CRITERION-8

8. FIRST YEAR ACADEMICS (50)

8.1. First Year Student-Faculty Ratio (FYSFR) (5)

Assessment×20) / Average = (5 FYSFR (Limited to Max. 5)
Data for first year courses to calculate the FYSFR:

Year	Number of students (approved intake strength)	Number of faculty members(considering load)	FYSFR	*Assessment=(5*20)/FYSFR (Limited to Max.5)
CAY (2021-2022)	780	55	14	5
CAYm1 (2020-2021)	780	39	20	5
CAYm2 (2019-2020)	780	46	17	5
Average	780	47	17	5

8.2. QUALIFICATION OF FACULTY TEACHING FIRST YEAR COMMON COURSES (5)

Assessment of qualification = $(5x + 3y)/RF$, x= Number of Regular Faculty with Ph.D, y = Number of Regular Faculty with Post-graduate qualification RF= Number of faculty members required as per SFR of 20:1, Faculty definition as defined in 5.1

Year	X	Y	RF	Assessment of faculty qualification (5X + 3Y)/RF
CAY (2021-2022)	4	51	55	3
CAYm1 (2020-2021)	5	34	39	3
CAYm2 (2019-2020)	8	38	46	3
AVERAGE ASSESSMENT				**3**

S.A.ENGINEERING COLLEGE, CHENNAI-77
FACULTY NAME LIST 2021-2022

S.No.	Name	Qualification	Designation	DOJ	Dept.
1.	Dr.R. Hariharasuthan	M.Sc.,Ph.D	Professor & HoD	20.09.2004	H&S
ENGLISH					
2	Dr.T. Senthilkumar	M.A, M.Phil.,Ph.D	Professor	08.10.2001	H&S
3	Mrs. G. Sri Nidhya	M.A ,M.Phil.,	Asso.Prof	17.10.2005	H&S
4	Mrs. K.R.Nithya	M.A.,M.Phil.,B.Ed.,	AP	05.06.2017	H&S
5	Mrs.V. Jeeva	M.A ,M.Phil.,	AP	05.07.2017	H&S
6	Mrs.S. Elakkiya	M.A ,M.Phil.,	AP	16.12.2019	H&S
7	Ms.M.Visalakchi	M.A ,M.Phil.,	AP	19.11.2020	H&S
8	Mrs.N.Karthiga	M.A ,M.Phil.,	AP	04.03.2022	H&S
9	Mrs.G.Kalpana	M.A ,M.Phil.,	AP	04.03.2022	H&S
10	Mrs.G.Sandhiya Devi	M.A ,M.Phil.,	AP	04.03.2022	H&S
MATHEMATICS					
11	Dr. V. Madhusudanan	M.Sc ,M.Phil.,Ph.D	Professor	15.06.2011	H&S
12	Mrs.K.Glory Prasanth	M.Sc , M.Phil.,	Asso.Prof	05.09.2011	H&S
13	Mr.R.Anbunathan	M.Sc , M.Phil.,	Asso.Prof	03.12.2021	H&S
14	Mrs.G. Swathy	M.Sc ,M.Phil.,	AP	14.06.2012	H&S

15	Mrs. S. Selvi	M.Sc , M.Phil.,	AP	01.08.2013	H&S
16	Mrs. M. Lakshmi	M.Sc.,M.Phil.,	AP	01.08.2013	H&S
17	Mrs.R.Ramya	M.Sc.,M.Phil.,	AP	23.07.2014	H&S
18	Mrs.K. Kasthuri Devi	M.Sc , M.Phil.,	AP	02.01.2015	H&S
19	Mrs. R. Usha	M.Sc , M.Phil.,	AP	15.07.2015	H&S
20	Mrs. A. Malathy	M.Sc , M.Phil.,	AP	15.06.2016	H&S
21	Mrs. B. Porkodi	M.Sc , M.Phil.,	AP	15.06.2016	H&S
22	Mrs. D. Nithya	M.Sc , M.Phil.,	AP	15.06.2016	H&S
23	Mr. S.Prabhakar	M.Sc , M.Phil.,	AP	04.06.2018	H&S
24	Mrs.K.Kavitha	M.Sc , M.Phil., B.Ed.,	AP	19.11.2020	H&S
25	Mrs.P.Sudha	M.Sc , M.Phil.,	AP	14.07.2021	H&S
26	Mrs.K.Elavarasi	M.Sc , M.Phil.,	AP	14.07.2021	H&S
27	Mrs.G.Divya	M.Sc , M.Phil.,	AP	14.07.2021	H&S
28	Mr.M.R.Babu	M.Sc , M.Phil.,	AP	14.07.2021	H&S
29	Mrs.S.Shobanaramah	M.Sc , M.Phil.,	AP	14.07.2021	H&S
PHYSICS					
30	Dr. R. Kumutha	M.sc.,M.phil.,Ph.D	Professor	23.07.2014	H&S
31	Mrs. A. Chandravadhana	M.Sc ,M.Phil,B.Ed	Asso.Prof	20.09.2004	H&S
32	Mr.R. Raja	M.Sc ,M.Phil,B.Ed	AP	01.08.2012	H&S

33	Mrs.V.Jeno Sheeba	M.Sc.,M.Phil.,B.Ed	AP	01.08.2012	H&S
34	Mrs. S. Asha Nirmal	M.Sc , M.Phil.,	AP	20.01.2014	H&S
35	Mr. R. Ganesan	M.Sc.,M.Phil.,	AP	15.06.2016	H&S
36	Mrs. H.Angelin Hemakumari	M.Sc.,M.Phil.,	AP	05.07.2017	H&S
37	Mr.M. Sasi Kumar	M.Sc.,M.Phil.,	AP	04.08.2021	H&S
38	Ms.R. Swetha	M.Sc.,M.Phil.,	AP	04.08.2021	H&S
39	Mrs. S. Lakshmi	M.Sc.,M.Phil.,	AP	22.11.2021	H&S
CHEMISTRY					
40	Mr.D.Vedamanickam	M.Sc.,M.Phil.,	Asso.Prof	03.09.1998	H&S
41	Mrs.V. O. Sangeetha	M.Sc M.Phil.,	Asso.Prof	18.08.2005	H&S
42	Mrs.S. Jayachitra	M.Sc ,M Phil.,	Asso.Prof	21.08.2006	H&S
43	Mrs.R. GoldaBright	M.Sc ,M Phil.,	AP	01.07.2008	H&S
44	Mrs.S. Suja	M.Sc.M.Phil.,	AP	01.08.2013	H&S
45	Mrs. G. S. Gayathri	M.Sc .,M.Phil.,	AP	15.06.2016	H&S
46	Mrs. A. Anitha	M.Sc .,M.Phil.,	AP	05.07.2017	H&S
47	Mrs.G.Devi Priya	M.Sc .,M.Phil.,	AP	04.08.2021	H&S
48	Mrs.G.Uma	M.Sc .,M.Phil.,	AP	04.08.2021	H&S
49	Mrs.N.Parimala	M.Sc .,M.Phil.,	AP	04.08.2021	H&S
50	Mrs.A.Bhuvaneswari	M.Sc .,M.Phil.,	AP	04.08.2021	H&S

51	Mrs.R.Radhika	M.Sc .,M.Phil.,	AP	04.08.2021	H&S
52	Mr.S.Raja	M.Sc .,M.Phil.,	AP	04.08.2021	H&S
GENERAL ENGINEERING					
53	Mrs.S.K.Aruna	B.E,M.E.,	AP	15.06.2016	H&S
54	Mr.M.Arvind	B.E., M.Tech	AP	14.07.2021	H&S
55	Mr.K.A.Rajkumar	B.Tech, M.Tech	AP	14.07.2021	H&S

S.A.ENGINEERING COLLEGE, CHENNAI-77
FACULTY NAME LIST 2020-2021

S. NO	NAME	DESIGNATION	QUALIFICATION	DEPT
1	Dr.R. Hariharasuthan	Professor & HoD	M.Sc.,Ph.D	H&S
2	Dr.T. Senthilkumar	Professor	M.A, M.Phil.,Ph.D	H&S
3	Mrs. G. Sri Nidhya	Asso.Prof	M.A ,M.Phil.,	H&S
4	Mr. R. Murali	AP	M.A ,M.Phil.,	H&S
5	Mrs. K.R.Nithya	AP	M.A.,M.Phil.,B.Ed.,	H&S
6	Mrs.V. Jeeva	AP	M.A ,M.Phil.,	H&S
7	Mrs.S. Elakkiya	AP	M.A ,M.Phil.,	H&S
8	Ms.M.Visalakchi	AP	M.A ,(M.Phil.,)	H&S
9	Dr. V. MadhuSudanan	Professor	M.Sc ,M.Phil.,Ph.D	H&S
10	Mrs.K.GloryPrasanth	Asso. Prof.	M.Sc , M.Phil.,	H&S
11	Mrs.G. Swathy	AP	M.Sc ,M.Phil.,	H&S

12	Mrs. S. Selvi	AP	M.Sc , M.Phil.,	H&S
13	Mrs. M. Lakshmi	AP	M.Sc.,M.Phil.,	H&S
14	Mrs.R.Ramya	AP	M.Sc.,M.Phil.,	H&S
15	Mrs. G. Menaka	AP	M.Sc , M.Phil.,	H&S
16	Mrs.K. KasthuriDevi	AP	M.Sc , M.Phil.,	H&S
17	Mrs. R. Usha	AP	M.Sc , M.Phil.,	H&S
18	Mrs. A. Malathy	AP	M.Sc , M.Phil.,	H&S
19	Mrs. B. Porkodi	AP	M.Sc , M.Phil.,	H&S
20	Mrs. D. Nithya	AP	M.Sc , M.Phil.,	H&S
21	Mr. S.Prabhakar	AP	M.Sc , M.Phil.,	H&S
22	Mrs.K.Kavitha	AP	M.Sc , M.Phil., B.Ed.,	H&S
23	Mrs. A. Chandravadhana	Asso.Prof	M.Sc ,M.Phil,B.Ed	H&S
24	Dr. R. Kumutha	Asso.Prof	M.sc.,M.phil.,Ph.D	H&S
25	Dr.P.Indumathi	AP	M.sc.,M.Phil.,Ph.D	H&S
26	Mr.R. Raja	AP	M.Sc ,M.Phil, B.Ed	H&S
27	Mrs.V.Jeno Sheeba	AP	M.Sc.,M.Phil., B.Ed	H&S
28	Mrs. S. AshaNirmal	AP	M.Sc , M.Phil.,	H&S
29	Mr. R. Ganesan	AP	M.Sc.,M.Phil.,	H&S
30	Mrs. H.AngelinHemakumari	AP	M.Sc.,M.Phil.,	H&S
31	Mr.D.Vedamanickam	Asso. Prof.	M.Sc.,M.Phil.,	H&S
32	Mrs.V. O. Sangeetha	Asso.Prof	M.Sc M.Phil.,	H&S
33	Mrs.S. Jayachitra	Asso.Prof	M.Sc ,M Phil.,	H&S

34	Mrs.R. GoldaBright	AP	M.Sc ,M Phil.,	H&S
35	Mrs.S. Suja	AP	M.Sc.M.Phil.,	H&S
36	Mrs. G. S. Gayathri	AP	M.Sc .,M.Phil.,	H&S
37	Mrs.S.K.Aruna	AP	B.E,M.E.,	H&S
38	Ms. A. Anitha	AP	M.Sc .,M.Phil.,	H&S
39	Mrs.P.Sushila Rameswari	AP	M.Sc .,M.Phil.,	H&S

S.A.ENGINEERING COLLEGE, CHENNAI-77
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ENGLISH					
2.	Dr.T. Senthilkumar	M.A, M.Phil.,Ph.D	Professor	08.10.2001	H&S
3.	Mrs. G. Srinidhya	M.A ,M.Phil.,	Asso.Prof.	17.10.2005	H&S
4.	Mr. R. Murali	M.A ,M.Phil.,	AP	17.06.2014	H&S
5.	Ms. B. Rajalakshmi	M.A ,M.Phil,	AP	10.06.2015	H&S
6.	Mrs. K. Kavitha	M.A ,M.Phil.,	AP	15.06.2016	H&
7.	Mrs. K.R.Nithya	M.A.,M.Phil.,B.Ed.,	AP	05.06.2017	H&S
8.	Mrs.V. Jeeva	M.A ,M.Phil.,	AP	05.07.2017	H&S
9.	Mrs.K.G.Jaishri	M.A ,M.Phil.,	AP	03.06.2019	H&S

10.	Ms.A.Vidhya	M.A ,M.Phil.,	AP	03.06.2019	H&S
11.	Mrs.S. Elakkiya	M.A ,M.Phil.,	AP	16.12.2019	H&S
MATHEMATICS					
12.	Dr. V. MadhuSudhanan	M.Sc ,M.Phil.,Ph.D	Professor	15.06.2011	H&S
13.	Dr. G.Ambika	M.Sc.M.Phil.,Ph.D.	Asso. Prof.	04.06.2018	H&S
14.	Dr. L. Girija	M.Sc , M.Phil.,Ph.D.	Asso. Prof.	05.06.2017	H&S
15.	Mrs.K.GloryPrasanth	M.Sc , M.Phil.,	Asso. Prof.	05.09.2011	H&S
16.	Mrs.B.Suganya	M.Sc , M.Phil.,	Asso. Prof.	02.02.2011	H&S
17.	Mrs.G. Swathy	M.Sc ,M.Phil.,	AP	14.06.2012	H&S
18.	Mrs. S. Selvi	M.Sc , M.Phil.,	AP	01.08.2013	H&S
19.	Mrs. M. Lakshmi	M.Sc.,M.Phil.,	AP	01.08.2013	H&S
20.	Mrs. G. Menaka	M.Sc , M.Phil.,	AP	23.07.2014	H&S
21.	Mrs.K. Kasthuri Devi	M.Sc , M.Phil.,	AP	02.01.2015	H&S
22.	Mrs. B. Srirekha	M.Sc , M.Phil.,	AP	04.06.2015	H&S
23.	Dr.T.Nagalakshmi	M.Sc.M.Phil.,Ph.D.	AP	15.07.2015	H&S
24.	Mrs. R. Usha	M.Sc , M.Phil.,	AP	15.07.2015	H&S
25.	Mrs. A. Malathy	M.Sc , M.Phil.,	AP	15.06.2016	H&S
26.	Mrs. B. Porkodi	M.Sc , M.Phil.,	AP	15.06.2016	H&S
27.	Mrs. D. Nithya	M.Sc , M.Phil.,	AP	15.06.2016	H&S

28.	Mr. S. Govardhan	M.Sc , M.Phil.,	AP	05.06.2017	H&S
29.	Mr. S.Prabhakar	M.Sc , M.Phil.,	AP	04.06.2018	H&S
30.	Mrs.R.Nithya	M.Sc , M.Phil.,	AP	03.06.2019	H&S
PHYSICS					
31.	Mrs. A. Chandravadhana	M.Sc ,M.Phil,B.Ed	Asso.Prof.	20.09.2004	H&S
32.	Dr. R. Kumutha	M.sc.,M.phil.,Ph.D	Asso.Prof.	23.07.2014	H&S
33.	Mr.R. Raja	M.Sc ,M.Phil, B.Ed	AP	01.08.2012	H&S
34.	Mrs.V.Jeno Sheeba	M.Sc.,M.Phil., B.Ed	AP	01.08.2012	H&S
35.	Mrs. S. AshaNirmal	M.Sc , M.Phil.,	AP	20.01.2014	H&S
36.	Mr. R. Ganesan	M.Sc.,M.Phil.,	AP	15.06.2016	H&S
37.	Mrs. H.AngelinHemakumari	M.Sc.,M.Phil.,	AP	05.07.2017	H&S
38.	Dr.B.Indumathi	M.sc.,M.phil.,Ph.D	AP	16.12.2019	H&S
CHEMISTRY					
39.	Mr.D. Vedamanickam	M.Sc.,M.Phil.,	Asso. Prof.	03.09.1998	H&S
40.	Mrs.V. O. Sangeetha	M.Sc M.Phil.,	Asso.Prof.	18.08.2005	H&S
41.	Mrs.S. Jayachitra	M.Sc ,M Phil.,	Asso.Prof.	21.08.2006	H&S
42.	Mrs.R. GoldaBright	M.Sc ,M Phil.,	AP	01.07.2008	H&S
43.	Mrs.S. Suja	M.Sc.M.Phil.,	AP	01.08.2013	H&S
44.	Mrs. G. S. Gayathri	M.Sc .,M.Phil.,	AP	15.06.2016	H&S

45.	Ms. A. Anitha	M.Sc .,M.Phil.,	AP	05.07.2017	H&S
GENERAL ENGINEERING					
46.	Mrs.S.K.Aruna	B.E,M.E.,	AP	15.06.2016	GE

8.3 FIRST YEAR ACADEMIC PERFORMANCE (10)

Academic Performance = ((Mean of 1st Year Grade Point Average of all successful Students on a 10point scale) or (Mean of the percentage of marks in First Year of all successful students/10))

Item	CAY (2020-21)	CAYm1 (2019-20)	CAYm2 (2018-19)
Mean of percentage of marks/Grade point average(X)	8.97	8.2	7.57
Total Number of successful students(Y)	133	84	67
No of students appeared in examination(Z)	153	168	164
AP=[X*(Y/Z)]	**7.79**	**4.11**	**3.09**
Average Academic Performance	**4.99**		

8.4 ATTAINMENT OF COURSE OUTCOMES OF FIRST YEAR COURSES (10)

8.4.1 Describe the assessment processes used together the data upon which the evaluation of Course Outcomes of first year is done (5)

Assessment Process	Evaluation	Frequency
DIRECT ASSESSMENT		
Tests and Exams	The department conducts class tests periodically depending on the course. Two Internal Tests and one Model Examinations are conducted regularly in each semester and attendance for the exams is made compulsory. The performance of the students in the tests helps faculty to know the level of knowledge gained by the students. Accordingly, the teaching methodology is modified by the concerned faculty. **Internal Assessment I** (50 Marks)- 1.30 Hrs • Unit 1 and Unit 2 **Internal Assessment II** (50 Marks)- 1.30 Hrs • Unit 3 and Unit 4 **Internal Assessment III** (100 Marks)- 3 Hrs • Unit 1 to Unit 5	Each assessment once in a semester
University Exams	Will be conducted as per Anna university schedule	Once in a semester
Laboratory works	Each student is assigned a system to carry out the laboratory work. 20 Marks will be allocated for each experiment as per Anna university syllabus	Once in a semester
Project Evaluation	Student Projects are evaluated periodically through the Reviews conducted by the department. The skills and abilities of the students related to project work are evaluated by conducting three reviews.	Once in Final year
Assignments for Students	In support of conventional classroom teaching, assignments are given to the students for further practice in the learned concepts. This increases the performance of the students in the assessment tests and exams. This enhances the self-learning capability of the students.	Minimum of three assignments per subject
INDIRECT ASSESSMENT		
Course End Survey	The faculties are encouraged to collect the feedback about Instructor's clarity in discussing and presenting course material, Instructional examples, Assignments and exams aligned with course objectives, Instructor's enthusiasm about teaching the course. Collected feedback is analyzed by faculty incharge, group coordinator and Head of the department. According to student response or feedback necessary action will be taken. These responses can provide a deeper understanding of factors that impact learning.	At the end of semester

CO ATTAINMENT PROCESS

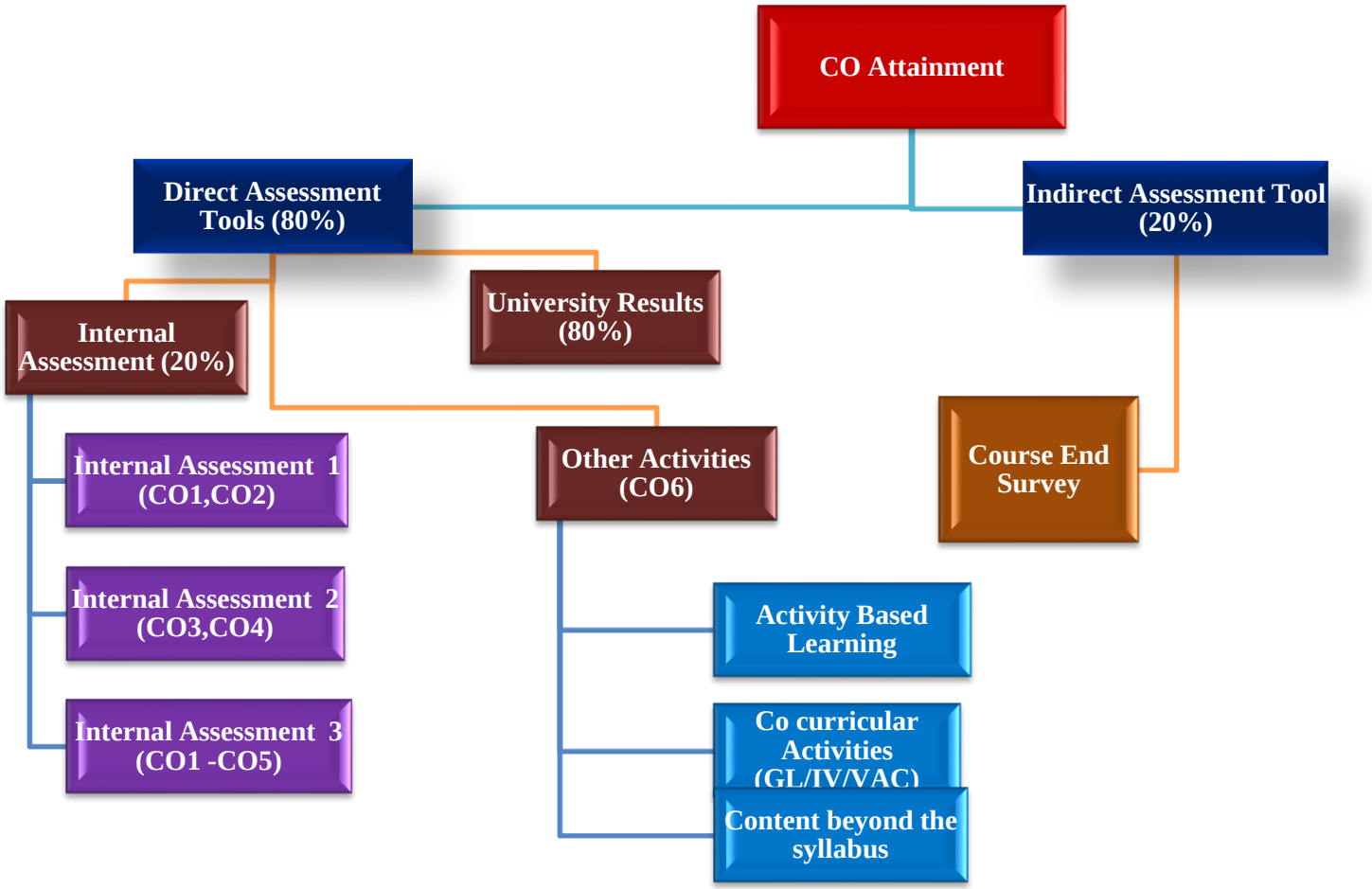

Figure 8.4.1: CO ATTAINMENT PROCESS

8.4.2 RECORD THE ATTAINMENT OF COURSE OUTCOMES OF ALL FIRST YEAR COURSES (5)

Program shall have set attainment levels for all first year courses.

(The attainment levels shall be set considering average performance levels in the university examination or any higher value set as target for the assessment years.

Attainment level is to be measured in terms of student performance in internal assessments with respect the COs of a subject plus the performance in the University examination)

BATCH 2017-2021

Sl .No	SEMESTER	NBA CODE	Subject Name	Subject Target (%)	Overall CO Attainment						CO AVERAGE	FINAL TTAINMENT	Attained Level (Out of 3)	Attained Yes/No
					CO1	CO2	CO3	CO4	CO5	CO6				
1	SEMESTER I	C101	Communicative English	65	2.9	2.9	2.9	2.9	2.9	2.9	2.9	97	3	Y
2		C102	Engineering Mathematics – I	75	2.5	2.5	2.1	2.1	2.1	2.9	2.4	79	3	Y
3		C103	Engineering Physics – I	65	2.8	2.8	2.8	2.7	2.6	2.9	2.8	92	3	Y
4		C104	Engineering Chemistry – I	75	2.9	2.9	2.9	2.9	2.8	2.9	2.9	96	3	Y
5		C105	Problem Solving And Python Programming	65	2.8	2.8	2.8	2.8	2.4	2.9	2.8	92	3	Y
6		C106	Engineering Graphics	65	2.7	2.5	2.5	2.5	2.5	2.0	2.5	82	3	Y
7		C107	Problem Solving And Python Programming Laboratory	90	2.8	2.7	2.7	2.7	2.7	2.7	2.7	91	3	Y
8		C108	Physics and Chemistry	90	2.9	2.9	2.9	2.9	2.9	2.9	2.9	97	3	Y

			Laboratory - I											
9	**SEMESTER II**	C109	Technical English	65	2.9	2.9	2.9	2.9	2.9	2.9	2.9	97	3	Y
10		C110	Mathematics – II	65	2.7	2.7	2.7	2.4	2.4	2.9	2.6	88	3	Y
11		C111	Physics for Information science	65	2.8	2.7	2.8	2.8	2.3	2.9	2.7	91	3	Y
12		C112	Basic Electrical, Electronics and Measurement Engineering	65	2.5	2.2	2.6	2.2	2.2	2.9	2.4	81	3	Y
13		**C113**	Environmental Science and Engineering	75	2.8	2.8	2.8	2.8	2.7	2.9	2.8	93	3	Y
14		C114	Programming in C	65	2.7	2.6	2.6	2.6	2.2	2.9	2.6	87	3	Y
15		C115	Engineering Practices Laboratory	90	2.9	2.9	2.9	2.9	2.8	2.9	2.9	96	3	Y
16		C116	C programming Laboratory	90	2.7	2.7	2.7	2.7	2.7	2.7	2.7	90	3	Y

ATTAINED LEVEL(in %) Level 1==50%, Level 2=55%, Level 3=65%)

8.5 ATTAINMENT OF PROGRAM OUTCOMES FROM FIRST YEAR COURSES (20)

8.5.1 INDICATE RESULTS OF VALUATION OF EACH RELEVANT PO AND / OR PSO, IFAPPLICABLE (15)

The relevant program outcomes that are to be addressed at first year need to be identified by the institution.

Program Outcome attainment levels shall be set for all relevant POs and/or PSOs through first year courses.

(Describe the assessment processes that demonstrate the degree to which the Program Outcomes are attained through first year courses and document the attainment levels. Also include information on assessment processes used to gather the data upon which the evaluation of each Program Outcome is based indicating the frequency with which these processes are carried out)

S. No	SEM	Sub. Code	Subject Name	Programme Outcomes											
				PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
1	SEMESTER I	C101	Communicative English	-	-	-	-	-	-	-	1.9	2.9	2.9	-	1.9
2		C102	Engineering Mathematics – I	2.4	2.4	2.4	-	-	-	-	-	1.6	-	-	-
3		C103	Engineering Physics – I	2.8	2.8	2.8	-	-	-	-	-	-	-	-	-
4		C104	Engineering Chemistry – I	2.9	1.9	1.9	-	-	-	-	-	-	-	-	-
5		C105	Problem Solving And Python Programming	3.0	2.0	2.0	-	-	-	-	-	-	-	-	-
6		C106	Engineering Graphics	2.4	2.4	1.6	-	1.6	-	-	2.4	2.4	1.6	-	1.6
7		C107	Problem Solving And Python Programming Laboratory	2.8	2.8	2.8	-	2.8	-	-	2.8	2.8	1.8	-	1.8

8		C108	Physics and Chemistry Laboratory - I	2.9	2.9	2.9	-	-	-	-	2.9	2.9	2.0	-	-
9	**SEMESTER II**	C109	Technical English	-	-	-	-	-	-	-	1.9	2.9	2.9	-	1.6
10		C110	Mathematics – II	2.6	2.6	2.2	-	-	-	-	-	1.8	-	-	-
11		C111	Physics for Information science	2.8	2.8	1.8	-	-	-	-	-	-	-	-	-
12		C112	Basic Electrical, Electronics and Measurement Engineering	2.5	1.6	1.6	-	-	-	-	-	-	-	-	-
13		C113	Environmental Science and Engineering	2.5	1.6	1.6	-	-	-	2.5	2.5	1.6	1.6	-	1.6
14		C114	Programming in C	3.0	2.6	2.6	-	-	-	-	1.7	1.7	1.7	-	1.7
15		C115	Engineering Practices Laboratory	2.9	2.9	2.9	2.0	2.0	2.9	-	2.9	2.0	2.9	-	1.0
16		C116	C programming Laboratory	2.7	2.7	2.7	-	-	-	-	1.8	1.5	1.5	-	1.5

S.No	Semester	Subject Code	Subject Name	Programme Specific Outcomes		
				PSO1	PSO2	PSO3
1	**Semester I**	C101	Communicative English	1.9	1.5	-
2		C102	Engineering Mathematics – I	1.4	1.0	-
3		C103	Engineering Physics – I	1.9	1.3	-
4		C104	Engineering Chemistry – I	-	-	-
5		C105	Problem Solving And Python Programming	1.0	-	0.7
6		C106	Engineering Graphics	0.7	1.7	-
7		C107	Problem Solving And Python Programming Laboratory	0.9	2.7	-
8		C108	Physics and Chemistry Laboratory - I	-	-	1.0

9	**Semester II**	C109	Technical English	0.7	0.8	2.7
10		C110	Mathematics – II	1.8	1.9	2.0
11		C111	Physics for Information science	1.5	1.9	1.3
12		C112	Basic Electrical, Electronics and Measurement Engineering	0.8	1.6	2.0
13		C113	Environmental Science and Engineering	2.6	0.8	-
14		C114	Programming in C	2.2	1.0	1.6
15		C115	Engineering Practices Laboratory	-	-	-
16		C116	C programming Laboratory	2.0	1.4	0.9

8.5.2 ACTIONS TAKEN BASED ON THE RESULTS OF EVALUATION OF RELEVANT POs (5)

(The attainment levels by direct (student performance) are to be presented through Program level Course-PO matrix as indicated)

ACADEMIC YEAR: 2020-2021
Actions taken based on the results of evaluation of relevant POs (5)
(The attainment levels by direct (student performance) are to be presented through Program level Course-PO matrix as indicated)

POs	Target Level	Attainment Level	Observations
1. **Engineering knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.			
PO1	1.95	2.73	Students acquired strong foundation knowledge of concepts both theoretical and practically
Action 1:	Motivated students to participate in technical events with their basic knowledge and helped them to enhance the same.		

POs	Target Level	Attainment Level	Observations
2. **Problem analysis**: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.			
PO2	1.95	2.43	Students gained problem solving and analyzing skills through exposure to real time application.
Action 1:	Industrial visits and implant training were arranged for the benefit of the students.		

POs	Target Level	Attainment Level	Observations
3. **Design/development of solutions**: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.			
PO3	1.95	2.27	Students were able to analyse solution for complex problems.
Action 1:	Students were trained with many real time scenarios.		

POs	Target Level	Attainment Level	Observations
4. **Conduct investigations of complex problems**: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.			
PO4	1.95	2.0	Students enhanced their research findings by presenting papers in conferences, symposiums
Action 1:	Students were motivated to present paper work at Conferences.		

POs	Target Level	Attainment Level	Observations
5. **Modern tool usage**: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.			
PO5	1.95	2.13	Students exposed their creative skills, presentation skills by participating in many events.
Action 1:	Students were allowed to participate in Outside College events that helped them to showcase their talents.		

POs	Target Level	Attainment Level	Observations
6. **The engineer and society**: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.			
PO6	1.95	2.90	Students were aware of the legal, cultural, safety mechanisms to be followed.
Action 1:	Many Guest Lectures, Guidance programme were arranged for the benefit of the students.		

POs	Target Level	Attainment Level	Observations
7. **Environment and sustainability**: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.			
PO7	1.95	2.50	Students were able to realize the need of professional solutions in real life.
Action 1:	Awareness programme were conducted for the students community.		

POs	Target Level	Attainment Level	Observations
8. **Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.			
PO8	1.95	2.31	Students were able to acquire some knowledge on being moral
Action 1:	Motivational and Inspirational programmes were conducted for enriching students with moral values.		

POs	Target Level	Attainment Level	Observations
9. **Individual and team work**: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.			
PO9	1.95	2.19	Students were able to cooperate and work in groups.
Action 1:	Students were allowed to participate in many co and extracurricular activities, participated in team events etc.		

POs	Target Level	Attainment Level	Observations
10. **Communication**: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.			
PO10	1.95	2.10	Students were to disseminate their ideas among others.
Action 1:	Soft skills trainings were provided to enhance their communication skills.		

POs	Target Level	Attainment Level	Observations
11. **Project management and finance**: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.			
PO11	1.95	-	-
Action 1:	Students were motivated , encouraged in developing their presentation skills by allowing them to take seminars, etc.		

POs	Target Level	Attainment Level	Observations
12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.			
PO12	1.95	1.59	Students were able to handle real world problems through professionalism
Action 1:	Many motivational programmes, modern tools helped them to analyse real world problems and provide an apt solution.		