICALS</b>								
3.	IT8811	Project Work	EEC	20	0	0	20	10
<b>TOTAL</b>				<b>26</b>	<b>6</b>	<b>0</b>	<b>20</b>	<b>16</b>

**ANNA UNIVERSITY, CHENNAI  
AFFILIATED INSTITUTIONS  
MASTER OF COMPUTER APPLICATIONS  
REGULATIONS – 2017  
CHOICE BASED CREDIT SYSTEM  
CURRICULA AND SYLLABI**

**SEMESTER I**

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA5161	Mathematical Foundations for Computer Applications	FC	4	4	0	0	4
2.	MC5101	Computer Organization	PC	3	3	0	0	3
3.	MC5102	Problem solving and Programming	PC	3	3	0	0	3
4.	MC5103	Database Management systems	PC	3	3	0	0	3
5.	MC5104	Data Structures	PC	3	3	0	0	3
<b>PRACTICALS</b>								
6.	MC5111	Data Structures Laboratory	PC	4	0	0	4	2
7.	MC5112	Database Management Systems Laboratory	PC	4	0	0	4	2
8.	MC5113	Communication Skills Laboratory	EEC	3	1	0	2	2
<b>TOTAL</b>				<b>27</b>	<b>17</b>	<b>0</b>	<b>10</b>	<b>22</b>

**SEMESTER II**

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MC5201	Object Oriented Programming	PC	3	3	0	0	3

2.	MC5202	Embedded Systems	PC	3	3	0	0	3
3.	MC5203	Software engineering	PC	3	3	0	0	3
4.	MC5204	Operating Systems	PC	3	3	0	0	3
5.	MC5205	Computer Graphics and Multimedia	PC	3	3	0	0	3
<b>PRACTICALS</b>								
6.	MC5211	Object Oriented Programing Laboratory	PC	4	0	0	4	2
7.	MC5212	Graphics and Multimedia Laboratory	PC	4	0	0	4	2
8.	MC5213	Operating Systems and Embedded Systems Laboratory	PC	4	0	0	4	2
<b>TOTAL</b>				<b>27</b>	<b>15</b>	<b>0</b>	<b>12</b>	<b>21</b>

### SEMESTER III

L. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MC5301	Advanced Data Structures and Algorithms	PC	3	3	0	0	3
2.	MC5302	Computer Networks	PC	3	3	0	0	3
3.	MC5303	Web Programming Essentials	PC	3	3	0	0	3
4.	MC5304	Programming with Java	PC	3	3	0	0	3
5.	MC5305	Object Oriented Analysis and Design	PC	5	3	2	0	4
<b>PRACTICALS</b>								
6.	MC5311	Data Structures and Algorithms Laboratory	PC	4	0	0	4	2
7.	MC5312	Web Programming Laboratory	PC	4	0	0	4	2
8.	MC5313	Programming with Java Laboratory	PC	4	0	0	4	2
<b>TOTAL</b>				<b>29</b>	<b>15</b>	<b>2</b>	<b>12</b>	<b>22</b>

### SEMESTER IV

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MC5401	Resource Management Techniques	PC	3	3	0	0	3
2.	MC5402	Mobile Computing	PC	3	3	0	0	3
3.	MC5403	Advanced Databases and Datamining	PC	3	3	0	0	3

4.	MC5404	Web Application Development	PC	5	3	2	0	4
5.		Professional Elective - I	PE	3	3	0	0	3
<b>PRACTICALS</b>								
6.	MC5411	Mobile Application Development Laboratory	PC	4	0	0	4	2
7.	MC5412	Web Application Development Laboratory	PC	4	0	0	4	2
8.	MC5413	Technical Seminar and Report Writing	PC	2	0	0	2	1
<b>TOTAL</b>				<b>27</b>	<b>15</b>	<b>2</b>	<b>10</b>	<b>21</b>

**SEMESTER V**

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MC5501	Cloud Computing	PC	3	3	0	0	3
2.	MC5502	Big Data Analytics	PC	3	3	0	0	3
3.	MC5503	Software Testing and Quality Assurance	PC	3	3	0	0	3
4.		Professional Elective II	PE	3	3	0	0	3
5.		Professional Elective III	PE	3	3	0	0	3
<b>PRACTICALS</b>								
6.	MC5511	Cloud and Big Data Laboratory	PC	4	0	0	4	2
7.	MC5512	Software Testing Laboratory	PC	4	0	0	4	2
8.	MC5513	Mini Project	EEC	4	0	0	4	2
<b>TOTAL</b>				<b>27</b>	<b>15</b>	<b>0</b>	<b>12</b>	<b>21</b>

**SEMESTER VI**

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>PRACTICALS</b>								
1.	MC5611	Project Work	EEC	24	0	0	24	12
<b>TOTAL</b>				<b>24</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>12</b>

**ANNA UNIVERSITY, CHENNAI**  
**AFFILIATED INSTITUTIONS**  
**B.E. COMPUTER SCIENCE AND ENGINEERING**  
**REGULATIONS – 2017**  
**CHOICE BASED CREDIT SYSTEM**  
**SEMESTER I**

Sl. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	HS8151	Communicative English	HS	4	4	0	0	4
2.	MA8151	Engineering Mathematics - I	BS	4	4	0	0	4
3.	PH8151	Engineering Physics	BS	3	3	0	0	3
4.	CY8151	Engineering Chemistry	BS	3	3	0	0	3
5.	GE8151	Problem Solving and Python Programming	ES	3	3	0	0	3
6.	GE8152	Engineering Graphics	ES	6	2	0	4	4
<b>PRACTICALS</b>								
7.	GE8161	Problem Solving and Python Programming Laboratory	ES	4	0	0	4	2
8.	BS8161	Physics and Chemistry Laboratory	BS	4	0	0	4	2
<b>TOTAL</b>				<b>31</b>	<b>19</b>	<b>0</b>	<b>12</b>	<b>25</b>

**SEMESTER II**

Sl.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	HS8251	Technical English	HS	4	4	0	0	4
2.	MA8251	Engineering Mathematics - II	BS	4	4	0	0	4
3.	PH8252	Physics for Information Science	BS	3	3	0	0	3
4.	BE8255	Basic Electrical, Electronics and Measurement Engineering	ES	3	3	0	0	3
5.	GE8291	Environmental Science and Engineering	HS	3	3	0	0	3
6.	CS8251	Programming in C	PC	3	3	0	0	3
<b>PRACTICALS</b>								
7.	GE8261	Engineering Practices Laboratory	ES	4	0	0	4	2
8.	CS8261	C Programming Laboratory	PC	4	0	0	4	2
<b>TOTAL</b>				<b>28</b>	<b>20</b>	<b>0</b>	<b>8</b>	<b>24</b>

**SEMESTER III**

SI.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA8351	Discrete Mathematics	BS	4	4	0	0	4
2.	CS8351	Digital Principles and System Design	ES	4	4	0	0	4
3.	CS8391	Data Structures	PC	3	3	0	0	3
4.	CS8392	Object Oriented Programming	PC	3	3	0	0	3
5.	EC8395	Communication Engineering	ES	3	3	0	0	3
<b>PRACTICALS</b>								
6.	CS8381	Data Structures Laboratory	PC	4	0	0	4	2
7.	CS8383	Object Oriented Programming Laboratory	PC	4	0	0	4	2
8.	CS8382	Digital Systems Laboratory	ES	4	0	0	4	2
9.	HS8381	Interpersonal Skills/Listening & Speaking	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>31</b>	<b>17</b>	<b>0</b>	<b>14</b>	<b>24</b>

**SEMESTER IV**

SI. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA8402	Probability and Queueing Theory	BS	4	4	0	0	4
2.	CS8491	Computer Architecture	PC	3	3	0	0	3
3.	CS8492	Database Management Systems	PC	3	3	0	0	3
4.	CS8451	Design and Analysis of Algorithms	PC	3	3	0	0	3
5.	CS8493	Operating Systems	PC	3	3	0	0	3
6.	CS8494	Software Engineering	PC	3	3	0	0	3
<b>PRACTICALS</b>								
7.	CS8481	Database Management Systems Laboratory	PC	4	0	0	4	2
8.	CS8461	Operating Systems Laboratory	PC	4	0	0	4	2
9.	HS8461	Advanced Reading and Writing	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>29</b>	<b>19</b>	<b>0</b>	<b>10</b>	<b>24</b>

**SEMESTER V**

SI. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA8551	Algebra and Number Theory	BS	4	4	0	0	4
2.	CS8591	Computer Networks	PC	3	3	0	0	3
3.	EC8691	Microprocessors and Microcontrollers	PC	3	3	0	0	3
4.	CS8501	Theory of Computation	PC	3	3	0	0	3
5.	CS8592	Object Oriented Analysis and Design	PC	3	3	0	0	3
6.		Open Elective I	OE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	EC8681	Microprocessors and Microcontrollers Laboratory	PC	4	0	0	4	2
8.	CS8582	Object Oriented Analysis and Design Laboratory	PC	4	0	0	4	2
9.	CS8581	Networks Laboratory	PC	4	0	0	4	2
<b>TOTAL</b>				<b>31</b>	<b>19</b>	<b>0</b>	<b>12</b>	<b>25</b>

**SEMESTER VI**

SI. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	CS8651	Internet Programming	PC	3	3	0	0	3
2.	CS8691	Artificial Intelligence	PC	3	3	0	0	3
3.	CS8601	Mobile Computing	PC	3	3	0	0	3
4.	CS8602	Compiler Design	PC	5	3	0	2	4
5.	CS8603	Distributed Systems	PC	3	3	0	0	3
6.		Professional Elective I	PE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	CS8661	Internet Programming Laboratory	PC	4	0	0	4	2
8.	CS8662	Mobile Application Development Laboratory	PC	4	0	0	4	2
9.	CS8611	Mini Project	EEC	2	0	0	2	1
10.	HS8581	Professional Communication	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>32</b>	<b>18</b>	<b>0</b>	<b>14</b>	<b>25</b>

**SEMESTER VII**

SI. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MG8591	Principles of Management	HS	3	3	0	0	3
2.	CS8792	Cryptography and Network Security	PC	3	3	0	0	3
3.	CS8791	Cloud Computing	PC	3	3	0	0	3
4.		Open Elective II	OE	3	3	0	0	3
5.		Professional Elective II	PE	3	3	0	0	3
6.		Professional Elective III	PE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	CS8711	Cloud Computing Laboratory	PC	4	0	0	4	2
8.	IT8761	Security Laboratory	PC	4	0	0	4	2
<b>TOTAL</b>				<b>26</b>	<b>18</b>	<b>0</b>	<b>8</b>	<b>22</b>

**SEMESTER VIII**

SI. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.		Professional Elective IV	PE	3	3	0	0	3
2.		Professional Elective V	PE	3	3	0	0	3
<b>PRACTICALS</b>								
3.	CS8811	Project Work	EEC	20	0	0	20	10
<b>TOTAL</b>				<b>26</b>	<b>6</b>	<b>0</b>	<b>20</b>	<b>16</b>

**ANNA UNIVERSITY, CHENNAI  
AFFILIATED INSTITUTIONS  
REGULATIONS – 2017  
CHOICE BASED CREDIT SYSTEM**

**MASTER OF BUSINESS ADMINISTRATION (FULL TIME)  
CURRICULA AND SYLLABI I TO IV SEMESTERS  
SEMESTER - I**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	BA5101	Economic Analysis for Business	PC	4	4	0	0	4
2.	BA5102	Principles of Management	PC	3	3	0	0	3
3.	BA5103	Accounting for Management	PC	4	4	0	0	4
4.	BA5104	Legal Aspects of Business	PC	3	3	0	0	3
5.	BA5105	Organizational Behaviour	PC	3	3	0	0	3
6.	BA5106	Statistics for Management	PC	3	3	0	0	3
7.	BA5107	Total Quality Management	PC	3	3	0	0	3
<b>PRACTICALS</b>								
8	BA5111	Spoken and Written Communication #	EEC	4	0	0	4	2
<b>TOTAL</b>				<b>27</b>	<b>23</b>	<b>0</b>	<b>4</b>	<b>25</b>

**SEMESTER - II**

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	BA5201	Applied Operations Research	PC	3	3	0	0	3
2.	BA5202	Business Research Methods	PC	3	3	0	0	3
3.	BA5203	Financial Management	PC	3	3	0	0	3
4.	BA5204	Human Resource Management	PC	3	3	0	0	3
5.	BA5205	Information Management	PC	3	3	0	0	3
6.	BA5206	Operations Management	PC	3	3	0	0	3
7.	BA5207	Marketing Management	PC	4	4	0	0	4
<b>PRACTICALS</b>								
8	BA5211	Data Analysis and Business Modelling	EEC	4	0	0	4	2
<b>TOTAL</b>				<b>26</b>	<b>22</b>	<b>0</b>	<b>4</b>	<b>24</b>

**SUMMER SEMESTER (4 WEEKS)**

**SUMMER TRAINING**

Summer Training -The training report along with the company certificate should be submitted within the two weeks of the reopening date of 3<sup>rd</sup> semester. The training report should be around 40 pages containing the details of training undergone, the departments wherein he was trained with duration (chronological diary), along with the type of managerial skills developed during training. The training report should be sent to the Controller of Examinations by the HOD through the Principal, before the last working day of the 3<sup>rd</sup> Semester.

**SEMESTER - III**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	BA5301	International Business Management	PC	3	3	0	0	3
2	BA5302	Strategic Management	PC	3	3	0	0	3
3		Professional Elective I***	PE	3	3	0	0	3
4		Professional Elective II***	PE	3	3	0	0	3
5		Professional Elective III***	PE	3	3	0	0	3
6		Professional Elective IV***	PE	3	3	0	0	3
7		Professional Elective V***	PE	3	3	0	0	3
8		Professional Elective VI***	PE	3	3	0	0	3
<b>PRACTICALS</b>								
9	BA5311	Summer Training	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>26</b>	<b>24</b>	<b>0</b>	<b>2</b>	<b>25</b>

\*\*\* Chosen electives should be from two streams of management of three electives each.

**SEMESTER - IV**

SI. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>PRACTICALS</b>								
1.	BA5411	Project Work	EEC	24	0	0	24	12
<b>TOTAL</b>				<b>0</b>	<b>0</b>	<b>24</b>	<b>12</b>	

**ANNA UNIVERSITY, CHENNAI  
AFFILIATED INSTITUTIONS  
B.E. CIVIL ENGINEERING  
REGULATIONS – 2017**

**CHOICE BASED CREDIT SYSTEM  
I TO VIII SEMESTERS CURRICULA & SYLLABI  
SEMESTER I**

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	HS8151	Communicative English	HS	4	4	0	0	4
2.	MA8151	Engineering Mathematics - I	BS	4	4	0	0	4
3.	PH8151	Engineering Physics	BS	3	3	0	0	3
4.	CY8151	Engineering Chemistry	BS	3	3	0	0	3

5.	GE8151	Problem Solving and Python Programming	ES	3	3	0	0	3
6.	GE8152	Engineering Graphics	ES	6	2	0	4	4
<b>PRACTICALS</b>								
7.	GE8161	Problem Solving and Python Programming Laboratory	ES	4	0	0	4	2
8.	BS8161	Physics and Chemistry Laboratory	BS	4	0	0	4	2
<b>TOTAL</b>				<b>31</b>	<b>19</b>	<b>0</b>	<b>12</b>	<b>25</b>

### SEMESTER II

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	HS8251	Technical English	HS	4	4	0	0	4
2.	MA8251	Engineering Mathematics - II	BS	4	4	0	0	4
3.	PH8201	Physics For Civil Engineering	BS	3	3	0	0	3
4.	BE8251	Basic Electrical and Electronics Engineering	ES	3	3	0	0	3
5.	GE8291	Environmental Science and Engineering	HS	3	3	0	0	3
6.	GE8292	Engineering Mechanics	ES	5	3	2	0	4
<b>PRACTICALS</b>								
7.	GE8261	Engineering Practices Laboratory	ES	4	0	0	4	2
8.	CE8211	Computer Aided Building Drawing	PC	4	0	0	4	2
<b>TOTAL</b>				<b>30</b>	<b>20</b>	<b>2</b>	<b>8</b>	<b>25</b>

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA8353	Transforms and Partial Differential Equations	BS	4	4	0	0	4
2.	CE8301	Strength of Materials I	PC	3	3	0	0	3
3.	CE8302	Fluid Mechanics	PC	3	3	0	0	3
4.	CE8351	Surveying	PC	3	3	0	0	3
5.	CE8391	Construction Materials	PC	3	3	0	0	3
6.	CE8392	Engineering Geology	ES	3	3	0	0	3
<b>PRACTICALS</b>								

7.	CE8311	Construction Materials Laboratory	PC	4	0	0	4	2
8.	CE8361	Surveying Laboratory	PC	4	0	0	4	2
9.	HS8381	Interpersonal Skills / Listening and Speaking	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>29</b>	<b>19</b>	<b>0</b>	<b>10</b>	<b>24</b>

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA8491	Numerical Methods	BS	4	4	0	0	4
2.	CE8401	Construction Techniques and Practices	PC	3	3	0	0	3
3.	CE8402	Strength of Materials II	PC	3	3	0	0	3
4.	CE8403	Applied Hydraulic Engineering	PC	3	3	0	0	3
5.	CE8404	Concrete Technology	PC	3	3	0	0	3
6.	CE8491	Soil Mechanics	PC	3	3	0	0	3
<b>PRACTICALS</b>								
7.	CE8481	Strength of Materials Laboratory	PC	4	0	0	4	2
8.	CE8461	Hydraulic Engineering Laboratory	PC	4	0	0	4	2
9.	HS8461	Advanced Reading and Writing	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>29</b>	<b>19</b>	<b>0</b>	<b>10</b>	<b>24</b>

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	CE8501	Design of Reinforced Cement Concrete Elements	PC	5	3	2	0	4
2.	CE8502	Structural Analysis I	PC	3	3	0	0	3
3.	EN8491	Water Supply Engineering	PC	3	3	0	0	3
4.	CE8591	Foundation Engineering	PC	3	3	0	0	3
5.		Professional Elective I	PE	3	3	0	0	3
6.		Open Elective I*	OE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	CE8511	Soil Mechanics Laboratory	PC	4	0	0	4	2
8.	CE8512	Water and Waste Water Analysis Laboratory	PC	4	0	0	4	2
9.	CE8513	Survey Camp (2 weeks -During IV Semester)	EEC	0	0	0	0	2
<b>TOTAL</b>				<b>28</b>	<b>18</b>	<b>2</b>	<b>8</b>	<b>25</b>

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	CE8601	Design of Steel Structural Elements	PC	5	3	2	0	4
2.	CE8602	Structural Analysis II	PC	3	3	0	0	3
3.	CE8603	Irrigation Engineering	PC	3	3	0	0	3
4.	CE8604	Highway Engineering	PC	3	3	0	0	3
5.	EN8592	Wastewater Engineering	PC	3	3	0	0	3
6.		Professional Elective II	PE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	CE8611	Highway Engineering Laboratory	PC	4	0	0	4	2
8.	CE8612	Irrigation and Environmental Engineering Drawing	PC	4	0	0	4	2
9.	HS8581	Professional Communication	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>30</b>	<b>18</b>	<b>2</b>	<b>10</b>	<b>24</b>

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	CE8701	Estimation, Costing and Valuation Engineering	PC	3	3	0	0	3
2.	CE8702	Railways, Airports, Docks and Harbour Engineering	PC	3	3	0	0	3
3.	CE8703	Structural Design and Drawing	PC	5	3	0	2	4
4.		Professional Elective III	PE	3	3	0	0	3
5.		Open Elective II*	OE	3	3	0	0	3
<b>PRACTICALS</b>								
6.	CE8711	Creative and Innovative Project (Activity Based - Subject Related)	EEC	4	0	0	4	2
7.	CE8712	Industrial Training (4 weeks During VI Semester - Summer)	EEC	0	0	0	0	2
<b>TOTAL</b>				<b>21</b>	<b>15</b>	<b>0</b>	<b>6</b>	<b>20</b>

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.		Professional Elective IV	PE	3	3	0	0	3
2.		Professional Elective V	PE	3	3	0	0	3
<b>PRACTICALS</b>								
3.	CE8811	Project Work	EEC	20	0	0	20	10
<b>TOTAL</b>				<b>26</b>	<b>6</b>	<b>0</b>	<b>20</b>	<b>16</b>

**CE8513 SURVEY CAMP**

L T P C

**(During IV semester Summer Vacation 2 weeks)**

**- - - 2**

The objective of the survey camp is to enable the students to get practical training in the field work. Groups of not more than six members in a group will carry out each exercise in survey camp. The camp must involve work on a large area of not less than 40 acres outside the campus (Survey camp should not be conducted inside the campus). At the end of the camp, each student shall have mapped and contoured the area. The camp record shall include all original field observations, calculations and plots.

Two weeks Survey Camp will be conducted during summer vacation in the following activities:

1. Traverse - using Total station
2. Contouring
  - (i). Radial tachometric contouring - Radial Line at Every 45 Degree and Length not less than 60 Meter on each Radial Line

- (ii). Block Level/ By squares of size at least 100 Meter x 100 Meter atleast 20 Meter interval
- (III). L.S & C.S - Road and canal alignment for a Length of not less than 1 Kilo Meter atleast L.S at Every 30M and C.S at every 90 M
- 3. Offset of Buildings and Plotting the Location
- 4. Sun observation to determine azimuth (guidelines to be given to the students)
- 5. Use of GPS to determine latitude and longitude and locate the survey camp location
- 6. Traversing using GPS
- 7. Curve setting by deflection angle

Apart from above students may be given survey exercises in other area also based on site condition to give good exposure on survey.

<b>CE8711</b>	<b>CREATIVE AND INNOVATIVE PROJECT</b>	<b>L T P C</b>
	<b>(Activity Based - Subject Related)</b>	<b>0 0 4 2</b>

**OBJECTIVE:**

- To use the knowledge acquired in Civil Engineering to do a mini project, which allows the students to come up with designs, fabrication or algorithms and programs expressing their ideas in a novel way.

**TOTAL: 60 PERIODS**

**STRATEGY**

To identify a topic of interest in consultation with Faculty/Supervisor. Review the literature and gather information pertaining to the chosen topic. State the objectives and develop a methodology to achieve the objectives. Carryout the design / fabrication or develop computer code. Demonstrate the novelty of the project through the results and outputs.

<b>CE8712</b>	<b>INDUSTRIAL TRAINING</b>	<b>L T P C</b>
	<b>(4 Weeks During VI Semester – Summer)</b>	<b>0 0 0 2</b>

**OBJECTIVE:**

- To train the students in field work so as to have a firsthand knowledge of practical problems in carrying out engineering tasks. To develop skills in facing and solving the field problems.

**STRATEGY:**

The students individually undertake training in reputed civil engineering companies for the specified duration. At the end of the training, a report on the work done will be prepared and presented. The students will be evaluated through a viva-voce examination by a team of internal staff.

**OUTCOMES:**

At the end of the course the student will be able to understand

- The intricacies of implementation textbook knowledge into practice
- The concepts of developments and implementation of new techniques

<b>CE8811</b>	<b>PROJECTWORK</b>	<b>L T P C 0 0 20 10</b>
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**OBJECTIVE:**

- To develop the ability to solve a specific problem right from its identification and literature review till the successful solution of the same. To train the students in preparing project reports and to face reviews and viva voce examination.

**STRATEGY:**

The student works on a topic approved by the head of the department under the guidance of a faculty member and prepares a comprehensive project report after completing the work to the satisfaction. The student will be evaluated based on the report and the viva voce examination by a team of examiners including one external examiner.

**TOTAL: 300 PERIODS**

**OUTCOME:**

- On Completion of the project work students will be in a position to take up any challenging practical problems and find solution by formulating proper methodology.

**ANNA UNIVERSITY, CHENNAI**

**AFFILIATED INSTITUTIONS**

**M.E. CONSTRUCTION ENGINEERING AND MANAGEMENT**

**REGULATIONS – 2017**

**CHOICE BASED CREDIT SYSTEM**

**CURRICULA AND SYLLABI**

**SEMESTER I**

S.No.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA5165	<u>Statistical Methods for Engineers</u>	FC	4	4	0	0	4
2.	CN5101	<u>Modern Construction Materials</u>	PC	3	3	0	0	3
3.	CN5102	<u>Construction Equipment</u>	PC	3	3	0	0	3
4.	CN5103	<u>Construction Planning, Scheduling and Control</u>	PC	3	3	0	0	3
5.		Professional Elective I	PE	3	3	0	0	3
6.		Professional Elective II	PE	3	3	0	0	3
<b>TOTAL</b>				<b>19</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>19</b>

**SEMESTER II**

S.No.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	CN5201	<u>Advanced Construction Techniques</u>	PC	3	3	0	0	3
2.	CN5202	<u>Contract Laws and Regulations</u>	PC	3	3	0	0	3
3.	CN5203	<u>Computer Applications in Construction Engineering and Planning</u>	PC	3	3	0	0	3

4.	CN5204	<u>Economics and Finance Management in Construction</u>	PC	3	3	0	0	3
5.		Professional Elective III	PE	3	3	0	0	3
6.		Professional Elective IV	PE	3	3	0	0	3
<b>PRACTICAL</b>								
7.	CN5211	<u>Advanced Construction Engineering and Computing Techniques Laboratory</u>	PC	4	0	0	4	2
8.	CN5212	Practical Training I (2 Weeks)	EEC	-	-	-	-	1
<b>TOTAL</b>				<b>22</b>	<b>18</b>	<b>0</b>	<b>4</b>	<b>21</b>

### SEMESTER III

S.No.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	CN5301	<u>Quality Control and Assurance in Construction</u>	PC	3	3	0	0	3
2.		Professional Elective V	PE	3	3	0	0	3
3.		Professional Elective VI	PE	3	3	0	0	3
<b>PRACTICAL</b>								
4.	CN5311	<u>Practical Training II (2 Weeks)</u>	EEC	-	-	-	-	1
5.	CN5312	Seminar	EEC	2	0	0	2	1
6.	CN5313	Project Work (Phase I)	EEC	12	0	0	12	6
<b>TOTAL</b>				<b>23</b>	<b>9</b>	<b>0</b>	<b>14</b>	<b>17</b>

### SEMESTER IV

S.No.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>PRACTICAL</b>								
1.	CN5411	Practical Training III (2 Weeks)	EEC	-	-	-	-	1
2.	CN5412	Project Work (Phase II)	EEC	24	0	0	24	12
<b>TOTAL</b>				<b>24</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>13</b>

**ANNA UNIVERSITY, CHENNAI  
AFFILIATED INSTITUTIONS**

**M.E. STRUCTURAL ENGINEERING  
REGULATIONS – 2017  
CHOICE BASED CREDIT SYSTEM  
CURRICULA AND SYLLABI**

**SEMESTER I**

S.No.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA5151	<u>Advanced Mathematical Methods</u>	FC	4	4	0	0	4
2.	ST5101	<u>Advanced Concrete Structures</u>	PC	3	3	0	0	3
3.	ST5102	<u>Dynamics of Structures</u>	PC	3	3	0	0	3
4.	ST5103	<u>Theory of Elasticity and Plasticity</u>	PC	3	3	0	0	3
5.		Professional Elective I	PE	3	3	0	0	3
6.		Professional Elective II	PE	3	3	0	0	3
<b>TOTAL</b>				<b>19</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>19</b>

### SEMESTER II

S.No.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	ST5201	Advanced Steel Structures	PC	3	3	0	0	3
2.	ST5202	Stability of Structures	PC	3	3	0	0	3
3.	ST5203	Experimental Techniques	PC	3	3	0	0	3
4.	ST5204	Finite Element Analysis of Structures	PC	3	3	0	0	3
5.		Professional Elective III	PE	3	3	0	0	3
6.		Professional Elective IV	PE	3	3	0	0	3
<b>PRACTICAL</b>								
7.	ST5211	<u>Advanced Structural Engineering Laboratory</u>	PC	4	0	0	4	2
8.	ST5212	<u>Practical Training I (2 weeks)</u>	EEC	0	0	0	0	1
<b>TOTAL</b>				<b>22</b>	<b>18</b>	<b>0</b>	<b>4</b>	<b>21</b>

### SEMESTER III

S.No.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	ST5301	<u>Earthquake Analysis and Design of Structures</u>	PC	3	3	0	0	3
2.		Professional Elective V	PE	3	3	0	0	3
3.		Professional Elective VI	PE	3	3	0	0	3
<b>PRACTICAL</b>								
4.	ST5311	<u>Practical Training II (2 weeks)</u>	EEC	0	0	0	0	1

5.	ST5312	Seminar	EEC	2	0	0	2	1
6.	ST5313	Project Work (Phase I)	EEC	12	0	0	12	6
<b>TOTAL</b>				<b>23</b>	<b>9</b>	<b>0</b>	<b>14</b>	<b>17</b>

### SEMESTER IV

S.No.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>PRACTICAL</b>								
1.	ST5411	Practical Training III (2 weeks)	EEC	0	0	0	0	1
2.	ST5412	Project Work (Phase II)	EEC	24	0	0	24	12
<b>TOTAL</b>				<b>24</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>13</b>

### ANNA UNIVERSITY, CHENNAI AFFILIATED INSTITUTIONS

### B.E. ELECTRICAL AND ELECTRONICS ENGINEERING REGULATIONS – 2017 CHOICE BASED CREDIT SYSTEM

### I TO VIII SEMESTERS CURRICULA & SYLLABI

### SEMESTER I

S.NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	HS8151	Communicative English	HS	4	4	0	0	4
2.	MA8151	Engineering Mathematics - I	BS	4	4	0	0	4
3.	PH8151	Engineering Physics	BS	3	3	0	0	3
4.	CY8151	Engineering Chemistry	BS	3	3	0	0	3
5.	GE8151	Problem Solving and Python Programming	ES	3	3	0	0	3
6.	GE8152	Engineering Graphics	ES	6	2	0	4	4
<b>PRACTICALS</b>								
7.	GE8161	Problem Solving and Python Programming Laboratory	ES	4	0	0	4	2
8.	BS8161	Physics and Chemistry Laboratory	BS	4	0	0	4	2
<b>TOTAL</b>				<b>31</b>	<b>19</b>	<b>0</b>	<b>12</b>	<b>25</b>

### SEMESTER II

S.NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	HS8251	Technical English	HS	4	4	0	0	4

2.	MA8251	Engineering Mathematics - II	BS	4	4	0	0	4
3.	PH8253	Physics for Electronics Engineering	BS	3	3	0	0	3
4.	BE8252	Basic Civil and Mechanical Engineering	ES	4	4	0	0	4
5.	EE8251	Circuit Theory	PC	4	2	2	0	3
6.	GE8291	Environmental Science and Engineering	HS	3	3	0	0	3
<b>PRACTICALS</b>								
7.	GE8261	Engineering Practices Laboratory	ES	4	0	0	4	2
8.	EE8261	Electric Circuits Laboratory	PC	4	0	0	4	2
<b>TOTAL</b>				<b>30</b>	<b>20</b>	<b>2</b>	<b>8</b>	<b>25</b>

### SEMESTER III

S.NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA8353	Transforms and Partial Differential Equations	BS	4	4	0	0	4
2.	EE8351	Digital Logic Circuits	PC	4	2	2	0	3
3.	EE8391	Electromagnetic Theory	PC	4	2	2	0	3
4.	EE8301	Electrical Machines - I	PC	4	2	2	0	3
5.	EC8353	Electron Devices and Circuits	ES	3	3	0	0	3
6.	ME8792	Power Plant Engineering	ES	3	3	0	0	3
<b>PRACTICALS</b>								
7.	EC8311	Electronics Laboratory	ES	4	0	0	4	2
8.	EE8311	Electrical Machines Laboratory - I	PC	4	0	0	4	2
<b>TOTAL</b>				<b>30</b>	<b>16</b>	<b>6</b>	<b>8</b>	<b>23</b>

### SEMESTER IV

S.NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA8491	Numerical Methods	BS	4	4	0	0	4
2.	EE8401	Electrical Machines - II	PC	4	2	2	0	3
3.	EE8402	Transmission and Distribution	PC	3	3	0	0	3
4.	EE8403	Measurements and Instrumentation	PC	3	3	0	0	3
5.	EE8451	Linear Integrated Circuits and Applications	PC	3	3	0	0	3
6.	IC8451	Control Systems	PC	5	3	2	0	4
<b>PRACTICALS</b>								
7.	EE8411	Electrical Machines Laboratory - II	PC	4	0	0	4	2
8.	EE8461	Linear and Digital Integrated Circuits Laboratory	PC	4	0	0	4	2
9.	EE8412	Technical Seminar	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>32</b>	<b>18</b>	<b>4</b>	<b>10</b>	<b>25</b>

### SEMESTER V

S.NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	EE8501	Power System Analysis	PC	3	3	0	0	3
2.	EE8551	Microprocessors and Microcontrollers	PC	3	3	0	0	3
3.	EE8552	Power Electronics	PC	3	3	0	0	3
4.	EE8591	Digital Signal Processing	PC	4	2	2	0	3
5.	CS8392	Object Oriented Programming	ES	3	3	0	0	3
6.		Open Elective I*	OE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	EE8511	Control and Instrumentation Laboratory	PC	4	0	0	4	2
8.	HS8581	Professional Communication	EEC	2	0	0	2	1
9.	CS8383	Object Oriented Programming Laboratory	ES	4	0	0	4	2
<b>TOTAL</b>				<b>29</b>	<b>17</b>	<b>2</b>	<b>10</b>	<b>23</b>

### SEMESTER VI

S.NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	EE8601	Solid State Drives	PC	3	3	0	0	3
2.	EE8602	Protection and Switchgear	PC	3	3	0	0	3
3.	EE8691	Embedded Systems	ES	3	3	0	0	3
4.		Professional Elective I	PE	3	3	0	0	3
5.		Professional Elective II	PE	3	3	0	0	3
<b>PRACTICALS</b>								
6.	EE8661	Power Electronics and Drives Laboratory	PC	4	0	0	4	2
7.	EE8681	Microprocessors and Microcontrollers Laboratory	PC	4	0	0	4	2
8.	EE8611	Mini Project	EEC	4	0	0	4	2
<b>TOTAL</b>				<b>27</b>	<b>15</b>	<b>0</b>	<b>12</b>	<b>21</b>

S.NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	EE8701	High Voltage Engineering	PC	3	3	0	0	3
2.	EE8702	Power System Operation and Control	PC	3	3	0	0	3
3.	EE8703	Renewable Energy Systems	PC	3	3	0	0	3
4.		Open Elective II*	OE	3	3	0	0	3
5.		Professional Elective III	PE	3	3	0	0	3
6.		Professional Elective IV	PE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	EE8711	Power System Simulation Laboratory	PC	4	0	0	4	2
8.	EE8712	Renewable Energy Systems Laboratory	PC	4	0	0	4	2
<b>TOTAL</b>				<b>26</b>	<b>18</b>	<b>0</b>	<b>8</b>	<b>22</b>

### SEMESTER VIII

S.NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.		Professional Elective V	PE	3	3	0	0	3
2.		Professional Elective VI	PE	3	3	0	0	3
<b>PRACTICALS</b>								
3.	EE8811	Project Work	EEC	20	0	0	20	10
<b>TOTAL</b>				<b>26</b>	<b>6</b>	<b>0</b>	<b>20</b>	<b>16</b>

<b>EE8811</b>	<b>PROJECT WORK</b>	<b>L T P C</b>
		<b>0 0 20 10</b>

#### OBJECTIVES:

- To develop the ability to solve a specific problem right from its identification and literature review till the successful solution of the same. To train the students in preparing project reports and to face reviews and viva voce examination.

The students in a group of 3 to 4 works on a topic approved by the head of the department under the guidance of a faculty member and prepares a comprehensive project report after completing the work to the satisfaction of the supervisor. The progress of the project is evaluated based on a minimum of three reviews. The review committee may be constituted by the Head of the Department. A project report is required at the end of the semester. The project work is evaluated based on oral presentation and the project report jointly by external and internal examiners constituted by the Head of the Department.

**TOTAL: 300 PERIODS**

#### OUTCOMES:

- On Completion of the project work students will be in a position to take up any challenging

practical problems and find solution by formulating proper methodology.

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**CHOICE BASED CREDIT SYSTEM**  
**I - VIII SEMESTERS CURRICULA AND SYLLABI**

**SEMESTER I**

SI. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	HS8151	Communicative English	HS	4	4	0	0	4
2.	MA8151	Engineering Mathematics - I	BS	4	4	0	0	4
3.	PH8151	Engineering Physics	BS	3	3	0	0	3
4.	CY8151	Engineering Chemistry	BS	3	3	0	0	3
5.	GE8151	Problem Solving and Python Programming	ES	3	3	0	0	3
6.	GE8152	Engineering Graphics	ES	6	2	0	4	4
<b>PRACTICALS</b>								
7.	GE8161	Problem Solving and Python Programming Laboratory	ES	4	0	0	4	2
8.	BS8161	Physics and Chemistry Laboratory	BS	4	0	0	4	2
<b>TOTAL</b>				<b>31</b>	<b>19</b>	<b>0</b>	<b>12</b>	<b>25</b>

**SEMESTER II**

SI. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	HS8251	Technical English	HS	4	4	0	0	4
2.	MA8251	Engineering Mathematics - II	BS	4	4	0	0	4
3.	PH8253	Physics for Electronics Engineering	BS	3	3	0	0	3
4.	BE8254	Basic Electrical and Instrumentation Engineering	ES	3	3	0	0	3
5.	EC8251	Circuit Analysis	PC	4	4	0	0	4
6.	EC8252	Electronic Devices	PC	3	3	0	0	3
<b>PRACTICALS</b>								
7.	EC8261	Circuits and Devices Laboratory	PC	4	0	0	4	2
8.	GE8261	Engineering Practices Laboratory	ES	4	0	0	4	2
<b>TOTAL</b>				<b>29</b>	<b>21</b>	<b>0</b>	<b>8</b>	<b>25</b>

### SEMESTER III

SI. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA8352	Linear Algebra and Partial Differential Equations	BS	4	4	0	0	4
2.	EC8393	Fundamentals of Data Structures In C	ES	3	3	0	0	3
3.	EC8351	Electronic Circuits- I	PC	3	3	0	0	3
4.	EC8352	Signals and Systems	PC	4	4	0	0	4
5.	EC8392	Digital Electronics	PC	3	3	0	0	3
6.	EC8391	Control Systems Engineering	PC	3	3	0	0	3
<b>PRACTICALS</b>								
7.	EC8381	Fundamentals of Data Structures in C Laboratory	ES	4	0	0	4	2
8.	EC8361	Analog and Digital Circuits Laboratory	PC	4	0	0	4	2
9.	HS8381	Interpersonal Skills/Listening & Speaking	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>30</b>	<b>20</b>	<b>0</b>	<b>10</b>	<b>25</b>

### SEMESTER IV

SI. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA8451	Probability and Random Processes	BS	4	4	0	0	4
2.	EC8452	Electronic Circuits II	PC	3	3	0	0	3
3.	EC8491	Communication Theory	PC	3	3	0	0	3
4.	EC8451	Electromagnetic Fields	PC	4	4	0	0	4
5.	EC8453	Linear Integrated Circuits	PC	3	3	0	0	3
6.	GE8291	Environmental Science and Engineering	HS	3	3	0	0	3
<b>PRACTICALS</b>								
7.	EC8461	Circuits Design and Simulation Laboratory	PC	4	0	0	4	2
8.	EC8462	Linear Integrated Circuits Laboratory	PC	4	0	0	4	2
<b>TOTAL</b>				<b>28</b>	<b>20</b>	<b>0</b>	<b>8</b>	<b>24</b>

### SEMESTER V

Sl. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	EC8501	Digital Communication	PC	3	3	0	0	3
2.	EC8553	Discrete-Time Signal Processing	PC	4	4	0	0	4
3.	EC8552	Computer Architecture and Organization	PC	3	3	0	0	3
4.	EC8551	Communication Networks	PC	3	3	0	0	3
5.		Professional Elective I	PE	3	3	0	0	3
6.		Open Elective I	OE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	EC8562	Digital Signal Processing Laboratory	PC	4	0	0	4	2
8.	EC8561	Communication Systems Laboratory	PC	4	0	0	4	2
9.	EC8563	Communication Networks Laboratory	PC	4	0	0	4	2
<b>TOTAL</b>				<b>31</b>	<b>19</b>	<b>0</b>	<b>12</b>	<b>25</b>

### SEMESTER VI

Sl. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	EC8691	Microprocessors and Microcontrollers	PC	3	3	0	0	3
2.	EC8095	VLSI Design	PC	3	3	0	0	3
3.	EC8652	Wireless Communication	PC	3	3	0	0	3
4.	MG8591	Principles of Management	HS	3	3	0	0	3
5.	EC8651	Transmission Lines and RF Systems	PC	3	3	0	0	3
6.		Professional Elective -II	PE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	EC8681	Microprocessors and Microcontrollers Laboratory	PC	4	0	0	4	2
8.	EC8661	VLSI Design Laboratory	PC	4	0	0	4	2
9.	EC8611	Technical Seminar	EEC	2	0	0	2	1
10.	HS8581	Professional Communication	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>30</b>	<b>18</b>	<b>0</b>	<b>12</b>	<b>24</b>

Sl.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	EC8701	Antennas and Microwave Engineering	PC	3	3	0	0	3
2.	EC8751	Optical Communication	PC	3	3	0	0	3
3.	EC8791	Embedded and Real Time Systems	PC	3	3	0	0	3
4.	EC8702	Ad hoc and Wireless Sensor Networks	PC	3	3	0	0	3
5.		Professional Elective -III	PE	3	3	0	0	3
6.		Open Elective - II	OE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	EC8711	Embedded Laboratory	PC	4	0	0	4	2
8.	EC8761	Advanced Communication Laboratory	PC	4	0	0	4	2
<b>TOTAL</b>				<b>26</b>	<b>18</b>	<b>0</b>	<b>8</b>	<b>22</b>

### SEMESTER VIII

Sl. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.		Professional Elective IV	PE	3	3	0	0	3
2.		Professional Elective V	PE	3	3	0	0	3
<b>PRACTICALS</b>								
3.	EC8811	Project Work	EEC	20	0	0	20	10
<b>TOTAL</b>				<b>26</b>	<b>6</b>	<b>0</b>	<b>20</b>	<b>16</b>

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**CURRICULA AND SYLLABI**

**SEMESTER I**

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA5152	Applied Mathematics for Electronics Engineers	FC	4	4	0	0	4
2.	AP5151	Advanced Digital System Design	PC	3	3	0	0	3
3.	AP5152	Advanced Digital Signal Processing	PC	5	3	2	0	4
4.	AP5191	Embedded System Design	PC	3	3	0	0	3
5.	AP5101	Sensors, Actuators and Interface Electronics	PC	3	3	0	0	3
6.		Professional Elective I	PC	3	3	0	0	3
<b>PRACTICALS</b>								
7.	AP5111	Electronic System Design Laboratory I	PC	4	0	0	4	2
<b>TOTAL</b>				<b>25</b>	<b>19</b>	<b>2</b>	<b>4</b>	<b>22</b>

**SEMESTER II**

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	AP5251	Soft Computing and Optimization Techniques	PC	3	3	0	0	3
2.	AP5252	ASIC and FPGA Design	PC	3	3	0	0	3
3.	AP5291	Hardware - Software Co-design	PC	3	3	0	0	3
4.	AP5292	Digital Image Processing	PC	3	3	0	0	3
5.		Professional Elective II	PE	3	3	0	0	3
6.		Professional Elective III	PE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	AP5211	Electronic System Design Laboratory II	PC	4	0	0	4	2
8.	CP5281	Term Paper Writing and Seminar	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>24</b>	<b>18</b>	<b>0</b>	<b>6</b>	<b>21</b>

### SEMESTER III

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	AP5301	Advanced Microprocessors and Microcontrollers Architectures	PC	3	3	0	0	3
2.		Professional Elective IV	PE	3	3	0	0	3
3.		Professional Elective V	PE	3	3	0	0	3
<b>PRACTICALS</b>								
4.	AP5311	Project Work Phase I	EEC	12	0	0	12	6
<b>TOTAL</b>				<b>21</b>	<b>9</b>	<b>0</b>	<b>12</b>	<b>15</b>

### SEMESTER IV

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>PRACTICALS</b>								
1.	AP5411	Project Work Phase II	EEC	24	0	0	24	12

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### SEMESTER - I

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA5154	Applied Mathematics for Communication Engineers	FC	4	4	0	0	4
2.	CU5191	Advanced Radiation Systems	PC	3	3	0	0	3
3.	CU5151	Advanced Digital Communication Techniques	PC	3	3	0	0	3
4.	AP5152	Advanced Digital Signal Processing	PC	5	3	2	0	4
5.	CU5192	Optical Networks	PC	3	3	0	0	3
6.		Professional Elective I	PE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	CU5161	Communication Systems Laboratory	PC	4	0	0	4	2
<b>TOTAL</b>				<b>25</b>	<b>19</b>	<b>2</b>	<b>4</b>	<b>22</b>

**SEMESTER II**

<b>SL. NO</b>	<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CATEGORY</b>	<b>CONTACT PERIODS</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>THEORY</b>								
1.	CU5291	Advanced Wireless Communication Systems	PC	3	3	0	0	3
2.	CU5201	<u>MIC and RF System Design</u>	PC	3	3	0	0	3
3.	CU5292	<u>Electromagnetic Interference and Compatibility</u>	PC	3	3	0	0	3
4.		Professional Elective II	PE	3	3	0	0	3
5.		Professional Elective III	PE	3	3	0	0	3
6.		Professional Elective IV	PE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	CU5211	<u>RF System Design Laboratory</u>	PC	4	0	0	4	2
8.	CP5281	Term Paper Writing and Seminar	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>24</b>	<b>18</b>	<b>0</b>	<b>6</b>	<b>21</b>

### SEMESTER III

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	CU5301	Millimeter Wave Communication	PC	3	3	0	0	3
2.		Professional Elective V	PE	3	3	0	0	3
3.		Professional Elective VI	PE	3	3	0	0	3
<b>PRACTICALS</b>								
4.	CU5311	Project Work Phase I	EEC	12	0	0	12	6
<b>TOTAL</b>				<b>21</b>	<b>9</b>	<b>0</b>	<b>12</b>	<b>15</b>

### SEMESTER IV

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>PRACTICALS</b>								
1.	CU5411	Project Work Phase II	EEC	24	0	0	24	12
<b>TOTAL</b>				<b>24</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>12</b>

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**CURRICULA AND SYLLABI**

### SEMESTER I

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA5157	Applied Mathematics for Medical Engineers	FC	4	4	0	0	4
2.	BM5151	Human Anatomy and Physiology	PC	3	3	0	0	3
3.	BM5191	Bio Signal Processing	PC	3	3	0	0	3
4.	MX5101	Medical Instrumentation	PC	3	3	0	0	3
5.	MX5102	Biomedical Equipments	PC	3	3	0	0	3
6.		Professional Elective I	PE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	MX5111	Medical Instrumentation Laboratory	PC	4	0	0	4	2
<b>TOTAL</b>				<b>23</b>	<b>19</b>	<b>0</b>	<b>4</b>	<b>21</b>

**SEMESTER II**

<b>SL. NO</b>	<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CATEGORY</b>	<b>CONTACT PERIODS</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>THEORY</b>								
1.	BM5291	Applied Medical Image Processing	PC	3	3	0	0	3
2.	MX5201	Medical Imaging and Radio Therapy	PC	3	3	0	0	3
3.	MX5202	Biomechanics	PC	3	3	0	0	3
4.	MX5203	Health Care and Hospital Equipment Management	PC	3	3	0	0	3
5.		Professional Elective II	PE	3	3	0	0	3
6.		Professional Elective III	PE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	MX5211	Data Acquisition and Processing Laboratory	PC	4	0	0	4	2
<b>TOTAL</b>				<b>22</b>	<b>18</b>	<b>0</b>	<b>4</b>	<b>20</b>

**SEMESTER III**

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MX5301	Human Assist Devices	PC	3	3	0	0	3
2.		Professional Elective IV	PE	3	3	0	0	3
3.		Professional Elective V	PE	3	3	0	0	3
<b>PRACTICALS</b>								
4.	BM 5361	Hospital / Biomedical Industry Training	EEC	4	0	0	4	2
5.	MX5311	Project Work Phase I	EEC	12	0	0	12	6
<b>TOTAL</b>				<b>25</b>	<b>9</b>	<b>0</b>	<b>16</b>	<b>17</b>

**SEMESTER IV**

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>PRACTICALS</b>								
1.	MX5411	Project Work Phase II	EEC	24	0	0	24	12
<b>TOTAL</b>				<b>24</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>12</b>

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**SEMESTER - I**

SL.NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA5154	Applied Mathematics for Communication Engineers	FC	4	4	0	0	4
2.	AP5152	Advanced Digital Signal Processing	PC	5	3	2	0	4
3.	CU5151	Advanced Digital Communication Techniques	PC	3	3	0	0	3
4.	CU5291	Advanced Wireless Communications Systems	PC	3	3	0	0	3
5.	NC5101	Communication Networks Modelling and Simulation	PC	3	3	0	0	3
6.		Professional Elective I	PE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	CU5161	Communication Systems Laboratory	PC	4	0	0	4	2
<b>TOTAL</b>				<b>25</b>	<b>19</b>	<b>2</b>	<b>4</b>	<b>22</b>

**SEMESTER II**

SI.NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
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<b>THEORY</b>								
1.	NC5291	Communication Network Security	PC	3	3	0	0	3
2.	NC5251	Cognitive Radio Networks	PC	3	3	0	0	3
3.	NC5252	Advanced Wireless Networks	PC	3	3	0	0	3
4.		Professional Elective II	PE	3	3	0	0	3
5.		Professional Elective III	PE	3	3	0	0	3
6.		Professional Elective IV	PE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	NC5211	Networking Laboratory	PC	4	0	0	4	2
8.	CP5281	Term Paper Writing and Seminar	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>24</b>	<b>18</b>	<b>0</b>	<b>6</b>	<b>21</b>

**SEMESTER III**

SI.NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	CP5292	Internet of Things	PC	3	3	0	0	3
2.		Professional Elective V	PE	3	3	0	0	3
3.		Professional Elective VI	PE	3	3	0	0	3
<b>PRACTICALS</b>								
4.	NC5311	Project Work Phase I	EEC	12	0	0	12	6
<b>TOTAL</b>				<b>21</b>	<b>9</b>	<b>0</b>	<b>12</b>	<b>15</b>

**SEMESTER IV**

SI. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>PRACTICALS</b>								
1.	NC5411	Project Work Phase II	EEC	24	0	0	24	12
<b>TOTAL</b>				<b>24</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>12</b>

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**I TO VIII SEMESTERS CURRICULA AND SYLLABI****SEMESTER I**

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	HS8151	Communicative English	HS	4	4	0	0	4
2.	MA8151	Engineering Mathematics - I	BS	4	4	0	0	4
3.	PH8151	Engineering Physics	BS	3	3	0	0	3
4.	CY8151	Engineering Chemistry	BS	3	3	0	0	3
5.	GE8151	Problem Solving and Python Programming	ES	3	3	0	0	3
6.	GE8152	Engineering Graphics	ES	6	2	0	4	4
<b>PRACTICALS</b>								
7.	GE8161	Problem Solving and Python Programming Laboratory	ES	4	0	0	4	2
8.	BS8161	Physics and Chemistry Laboratory	BS	4	0	0	4	2
<b>TOTAL</b>				<b>31</b>	<b>19</b>	<b>0</b>	<b>12</b>	<b>25</b>

**SEMESTER II**

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	HS8251	Technical English	HS	4	4	0	0	4
2.	MA8251	Engineering Mathematics - II	BS	4	4	0	0	4
3.	PH8251	Materials Science	BS	3	3	0	0	3
4.	BE8253	Basic Electrical, Electronics and Instrumentation Engineering	ES	3	3	0	0	3
5.	GE8291	Environmental Science and Engineering	HS	3	3	0	0	3
6.	GE8292	Engineering Mechanics	ES	5	3	2	0	4
<b>PRACTICALS</b>								
7.	GE8261	Engineering Practices Laboratory	ES	4	0	0	4	2
8.	BE8261	Basic Electrical, Electronics and Instrumentation Engineering Laboratory	ES	4	0	0	4	2
<b>TOTAL</b>				<b>30</b>	<b>20</b>	<b>2</b>	<b>8</b>	<b>25</b>

**SEMESTER III**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA8353	Transforms and Partial Differential Equations	BS	4	4	0	0	4
2.	ME8391	Engineering Thermodynamics	PC	5	3	2	0	4
3.	CE8394	Fluid Mechanics and Machinery	ES	4	4	0	0	4
4.	ME8351	Manufacturing Technology - I	PC	3	3	0	0	3
5.	EE8353	Electrical Drives and Controls	ES	3	3	0	0	3
<b>PRACTICAL</b>								
6.	ME8361	Manufacturing Technology Laboratory - I	PC	4	0	0	4	2
7.	ME8381	Computer Aided Machine Drawing	PC	4	0	0	4	2
8.	EE8361	Electrical Engineering Laboratory	ES	4	0	0	4	2
9.	HS8381	Interpersonal Skills / Listening & Speaking	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>33</b>	<b>17</b>	<b>2</b>	<b>14</b>	<b>25</b>

**SEMESTER IV**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA8452	Statistics and Numerical Methods	BS	4	4	0	0	4
2.	ME8492	Kinematics of Machinery	PC	3	3	0	0	3
3.	ME8451	Manufacturing Technology - II	PC	3	3	0	0	3
4.	ME8491	Engineering Metallurgy	PC	3	3	0	0	3
5.	CE8395	Strength of Materials for Mechanical Engineers	ES	3	3	0	0	3
6.	ME8493	Thermal Engineering- I	PC	3	3	0	0	3
<b>PRACTICAL</b>								
7.	ME8462	Manufacturing Technology Laboratory - II	PC	4	0	0	4	2
8.	CE8381	Strength of Materials and Fluid Mechanics and Machinery Laboratory	ES	4	0	0	4	2
9.	HS8461	Advanced Reading and Writing	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>29</b>	<b>19</b>	<b>0</b>	<b>10</b>	<b>24</b>

### SEMESTER V

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	ME8595	Thermal Engineering- II	PC	3	3	0	0	3
2.	ME8593	Design of Machine Elements	PC	3	3	0	0	3
3.	ME8501	Metrology and Measurements	PC	3	3	0	0	3
4.	ME8594	Dynamics of Machines	PC	4	4	0	0	4
5.		Open Elective I	OE	3	3	0	0	3
<b>PRACTICAL</b>								
6.	ME8511	Kinematics and Dynamics Laboratory	PC	4	0	0	4	2
7.	ME8512	Thermal Engineering Laboratory	PC	4	0	0	4	2
8.	ME8513	Metrology and Measurements Laboratory	PC	4	0	0	4	2
<b>TOTAL</b>				<b>28</b>	<b>16</b>	<b>0</b>	<b>12</b>	<b>22</b>

### SEMESTER VI

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	ME8651	Design of Transmission Systems	PC	3	3	0	0	3
2.	ME8691	Computer Aided Design and Manufacturing	PC	3	3	0	0	3
3.	ME8693	Heat and Mass Transfer	PC	5	3	2	0	4
4.	ME8692	Finite Element Analysis	PC	3	3	0	0	3
5.	ME8694	Hydraulics and Pneumatics	PC	3	3	0	0	3
6.		Professional Elective - I	PE	3	3	0	0	3
<b>PRACTICAL</b>								
7.	ME8681	CAD / CAM Laboratory	PC	4	0	0	4	2
8.	ME8682	Design and Fabrication Project	EEC	4	0	0	4	2
9.	HS8581	Professional Communication	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>30</b>	<b>18</b>	<b>2</b>	<b>10</b>	<b>24</b>

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	ME8792	Power Plant Engineering	PC	3	3	0	0	3
2.	ME8793	Process Planning and Cost Estimation	PC	3	3	0	0	3
3.	ME8791	Mechatronics	PC	3	3	0	0	3
4.		Open Elective - II	OE	3	3	0	0	3
5.		Professional Elective - II	PE	3	3	0	0	3
6.		Professional Elective - III	PE	3	3	0	0	3
<b>PRACTICAL</b>								
7.	ME8711	Simulation and Analysis Laboratory	PC	4	0	0	4	2
8.	ME8781	Mechatronics Laboratory	PC	4	0	0	4	2
9.	ME8712	Technical Seminar	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>28</b>	<b>18</b>	<b>0</b>	<b>10</b>	<b>23</b>

#### SEMESTER VIII

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MG8591	Principles of Management	HS	3	3	0	0	3
2.		Professional Elective- IV	PE	3	3	0	0	3
<b>PRACTICAL</b>								
3.	ME8811	Project Work	EEC	20	0	0	20	10
<b>TOTAL</b>				<b>29</b>	<b>9</b>	<b>0</b>	<b>20</b>	<b>16</b>

### ANNA UNIVERSITY, CHENNAI AFFILIATED INSTITUTIONS

#### M.E. COMPUTER SCIENCE AND ENGINEERING REGULATIONS – 2017

#### CHOICE BASED CREDIT SYSTEM

#### CURRICULA AND SYLLABI

#### SEMESTER I

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA5160	Applied Probability and Statistics	FC	4	4	0	0	4
2.	CP5151	Advanced Data Structures and Algorithms	PC	4	4	0	0	4
3.	CP5152	Advanced Computer Architecture	PC	3	3	0	0	3
4.	CP5153	Operating System Internals	PC II	3	3	0	0	3
5.	CP5154	Advanced Software Engineering	PC	3	3	0	0	3
6.	CP5191	Machine Learning Techniques	PC	3	3	0	0	3

**SEMESTER II**

<b>SL. NO</b>	<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CATEGORY</b>	<b>CONTACT PERIODS</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>THEORY</b>								
1.	CP5201	Network Design and Technologies	PC	3	3	0	0	3
2.	CP5291	Security Practices	PC	3	3	0	0	3
3.	CP5292	Internet of Things	PC	3	3	0	0	3
4.	CP5293	Big Data Analytics	PC	3	3	0	0	3
5.		Professional Elective -I	PE	3	3	0	0	3
6.		Professional Elective -II	PE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	CP5261	Data Analytics Laboratory	PC	4	0	0	4	2
8.	CP5281	Term Paper Writing and Seminar	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>24</b>	<b>18</b>	<b>0</b>	<b>6</b>	<b>21</b>

**SEMESTER III**

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.		Professional Elective -III	PE	3	3	0	0	3
2.		Professional Elective -IV	PE	3	3	0	0	3
3.		Professional Elective -V	PE	3	3	0	0	3
<b>PRACTICALS</b>								
4.	CP5311	Project Work Phase - I	EEC	12	0	0	12	6
<b>TOTAL</b>				<b>21</b>	<b>9</b>	<b>0</b>	<b>12</b>	<b>15</b>

**SEMESTER IV**

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>PRACTICALS</b>								
1.	CP5411	Project Work Phase - II	EEC	24	0	0	24	12
<b>TOTAL</b>				<b>24</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>12</b>

**ANNA UNIVERSITY, CHENNAI  
AFFILIATED INSTITUTIONS  
REGULATIONS 2017**

**M.E. ENERGY ENGINEERING  
CHOICE BASED CREDIT SYSTEM  
I TO IV SEMESTERS (FULL TIME) CURRICULUM AND SYLLABUS**

**SEMESTER I**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1	MA5153	Advanced Numerical Methods	FC	5	3	2	0	4
2	EY5151	Fluid Mechanics and Heat Transfer	FC	3	3	0	0	3
3	EY5101	Thermodynamic Analysis of Energy Systems	FC	5	3	2	0	4
4	EY5152	Energy Resources	FC	3	3	0	0	3
5		Professional Elective I	PE	3	3	0	0	3
6		Professional Elective II	PE	3	3	0	0	3
<b>PRACTICAL</b>								
7	EY5111	Energy Laboratory	PC	4	0	0	4	2
<b>TOTAL</b>				<b>26</b>	<b>18</b>	<b>4</b>	<b>4</b>	<b>22</b>

**SEMESTER II**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1	EY5201	Energy Conservation in Thermal Systems	PC	3	3	0	0	3
2	EY5202	Energy Conversion Techniques	PC	3	3	0	0	3

3	EY5203	Measurement and Control for Energy Systems	PC	3	3	0	0	3
4		Professional Elective III	PE	3	3	0	0	3
5		Professional Elective IV	PE	3	3	0	0	3
6		Professional Elective V	PE	3	3	0	0	3
<b>PRACTICAL</b>								
7	TE5261	Thermal Systems Simulation Laboratory	PC	4	0	0	4	2
8	EY5211	Technical Seminar - I	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>24</b>	<b>18</b>	<b>0</b>	<b>6</b>	<b>21</b>

**SEMESTER III**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1.	EY5301	Energy Conservation in Electrical Systems	PC	3	3	0	0	3
2.		Professional Elective VI	PE	3	3	0	0	3
3.		Professional Elective VII	PE	3	3	0	0	3
<b>PRACTICAL</b>								
4.	EY5311	Technical Seminar - II	EEC	2	0	0	2	1
5.	EY5312	Project Work Phase - I	EEC	12	0	0	12	6
<b>TOTAL</b>				<b>23</b>	<b>9</b>	<b>0</b>	<b>14</b>	<b>16</b>

**SEMESTER IV**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>PRACTICAL</b>								
1	EY5411	Project Work Phase - II	EEC	24	0	0	24	12
<b>TOTAL</b>				<b>24</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>12</b>

**ANNA UNIVERSITY, CHENNAI  
AFFILIATED INSTITUTIONS  
REGULATIONS – 2017  
CHOICE BASED CREDIT SYSTEM**

**M.E. POWER ELECTRONICS AND DRIVES (FULL TIME)  
CURRICULUM AND SYLLABUS I TO IV SEMESTERS**

**SEMESTER I**

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA5155	Applied Mathematics for Electrical Engineers	FC	4	4	0	0	4
2.	PX5101	Power Semiconductor Devices	PC	3	3	0	0	3
3.	PX5151	Analysis of Electrical Machines	PC	3	3	0	0	3
4.	PX5152	Analysis and Design of Power Converters	PC	3	3	0	0	3
5.	IN5152	System Theory	PC	5	3	2	0	4
6.		Professional Elective I	PE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	PX5111	Power Electronics Circuits Lab	PC	4	0	0	4	2
<b>TOTAL</b>				<b>25</b>	<b>19</b>	<b>2</b>	<b>4</b>	<b>22</b>

**SEMESTER II**

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								

1.	PX5201	Analysis and Design of Inverters	PC	3	3	0	0	3
2.	PX5202	Solid State Drives	PC	5	3	2	0	4
3.	PX5251	Special Electrical Machines	PC	3	3	0	0	3
4.	PX5252	Power Quality	PC	3	3	0	0	3
5.		Professional Elective II	PE	3	3	0	0	3
6.		Professional Elective III	PE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	PX5211	Electrical Drives Laboratory	PC	4	0	0	4	2
8.	PX5212	Mini Project	EEC	4	0	0	4	2
<b>TOTAL</b>				<b>28</b>	<b>18</b>	<b>2</b>	<b>8</b>	<b>23</b>

### SEMESTER III

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.		Professional Elective IV	PE	3	3	0	0	3
2.		Professional Elective V	PE	3	3	0	0	3
3.		Professional Elective VI	PE	3	3	0	0	3
<b>PRACTICALS</b>								
4.	PX5311	Project Work Phase I	EEC	12	0	0	12	6
<b>TOTAL</b>				<b>21</b>	<b>9</b>	<b>0</b>	<b>12</b>	<b>15</b>

### SEMESTER IV

SI.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>PRACTICALS</b>								
1.	PX5411	Project Work Phase II	EEC	24	0	0	24	12
<b>TOTAL</b>				<b>24</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>12</b>

**ANNA UNIVERSITY::CHENNAI  
AFFILIATED INSTITUTIONS  
REGULATIONS – 2017  
CHOICE BASED CREDIT SYSTEM**

**M.E. CONTROL AND INSTRUMENTATION ENGINEERING (FULL TIME)  
CURRICULUM AND SYLLABUS I TO IV SEMESTERS  
SEMESTER I**

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.	MA5155	Applied Mathematics for Electrical Engineers	FC	4	4	0	0	4
2.	IN5151	Transducers and Smart Instruments	PC	3	3	0	0	3
3.	IN5152	System Theory	PC	5	3	2	0	4
4.	CL5101	Control System Design	PC	4	4	0	0	4
5.	ET5152	Design of Embedded Systems	PC	3	3	0	0	3

<b>PRACTICALS</b>								
6.	IN5161	Modeling and Simulation Laboratory	PC	4	0	0	4	2
<b>TOTAL</b>				<b>23</b>	<b>17</b>	<b>2</b>	<b>4</b>	<b>20</b>

### SEMESTER II

<b>S.No</b>	<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CATEGORY</b>	<b>CONTACT PERIODS</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>THEORY</b>								
1.	CL5201	Process Dynamics and Control	PC	4	4	0	0	4
2.	CL5202	Industrial Automation	PC	3	3	0	0	3
3.	CL5203	Advanced Control Systems	PC	3	3	0	0	3
4.		Professional Elective I	PE	3	3	0	0	3
5.		Professional Elective II	PE	3	3	0	0	3
6.		Professional Elective III	PE	3	3	0	0	3
<b>PRACTICALS</b>								
7.	CL5211	Digital Control and Instrumentation Laboratory	PC	4	0	0	4	2
8.	IN5261	Automation Laboratory	PC	4	0	0	4	2
<b>TOTAL</b>				<b>27</b>	<b>19</b>	<b>0</b>	<b>8</b>	<b>23</b>

### SEMESTER III

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
1.		Professional Elective IV	PE	3	3	0	0	3
2.		Professional Elective V	PE	3	3	0	0	3
3.		Professional Elective VI	PE	3	3	0	0	3
<b>PRACTICALS</b>								
4.	CL5311	Project Work Phase I	EEC	12	0	0	12	6
<b>TOTAL</b>				<b>21</b>	<b>9</b>	<b>0</b>	<b>12</b>	<b>15</b>

### SEMESTER IV

SI.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>PRACTICALS</b>								
1.	CL5411	Project Work Phase II	EEC	24	0	0	24	12
<b>TOTAL</b>				<b>24</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>12</b>