

**Sri Eshwar College of Engineering  
Autonomous Institution**

**BE CSE (AIML) Curriculum - Regulation 2023**

**SEMESTER I**

Sl. No.	Course Code	Course Name	Category	Periods / Week				Total Contact Periods	Credits
				L	T	P	J		
Theory Courses									
-	-	Induction Program	-	-	-	-	-	-	-
1	U23MA201	Calculus for Engineers	BS	3	1	0	0	4	4
2	U23CS301	Problem solving using C	ES	3	0	0	0	3	3
Theory cum Practical Courses									
3	U23HS181	Technical English	HS	2	0	2	0	4	3
4	U23CS381	Application Design and Development	ES	2	0	2	0	4	3
5	U23EC381	Electronics and Microprocessors	ES	3	0	2	0	5	4
Practical Courses									
6	U23GE351	Engineering Practices Laboratory	ES	0	0	2	0	2	1
7	U23CS351	Problem-solving using C Laboratory	ES	0	0	4	0	4	2
Professional Development Courses									
8	U23EM751	Soft Skills	EM	0	0	2	0	2	1
Mandatory Courses									
9	U23MC901	தமிழர்மரபு/ Heritage of Tamils	HSMC	1	0	0	0	1	1
Total				14	1	14	0	29	22

**SEMESTER II**

Sl. No.	Course Code	Course Name	Category	Periods / Week				Total Contact Periods	Credits
				L	T	P	J		
Theory Courses									
1	U23MA203	Linear Algebra	BS	3	1	0	0	4	4
2	U23CS401	Data Structures	PC	3	0	0	0	3	3
3	U23PH201	Computational Physics	BS	3	0	0	0	3	3
4	U23CS402	Object Oriented Programming using C++	PC	3	0	0	0	3	3
5	U23NCC01	NCC Credit Course Level 1#	-	2	0	0	0	2	2 <sup>#</sup>
Theory cum Practical Courses									
6	U23HS1XX	Language Elective	HS	2	0	2	0	4	3
Theory cum Practical cum Project Courses									
7	U23AD491	Python for AI	ES	2	0	2	2	6	4
Practical Courses									
8	U23CS451	Data Structures Laboratory	PC	0	0	4	0	4	2
9	U23CS452	Object Oriented Programming using C++ Laboratory	PC	0	0	2	0	2	1
Professional Development Courses									
10	U23EM752	Logical Thinking	EM	0	0	2	0	2	1
Mandatory Courses									

Sl. No.	Course Code	Course Name	Category	Periods / Week				Total Contact Periods	Credits
				L	T	P	J		
11	U23MC902	தமிழரும் தொழில்நுட்பமும்/ Tamils and Technology	HSMC	1	0	0	0	1	1
<b>Total</b>				19	01	12	2	34	25

#-Offered only for NCC students

### SEMESTER III

Sl. No.	Course Code	Course Name	Category	Periods / Week				Total Contact Periods	Credits
				L	T	P	J		
Theory Courses									
1	U23MA204	Discrete Mathematics	BS	3	1	0	0	4	4
2	U23CS403	Design and Analysis of Algorithms	PC	3	0	0	0	3	3
3	U23CS404	Database Management Systems	PC	3	0	0	0	3	3
Theory cum Practical cum Project Courses									
4	U23CS491	Java Programming	PC	2	0	2	2	6	4
Theory cum Project Course									
5	U23AD493	Artificial Intelligence	PC	3	0	0	2	5	4
Practical Courses									
6	U23CS453	Design and Analysis of Algorithms Laboratory	PC	0	0	4	0	4	2
7	U23CS454	Database Management Systems Laboratory	PC	0	0	2	0	2	1
Professional Development Courses									
8	U23EM753	Advanced Logical Thinking	EM	0	0	2	0	2	1
Mandatory Courses									
9	U23MC903	Environmental Science	MC	2	0	0	0	1	NC
Total				15	1	10	4	30	22

### SEMESTER IV

Sl. No.	Course Code	Course Name	Category	Periods / Week				Total Contact Periods	Credits
				L	T	P	J		
Theory Courses									
1	U23MA209	Probability and Statistics	BS	3	1	0	0	4	4
2	U23NCC02	NCC Credit Course Level 2#	MC	3	0	0	0	3	NC
Theory cum Practical Courses									
3	U23EC384	Computer Networks	ES	2	0	2	0	5	3
4	U23EC382	Digital Principles and Computer Organization	ES	2	0	2	0	5	3
Theory cum Practical Cum Project Courses									
5	U23AM491	Machine Learning	PC	2	0	2	2	6	4
6	U23AD492	Data Science	PC	2	0	2	2	6	4
Mandatory Courses									
7	U23MC904	Universal Human Values	MC	1	0	0	0	1	NC
Total				15	1	8	4	30	18

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Page | 6



## SEMESTER V

Sl. No.	Course Code	Course Name	Category	Periods / Week				Total Contact Periods	Credits
				L	T	P	J		
Theory Courses									
1	U23CB401	Operating Systems	PC	3	0	0	0	3	3
2	U23XXXX	Professional Elective I	PE	3	0	0	0	3	3
Theory cum Practical Courses									
3	U23AD482	Data Visualization & Exploration	PC	2	0	2	0	4	3
4	U23EC383	Embedded Systems and IoT	PC	3	0	2	0	5	4
Theory cum Practical with Project Course									
5	U23CS492	Full Stack Development	PC	2	0	2	2	6	4
6	U23AM492	Deep Learning for Computer Vision	PC	2	0	2	2	6	4
Practical Courses									
7	U23CB451	Operating Systems Laboratory	PC	0	0	2	0	2	1
Professional Development Course									
8	U23IAMXX	Industry Oriented Course	PC	0	0	2	0	2	1
Total				15	0	12	4	31	23

## SEMESTER VI

Sl. No.	Course Code	Course Name	Category	Periods / Week				Total Contact Periods	Credits
				L	T	P	J		
Theory Courses									
1	U23XXXX	Professional Elective II	PE	3	0	0	0	3	3
2	U23XXXX	Professional Elective III	PE	3	0	0	0	3	3
3	U23XXXX	Open Elective I*	OE	3	0	0	0	3	3
4	U23NCC03	NCC Credit Course Level 3#	--	3	0	0	0	3	NC
Theory Cum Practical Courses									
5	U23IT481	Software Engineering	PC	2	0	2	0	4	3
Theory cum Practical with Project Courses									
6	U23AM493	Generative AI	PC	2	0	2	2	6	4
7	U23AM494	Natural Language Processing	PC	2	0	2	2	6	4
Project Work									
8	U23AM604	Innovative / Multi-Disciplinary Project	PW	2	0	0	2	4	3
Total				20	0	6	6	29	23

\*L T P C either 3 0 0 3 or 2 0 2 3, #-Offered only for NCC students

## SEMESTER VII

Sl. No.	Course Code	Course Name	Category	Periods / Week				Total Contact Periods	Credits
				L	T	P	J		
Theory Courses									
1	U23CB103	Principles of Management	HS	3	0	0	0	3	3
2	U23XXXX	Professional Elective IV	PE	3	0	0	0	3	3

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Sl. No.	Course Code	Course Name	Category	Periods / Week				Total Contact Periods	Credits
				L	T	P	J		
3	U23XXXX	Open Elective II*	OE	3	0	0	0	3	3
4	U23CB104	Project Management and Finance	MC	1	0	0	0	1	1
<b>Theory cum Practical Course</b>									
5	U23IT483	Blockchain Technologies	PC	3	0	2	0	5	4
<b>Project Work</b>									
6	U23AM607	Project Work – Phase I	PW	0	0	0	12	12	6
<b>Total</b>				10	0	0	12	22	20

#### SEMESTER VIII

SEMESTER VII									
Sl. No.	Course Code	Course Name	Category	Periods / Week				Total Contact Periods	Credits
				L	T	P	J		
Project Work									
1	U23AM605	Industry Internship/Project Work -Phase II	PW	0	0	0	20	20	10
Total				0	0	0	20	20	10

**Total Number of Credits: 163**

#### CREDIT SUMMARY

Sl. No.	Course Category	Credits per Semester								Credits	Credit %
		I	II	III	IV	V	VI	VII	VIII		
1	HS	3	3	-	-	-	-	3	-	9	5.5
2	BS	4	7	4	4	-	-	-	-	19	11.6
3	ES	13	4	-	6	-	-	-	-	23	14.0
4	PC	-	9	18	7	20	11	4	-	69	42.1
5	PE	-	-	-	-	3	6	3	-	12	7.3
6	OE	-	-	-	-	-	3	3	-	6	3.7
7	PW	-	-	-	-	-	3	6	10	19	11.6
8	EM	1	1	1	-	-	-	-	-	3	1.8
9	NC	-	√	√	√	-	-	-	-	0	0.0
10	MC	-	-	√	√	-	-	1	-	1	0.6
11	HSMC	1	1	-	-	-	-	-	-	2	1.2
<b>Total</b>		22	25	23	17	23	23	20	10	163	100