

**St. XAVIER'S CATHOLIC COLLEGE OF ENGINEERING,  
Chunkankadai, Nagercoil – 629 003.**

**AUTONOMOUS COLLEGE AFFILIATED TO ANNA UNIVERSITY**

**Courses focusing on field work/projects/ internships / student projects  
during the year [2022 – 2023]**

**ANNA UNIVERSITY, CHENNAI AFFILIATED 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
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THEORY								
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
PRACTICALS								
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
THEORY								
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
PRACTICALS								
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
THEORY								
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
PRACTICALS								
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 Programming 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**

Sl.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**

Sl. 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 & SYLLABUS 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:

Traverse - using Total station

Contouring

Radial tachometric contouring - Radial Line at Every 45 Degree and Length not less than 60 Meter on each Radial Line

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  
 Offset of Buildings and Plotting the Location  
 Sun observation to determine azimuth (guidelines to be given to the students)  
 Use of GPS to determine latitude and longitude and locate the survey camp location  
 Traversing using GPS  
 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.

**CE8711** **CREATIVE AND INNOVATIVE PROJECT** **L T P C**  
**(Activity Based - Subject Related)** **0 0 4 2**

**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.

**CE8712** **INDUSTRIAL TRAINING** **L T P C**  
**(4 Weeks During VI Semester – Summer)** **0 0 0 2**

**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

**CE8811** **PROJECTWORK** **L T P C 0 0 20 10**

**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	Advanced Construction Engineering and Computing Techniques Laboratory	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	Quality Control and Assurance in Construction	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	Practical Training II (2 Weeks)	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	Advanced Mathematical Methods	FC	4	4	0	0	4
2.	ST5101	Advanced Concrete Structures	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	<u>Seminar</u>	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 & SYLLABUS 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>SEMESTER II TOTAL</b>				<b>31</b>	<b>19</b>	<b>0</b>	<b>12</b>	<b>25</b>

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>

EE8811

PROJECT WORK

L T  
P C 0 0 20 10

#### 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.

**ANNA UNIVERSITY, CHENNAIAFFILIATED INSTITUTIONS**

**B.E. ELECTRONICS AND COMMUNICATION ENGINEERINGREGULATIONS – 2017**

**CHOICE BASED CREDIT SYSTEM**

**I - VIII SEMESTERS CURRICULA AND SYLLABISEMESTER 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

SI. 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

SI. 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>

SI.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

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.	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>

**ANNA UNIVERSITY, CHENNAI AFFILIATED INSTITUTIONS**

**M.E. APPLIED ELECTRONICS**

**REGULATIONS – 2017 CHOICE BASED CREDIT SYSTEM**

**CURRICULA AND SYLLABUS 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>SEMESTER II TOTAL</b>				<b>25</b>	<b>19</b>	<b>2</b>	<b>4</b>	<b>22</b>

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

**ANNA UNIVERSITY, CHENNAI AFFILIATED INSTITUTIONS  
M.E. COMMUNICATION SYSTEMS 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.	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

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<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>

**ANNA UNIVERSITY, CHENNAI AFFILIATED INSTITUTIONS  
M.E. MEDICAL ELECTRONICS**

**REGULATIONS – 2017 CHOICE BASED CREDIT SYSTEM  
CURRICULA AND SYLLABUS 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>SEMESTER II TOTAL</b>				<b>23</b>	<b>19</b>	<b>0</b>	<b>4</b>	<b>21</b>

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<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>

**ANNA UNIVERSITY, CHENNAI AFFILIATED INSTITUTIONS**

**M.E. COMMUNICATION AND NETWORKING 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.	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
<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>

**ANNA UNIVERSITY, CHENNAI AFFILIATED INSTITUTIONS**

**B.E. MECHANICAL ENGINEERING REGULATIONS - 2017**  
**CHOICE BASED CREDIT SYSTEM**

**I TO VIII SEMESTERS CURRICULA AND SYLLABUS 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 SYLLABUS 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	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
<b>PRACTICALS</b>								
7.	CP5161	Data Structures	PC	4	0	0	4	2

**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::CHENNAIAFFILIATED 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

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

**ANNA UNIVERSITY, CHENNAI REGULATIONS – 2017**  
**AFFILIATED INSTITUTIONS CHOICE BASED CREDIT SYSTEM**  
**MASTER OF COMPUTER APPLICATIONS SEMESTER I**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT HOURS	L	T	P	C
<b>THEORY</b>								
1.	MA5101	Matrices, Probability and Statistics	FC	5	3	2	0	4
2.	MC5301	Advanced Data Structures and Algorithms	PC	3	3	0	0	3
3.	MC5105	Advanced Database Technology	PC	3	3	0	0	3
4.	MC5106	Object Oriented Software Engineering	PC	3	3	0	0	3
5.	MC5107	Python Programming	PC	3	3	0	0	3
6.	MC5108	Research Methodology and Intellectual Property Rights	PC	2	2	0	0	2
<b>PRACTICALS</b>								
7.	MC5114	Advanced Database Technology Laboratory	PC	4	0	0	4	2
8.	MC5115	Advanced Data Structures and Python Programming Laboratory	PC	4	0	0	4	2
9.	MC5116	Communication Skills Enhancement - I	EEC	2	0	0	2	1

### SEMESTER II

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT HOURS	L	T	P	C
<b>THEORY</b>								
1.	MC5206	Internet Programming	PC	3	3	0	0	3
2.	MC5207	Cloud Computing Technologies	PC	3	3	0	0	3
3.	MC5208	Artificial Intelligence and Machine Learning	PC	3	3	0	0	3
4.	MC5209	Mobile Application Development	PC	4	2	0	2	3
5.	MC5210	Cyber Security	PC	3	3	0	0	3
6.		Professional Elective I	PEC	3	3	0	0	3
<b>PRACTICALS</b>								
7.	MC5214	Internet Programming Laboratory	PC	4	0	0	4	2
8.	MC5215	Artificial Intelligence and Machine Learning Laboratory	PC	4	0	0	4	2
9.	MC5216	Communication Skills Enhancement- II	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>29</b>	<b>17</b>	<b>0</b>	<b>12</b>	<b>23</b>

### SEMESTER III

SL. NO.	COURSE CODE	COURSE TITLE	CATE GORY	CONTACT HOURS	L	T	P	C
<b>THEORY</b>								
1.	MC5306	Data Science	PC	3	3	0	0	3
2.	MC5307	Embedded Systems and Internet of Things	PC	3	3	0	0	3
3.	MC5308	Accounting and Financial Management for Application Development	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
7.		Professional Elective V:	PE	3	3	0	0	3
<b>PRACTICALS</b>								
1.	MC5314	Data Science Laboratory	PC	4	0	0	4	2
2.	MC5315	Internet of Things Laboratory	PC	4	0	0	4	2
<b>TOTAL</b>				<b>29</b>	<b>21</b>	<b>0</b>	<b>8</b>	<b>25</b>

### SEMESTER IV

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT HOURS	L	T	P	C
<b>PRACTICALS</b>								
1.	MC5414	Project Work	PC	24	0	0	24	12
<b>TOTAL</b>				<b>24</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>12</b>

**TOTAL CREDITS: 83**

**ANNA UNIVERSITY, CHENNAI**  
**NON-AUTONOMOUS AFFILIATED COLLEGES**  
**REGULATIONS 2021**  
**CHOICE BASED CREDIT SYSTEM**  
**B. E. CIVIL ENGINEERING**  
**CURRICULUM AND SYLLABI FOR SEMESTERS III AND IV**

**SEMESTER III**

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1.	MA3351	Transforms and Partial Differential Equations	BSC	3	1	0	4	4
2.	ME3351	Engineering Mechanics	ESC	3	0	0	3	3
3.	CE3301	Fluid Mechanics	PCC	3	0	0	3	3
4.	CE3302	Construction Materials and Technology	PCC	3	0	0	3	3
5.	CE3303	Water Supply and Wastewater Engineering	PCC	4	0	0	4	4
6.	CE3351	Surveying and Levelling	PCC	3	0	0	3	3
<b>PRACTICALS</b>								
7.	CE3361	Surveying and Levelling Laboratory	PCC	0	0	3	3	1.5
8.	CE3311	Water and Wastewater Analysis Laboratory	PCC	0	0	3	3	1.5
9.	GE3361	Professional Development <sup>§</sup>	EEC	0	0	2	2	1
<b>TOTAL</b>				<b>19</b>	<b>1</b>	<b>8</b>	<b>28</b>	<b>24</b>

<sup>§</sup> Skill Based Course

**SEMESTER IV**

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1.	CE3401	Applied Hydraulics Engineering	PCC	3	1	0	4	4
2.	CE3402	Strength of Materials	PCC	3	0	0	3	3
3.	CE3403	Concrete Technology	PCC	3	0	0	3	3
4.	CE3404	Soil Mechanics	PCC	3	0	0	3	3
5.	CE3405	Highway and Railway Engineering	PCC	3	0	0	3	3
6.	GE3451	Environmental Sciences and Sustainability	BSC	2	0	0	2	2
7.		NCC Credit Course Level 2 <sup>#</sup>		3	0	0	3	3 <sup>#</sup>
<b>PRACTICALS</b>								
8.	CE3411	Hydraulic Engineering Laboratory	PCC	0	0	3	3	1.5
9.	CE3412	Materials Testing Laboratory	PCC	0	0	4	4	2
10.	CE3413	Soil Mechanics Laboratory	PCC	0	0	3	3	1.5

<b>TOTAL</b>	<b>17</b>	<b>1</b>	<b>10</b>	<b>28</b>	<b>23</b>
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**ANNA UNIVERSITY, CHENNAI**  
**NON- AUTONOMOUS AFFILIATED COLLEGES**  
**REGULATIONS 2021**  
**B. E. COMPUTER SCIENCE AND ENGINEERING**  
**CHOICE BASED CREDIT SYSTEM**  
**CURRICULUM AND SYLLABI FOR SEMESTERS III AND IV**

**SEMESTER III**

S. NO.	COURSE CODE	COURSE TITLE	CATE GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1.	MA3354	Discrete Mathematics	BSC	3	1	0	4	4
2.	CS3351	Digital Principles and Computer Organization	ESC	3	0	2	5	4
3.	CS3352	Foundations of Data Science	PCC	3	0	0	3	3
4.	CS3301	Data Structures	PCC	3	0	0	3	3
5.	CS3391	Object Oriented Programming	PCC	3	0	0	3	3
<b>PRACTICALS</b>								
6.	CS3311	Data Structures Laboratory	PCC	0	0	3	3	1.5
7.	CS3381	Object Oriented Programming Laboratory	PCC	0	0	3	3	1.5
8.	CS3361	Data Science Laboratory	PCC	0	0	4	4	2
9.	GE3361	Professional Development <sup>§</sup>	EEC	0	0	2	2	1
<b>TOTAL</b>				<b>15</b>	<b>1</b>	<b>14</b>	<b>30</b>	<b>23</b>

<sup>§</sup> Skill Based Course

**SEMESTER IV**

S. NO.	COURSE CODE	COURSE TITLE	CATE GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1.	CS3452	Theory of Computation	PCC	3	0	0	3	3
2.	CS3491	Artificial Intelligence and Machine Learning	PCC	3	0	2	5	4
3.	CS3492	Database Management Systems	PCC	3	0	0	3	3
4.	CS3401	Algorithms	PCC	3	0	2	5	4
5.	CS3451	Introduction to Operating Systems	PCC	3	0	0	3	3
6.	GE3451	Environmental Sciences and Sustainability	BSC	2	0	0	2	2
7.		NCC Credit Course Level 2 <sup>#</sup>		3	0	0	3	3 <sup>#</sup>
<b>PRACTICALS</b>								
8.	CS3461	Operating Systems Laboratory	PCC	0	0	3	3	1.5

9.	CS3481	Database Management Systems Laboratory	PCC	0	0	3	3	1.5
<b>TOTAL</b>				<b>20</b>	<b>0</b>	<b>10</b>	<b>30</b>	<b>22</b>

**ANNA UNIVERSITY, CHENNAI**  
**NON- AUTONOMOUS AFFILIATED COLLEGES**  
**REGULATIONS 2021**  
**B. E. ELECTRONICS AND COMMUNICATION ENGINEERING**  
**CHOICE BASED CREDIT SYSTEM**  
**CURRICULUM AND SYLLABI FOR SEMESTERS III AND IV**  
**SEMESTER III**

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1.	MA3355	Random Processes and Linear Algebra	BSC	3	1	0	4	4
2.	CS3353	C Programming and Data Structures	ESC	3	0	0	3	3
3.	EC3354	Signals and Systems	PCC	3	1	0	4	4
4.	EC3353	Electronic Devices and Circuits	PCC	3	0	0	3	3
5.	EC3351	Control Systems	PCC	3	0	0	3	3
6.	EC3352	Digital Systems Design	PCC	3	0	2	5	4
<b>PRACTICALS</b>								
7.	EC3361	Electronic Devices and Circuits Laboratory	PCC	0	0	3	3	1.5
8.	CS3362	C Programming and Data Structures Laboratory	PCC	0	0	3	3	1.5
9.	GE3361	Professional Development <sup>§</sup>	EEC	0	0	2	2	1
<b>TOTAL</b>				<b>18</b>	<b>2</b>	<b>10</b>	<b>30</b>	<b>25</b>

<sup>§</sup> Skill Based Course

### SEMESTER IV

S. NO.	COURSE CODE	COURSE TITLE	CATE GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1.	EC3452	Electromagnetic Fields	PCC	3	0	0	3	3
2.	EC3401	Networks and Security	PCC	3	0	2	5	4
3.	EC3451	Linear Integrated Circuits	PCC	3	0	0	3	3
4.	EC3492	Digital Signal Processing	PCC	3	0	2	5	4
5.	EC3491	Communication Systems	PCC	3	0	0	3	3
6.	GE3451	Environmental Sciences and Sustainability	BSC	2	0	0	2	2
7.		NCC Credit Course Level 2 <sup>#</sup>		3	0	0	3	3 <sup>#</sup>
<b>PRACTICALS</b>								
8.	EC3461	Communication Systems Laboratory	PCC	0	0	3	3	1.5
9.	EC3462	Linear Integrated Circuits Laboratory	PCC	0	0	3	3	1.5
<b>TOTAL</b>				<b>17</b>	<b>0</b>	<b>10</b>	<b>27</b>	<b>22</b>

**ANNA UNIVERSITY, CHENNAI  
NON-AUTONOMOUS AFFILIATED COLLEGES  
REGULATIONS 2021**

**CHOICE BASED CREDIT SYSTEM**

**B.E. ELECTRICAL AND ELECTRONICS ENGINEERING CURRICULUM AND SYLLABI FOR SEMESTERS III AND IV**

### SEMESTER III

S. NO.	COURSE CODE	COURSE TITLE	CATE GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1.	MA3303	Probability and Complex Functions	BSC	3	1	0	4	4
2.	EE3301	Electromagnetic Fields	PCC	3	1	0	4	4
3.	EE3302	Digital Logic Circuits	PCC	3	0	0	3	3
4.	EC3301	Electron Devices and Circuits	PCC	3	0	0	3	3
5.	EE3303	Electrical Machines - I	PCC	3	0	0	3	3
6.	CS3353	C Programming and Data Structures	PCC	3	0	0	3	3
<b>PRACTICALS</b>								
7.	EC3311	Electronic Devices and Circuits Laboratory	PCC	0	0	3	3	1.5
8.	EE3311	Electrical Machines Laboratory – I	PCC	0	0	3	3	1.5
9.	CS3362	C Programming and Data Structures Laboratory	PCC	0	0	3	3	1.5
10.	GE3361	Professional Development <sup>\$</sup>	EEC	0	0	2	2	1
<b>TOTAL</b>				<b>18</b>	<b>2</b>	<b>11</b>	<b>31</b>	<b>25.5</b>

\$ Skill Based Course

### SEMESTER IV

S. NO.	COURSE CODE	COURSE TITLE	CATE GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1.	GE3451	Environmental Sciences and Sustainability	BSC	2	0	0	2	2
2.	EE3401	Transmission and Distribution	PCC	3	0	0	3	3
3.	EE3402	Linear Integrated Circuits	PCC	3	0	0	3	3
4.	EE3403	Measurements and Instrumentation	PCC	3	0	0	3	3
5.	EE3404	Microprocessor and Microcontroller	PCC	3	0	0	3	3
6.	EE3405	Electrical Machines - II	PCC	3	0	0	3	3
7.		NCC Credit Course Level 2 <sup>#</sup>		3	0	0	3	3 <sup>#</sup>
<b>PRACTICALS</b>								
8.	EE3411	Electrical Machines Laboratory - II	PCC	0	0	3	3	1.5
9.	EE3412	Linear and Digital Circuits Laboratory	PCC	0	0	3	3	1.5
10.	EE3413	Microprocessor and Microcontroller laboratory	PCC	0	0	3	3	1.5
<b>TOTAL</b>				<b>17</b>	<b>0</b>	<b>9</b>	<b>26</b>	<b>21.5</b>

**ANNA UNIVERSITY, CHENNAI**  
**NON- AUTONOMOUS AFFILIATED COLLEGES**  
**REGULATIONS 2021**  
**B. TECH. INFORMATION TECHNOLOGY**  
**CHOICE BASED CREDIT SYSTEM**  
**CURRICULUM AND SYLLABI FOR SEMESTERS III AND IV**

**SEMESTER III**

S. NO.	COURSE CODE	COURSE TITLE	CATE GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1.	MA3354	Discrete Mathematics	BSC	3	1	0	4	4
2.	CS3351	Digital Principles and Computer Organization	ESC	3	0	2	5	4
3.	CS3352	Foundations of Data Science	PCC	3	0	0	3	3
4.	CD3291	Data Structures and Algorithms	PCC	3	0	0	3	3
5.	CS3391	Object Oriented Programming	PCC	3	0	0	3	3
<b>PRACTICALS</b>								
6.	CD3281	Data Structures and Algorithms Laboratory	PCC	0	0	4	4	2
7.	CS3381	Object Oriented Programming Laboratory	PCC	0	0	3	3	1.5
8.	CS3361	Data Science Laboratory	PCC	0	0	4	4	2
9.	GE3361	Professional Development <sup>\$</sup>	EEC	0	0	2	2	1
<b>TOTAL</b>				<b>15</b>	<b>1</b>	<b>15</b>	<b>31</b>	<b>23.5</b>

§ Skill Based Course

**SEMESTER IV**

S. NO.	COURSE CODE	COURSE TITLE	CATE GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1.	CS3452	Theory of Computation	PCC	3	0	0	3	3
2.	CS3491	Artificial Intelligence and Machine Learning	PCC	3	0	2	5	4
3.	CS3492	Database Management Systems	PCC	3	0	0	3	3
4.	IT3401	Web Essentials	PCC	3	0	2	5	4
5.	CS3451	Introduction to Operating Systems	PCC	3	0	0	3	3
6.	GE3451	Environmental Sciences and Sustainability	BSC	2	0	0	2	2
7.		NCC Credit Course Level 2 <sup>#</sup>	-	3	0	0	3	3 <sup>#</sup>
<b>PRACTICALS</b>								
8.	CS3461	Operating Systems Laboratory	PCC	0	0	3	3	1.5
9.	CS3481	Database Management Systems Laboratory	PCC	0	0	3	3	1.5
<b>TOTAL</b>				<b>20</b>	<b>0</b>	<b>10</b>	<b>30</b>	<b>22</b>

**ANNA UNIVERSITY, CHENNAI  
NON-AUTONOMOUS AFFILIATED COLLEGES REGULATIONS 2021  
CHOICE BASED CREDIT SYSTEM  
B. E. MECHANICAL ENGINEERING CURRICULUM AND SYLLABI  
FOR III AND IV SEMESTERS**

**SEMESTER III**

SL. NO.	COURSE CODE	COURSE TITLE	CATE GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1.	MA3351	Transforms and Partial Differential Equations	BSC	3	1	0	4	4
2.	ME3351	Engineering Mechanics	ESC	3	0	0	3	3
3.	ME3391	Engineering Thermodynamics	PCC	3	0	0	3	3
4.	CE3391	Fluid Mechanics and Machinery	ESC	3	1	0	4	4
5.	ME3392	Engineering Materials and Metallurgy	PCC	3	0	0	3	3
6.	ME3393	Manufacturing Processes	PCC	3	0	0	3	3
<b>PRACTICALS</b>								
7.	ME3381	Computer Aided Machine Drawing	ESC	0	0	4	4	2
8.	ME3382	Manufacturing Technology Laboratory	PCC	0	0	4	4	2
9.	GE3361	Professional Development <sup>§</sup>	EEC <sup>2</sup>	0	0	2	2	1
<b>TOTAL</b>				<b>18</b>	<b>2</b>	<b>10</b>	<b>30</b>	<b>25</b>

## SEMESTER IV

SL. NO.	COURSE CODE	COURSE TITLE	CATE GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1.	ME3491	Theory of Machines	PCC	3	0	0	3	3
2.	ME3451	Thermal Engineering	PCC	4	0	0	4	4
3.	ME3492	Hydraulics and Pneumatics	PCC	3	0	0	3	3
4.	ME3493	Manufacturing Technology	PCC	3	0	0	3	3
5.	CE3491	Strength of Materials	PCC	3	0	0	3	3
6.	GE3451	Environmental Sciences and Sustainability	BSC	2	0	0	2	2
7.		NCC Credit Course Level 2 <sup>#</sup>		3	0	0	3	3 <sup>#</sup>
<b>PRACTICALS</b>								
8.	CE3481	Strength of Materials and Fluid Machinery Laboratory	PCC	0	0	4	4	2
9.	ME3461	Thermal Engineering Laboratory	PCC	0	0	4	4	2
TOTAL				18	0	8	26	22

**ANNA UNIVERSITY, CHENNAI**  
**NON-AUTONOMOUS COLLEGES AFFILIATED TO ANNA UNIVERSITY**  
**REGULATIONS – 2021**  
**MASTER OF BUSINESS ADMINISTRATION (FULL – TIME)**  
**CHOICE BASED CREDIT SYSTEM**  
**CURRICULA AND SYLLABI FOR III AND IV SEMESTERS**

## SEMESTER - III

SL. NO.	COURSE CODE	COURSE TITLE	CATEG ORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1.	BA4301	Strategic Management	PCC	3	0	0	3	3
2.	BA4302	International Business	PCC	3	0	0	3	3
3.		Professional Elective I	PEC	3	0	0	3	3
4.		Professional Elective II	PEC	3	0	0	3	3
5.		Professional Elective III	PEC	3	0	0	3	3
6.		Professional Elective IV	PEC	3	0	0	3	3
7.		Professional Elective V	PEC	3	0	0	3	3
8.		Professional Elective VI	PEC	3	0	0	3	3
<b>PRACTICAL</b>								
9.	BA4311	Creativity and Innovation Laboratory	EEC	0	0	4	4	2
10.	BA4312	Summer Internship	EEC <sup>2</sup>	0	0	4	4	2
TOTAL				24	0	8	32	28

**PROFESSIONAL ELECTIVES (PEC)**

**FUNCTIONAL SPECIALISATIONS**

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>Stream/ Specialization : Financial Management [ 7 ]</b>								
1.	BA4001	Security Analysis and Portfolio Management	PEC	3	0	0	3	3
2.	BA4002	Financial Markets	PEC	3	0	0	3	3
3.	BA4003	Banking and Financial Services	PEC	3	0	0	3	3
4.	BA4004	Financial Derivatives	PEC	3	0	0	3	3
5.	BA4005	Financial Modelling	PEC	3	0	0	3	3
6.	BA4006	International Finance	PEC	3	0	0	3	3
7.	BA4007	Behavioral Finance	PEC	3	0	0	3	3
<b>Stream/ Specialization : Marketing Management [ 7 ]</b>								
8.	BA4008	Retail Marketing	PEC	3	0	0	3	3
9.	BA4009	Consumer Behavior	PEC	3	0	0	3	3
10.	BA4010	Integrated Marketing Communication	PEC	3	0	0	3	3
11.	BA4011	Services Marketing	PEC	3	0	0	3	3
12.	BA4012	Sales and Distribution Management	PEC	3	0	0	3	3
13.	BA4013	Product and Brand Management	PEC	3	0	0	3	3
14.	BA4014	Digital Marketing	PEC	3	0	0	3	3

Stream/ Specialization : <b>Human Resource Management [ 6 ]</b>								
15.	BA4015	Strategic Human Resource Management	PEC	3	0	0	3	3
16.	BA4016	Industrial relations and labour legislations	PEC	3	0	0	3	3
17.	BA4017	Organizational, design, change and development	PEC	3	0	0	3	3
18.	BA4018	Negotiation and conflict management	PEC	3	0	0	3	3
19.	BA4019	Reward and Compensation management	PEC	3	0	0	3	3
20.	BA4020	International Human Resource Management	PEC	3	0	0	3	3
Stream/ Specialization : <b>Operations Management [ 6 ]</b>								
21.	BA4021	Supply Chain Management	PEC	3	0	0	3	3
22.	BA4022	Quality Management	PEC	3	0	0	3	3
23.	BA4023	Materials Management	PEC	3	0	0	3	3
24.	BA4024	Services Operations Management	PEC	3	0	0	3	3
25.	BA4025	Supply Chain Analytics	PEC	3	0	0	3	3
26.	BA4026	Project Management	PEC	3	0	0	3	3
Stream/ Specialization : <b>Business Analytics [ 5 ]</b>								
27.	BA4027	Data Mining for Business Intelligence	PEC	3	0	0	3	3
28.	BA4028	Deep Learning and Artificial Intelligence	PEC	3	0	0	3	3
29.	BA4029	Social media web Analytics	PEC	3	0	0	3	3
30.	BA4030	E-Business Management	PEC	3	0	0	3	3
31.	BA4031	Enterprise Resource Planning	PEC	3	0	0	3	3

## SECTORAL SPECIALIZATIONS

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
Sectoral Specialization: <b>Logistics and Supply Chain Management</b>								
1.	BA4051	Supply Chain Concepts and Planning	PEC	3	3	0	0	3
2.	BA4052	Sourcing and Supply Management	PEC	3	3	0	0	3
3.	BA4053	Supply Chain Inventory Management	PEC	3	3	0	0	3

4.	BA4054	Supply Chain Information System	PEC	3	3	0	0	3
5.	BA4055	Warehouse Management	PEC	3	3	0	0	3
6.	BA4056	Transportation and Distribution Management	PEC	3	3	0	0	3
7.	BA4057	Reverse and Contract Logistics	PEC	3	3	0	0	3
8.	BA4058	Air Cargo Management	PEC	3	3	0	0	3
9.	BA4059	Containerization and Allied Business	PEC	3	3	0	0	3
10.	BA4060	Exim Management	PEC	3	3	0	0	3
11.	BA4061	Fundamentals of Shipping	PEC	3	3	0	0	3
12.	BA4062	Port and Terminal Management	PEC	3	3	0	0	3
<b>Sectoral Specialization : Infrastructure and Real Estate Management</b>								
13.	BA4063	Infrastructure Planning Scheduling and Control	PEC	3	3	0	0	3
14.	BA4064	Contracts and Arbitration	PEC	3	3	0	0	3
15.	BA4065	Project Management for Infrastructure	PEC	3	3	0	0	3
16.	BA4066	Management of Human Resources, Safety and Quality	PEC	3	3	0	0	3
17.	BA4067	Disaster Mitigation and Management	PEC	3	3	0	0	3
18.	BA4068	Economics and Financial Management in Construction	PEC	3	3	0	0	3
19.	BA4069	Urban Environmental Management	PEC	3	3	0	0	3
20.	BA4070	Smart Materials, Techniques and Equipments for Infrastructure	PEC	3	3	0	0	3
21.	BA4071	Strategic Airport Infrastructure Management	PEC	3	3	0	0	3
22.	BA4072	Real Estate Marketing and Management	PEC	3	3	0	0	3
23.	BA4073	Infrastructure and Real Estate Entrepreneurship	PEC	3	3	0	0	3
24.	BA4074	Valuation of Real Estate and Infrastructure Assets	PEC	3	3	0	0	3
<b>Sectoral Specialization : Tourism Management</b>								
25.	BA4075	Tourism Principles and Practices	PEC	3	3	0	0	3
26.	BA4076	Travel Management	PEC	3	3	0	0	3
27.	BA4077	International Tourism	PEC	3	3	0	0	3

28.	BA4078	Tourism Geography	PEC	3	3	0	0	3
29.	BA4079	Culture and Heritage	PEC	3	3	0	0	3
30.	BA4080	Tourism Products in India	PEC	3	3	0	0	3
31.	BA4081	Accommodation and House Keeping Management	PEC	3	3	0	0	3
32.	BA4082	Travel Media and Public Relations	PEC	3	3	0	0	3
33.	BA4083	Destination Planning and Management	PEC	3	3	0	0	3
34.	BA4084	Tour Operations	PEC	3	3	0	0	3
35.	BA4085	Leisure and Recreation Management	PEC	3	3	0	0	3
36.	BA4086	Medical Tourism	PEC	3	3	0	0	3

#### SEMESTER – IV

SI. NO	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>PRACTICAL</b>								
1.	BA4411	Project Work	EEC	0	0	24	24	12
<b>TOTAL</b>				<b>0</b>	<b>0</b>	<b>24</b>	<b>24</b>	<b>12</b>

**ANNA UNIVERSITY, CHENNAI  
NON - AUTONOMOUS AFFILIATED COLLEGES  
MASTER OF COMPUTER APPLICATIONS (2 YEARS) REGULATIONS – 2021  
CHOICE BASED CREDIT SYSTEM  
III AND IV SEMESTERS CURRICULA AND SYLLABI**

#### SEMESTER III

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1.	MC4301	Machine Learning	PCC	3	0	0	3	3
2.	MC4302	Internet of Things	PCC	3	0	0	3	3
3.		Professional Elective II	PEC	3	0	0	3	3
4.		Professional Elective III	PEC	3	0	0	3	3
5.		Professional Elective IV	PEC	3	0	2	5	4
6.		Open Elective	OEC	3	0	0	3	3
<b>PRACTICALS</b>								
7.	MC4311	Machine Learning Laboratory	PCC	0	0	4	4	2
8.	MC4312	Internet of Things Laboratory	PCC	0	0	4	4	2
<b>TOTAL</b>				<b>18</b>	<b>0</b>	<b>10</b>	<b>28</b>	<b>23</b>

### SEMESTER III, ELECTIVE II

S.No.	COURSE CODE	COURSE TITLE	CATE-GORY	CONTACT PERIODS	L	T	P	C
1.	MC4009	DevOps and Microservices	PEC	3	3	0	0	3
2.	MC4010	Advances in Networking	PEC	3	3	0	0	3
3.	MC4011	Digital Image Processing	PEC	3	3	0	0	3
4.	MC4012	Social Network Analytics	PEC	3	3	0	0	3
5.	MC4013	Cryptocurrency and Blockchain Technologies	PEC	3	3	0	0	3
6.	MC4014	Bio Inspired learning	PEC	3	3	0	0	3
7.	MC4015	Digital Marketing	PEC	3	3	0	0	3

### SEMESTER III, ELECTIVE III

S.No.	COURSE CODE	COURSE TITLE	CATE-GORY	CONTAC PERIODS	L	T	P	C
1.	MC4016	Software Architecture	PEC	3	3	0	0	3
2.	MC4017	Digital Forensics	PEC	3	3	0	0	3
3.	MC4018	Wireless Networking	PEC	3	3	0	0	3
4.	MC4019	Data Visualization Techniques	PEC	3	3	0	0	3
5.	MC4020	Data Mining and Data Warehousing Techniques	PEC	3	3	0	0	3
6.	MC4021	Agile Methodologies	PEC	3	3	0	0	3
7.	MC4022	Organizational Behavior	PEC	3	3	0	0	3

### SEMESTER III, ELECTIVE IV

S.No.	COURSE CODE	COURSE TITLE	CATE-GORY	CONTACT PERIODS	L	T	P	C
1.	MC4023	Web Design	PEC	5	3	0	2	4
2.	MC4024	C# and .NET	PEC	5	3	0	2	4
3.	MC4025	Big Data Analytics	PEC	5	3	0	2	4
4.	MC4026	Software Quality and Testing	PEC	5	3	0	2	4
5.	MC4027	Advanced Java Programming	PEC	5	3	0	2	4
6.	MC4028	Network Programming and Security	PEC	5	3	0	2	4

### LIST OF OPEN ELECTIVES FOR PG PROGRAMMES

SL. NO.	COURSE CODE	COURSE TITLE	PERIODS PER WEEK			CREDITS
			L	T	P	
1.	OCE431	Integrated Water Resources Management	3	0	0	3
2.	OCE432	Water, Sanitation and Health	3	0	0	3
3.	OCE433	Principles of Sustainable Development	3	0	0	3
4.	OCE434	Environmental Impact Assessment	3	0	0	3

5.	OME431	Vibration and Noise Control Strategies	3	0	0	3
6.	OME432	Energy Conservation and Management in Domestic Sectors	3	0	0	3
7.	OME433	Additive Manufacturing	3	0	0	3
8.	OME434	Electric Vehicle Technology	3	0	0	3
9.	OME435	New Product Development	3	0	0	3
10.	OBA431	Sustainable Management	3	0	0	3
11.	OBA432	Micro and Small Business Management	3	0	0	3
12.	OBA433	Intellectual Property Rights	3	0	0	3
13.	OBA434	Ethical Management	3	0	0	3
14.	ET4251	IoT for Smart Systems	3	0	0	3
15.	ET4072	Machine Learning and Deep Learning	3	0	0	3
16.	PX4012	Renewable Energy Technology	3	0	0	3
17.	PS4093	Smart Grid	3	0	0	3
18.	DS4015	Big Data Analytics	3	0	0	3
19.	NC4201	Internet of Things and Cloud	3	0	0	3
20.	MX4073	Medical Robotics	3	0	0	3
21.	VE4202	Embedded Automation	3	0	0	3
22.	CX4016	Environmental Sustainability	3	0	0	3
23.	TX4092	Textile Reinforced Composites	3	0	0	3
24.	NT4002	Nano composite Materials	3	0	0	3
25.	BY4016	IPR, Biosafety and Entrepreneurship	3	0	0	3

#### SEMESTER IV

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>PRACTICALS</b>								
1.	MC4411	Project Work	EEC	0	0	24	24	12
<b>TOTAL</b>				0	0	24	24	12

#### EMPLOYABILITY ENHANCEMENT COURSES (EEC)

S. NO	COURSE CODE	COURSE TITLE	PERIODS PER WEEK			CREDITS	SEMESTER
			Lecture	Tutorial	Practical		
1.	MC 4411	Project Work II	0	0	24	12	IV

**ANNA UNIVERSITY, CHENNAI  
NON-AUTONOMOUS AFFILIATED COLLEGES  
M. E. CONSTRUCTION ENGINEERING AND MANAGEMENT  
REGULATIONS 2021  
CHOICE BASED CREDIT SYSTEM  
III & IV SEMESTERS CURRICULA AND SYLLABUS**

3

#### SEMESTER III

S	COURSE	COURSE TITLE	CATE-	PERIODS PER WEEK	TOTAL	CREDITS
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NO.	CODE		GORY	L	T	P	CONTACT PERIODS	
<b>THEORY</b>								
1.		Professional Elective IV	PEC	3	0	0	3	3
2.		Professional Elective V	PEC	3	0	0	3	3
3.		Open Elective	OEC	3	0	0	3	3
<b>PRACTICALS</b>								
4.	CN4311	Practical Training (4 Weeks)	EEC	0	0	0	0	2
5.	CN4312	Project Work I	EEC	0	0	12	12	6
<b>TOTAL</b>				<b>9</b>	<b>0</b>	<b>12</b>	<b>21</b>	<b>17</b>

**SEMESTER IV**

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>PRACTICALS</b>								
1.	CN4411	Project Work II	EEC	0	0	24	24	12
<b>TOTAL</b>				<b>0</b>	<b>0</b>	<b>24</b>	<b>24</b>	<b>12</b>

**TOTAL CREDITS: 70**

**LIST OF PROFESSIONAL ELECTIVE COURSES [PEC]**

**SEMESTER III, ELECTIVE IV**

S. NO	COURSE CODE	COURSE TITLE	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
			L	T	P		
1.	CN4011	Advanced Data Analysis	3	0	0	3	3
2.	CN4012	Environmental Impact Assessment For Construction Engineers	3	0	0	3	3
3.	CN4091	Lean Construction Concepts, Tools and Practices	3	0	0	3	3
4.	ST4073	Maintenance, Repair and Rehabilitation of Structures	3	0	0	3	3

**SEMESTER III, ELECTIVE V**

S. NO.	COURSE CODE	COURSE TITLE	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
			L	T	P		
1.	CN4013	Quality Control and Assurance in Construction	3	0	0	3	3
2.	CN4014	Digital Design and Construction	3	0	0	3	3
3.	CN4074	Organizational Behaviour	3	0	0	3	3
4.	CN4092	Supply Chain Management and Logistics in Construction	3	0	0	3	3

**ANNA UNIVERSITY, CHENNAI  
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**M. E. STRUCTURAL ENGINEERING**

**REGULATIONS 2021 CHOICE BASED CREDIT SYSTEM**

**III& IV SEMESTERS CURRICULA AND SYLLABUS**

**SEMESTER III**

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1.		Professional Elective IV	PEC	3	0	0	3	3
2.		Professional Elective V	PEC	3	0	0	3	3
3.		Open Elective	OEC	3	0	0	3	3
<b>PRACTICALS</b>								
4.	ST4311	Practical Training (4 Weeks)	EEC	0	0	0	0	2
5.	ST4312	Project Work I	EEC	0	0	12	12	6
<b>TOTAL</b>				<b>9</b>	<b>0</b>	<b>12</b>	<b>21</b>	<b>17</b>

**SEMESTER IV**

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>PRACTICALS</b>								
1.	ST4411	Project Work II	EEC	0	0	24	24	12
<b>TOTAL</b>				<b>0</b>	<b>0</b>	<b>24</b>	<b>24</b>	<b>12</b>

## LIST OF PROFESSIONAL ELECTIVE COURSES [PEC]

### SEMESTER III, ELECTIVE IV

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	ST4010	Design of Industrial Structures	PEC	3	0	0	3	3
2.	ST4011	Advanced Design of Foundation Structures	PEC	3	0	0	3	3
3.	ST4012	Optimization of Structures	PEC	3	0	0	3	3
4.	ST4013	Structural Health Monitoring	PEC	3	0	0	3	3

### SEMESTER III, ELECTIVE V

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	ST4014	Design of Offshore Structures	PEC	3	0	0	3	3
2.	ST4015	Performance of Structures with Soil-Structure Interaction	PEC	3	0	0	3	3
3.	ST4091	Design of Bridge Structures	PEC	3	0	0	3	3
4.	ST4016	Design of Shell and Spatial Structures	PEC	3	0	0	3	3

**ANNA UNIVERSITY, CHENNAI**  
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**M.E. ENERGY ENGINEERING**  
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**CHOICE BASED CREDIT SYSTEM**  
**III&IV SEMESTERS CURRICULA AND SYLLABI**

### SEMESTER III

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1.		Professional Elective - III	PEC	3	0	0	3	3
2.		Professional Elective - IV	PEC	3	0	0	3	3
3.		Professional Elective - V	PEC	3	0	0	3	3
4.		Open Elective	OEC	3	0	0	3	3
<b>PRACTICAL</b>								
5.	EY4311	Project Work – I	EEC	0	0	12	12	6
<b>TOTAL</b>				<b>12</b>	<b>0</b>	<b>12</b>	<b>24</b>	<b>18</b>

**SEMESTER IV**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>PRACTICAL</b>								
1.	EY4411	Project Work – II	EEC	0	0	24	24	12
<b>TOTAL</b>				<b>0</b>	<b>0</b>	<b>24</b>	<b>24</b>	<b>12</b>

**TOTAL CREDITS TO BE EARNED FOR THE AWARD OF THE DEGREE = 75**

**LIST OF PROFESSIONAL ELECTIVE COURSES [PEC]****SEMESTER III, ELECTIVE III**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	EY4091	Advanced Energy Storage Technologies	PEC	3	0	0	3	3
2.	TE4092	Design of Heat Exchangers	PEC	3	0	0	3	3
3.	IC4092	Hybrid and Electric Vehicles	PEC	3	0	0	3	3

**SEMESTER III, ELECTIVE IV**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	EY4004	Power Electronics for Renewable Energy Systems	PEC	3	0	0	3	3
2.	EY4005	Wind Energy systems	PEC	3	0	0	3	3
3.	TE4091	Advanced Power Plant Engineering	PEC	3	0	0	3	3

**SEMESTER III, ELECTIVE V**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	TE4073	Hydrogen and Fuel Cell Technologies	PEC	3	0	0	3	3
2.	EY4006	Smart Grid	PEC	3	0	0	3	3
3.	EY4007	Environmental Engineering and Pollution Control	PEC	3	0	0	3	3
4.	IL4073	Human Industrial Safety And Hygiene	PEC	3	0	0	3	3

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**CHOICE BASED CREDIT SYSTEM**  
**M.E. POWER ELECTRONICS AND DRIVES (FULL TIME)**  
**III & IV SEMESTERS CURRICULUM AND SYLLABUS**

**SEMESTER III**

S.NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1.		Professional Elective IV	PEC	3	0	0	3	3
2.		Professional Elective V	PEC	3	0	0	3	3
3.		Open Elective	OEC	3	0	0	3	3
<b>PRACTICALS</b>								
4.	PX4311	Project Work I	EEC	0	0	12	12	6
<b>TOTAL</b>				<b>9</b>	<b>0</b>	<b>12</b>	<b>21</b>	<b>15</b>

**SEMESTER IV**

S.NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>PRACTICALS</b>								
1.	PX4411	Project Work II	EEC	0	0	24	24	12
<b>TOTAL</b>				<b>0</b>	<b>0</b>	<b>24</b>	<b>24</b>	<b>12</b>

**TOTAL NO. OF CREDITS: 71**

**LIST OF PROFESSIONAL ELECTIVE COURSES [PEC]**

**SEMESTER III ELECTIVE IV & V**

S.	COURS		PERIODS PER WEEK	TOTAL
			3	

NO.	ECODE	COURSE TITLE	CATE-GORY	L	T	P	CONTACT PERIODS	CREDITS
1	PX4010	Nonlinear Dynamics for Power Electronics Circuits	PEC	3	0	0	3	3
2	PX4011	Grid Integration of Renewable Energy Sources	PEC	3	0	0	3	3
3	PX4012	Renewable Energy Technology	PEC	3	0	0	3	3
4	PX4013	Wind Energy Conversion System	PEC	3	0	0	3	3
5	PX4014	Optimization Techniques	PEC	3	0	0	3	3
6	PS4091	Distributed Generation and Micro Grid	PEC	3	0	0	3	3
7	PS4071	Energy Management and Auditing	PEC	3	0	0	3	3
8	PS4093	Smart Grid	PEC	3	0	0	3	3
9	PS4351	HVDC and FACTS	PEC	3	0	0	3	3
10	ET4073	Python Programming for Machine Learning	PEC	3	0	0	3	3

### EMPLOYABILITY ENHANCEMENT COURSES (EEC)

S.NO	COURSE CODE	COURSE TITLE	PERIODS PER WEEK			CREDITS	SEMESTER
			LECTURE	TUTORIAL	PRACTICAL		
1.	PX4311	Project Work I	0	0	12	6	III
2.	PX4411	Project Work II	0	0	24	12	IV
<b>TOTAL CREDITS</b>						<b>18</b>	

**ANNA UNIVERSITY, CHENNAI**  
**NON - AUTONOMOUS COLLEGES AFFILIATED ANNA UNIVERSITY**  
**M.E. COMMUNICATION SYSTEMS REGULATIONS – 2021**  
**CHOICE BASED CREDIT SYSTEM**  
**III&IV SEMESTERS CURRICULA AND SYLLABI**

### SEMESTER III

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1.	CU4301	Optical Communication and Networking	PCC	3	0	0	3	3
2.		Professional Elective III	PEC	3	0	0	3	3
3.		Professional Elective IV	PEC	3	0	2	5	4
4.		Open Elective	OEC	3	0	0	3	3

PRACTICALS								
5.	CU4311	Project Work I	EEC	0	0	12	12	6
<b>TOTAL</b>				<b>12</b>	<b>0</b>	<b>14</b>	<b>26</b>	<b>19</b>

#### SEMESTER IV

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
PRACTICALS								
1.	CU4411	Project Work II	EEC	0	0	24	24	12
<b>TOTAL</b>				<b>0</b>	<b>0</b>	<b>24</b>	<b>24</b>	<b>12</b>

**TOTAL NO. OF CREDITS: 75**

#### LIST OF PROFESSIONAL ELECTIVE COURSES [PEC]

##### SEMESTER III, ELECTIVE III

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	CU4075	Ultra Wide Band Communications	PEC	3	0	0	3	3
2.	CU4076	VLSI for Wireless Communication	PEC	3	0	0	3	3
3.	VL4073	MEMS and NEMS	PEC	3	0	0	3	3
4.	CU4004	Advanced Antenna Design	PEC	3	0	0	3	3
5.	CU4005	Software Defined Radios	PEC	3	0	0	3	3

##### SEMESTER III, ELECTIVE IV

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	CU4073	Image Processing and Video Analytics	PEC	3	0	2	5	4
2.	DS4071	Radar Signal Processing	PEC	3	0	2	5	4
3.	EL4291	Telecommunication System Modeling and Simulation	PEC	3	0	2	5	4
4.	EL4072	Signal Detection and Estimation	PEC	3	0	2	5	4
5.	VE4072	Real Time Embedded Systems	PEC	3	0	2	5	4

ANNA UNIVERSITY, CHENNAI  
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**M.E. COMPUTER SCIENCE AND ENGINEERING REGULATIONS - 2021**  
**CHOICE BASED CREDIT SYSTEM**  
**III & IV SEMESTERS CURRICULA AND SYLLABI**

**SEMESTER III**

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1.	CP4391	Security Practices	PCC	3	0	0	3	3
2.		Professional Elective III	PEC	3	0	0	3	3
3.		Professional Elective IV	PEC	3	0	2	5	4
4.		Open Elective	OEC	3	0	0	3	3
<b>PRACTICALS</b>								
5.	CP4311	Project Work I	EEC	0	0	12	12	6
<b>TOTAL</b>				<b>12</b>	<b>0</b>	<b>14</b>	<b>26</b>	<b>19</b>

**SEMESTER IV**

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>PRACTICALS</b>								
1.	CP4411	Project Work II	EEC	0	0	24	24	12
<b>TOTAL</b>				<b>0</b>	<b>0</b>	<b>24</b>	<b>24</b>	<b>12</b>

**TOTAL NO. OF CREDITS: 75**

**LIST OF PROFESSIONAL ELECTIVE COURSES [PEC]**

**SEMESTER III, ELECTIVE III**

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	CP4094	Mobile and Pervasive Computing	PEC	3	0	0	3	3
2.	MP4094	Web Services and API Design	PEC	3	0	0	3	3
3.	CP4092	Data Visualization Techniques	PEC	3	0	0	3	3
4.	IF4091	Compiler Optimization Techniques	PEC	3	0	0	3	3

5.	CP4002	Formal Models of Software Systems	PEC	3	0	0	3	3
6.	AP4094	Robotics	PEC	3	0	0	3	3
7.	ML4291	Natural Language Processing	PEC	2	0	2	4	3
8.	IF4093	GPU Computing	PEC	3	0	0	3	3

### SEMESTER III, ELECTIVE IV

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	IF4073	Devops and Microservices	PEC	3	0	2	5	4
2.	MP4292	Mobile Application Development	PEC	3	0	2	5	4
3.	IF4071	Deep Learning	PEC	3	0	2	5	4
4.	CP4072	Blockchain Technologies	PEC	3	0	2	5	4
5.	SE4073	Embedded Software Development	PEC	3	0	2	5	4
6.	IF4291	Full Stack Web Application Development	PEC	3	0	2	5	4
7.	CP4071	Bioinformatics	PEC	3	0	2	5	4
8.	MP4291	Cyber Physical Systems	PEC	3	0	2	5	4
9.	MU4291	Mixed Reality	PEC	3	0	2	5	4

ANNA UNIVERSITY, CHENNAI

NON - AUTONOMOUS COLLEGES AFFILIATED ANNA UNIVERSITY

**M.E. MEDICAL ELECTRONICS**

**REGULATIONS-2021**

**CHOICE BASED CREDIT SYSTEM**

**III& IV SEMESTERS CURRICULA AND SYLLABI**

### SEMESTER III

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1.		Professional Elective III	PEC	3	0	0	3	3

2.		Professional Elective IV	PEC	3	0	2	5	4
3.		Open Elective	OEC	3	0	0	3	3
<b>PRACTICALS</b>								
4.	MX4311	Project Work I	EEC	0	0	12	12	6
5.	MX4312	Hospital / Biomedical Industry Training	EEC	0	0	4	4	2
<b>TOTAL</b>				<b>9</b>	<b>0</b>	<b>18</b>	<b>27</b>	<b>18</b>

**SEMESTER IV**

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>PRACTICALS</b>								
1.	MX4411	Project Work II	EEC	0	0	24	24	12
<b>TOTAL</b>				<b>0</b>	<b>0</b>	<b>24</b>	<b>24</b>	<b>12</b>

**TOTAL NO. OF CREDITS: 75**

**LIST OF PROFESSIONAL ELECTIVE COURSES [PEC]**

**SEMESTER III, PROFESSIONAL ELECTIVES – III**

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	MX4005	Health Care, Hospital and Equipment Management	PEC	3	0	0	3	3
2.	MX4006	Ultra Sound in Medicines	PEC	3	0	0	3	3
3.	MX4007	Bio Ethics and Standards	PEC	3	0	0	3	3
4.	BM4092	Medical Device Standards and Regulation	PEC	3	0	0	3	3
5.	MX4008	Tissue Engineering and Immuno Engineering	PEC	3	0	0	3	3
6.	MX4009	Medical Equipment	PEC	3	0	0	3	3

**SEMESTER III, PROFESSIONAL ELECTIVES - IV**

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	MX4010	Biomems and Artificial Organs	PEC	3	0	2	5	4
2.	MX4011	Physiological Modeling	PEC	3	0	2	5	4
3.	MX4074	Pattern Recognition Techniques and Applications	PEC	3	0	2	5	4
4.	MU4291	Mixed Reality	PEC	3	0	2	5	4
5.	MX4012	3D Printing in Medicines	PEC	3	0	2	5	4

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

**AUTONOMOUS COLLEGE AFFILIATED TO ANNA UNIVERSITY**

Courses focusing on employability/ entrepreneurship/ skill development offered by the Institution during  
the year [2022 – 2023]

**REGULATIONS 2022**

**B. TECH. ARTIFICIAL INTELLIGENCE & DATA SCIENCE**

**CURRICULUMCHOICE BASED CREDIT SYSTEM**

**SEMESTER I**

SL. NO.	COURSE CODE	COURSE TITLE	CATE - GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDI TS
				L	T	P		
<b>THEORY COURSES</b>								
1.	MA22101	Matrices and Calculus	BSC	3	1	0	4	4
2.	PH22101	Engineering Physics	BSC	3	0	0	3	3
3.	CH22101	Engineering Chemistry	BSC	3	0	0	3	3
4.	CS22101	Problem Solving and Python Programming	ESC	3	0	0	3	3
5.	HS22102	Universal Human Values: Understanding Harmony and Ethical Human Conduct	HSMC	2	0	0	2	2
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
6.	EN22101	Communicative English	HSMC	2	0	2	4	3
<b>PRACTICAL COURSES</b>								
7.	BS22101	Physics & Chemistry Laboratory	BSC	0	0	4	4	2
8.	CS22102	Python Programming Laboratory	ESÇ	0	0	4	4	2
<b>MANDATORY COURSES</b>								

9.	IP22101	Induction Programme	-	-	-	-	-	0
10.	HS22101	Higher Order Thinking	MC	1	0	0	1	1
<b>TOTAL</b>				<b>17</b>	<b>1</b>	<b>10</b>	<b>28</b>	<b>23</b>

### SEMESTER II

SL. NO.	COURSE CODE	COURSE TITLE	CATE - GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDI TS
				L	T	P		
<b>THEORY COURSES</b>								
1	MA22201	Statistics and Numerical Methods	BSC	3	1	0	4	4
2	ES22202	Basic Electrical Electronics & Measurements Engineering	ESC	3	0	0	3	3
3	AD22201	Data Structures and Algorithms using C	ESC	3	1	0	4	4
4	ME22201	Engineering Graphics	ESC	2	0	2	4	3
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
5	EN22201	Technical English	HSMC	2	0	2	4	3
6	PH22203	Physics for Information Science	BSC	2	0	2	4	3
7	CH22201	Environment and Sustainability	BSC	2	0	2	4	3
<b>PRACTICAL COURSES</b>								
8	AD22202	Data Structures and Algorithms using C Laboratory	ESC	0	0	4	4	2
9	ES22203	Engineering Practices Laboratory	ESC	0	0	4	4	2
<b>MANDATORY COURSES</b>								
10	GE3152	Heritage of Tamil	MC	1	0	0	1	1
<b>TOTAL</b>				<b>18</b>	<b>2</b>	<b>16</b>	<b>36</b>	<b>28</b>

### REGULATIONS 2022

### B. E. CIVIL ENGINEERING

### CURRICULUM CHOICE BASED CREDIT SYSTEM

**SEMESTER I**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY COURSES</b>								
1	MA22101	Matrices and Calculus	BSC	3	1	0	4	4
2	PH22101	Engineering Physics	BSC	3	0	0	3	3
3	CH22101	Engineering Chemistry	BSC	3	0	0	3	3
4	CS22101	Problem solving and Python Programming	ESC	3	0	0	3	3
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
5	EN22101	Communicative English	HSMC	2	0	2	4	3
<b>PRACTICAL COURSES</b>								
6	BS22101	Physics & Chemistry Laboratory	BSC	0	0	4	4	2
7	CS22102	Python programming Laboratory	ESC	0	0	4	4	2
<b>MANDATORY COURSES</b>								
8	IP22101	Induction Programme	-	-	-	-	-	0
9	HS22101	Higher order thinking	MC	1	0	0	1	1
10	HS22102	Universal Human Values : Understanding Harmony and Ethical Human Conduct	HSMC	2	0	0	2	2
<b>TOTAL</b>				17	1	10	28	23

SL. NO.	COURSE CODE	COURSE TITLE	CATE - GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY COURSES</b>								
1	MA22201	Statistics and Numerical Methods	BSC	3	1	0	4	4
2	ES22202	Basic Electrical and Electronics Engineering	ESC	3	0	0	3	3
3	CE22201	Building Materials and Techniques	ESC	3	0	0	3	3
4	ME22201	Engineering Graphics	ESC	3	0	0	3	3
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
5	EN22201	Technical English	HSMC	2	0	2	4	3
6	PH22201	Physics for Civil Engineers	BSC	2	0	2	4	3
7	CH22201	Environment and Sustainability	BSC	2	0	2	4	3
<b>PRACTICAL COURSES</b>								
8	CE22202	Building Materials Laboratory	ESC	0	0	4	4	2
9	ES22203	Engineering Practices Laboratory	ESC	0	0	4	4	2
<b>MANDATORY COURSES</b>								
10	GE3152	Heritage Of Tamil	MC	1	0	0	1	1
<b>TOTAL</b>				19	1	14	34	27

**REGULATIONS 2022**

**B. E. COMPUTER SCIENCE AND ENGINEERING**

**CURRICULUM CHOICE BASED CREDIT SYSTEM**

**SEMESTER I**

SL. NO.	COURSE CODE	COURSE TITLE	CATE - GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY COURSES</b>								

1.	MA22101	Matrices and Calculus	BSC	3	1	0	4	4
2.	PH22101	Engineering Physics	BSC	3	0	0	3	3
3.	CH22101	Engineering Chemistry	BSC	3	0	0	3	3
4.	CS22101	Problem Solving and Python Programming	ESC	3	0	0	3	3
5.	HS22102	Universal Human Values : Understanding Harmony and Ethical Human Conduct	HSMC	2	0	0	2	2
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
6.	EN22101	Communicative English	HSMC	2	0	2	4	3
<b>PRACTICAL COURSES</b>								
7.	BS22101	Physics & Chemistry Laboratory	BSC	0	0	4	4	2
8.	CS22102	Python Programming Laboratory	ESC	0	0	4	4	2
<b>MANDATORY COURSES</b>								
9.	IP22101	Induction Programme	-	-	-	-	-	0
10.	HS22101	Higher Order Thinking	MC	1	0	0	1	1
<b>TOTAL</b>				<b>17</b>	<b>1</b>	<b>10</b>	<b>28</b>	<b>23</b>

### SEMESTER II

SL. NO.	COURSE CODE	COURSE TITLE	CATE - GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDI TS
				L	T	P		
<b>THEORY COURSES</b>								
1.	MA22201	Statistics and Numerical Methods	BSC	3	1	0	4	4
2.	ES22202	Basic Electrical and Electronics Engineering	ESC	3	0	0	3	3
3.	CS22201	Programming in C	ESC	3	0	0	3	3
4.	ME22201	Engineering Graphics	ESC	2	0	2	4	3

5.	GE3152	சமீப காலம் /Heritage of Tamils	HSMC	1	0	0	1	1
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
6.	EN22201	Technical English	HSMC	2	0	2	4	3
7.	PH22203	Physics for Information Science	BSC	2	0	2	4	3
8.	CH22201	Environment and Sustainability	BSC	2	0	2	4	3
<b>PRACTICAL COURSES</b>								
9.	CS22202	C Programming Laboratory	ESC	0	0	4	4	2
10.	ES22203	Engineering Practices Laboratory	ESC	0	0	4	4	2
<b>TOTAL</b>				<b>18</b>	<b>1</b>	<b>16</b>	<b>35</b>	<b>27</b>

## REGULATIONS 2022

### M. E. COMPUTER SCIENCE AND ENGINEERING

#### CURRICULUM CHOICE BASED CREDIT SYSTEM

#### SEMESTER I

SL. NO.	COURSE CODE	COURSE TITLE	CATE - GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY COURSES</b>								
1.	MA22102	Applied Probability and Statistics for Computer Engineers	FC	3	1	0	4	4
2.	CP22101	Advanced Data Structures and Algorithms	PCC	3	0	0	3	3
3.		Professional Elective I	PEC	3	0	0	3	3
4.	RM22101	Research Methodology	RMC	2	0	0	2	2
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
5.	CP22102	Database Practices	PCC	3	0	2	5	4
<b>PRACTICAL COURSES</b>				5				

6.	CP22103	Advanced Data Structures and Algorithms Laboratory	PCC	0	0	4	4	2
<b>EMPLOYABILITY ENHANCEMENT COURSES</b>								
7.	CP22104	Technical Seminar	EEC	0	0	2	2	1
<b>MANDATORY COURSES</b>								
8.		Audit Course I	AC	2	0	0	2	0
<b>TOTAL</b>				16	1	8	25	<b>19</b>

### SEMESTER II

SL. NO.	COURSE CODE	COURSE TITLE	CATE - GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDI TS	
				L	T	P			
<b>THEORY COURSES</b>									
1.	CP22204	Advanced Software Engineering	PCC	3	0	0	3	3	
2.		Professional Elective II	PEC	3	0	0	3	3	
3.		Professional Elective III	PEC	3	0	0	3	3	
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>									
4.	CP22201	Advanced Operating Systems	PCC	3	0	2	5	4	
5.	CP22202	Multicore Architecture and Programming	PCC	3	0	2	5	4	
6.	CP22203	Machine Learning	PCC	3	0	2	5	4	
<b>PRACTICAL COURSES</b>									
7.	CP22205	Software Engineering Laboratory	PCC	0	0	4	4	2	
8.	RM22201	Research Tools Laboratory	RMC	0	0	4	4	2	
<b>MANDATORY COURSES</b>									
9.		Audit Course II	AC	2	0	0	2	0	
<b>TOTAL</b>				5	20	0	14	34	<b>25</b>

**REGULATIONS 2022**

**B. E. ELECTRONICS AND COMMUNICATION ENGINEERING**

**CURRICULUM CHOICE BASED CREDIT SYSTEM**

**SEMESTER I**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY COURSES</b>								
1.	MA22101	Matrices and Calculus	BSC	3	1	0	4	4
2.	PH22101	Engineering Physics	BSC	3	0	0	3	3
3.	CH22101	Engineering Chemistry	BSC	3	0	0	3	3
4.	CS22101	Problem Solving and Python Programming	ESC	3	0	0	3	3
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
5.	EN22101	Communicative English	HSMC	2	0	2	4	3
<b>PRACTICAL COURSES</b>								
6.	BS22101	Physics and Chemistry Laboratory	BSC	0	0	4	4	2
7.	CS22102	Python Programming Laboratory	ESC	0	0	4	4	2
<b>MANDATORY COURSES</b>								
8.	IP22101	Induction Programme	-	-	-	-	-	0
9.	HS22101	Higher Order Thinking	MC	1	0	0	1	1
10.	HS22102	Universal Human Values : Understanding Harmony and Ethical Human Conduct	HSMC	2	0	0	2	2
<b>TOTAL</b>				<b>17</b>	<b>1</b>	<b>10</b>	<b>28</b>	<b>23</b>

**SEMESTER II**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY COURSES</b>								

1.	MA22201	Statistics and Numerical Methods	BSC	3	1	0	4	4
2.	EE22201	Basic Electrical and Instrumentation Engineering	ESC	3	0	0	3	3
3.	EC22201	Electric Circuits and Electron Devices	ESC	3	0	0	3	3
4.	ME22201	Engineering Graphics	ESC	2	2	0	4	3
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
5.	EN22201	Technical English	HSMC	2	0	2	4	3
6.	PH22202	Physics for Electronics Engineering	BSC	2	0	2	4	3
7.	CH22201	Environment and Sustainability	BSC	2	0	2	4	3
<b>PRACTICAL COURSES</b>								
8.	EC22202	Circuits and Devices Laboratory	ESC	0	0	4	4	2
9.	ES22203	Engineering Practices Laboratory	ESC	0	0	4	4	2
<b>MANDATORY COURSES</b>								
10.	GE3152	Heritage of Tamil	MC	1	0	0	1	1
<b>TOTAL</b>				<b>18</b>	<b>1</b>	<b>16</b>	<b>35</b>	<b>27</b>

## REGULATIONS 2022

### M. E. APPLIED ELECTRONICS

#### SEMESTER I

SL. NO.	COURSE CODE	COURSE TITLE	CATE - GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY COURSES</b>								
1.	MA22103	Applied Mathematics for Electronics Engineers	FC	3	1	0	4	4
2.	AE22102	Digital CMOS VLSI Design	PCC	3	0	0	3	3
3.		Professional Elective - I	PEC	3	0	0	3	3
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
4.	AE22101	Advanced Digital System Design	PCC	3	0	2	5	4
<b>PRACTICAL COURSES</b>								
5.	AE22103	Electronics System Design Laboratory	PCC	0	0	4	4	2

<b>EMPLOYABILITY ENHANCEMENT COURSES</b>								
6.	AE22104	Technical Seminar	EEC	0	0	2	2	1
7.	RM22101	Research Methodology	RMC	2	0	0	2	2
<b>MANDATORY COURSES</b>								
8.		Audit Course – I	AC	2	0	0	2	0
<b>TOTAL</b>				<b>16</b>	<b>1</b>	<b>8</b>	<b>25</b>	<b>19</b>

## SEMESTER II

SL. NO.	COURSE CODE	COURSE TITLE	CATE - GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY COURSES</b>								
1.	AE22204	Power Conversion Circuits for Electronics	PCC	3	0	0	3	3
2.		Professional Elective II	PEC	3	0	0	3	3
3.		Professional Elective III	PEC	3	0	0	3	3
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
4.	AE22201	Semiconductor Devices and Modeling	PCC	3	0	2	5	4
5.	AE22202	Advanced Digital Signal Processing	PCC	3	0	2	5	4
6.	AE22203	Embedded Systems	PCC	3	0	2	5	4
<b>PRACTICAL COURSES</b>								
7.	AE22205	VLSI Design Laboratory	PCC	0	0	4	4	2
<b>EMPLOYABILITY ENHANCEMENT COURSES</b>								
8.	RM22201	Research Tools Laboratory	RMC	0	0	4	4	2
<b>MANDATORY COURSES</b>								
9.		Audit Course – II	AC	2	0	0	2	0
<b>TOTAL</b>				<b>20</b>	<b>0</b>	<b>14</b>	<b>34</b>	<b>25</b>

## REGULATIONS 2022

### M. E. COMMUNICATION SYSTEM

## SEMESTER I

SL. NO.	COURSE CODE	COURSE TITLE	CATE - GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY COURSES</b>								
1	MA22104	Applied Mathematics for Communication Engineers	FC	3	1	0	4	4

2	CU22102	Modern Digital Communication Systems	PCC	3	0	0	3	3
3		Professional Elective I	PEC	3	0	0	3	3
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
4	CU22101	Statistical Signal Processing	PCC	3	0	2	5	4
<b>PRACTICAL COURSES</b>								
5	CU22103	Digital Communication Systems Laboratory	PCC	0	0	4	4	2
<b>EMPLOYABILITY ENHANCEMENT COURSES</b>								
6	CU22104	Technical Seminar	EEC	0	0	2	2	1
7	RM22101	Research Methodology	RMC	2	0	0	2	2
<b>MANDATORY COURSES</b>								
8		Audit Course I	AC	2	0	0	2	0
<b>TOTAL</b>				<b>16</b>	<b>1</b>	<b>8</b>	<b>25</b>	<b>19</b>

### SEMESTER II

SL. NO.	COURSE CODE	COURSE TITLE	CATE - GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY COURSES</b>								
1	CU22204	Advanced Wireless Communication	PCC	3	0	0	3	3
2		Professional Elective II	PEC	3	0	0	3	3
3		Professional Elective III	PEC	3	0	0	3	3
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
4	CU22201	Microwave Circuits	PCC	3	0	2	5	4
5	CU22202	Radiating Systems	PCC	3	0	2	5	4
6	CU22203	Machine Learning	PCC	3	0	2	5	4
<b>PRACTICAL COURSES</b>								
7	CU22205	Wireless Communication Laboratory	PCC	0	0	4	4	2
<b>EMPLOYABILITY ENHANCEMENT COURSES</b>								
8	RM22201	Research Tool Laboratory	RMC	0	0	4	4	2
<b>MANDATORY COURSES</b>								
9		Audit Course II	AC	2	0	0	2	0
<b>TOTAL</b>				<b>20</b>	<b>0</b>	<b>14</b>	<b>34</b>	<b>25</b>

**REGULATIONS 2022**

**M. E. MEDICAL ELECTRONICS**

**SEMESTER I**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY COURSES</b>								
1.	MA22105	Applied Mathematics for Medical Engineers	FC	3	1	0	4	4
2.	MX22102	Biomedical Instrumentation and Equipment	PCC	3	0	0	3	3
3.		Professional Elective I	PEC	3	0	0	3	3
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
4.	MX22101	Bio Signal Processing	PCC	3	0	2	5	4
<b>PRACTICAL COURSES</b>								
5.	MX22103	Biomedical Instrumentation Laboratory	PCC	0	0	4	4	2
<b>EMPLOYABILITY ENHANCEMENT COURSES</b>								
6.	MX22104	Technical Seminar	EEC	0	0	2	2	1
7.	RM22101	Research Methodology	RMC	2	0	0	2	2
<b>MANDATORY COURSES</b>								
8.		Audit Course I	AC	2	0	0	2	0
<b>TOTAL</b>				<b>16</b>	<b>1</b>	<b>8</b>	<b>25</b>	<b>19</b>

**SEMESTER II**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY COURSES</b>								
1.	MX22204	Human Anatomy and Physiology	PCC	3	0	0	3	3
2.		Professional Elective II	PEC	3	0	0	3	3
3.		Professional Elective III	PEC	3	0	0	3	3
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
4.	MX22201	Medical Image Processing	PCC	3	0	2	5	4

5.	MX22202	Embedded Systems and Internet of Things for Medical Application	PCC	3	0	2	5	4
6.	MX22203	Machine Learning Techniques	PCC	3	0	2	5	4
<b>PRACTICAL COURSES</b>								
7.	MX22205	Data Acquisition and Design Laboratory	PCC	0	0	4	4	2
<b>EMPLOYABILITY ENHANCEMENT COURSES</b>								
8.	RM22201	Research Tools Laboratory	RMC	0	0	4	4	2
<b>MANDATORY COURSES</b>								
9.		Audit Course II	AC	2	0	0	2	0
<b>TOTAL</b>				<b>20</b>	<b>0</b>	<b>14</b>	<b>34</b>	<b>25</b>

### REGULATIONS 2022

### B. E. ELECTRICAL AND ELECTRONICS ENGINEERING

#### SEMESTER I

SL. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1	MA22101	Matrices and Calculus	BSC	3	1	0	4	4
2	PH22101	Engineering Physics	BSC	3	0	0	3	3
3	CH22101	Engineering Chemistry	BSC	3	0	0	3	3
4	CS22101	Problem Solving and Python Programming	ESC	3	0	0	3	3
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
5	EN22101	Communicative English	HSMC	2	0	2	4	3
<b>PRACTICALS</b>								
6	BS22101	Physics and Chemistry Laboratory	BSC	0	0	4	4	2
7	CS22102	Python Programming Laboratory	ESC	0	0	4	4	2
<b>MANDATORY COURSES</b>								
8	IP22101	Induction Programme	-	-	-	-	-	0
9	HS22101	Higher Order Thinking	MC	1	0	0	1	1
10	HS22102	Universal Human Values: Understanding Harmony and Ethical Human Conduct	HSMC	2	0	0	2	2
<b>TOTAL</b>				<b>17</b>	<b>1</b>	<b>10</b>	<b>28</b>	<b>23</b>

**SEMESTER II**

SL. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1	MA22201	Statistics and Numerical Methods	BSC	3	1	0	4	4
2	ES22201	Basic Civil and Mechanical Engineering	ESC	3	0	0	3	3
3	EE22202	Electric Circuit Analysis	ESC	3	0	0	3	3
4	ME22201	Engineering Graphics	ESC	2	0	2	4	3
5	GE3152	Heritage of Tamils	HSMC	1	0	0	1	1
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
5	EN22201	Technical English	HSMC	2	0	2	4	3
6	PH22202	Physics For Electronics Engineering	BSC	2	0	2	4	3
7	CH22201	Environment And Sustainability	BSC	2	0	2	4	3
<b>PRACTICAL</b>								
8	EE22203	Electric Circuit Analysis Laboratory	ESC	0	0	4	4	2
9	ES22203	Engineering Practices Laboratory	ESC	0	0	4	4	2
<b>TOTAL</b>				<b>18</b>	<b>1</b>	<b>16</b>	<b>35</b>	<b>27</b>

**REGULATIONS 2022**

**M. E. POWER ELECTRONICS**

**SEMESTER I**

SL. NO.	COURS ECODE	COURSE TITLE	CATE - GORY	PERIOD S PER WEEK			TOTAL CONT ACT PERIO DS	CREDI TS
				L	T	P		
<b>THEORY</b>								
1	MA22106	Advanced Mathematics for Power Electronics Engineers	FC	3	1	0	4	4
2	PE22102	Modelling and Design of SMPS	PCC 6	3	1	0	4	4

3		Professional Elective I	PEC	3	0	0	3	3
4	RM22101	Research Methodology	RMC	2	0	0	2	2
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
5	PE22101	Analysis of Power Converters	PCC	3	0	2	5	4
<b>PRACTICAL</b>								
6	PE22103	Design Laboratory for Power Electronics and Drives	PCC	0	0	4	4	2
<b>EMPLOYABILITY ENHANCEMENT COURSES</b>								
7	PE22104	Technical Seminar	EEC	0	0	2	2	1
<b>MANDATORY COURSES</b>								
8		Audit Course I	AC	2	0	0	2	0
<b>TOTAL</b>				<b>16</b>	<b>2</b>	<b>8</b>	<b>26</b>	<b>20</b>

## SEMESTER II

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1	PE22201	Analysis of Electrical Machines	PCC	3	1	0	4	4
2	PE22203	System Design Using Microcontroller	PCC	3	0	0	3	3
3	PE22204	Electric Vehicles and Power management	PCC	3	0	0	3	3
4		Professional Elective II	PEC	3	0	0	3	3
5		Professional Elective III	PEC	3	0	0	3	3
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
6	PE22202	Analysis of Electrical Drives	PCC	3	0	2	5	4

<b>PRACTICAL</b>								
7	PE22205	Analog and Digital Controllers for PE Converters Laboratory	PCC	0	0	4	4	2
<b>EMPLOYABILITY ENHANCEMENT COURSES</b>								
8	RM22201	Research Tool Laboratory	EEC	0	0	4	4	2
<b>MANDATORY COURSES</b>								
9		Audit Course II	AC	2	0	0	2	0
<b>TOTAL</b>				<b>20</b>	<b>1</b>	<b>14</b>	<b>34</b>	<b>24</b>

## REGULATIONS 2022

### B. Tech. INFORMATION TECHNOLOGY

#### SEMESTER I

SL. NO.	COURSE CODE	COURSE TITLE	CATE - GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDI TS
				L	T	P		
<b>THEORY COURSES</b>								
1.	MA22101	Matrices and Calculus	BSC	3	1	0	4	4
2.	PH22101	Engineering Physics	BSC	3	0	0	3	3
3.	CH22101	Engineering Chemistry	BSC	3	0	0	3	3
4.	CS22101	Problem Solving and Python Programming	ESC	3	0	0	3	3
5.	HS22102	Universal Human Values: Understanding Harmony and Ethical Human Conduct	HSMC	2	0	0	2	2
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
6.	EN22101	Communicative English	<sup>6</sup> HSMC	2	0	2	4	3

<b>PRACTICAL COURSES</b>								
7.	BS22101	Physics & Chemistry Laboratory	BSC	0	0	4	4	2
8.	CS22102	Python Programming Laboratory	ESC	0	0	4	4	2
<b>MANDATORY COURSES</b>								
9.	IP22101	Induction Programme	-	-	-	-	-	0
10.	HS22101	Higher Order Thinking	MC	1	0	0	1	1
<b>TOTAL</b>				<b>17</b>	<b>1</b>	<b>10</b>	<b>28</b>	<b>23</b>

### SEMESTER II

SL. NO.	COURSE CODE	COURSE TITLE	CATE - GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDI TS
				L	T	P		
<b>THEORY COURSES</b>								
1.	MA22201	Statistics and Numerical Methods	BSC	3	1	0	4	4
2.	ES22202	Basic Electrical and Electronics Engineering	ESC	3	0	0	3	3
3.	CS22201	Programming in C	ESC	3	0	0	3	3
4.	ME22201	Engineering Graphics	ESC	2	0	2	4	3
5.	GE3152	தமிழர் மரபு /Heritage of Tamils	HSMC	1	0	0	1	1
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
6.	EN22201	Technical English	HSMC	2	0	2	4	3
7.	PH22203	Physics for Information Science	BSC	2	0	2	4	3
8.	CH22201	Environment and Sustainability	BSC	2	0	2	4	3
<b>PRACTICAL COURSES</b>								
9.	CS22202	C Programming Laboratory	6ESC	0	0	4	4	2

10.	ES22203	Engineering Practices Laboratory	ESC	0	0	4	4	2
<b>TOTAL</b>				<b>18</b>	<b>1</b>	<b>16</b>	<b>35</b>	<b>27</b>

**REGULATIONS 2022**

**B. E. MECHANICAL ENGINEERING**

**SEMESTER I**

SL. NO.	COURSE CODE	COURSE TITLE	CATE - GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY COURSES</b>								
1	MA22101	Matrices and Calculus	BSC	3	1	0	4	4
2	PH22101	Engineering Physics	BSC	3	0	0	3	3
3	CH22101	Engineering Chemistry	BSC	3	0	0	3	3
4	CS22101	Problem Solving and Python Programming	ESC	3	0	0	3	3
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
5	EN22101	Communicative English	HSMC	2	0	2	4	3
<b>PRACTICAL COURSES</b>								
6	BS22101	Physics – Chemistry Laboratory	BSC	0	0	4	4	2
7	CS22102	Python Programming Laboratory	ESC	0	0	4	4	2
<b>MANDATORY COURSES</b>								
8	IP22101	Induction Programme	-	-	-	-	-	0
9	CS22101	Higher Order thinking	MC	1	0	0	1	1
10	HS22102	Universal Human Values: Understanding Harmony and Ethical Human Conduct	HSMC	2	0	0	2	2
<b>TOTAL</b>				<b>17</b>	<b>1</b>	<b>10</b>	<b>28</b>	<b>23</b>

## SEMESTER II

SL. NO.	COURSE CODE	COURSE TITLE	CATE - GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CRED ITS
				L	T	P		
<b>THEORY COURSES</b>								
1	MA22201	Statistics and Numerical Methods	BSC	3	1	0	4	4
2	ES22202	Basic Electrical and Electronics Engineering	ESC	3	0	0	3	3
3	ME22201	Engineering Graphics	ESC	2	0	2	4	3
4	ME22202	Engineering Mechanics	PCC	2	1	0	3	3
5	GE3152	Heritage of Tamil	HSMC	1	0	0	1	1
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
6	EN22201	Technical English	HSMC	2	0	2	4	3
7	PH22204	Material Science	BSC	2	0	2	4	3
8	CH22201	Environment and Sustainability	BSC	2	0	2	4	3
<b>PRACTICAL COURSES</b>								
9	ME22203	Computer Aided design and Drafting Laboratory	PCC	0	0	4	4	2
10	ES22203	Engineering Practices Laboratory	ESC	0	0	4	4	2
<b>TOTAL</b>				<b>17</b>	<b>2</b>	<b>16</b>	<b>35</b>	<b>27</b>

## REGULATIONS 2022

### M. E. ENERGY ENGINEERING

#### SEMESTER I

SL. NO.	COURSE CODE	COURSE TITLE	CATE - GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
6								
<b>THEORY</b>								

1	EY22101	Fluid Mechanics and Heat Transfer	FC	3	1	0	4	4
2	EY22102	Renewable Energy Systems	PCC	3	0	2	5	4
3	EY22103	Thermodynamic analysis of energy systems	PCC	3	1	0	4	4
4		Professional Elective I	PEC	3	0	0	3	3
5	RM22101	Research Methodology	RMC	2	0	0	2	2
6		Audit Course I	AC	2	0	0	2	0
<b>PRACTICAL</b>								
7	EY22104	Simulation and Analysis Laboratory for Energy Systems	PCC	0	0	4	4	2
8	EY22105	Technical Seminar	EEC	0	0	2	2	1
<b>TOTAL</b>				16	2	8	26	20

### SEMESTER II

SL. NO.	COURSE CODE	COURSE TITLE	CATE - GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1	EY22201	Computational Fluid Dynamics for Energy Systems	PCC	3	1	0	4	4
2	EY22202	Energy Conservation in Industrial Utilities	PCC	3	0	0	3	3
3	EY22203	Waste to Energy	PCC	3	0	0	3	3

4	EY22204	Instrumentation for Energy Systems	PCC	3	1	0	3	4
5		Professional Elective II	PEC	3	0	0	3	3
6		Professional Elective III	PEC	3	0	0	3	3
7		Audit Course II	AC	2	0	0	2	0
<b>PRACTICAL</b>								
8	EY22205	Analysis and Simulation Laboratory	PCC	0	0	4	4	2
9	RM22201	Research Tools in Engineering	EEC	0	0	4	4	2
<b>TOTAL</b>				20	1	10	31	24

## REGULATIONS 2022

### MBA – MASTER OF BUSINESS ADMINISTRATION

#### SEMESTER I

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1.	MS22101	Statistics for Management	FC	3	0	0	3	3
2.	MS22102	Management Concepts and Organizational Behavior	PCC	3	0	0	3	3
3.	MS22103	Managerial Economics	PCC	3	0	0	3	3
4.	MS22104	Accounting for Management	PCC	3	0	0	3	3
5.	MS22105	Legal Aspects of Business	PCC	3	0	0	3	3
6.	MS22106	Information Management	PCC	3	0	0	3	3
7.	MS22107	Entrepreneurship Development	PCC	3	0	0	3	3
<b>PRACTICAL</b>								
8.	MS22108	Communications Skill Development	EEC	0	0	4	4	2

9.	MS22109	Business Tools Laboratory	EEC	0	0	4	4	2
<b>TOTAL</b>				<b>21</b>	<b>0</b>	<b>8</b>	<b>29</b>	<b>25</b>

**Semester – II**

SL. NO.	COURS CODE	COURSE TITLE	CATEGORY	PERIODS PERWEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY</b>								
1.	MS22201	Operations Research For Management	PCC	3	0	0	3	3
2.	MS22202	Financial Management	PCC	3	0	0	3	3
3.	MS22203	Human Resource Management	PCC	3	0	0	3	3
4.	MS22204	Operations Management	PCC	3	0	0	3	3
5.	MS22205	Business Research Methods	PCC	3	0	0	3	3
6.	MS22206	International Business Management	PCC	3	0	0	3	3
7.	MS22207	Marketing Management	PCC	3	0	0	3	3

<b>PRACTICAL</b>								
8.	MS22208	Leadership Skills Development	EEC	0	0	4	4	2
9.	MS22209	Big Data Analytics Laboratory	EEC	0	0	4	4	2
<b>TOTAL</b>				<b>21</b>	<b>0</b>	<b>8</b>	<b>29</b>	<b>25</b>

## REGULATIONS 2022

### MCA – MASTER OF COMPUTER APPLICATIONS

#### SEMESTER I

SL. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
<b>THEORY COURSES</b>								
1.	MA22109	Mathematical Statistics for Computer Applications	FC	3	1	0	4	4
2.	MC22101	Advanced Data Structures and Algorithms	PCC	3	0	0	3	3
3.	MC22102	Advanced Database Technology	PCC	3	0	0	3	3
4.	MC22103	Object Oriented Software Engineering	PCC	3	0	0	3	3
5.	MC22105	Cloud Computing Technologies	PCC	3	0	0	3	3
<b>THEORY COURSES WITH PRACTICAL COMPONENT</b>								
6.	MC22104	Python Programming	PCC	3	0	2	5	4
<b>PRACTICAL COURSES</b>								
7.	MC22106	Advanced Database Technology Laboratory	PCC	0	0	4	4	2
8.	MC22107	Advanced Data Structures and Algorithms Laboratory	PCC	0	0	4	4	2
<b>EMPLOYABILITY ENHANCEMENT COURSES</b>								
9.	SD22101	Coding Skills and Soft skills Training -Phase I	EEC	0	0	4	4	2
<b>MANDATORY COURSES</b>								
10.		Audit Course – I*	AC	2	0	0	2	0
<b>TOTAL</b>				<b>20</b>	<b>1</b>	<b>14</b>	<b>35</b>	<b>26</b>

#### SEMESTER II

SL. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		

THEORY COURSES								
1.	MC22201	Full Stack Web Development	PCC	3	0	0	3	3
2.	MC22202	Research Methodology and IPR	RMC	2	0	0	2	2
3.	MC22203	Data Science	PCC	3	0	0	3	3
4.	MC22205	Advances in Operating System	PCC	3	0	0	3	3
5.		Professional Elective I	PEC	3	0	0	3	3
THEORY COURSES WITH PRACTICAL COMPONENT								
6.	MC22204	Mobile Application Development	PCC	3	0	2	5	4
PRACTICAL COURSES								
7.	MC22206	Full Stack Web Development Laboratory	PCC	0	0	4	4	2
8.	MC22207	Data Science Laboratory	PCC	0	0	4	4	2
EMPLOYABILITY ENHANCEMENT COURSES								
9.	SD22201	Coding Skills and Quantitative Aptitude –Phase I	EEC	0	0	4	4	2
MANDATORY COURSES								
10.		Audit Course – II*	AC	2	0	0	2	0
TOTAL				19	0	14	33	24