



CO ATTAINMENT TOOLS:

CO ATTAINMENT = 80% of Direct Assessment Tools + 20% Indirect Assessment Tools

Direct Assessment Tools: The description of evaluation process for CO attainment through Direct Assessment Tool is explained below:

Complete syllabus is covered in this examination. Major weightage of marks is given to this component.

Practical Subjects: For practical courses, there shall be a continuous evaluation during the semester for 40 marks (Internal) and End examination shall be for 60 marks. Day-to-day work in the laboratory shall be evaluated for 30 marks by the concerned laboratory faculty based on the regularity, viva, observation & record and 10 marks for internal exam.

Summer Internship / Mini Project: There shall be one mini project at the end of VI semester. This is to be registered during VI Semester taken up during the summer vacation, for a period of four weeks duration. A report/dissertation certified in the prescribed format by the concerned Supervisor and HOD shall be submitted to the Department. The viva voce shall be conducted by a committee



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consisting of Head of the Department, project supervisor and a senior faculty member of the department constituted by the Principal/Controller of Examinations and it should be evaluated for 100 marks. There shall be no internal marks for mini project. The mini project shall be evaluated at the end of the VII Semester.

- **Project Work:**

Procedure and Evaluation of Project Stage – I: It shall be evaluated for 50 marks. A student shall acquire 2 credits, when he/she secures 40% or more marks for the total of 50 marks. It will be evaluated at the end of VII semester by PEC.

- **Procedure and Evaluation of Project Stage – II:** Project work shall start in VII Semester and continue in the VIII Semester. The evaluation of project is as follows.

Out of 200 marks for the Project stage-II, 60 marks for Internal Evaluation and 140 marks for the end semester examination (viva-voce) shall be awarded.

- **Technical Seminars:** The technical Seminar evaluated for 40 marks, is based on the report and presentation shall be evaluated by the departmental committee consisting of Head of the Department, technical seminar supervisor and a senior faculty member.

Indirect Assessment Tool: Course End Survey(CES).

- **Process:** At the end of semester feedback is collected through offline and calculate the weighted average as mentioned below:

$$CES = \frac{G \times 3 + A \times 2 + S \times 1}{T}$$

G: Total Number of Students gave **GOOD**.

A: Total Number of Students gave **Moderate**.

S: Total Number of Students gave **Satisfactory**.

T: **Total** Number of Students.



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Step1: Direct Assessment:

- **Measurement of Course attainment levels for Internal Examinations (Mid Semester Examination and Assignments):**

$$\text{Assignment Level} = \left(\frac{\text{No. of students secured more than 60\%}}{\text{No. of Students attempted}} * 3 \right)$$

$$\% \text{ Assignment} = \left(\frac{\text{No. of students secured more than 60\%}}{\text{No. of Students attempted}} * 100 \right)$$

$$\text{Course Level} = \left(\frac{\text{No. of students secured more than 60\%}}{\text{No. of Students attempted}} * 3 \right)$$

$$\% \text{ Course} = \left(\frac{\text{No. of students secured more than 60\%}}{\text{No. of Students attempted}} * 100 \right)$$

- **Measurement of Course attainment levels for End Examinations:**

$$\text{Course Level} = \left(\frac{\text{No. of students secured more than 60\%}}{\text{No. of Students attempted}} * 3 \right)$$

$$\% \text{ Course} = \left(\frac{\text{No. of students secured more than 60\%}}{\text{No. of Students attempted}} * 100 \right)$$

Overall Direct Assessment includes both Mid Semester and End Examinations

Direct Assessment = 40% of Internal Semester Examination + 60% End Examinations.

Step2: Indirect Assessment:

Tools: Course End Survey

Process: Collect the feedback and calculate the weighted average as mentioned below

$$\text{CES} = \frac{G \times 3 + A \times 2 + S \times 1}{T}$$

G: Total Number of Students gave **GOOD**.

A/M: Total Number of Students gave **Average/Moderate**.

S: Total Number of Students gave **Satisfactory**.

T: Total Number of Students.

Step3: Overall Course Outcome Attainment including Direct and Indirect Survey:

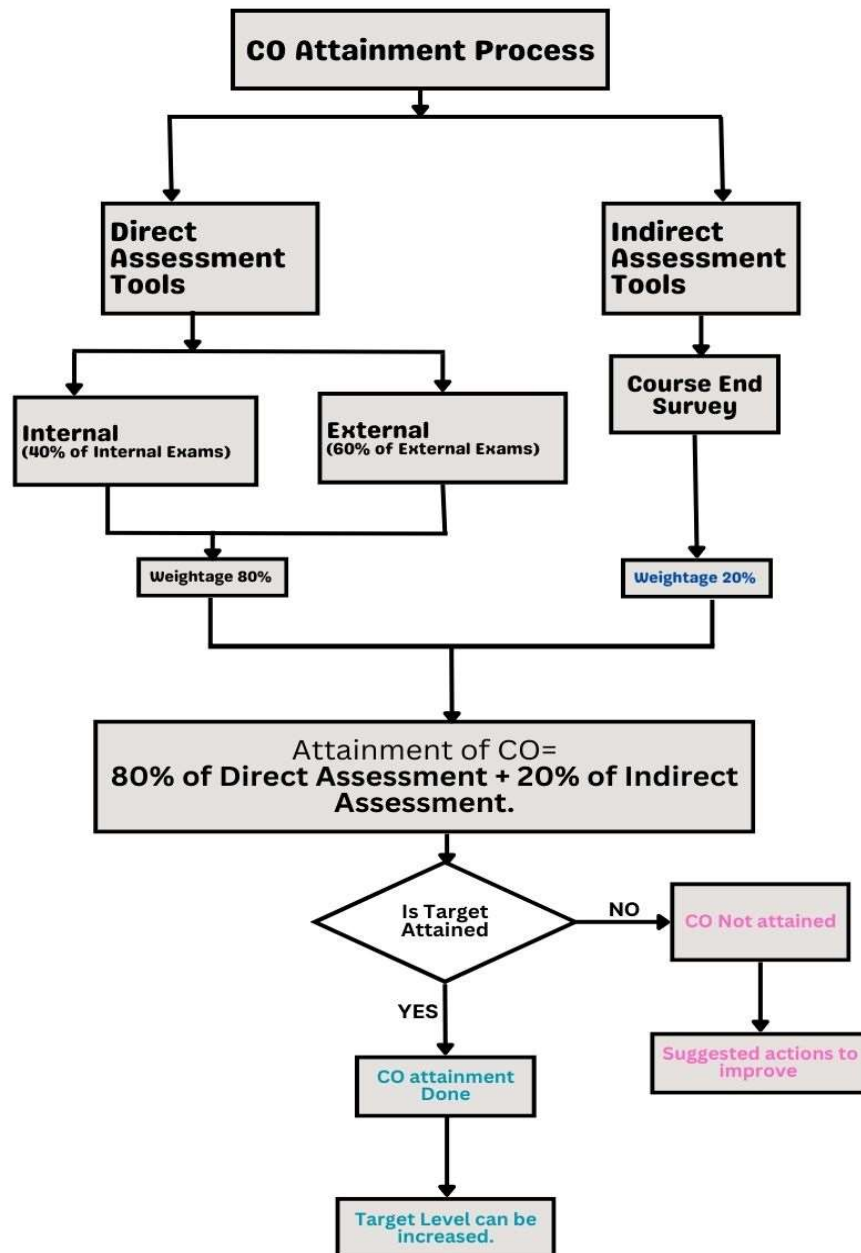
CO ATTAINMENT = 80% of Direct Assessment Tools + 20% Indirect Assessment Tools



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FLOW CHART FOR CO ATTAINMENT Department of ECE





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Sample CO Attainment

Course: Digital Image Processing

Course Name:	Digital Image Processing	
Course Code:	EC20APE704	C412
Session of Course:	July 2023 - Jan 2024	
L:T:P	3-0-0	
Year/Semester	IV-I B.Tech	
Credits:	3	
Batch:	2020-24	

CO mapping with Internal Question Paper, External Question Paper and Assignments:

COURSE OUTCOMES		Mid 1	Mid 2	Assignment	External Examination
CO1	Understand fundamentals of digital image processing and Apply engineering mathematics in processing of digital image.	Q1, Q2, Q3		1	Q1a, Q2, Q3
CO2	Analyze 2D transforms in frequency domains w.r.t digital image processing	Q4, Q5, Q6		2	Q1b, Q4, Q5
CO3	Analyze different image enhancement techniques in spatial and frequency domains		Q1, Q2	3	Q1c, Q6, Q7
CO4	Analyze various techniques in image segmentation and Apply various algorithms to perform image compression.		Q3, Q4	4	Q1d, Q8, Q9
CO5	Analyze various color models and Apply color models in image processing.		Q5, Q6	5	Q1e, Q10, Q11

Question-wise Distribution of marks obtained in Mid Semester Examination and Assignments:

S.No.	Reg. No.	Mid 1						Mid 2						Assignments				
		Q.1	Q.2	Q.3	Q.4	Q.5	Q.6	Q.1	Q.2	Q.3	Q.4	Q.5	Q.6	A1	A2	A3	A4	A5
Max. Marks		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
60% Marks		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
1	20BF1A0401	10			5				3		5		9	8	8	8	8	8
2	20BF1A0402		10	5			10			7			9	10	10	10	10	10
3	20BF1A0403	10		6	6				6	7		9		10	10	10	10	10
4	20BF1A0404	10		5			10		8	10			8	10	10	10	10	10
5	20BF1A0405	10		5					9		6	2		10	10	10	10	10



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6	20BF1A0406	10			6				10		5		10	8	8	8	8	8
7	20BF1A0407	10		5	6		10	2	8	2	8	2	8	10	10	10	10	10
8	20BF1A0408	10		6		2		8		9			8	10	10	10	10	10
9	20BF1A0409		3			3				6		9		8	8	8	8	8
10	20BF1A0410	10		2	7		10		3	5	6		7	10	10	10	10	10
11	20BF1A0411	10		5			3	10		4	5		7	10	10	10	10	10
12	20BF1A0412	10			7			10		8				10	10	10	10	10
13	20BF1A0413	10			6				10	6	6		8	10	10	10	10	10
14	20BF1A0414		10	5			10		10	10			9	10	10	10	10	10
15	20BF1A0415	10		7	7		10		10	9			10	10	10	10	10	10
16	20BF1A0416	3			6				9	1				8	8	8	8	8
17	20BF1A0417	10		6			10	7		10			10	10	10	10	10	10
18	20BF1A0418	0	0	0	0	0	0	0	5	5		0		10	10	10	10	10
19	20BF1A0419	10			7			3			5		10	8	8	8	8	8
20	20BF1A0420	0	0	0	0	0	0		5		5		8	8	8	8	8	8
21	20BF1A0421	10					10		10	9			7	8	8	8	8	8
22	20BF1A0422	0	0	0	0	0	0		10		5		8	10	10	10	10	10
23	20BF1A0423	10			6		10		2	9		8		10	10	10	10	10
24	20BF1A0424	10						8					9	8	8	8	8	8
25	20BF1A0425	10			8		6		8	6			8	10	10	10	10	10
26	20BF1A0426	10			4		3		10		5			8	8	8	8	8
27	20BF1A0427	10		5						5		10		8	8	8	8	8
28	20BF1A0428	10			6		10	9			10			10	10	10	10	10
29	20BF1A0429	10			7		10	10			5		5	8	8	8	8	8
30	20BF1A0430	0	0	0	0	0	0		10		8		7	8	8	8	8	8
31	20BF1A0431	0	0	0	0	0	0	8			5		9	8	8	8	8	8
32	20BF1A0432	10			7		10	2			5		2	8	8	8	8	8
33	20BF1A0433		10	5	8		10		10	10	4		7	8	8	8	8	8
34	20BF1A0434	10		6					10		5			8	8	8	8	8
35	20BF1A0435		10	7			10		10	8			6	10	10	10	10	10
36	20BF1A0436	0	0	0	0	0	0	0	10	0		0		10	10	10	10	10
37	20BF1A0437		10		8			6		7			7	10	10	10	10	10
38	20BF1A0438		10		5				9		5		4	8	8	8	8	8
39	20BF1A0439	10			6		10	8		6			3	8	8	8	8	8
40	20BF1A0440	10			5		10		10	10			9	8	8	8	8	8
41	20BF1A0441		10	10			10		8		9		9	10	10	10	10	10
42	20BF1A0442	10		5			10		10	10		2		10	10	10	10	10
43	20BF1A0444	10			7			9		9			9	10	10	10	10	10
44	20BF1A0445	10			5		10		10		5		10	10	10	10	10	10
45	20BF1A0446	10		5			10		10		5		10	10	10	10	10	10



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46	20BF1A0447	10		4			10	8		4			8	8	8	8	8	8
47	20BF1A0448	10			7		10		10	7	7		9	10	10	10	10	10
48	20BF1A0449	10		7	7		10		10	10			8	10	10	10	10	10
49	20BF1A0450	8	7	2				6		5				8	8	8	8	8
50	20BF1A0451	10			5	6			10		6		6	10	10	10	10	10
51	20BF1A0452	10			6		6		2		4		7	10	10	10	10	10
52	20BF1A0453		10		5		10		10	1	9		9	10	10	10	10	10
53	20BF1A0454	10			10		10	7			7		8	10	10	10	10	10
54	20BF1A0455	10		6					9	4			9	8	8	8	8	8
55	20BF1A0456	10		5			2	5		7			8	10	10	10	10	10
56	20BF1A0457	0	0	0	0	0	0		8		5			8	8	8	8	8
57	20BF1A0458	10					10		7	4			6	8	8	8	8	8
58	20BF1A0459	0	0	0	0	0	0	4		6			4	8	8	8	8	8
59	20BF1A0460		6	5					10		8		7	8	8	8	8	8
60	20BF1A0461	10					10		2		2			8	8	8	8	8
61	20BF1A0462	0	0	0	0	0	0		10		8		2	10	10	10	10	10
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
235	20BF1A04L7	9			5		8	9			5		8	10	10	10	10	10
236	20BF1A04L8	9		5			9	7		4			9	10	10	10	10	10
237	20BF1A04L9	9		9			9	6		7			9	10	10	10	10	10
238	20BF1A04M0	9		5			9		6		6		8	10	10	10	10	10
239	20BF1A04M2	9			10		9		9		8		9	10	10	10	10	10
240	20BF1A04M3		9		5		4		9		4		9	10	10	10	10	10
241	20BF1A04M4	9		10			8	8			8		7	10	10	10	10	10
242	20BF1A04M5		9		9		8	9		7			9	10	10	10	10	10
243	20BF1A04M6		8	8			7		9		7	9		10	10	10	10	10
244	20BF1A04M7		9	7			9		9		8		8	10	10	10	10	10
245	20BF1A04M8	9		8			5	9			8		9	10	10	10	10	10
246	20BF1A04M9	8		5			3		9		7		9	10	10	10	10	10
247	20BF1A04N0				3		7	0	0	0	0	0	0	9	9	9	9	9
248	20BF1A04N1		8		4			9		3			8	9	9	9	9	9
249	20BF1A04N2		9		9		9		9		7		8	10	10	10	10	10
250	20BF1A04N3		8		8			9		4			8	9	9	9	9	9
251	20BF1A04N4	9			9	10			9	8			9	10	10	10	10	10



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252	20BF1A04N5	4	7	7				8		8		8	9	9	9	9	9
253	20BF1A04N6	9					8	9		8		8	10	10	10	10	10
254	20BF1A04N7	4			4				6			8	9	9	9	9	9
255	20BF1A04N8	7		4			7	9	6	8		8	10	10	10	10	10
256	20BF1A04N9		7	8			2		9		8		9	10	10	10	10
257	20BF1A04O0		1	4				9		0			10	10	10	10	10
258	20BF1A04O1		8	6			8	7		8			7	10	10	10	10
259	20BF1A04O2		7	3					4				9	10	10	10	10
260	20BF1A04O3	9		8				9		8			7	10	10	10	10
261	20BF1A04O4	9			5		9		9		5		9	10	10	10	10
262	20BF1A04O5	9							8		1		8	10	10	10	10
263	20BF1A04O6	9			5		8		9	8			9	10	10	10	10
264	20BF1A04O7	9		7	4				9	8			8	10	10	10	10
265	20BF1A04O8	9							9		8		9	10	10	10	10
266	20BF1A04O9	9							9		5			10	10	10	10
267	20BF1A04P0	9					5		9	2			9	9	9	9	9
268	20BF1A04P1	9			4				9	8			3	10	10	10	10
269	20BF1A04P2	9		7					9		5		9	10	10	10	10
270	20BF1A04P3	2		2				2		3		3		9	9	9	9
271	20BF1A04P4	9							9	5			9	10	10	10	10
272	20BF1A04P5	9			9		8		9		8		9	10	10	10	10
273	20BF1A04P6	9		8					9		5	9		10	10	10	10
274	20BF1A04P7	8			5		8	9			8		9	10	10	10	10
275	21BF5A0422		9	8		8		8		8			8	10	10	10	10
276	21BF5A0423	9						9			4		9	10	10	10	10
277	21BF5A0424	9						9		8			9	10	10	10	10

	Mid 1						Mid 2						Assignments				
	Q.1	Q.2	Q.3	Q.4	Q.5	Q.6	Q.1	Q.2	Q.3	Q.4	Q.5	Q.6	A1	A2	A3	A4	A5
Number of students attempted question	220	71	163	115	27	186	128	148	159	122	23	226	277	277	277	277	277
Number of students scoring more than 60%	197	53	86	51	9	153	111	138	110	57	13	206	277	277	277	277	277
% CO Assessment	89.5	74.6	52.8	44.3	33.3	82.3	86.7	93.2	69.2	46.7	56.5	91.2	100	100	100	100	100
CO Assessment level	2.69	2.24	1.58	1.33	1.00	2.47	2.60	2.80	2.08	1.40	1.70	2.73	3	3	3	3	3



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Question-wise Distribution of Marks obtained in End Examinations:

S.No.	Reg. No.	Short Answers					Essay Answers									
		1a	1b	1c	1d	1e	Q.2	Q.3	Q.4	Q.5	Q.6	Q.7	Q.8	Q.9	Q.10	Q.11
Max. Marks		2	2	2	2	2	10	10	10	10	10	10	10	10	10	10
60% Marks		1	1	1	1	1	6	6	6	6	6	6	6	6	6	6
1	41518/01	0	0	2	1	0		3	4		10			7	7	
2	41518/02	0	0	1	2	1		5	8		5			6	1	
3	41518/03	2	2	1	2	2		5		8	9		5		4	
4	41518/04	2	1	1	2	1		5	8		9		9		6	
5	41518/05	0	0	1	1	0		5	4		5			9	4	
6	41518/06		1	1	1	1		3		10	7		7		9	
7	41518/07	2	1	2	2	1	3	6		10	8	3	7	8	9	
8	41518/08	2	2	1	1	1	3	5	6	6	9	3	6		7	6
9	41518/09	1	1	1	1	1	5		2	2		4	3		6	
10	41518/10	2	1	1	2	1		6	10	8	4			9		
11	41518/11	1	1	1	0	0		4		10	5			9		4
12	41518/12			1	2			5	5	3				7		2
13	41518/13	2	1	2	2	2		3		8	6		8		8	
14	41518/14	2	1	1	2	2		7		10	10	10		10	9	
15	41518/15	2	2	2	2	1		5		10	8			10		7
16	41518/16						0		0					0		0
17	41518/17	2	2	2	2	2		7		10	10			10	9	
18	41518/18	0	2	1	1			5	4		5			2	4	
19	41518/19	2	2	2	2	1		6	10		4			7	6	
20	41518/20	2	1	2	1	1		8			10			9	9	
21	41518/21	2	2	1	2	2	6	8	7	3	8			9	5	
22	41518/22	2		2	2	2		7			10		8	10	8	
23	41518/23	1	1	1	1	2		8	10	9	10		10		10	
24	41518/24	2	2	2	1	0		6		5		7	7	9	9	
25	41518/25		2	2	2	2				10	10			10	8	
26	41518/26	1	1	1	1	0		6	8		6			3		2
27	41518/27	0	0	2	2			8	6		7			8	6	
28	41518/28	0	1	1	0	0		4		7	3		4		3	
29	41518/29		2	2	2	2		4		9	8		3		6	
30	41518/30	2	2	2	2	2	7		10		7			9	5	
31	41518/31	2	2	2	2	2		7				10		10	10	
32	41518/32	0	1	0	1			3		5	4		6		3	
33	41518/33	2	0	1	2	0	9	4	6	8	9		8		6	7
34	41518/34	2	1	2	2	1	6	9		2	7		5		7	
35	41518/35	2	2	2	2	0	7			8		9		3	6	



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36	41518/36	0	1	1	0	0	6		8		4			6	4	
37	41518/37	0	0	1	1	1	4		3	4	4		5			4
38	41518/38	2	1	1	1	2		5	10		7			6	6	
39	41518/39		2	1	1	1		4		7	4		5		2	
40	41518/40	2	1	2	2	1	3	7	7		10			9	9	
41	41519/01	1	1	1	2	2	7			10		7		10	9	
42	41519/02	1	2	2	2	2		5		7	7			10	8	
43	41519/03	1	2	2	2	1		7		9	10		10		9	
44	41519/04	2	2	2	1	1	8			9	10			9	8	
45	41519/05	2	1	2	1	0	5		10		10			9	9	
46	41519/06	2	2	1	1	2		7	6		7		9		9	
47	41519/07	2	2	2	2	2	10	2		8	10	5	6	9	7	
48	41519/08	2	2	2	2	2	7		8	9	10			10	9	
49	41519/09	2		0	0	1		5	5			6	2		6	
50	41519/10	2	1	1	1	0		5		8	4		7		5	
51	41519/11	0		1	0	0		3		9		8			8	
52	41519/12	2	1	1	2	2		5		8	9		9		8	
53	41519/13	2	2	1	1	0	5	7		9	8		9		7	
54	41519/14	2	2	2	2	2		6	3	7	5		7		7	
55	41519/15	2	1	1	2	2		5		7		10		5	8	
56	41519/16	1	2		1	1		6	6		3			4	3	
57	41519/17	1	0	1	1	1		7	4		6		5		9	
58	41519/18	1	1	1	1	1		6			5			6	6	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
246	41524/06	1		0	1			4	4		7		7		4	
247	41524/07	1	1	1	1	1		8		9	8			9	8	
248	41524/08	0	0	0	0	0		2	1				0			
249	41524/09	1	1	1	1	1		7	4		7		7		8	
250	41524/10	2	0	1	1	1		8		9	7			9	9	
251	41524/11	2	1	2	2	1	4	8		8	8			9	9	
252	41524/12	2	0	1	0	2		8		9	6	6	7	9	6	
253	41524/13	2	1	1	1	1	7			8	7			9	9	
254	41524/14	2	1	1	1	1		8		9		7		9	8	
255	41524/15	1	1	1	1	1	6	5		8	6		7	7	7	3
256	41524/16	2	1	2	2	2		8	8		8		8		8	



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257	41524/17	2	2	2	1	1	8		8	8	8		7			6
258	41524/18	0	0	2	2	2	4		9		6			9	9	
259	41524/19	2	2	0	0	0	7		9		8		8		6	
260	41524/20	2	2	1	1	1		7	7		7			8		2
261	41524/21	2	0	1	2	1		5	1	6	7			8	4	
262	41524/22	2	1	1	1	1	7			9	8		6		8	
263	41524/23	2	2	1	2	2		4	6		8			9	8	
264	41524/24	2	2	2	2	2	8			10	7			9	9	
265	41524/25	1	1	1	1	1		6	5		8			9		6
266	41524/26	2	2	1	2	1		6	4	8	7			8	8	
267	41524/27	2	2	2	1	1		4	4			7		9	7	
268	41524/28	2	2	2	2	1		6	8		7		6		8	
269	41524/29	2	0	1	1			7	5		7			8	6	
270	41524/30	2	2	2	2	2		8			8			9	9	
271	41524/31	2	2	1	2	1		7		7	8			7	7	
272	41524/32	2	2	2	2	2		7		9	8		9		8	
273	41524/33	1	1	1	1	1		8	5	5				9		7
274	41524/34	2	1	1	1	1	8			8	8		8		6	
275	41524/35	1	1	1	1	1		7	8		7		6		7	
276	41524/36	2	0	2	1	2		7	6		8			9	9	
277	41524/37	2	1	2	2	1	4	8		8	8			9	9	
Number of students attempted question		255	254	266	269	257	82	218	119	181	246	35	112	188	240	43
Number of students scoring more than 60%		230	212	248	249	225	53	146	79	154	190	28	74	172	195	16
% CO Assessment		90.2	83.5	93.2	92.6	87.5	64.6	67.0	66.4	85.1	77.2	80.0	66.1	91.5	81.3	37.2
CO Assessment level		2.71	2.50	2.80	2.78	2.63	1.94	2.01	1.99	2.55	2.32	2.40	1.98	2.74	2.44	1.12

INDIRECT TOOLS: Course End Survey-

$$CES = \frac{G \times 3 + A \times 2 + S \times 1}{T}$$

G: Total Number of Students gave **GOOD**. **A/M:** Total Number of Students gave **Average/Moderate**.

S: Total Number of Students gave **Satisfactory**. **T:** Total Number of Students.



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Course Name	COs	COURSE OUTCOMES	Good (3)	Average (2)	Satisfactory (1)	TOTAL NO	INDIRECT LEVEL
Digital Image Processing (EC20APE704)	C412.1	Are you able to understand fundamentals of digital image processing and apply engineering mathematics in processing of digital image?	141	60	17	218	2.57
	C412.2	Are you able to analyze 2D transforms in frequency domains with respect to digital image processing?	137	66	15	218	2.56
	C412.3	Are you able to analyze different image enhancement techniques in spatial and frequency domains?	140	57	21	218	2.55
	C412.4	Are you able to analyze various techniques in image segmentation and apply various algorithms to perform image compression?	141	55	22	218	2.55
	C412.5	Are you able to analyze various color models and apply color models in image processing?	135	62	21	218	2.52

CO ATTAINMENT:

Mapping of COs				Assignmen t	Internal Evaluation	Mapping of COs			External Evaluation	Direct Attainment levels	Indirect Attainment Level (CES)	CO Attained	% CO Attained
CO	Mapping of Mid I & Mid II Term Examination					Mapping of End Term Examination							
C412.1	2.69	2.24	1.58	3.00	2.38	2.71	1.94	2.01	2.22	2.28	2.57	2.34	77.97
C412.2	1.33	1.00	2.47	3.00	1.95	2.50	1.99	2.55	2.35	2.19	2.56	2.26	75.45
C412.3	2.60	2.80		3.00	2.80	2.80	2.32	2.40	2.50	2.62	2.55	2.61	86.91
C412.4	2.08	1.40		3.00	2.16	2.78	1.98	2.74	2.50	2.36	2.55	2.40	80.02
C412.5	1.70	2.73		3.00	2.48	2.63	2.44	1.12	2.06	2.23	2.52	2.29	76.20

CO Attainment Analysis:

Based on the above CO attainment it was found that all CO's has reached the target level of 60%. therefore, all CO's are attained

ACTION SUGGESTED:

For the forth coming batch target level can be increased.


In-Charge


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ELECTRONICS & COMMUNICATION ENGINEERING
SV COLLEGE OF ENGINEERING
KARAKAMBADI ROAD TIRUPATI-517 50