



ESTD : 2007

Sri Indu Institute of Engineering and Technology (Autonomous)

(Formerly RVR Institute of Engineering & Technology)

An Autonomous Institution Under UGC

NAAC Accredited. Recognized Under 2(f) of UGC Act 1956



EAMCET CODE: INDI

Approved by AICTE, New Delhi, & Affiliated to JNTUH, Hyderabad.

JNTUH CODE: X3

COURSE FILE

ON

COMPUTER AIDED ENGINEERING GRAPHICS

Course Code - ME201ES

**I - B.Tech Semester-II
A.Y. 2022-2023**

Prepared by

Mr.M YADHAGIRI

Assistant Professor

Head of the Department
Department of H&S
SRI INDU INSTITUTE OF ENGG & TECH
Sheriguda (V), Ibrahimpatnam (M) R.R. Dist-501 510

PRINCIPAL
Sri Indu Institute of Engineering & Techno.
Sheriguda(VIII), Ibrahimpatnam
R.R. Dist. Telangana-501 510.



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INSTITUTE VISION & MISSION

Vision:

To become a premier institute of academic excellence by providing the world class education that transforms individuals into high intellectuals, by evolving them as empathetic and responsible citizens through continuous improvement.

Mission:

- **IM1:** To offer outcome-based education and enhancement of technical and practical skills.
- **IM2:** To Continuous assess of teaching-learning process through institute-industry collaboration.
- **IM3:** To be a centre of excellence for innovative and emerging fields in technology development with state-of-art facilities to faculty and students' fraternity.
- **IM4:** To Create an enterprising environment to ensure culture, ethics and social responsibility among the stakeholders.


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Khalsa Ibrahimpatnam, Sheriguda(V), Ibrahimpatnam(M), Ranga Reddy Dist., Telangana – 501510

PROGRAM OUTCOMES

PO1: ENGINEERING KNOWLEDGE: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: PROBLEM ANALYSIS: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: 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.

PO4: 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.

PO5: MODERN TOOL USAGE: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

PO6: 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.

PO7: 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.

PO8: ETHICS: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: INDIVIDUAL AND TEAM WORK: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: 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, give and receive clear instructions.

PO11: 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.

PO12: 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

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SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

B.Tech. in COMPUTER SCIENCE AND ENGINEERING (AI & ML)

COURSE STRUCTURE, I YEAR SYLLABUS (BR22 Regulations)

Applicable from Academic Year: 2022-23 Batch

I Year I Semester

S. No.	Course Code	Course Title	L	T	P	Credits
1.	MA101BS	Matrices and Calculus	3	1	0	4
2.	AP102BS	Applied Physics	3	1	0	4
3.	CS103ES	Programming for Problem Solving	3	0	0	3
4.	ME102ES	Engineering Workshop	0	1	3	2.5
5.	EN104HS	English for Skill Enhancement	2	0	0	2
6.	CS106ES	Elements of Computer Science & Engineering	0	0	2	1
7.	AP105BS	Applied Physics Laboratory	0	0	3	1.5
8.	CS107ES	Programming for Problem Solving Laboratory	0	0	2	1
9.	EN107HS	English Language and Communication Skills Laboratory	0	0	2	1
10.	*MC101ES	Environmental Science	3	0	0	0
11.		Induction Programme				
		Total	14	3	12	20

I Year II Semester

S. No.	Course Code	Course Title	L	T	P	Credits
1.	MA201BS	Ordinary Differential Equations and Vector Calculus	3	1	0	4
2.	CH203BS	Engineering Chemistry	3	1	0	4
3.	ME201ES	Computer Aided Engineering Graphics	1	0	4	3
4.	EE201ES	Basic Electrical Engineering	2	0	0	2
5.	EC201ES	Electronic Devices and Circuits	2	0	0	2
6.	CH206BS	Engineering Chemistry Laboratory	0	0	2	1
7.	EE202ES	Basic Electrical Engineering Laboratory	0	0	2	1
8.	CS201ES	Python Programming Laboratory	0	1	2	2
9.	CS203ES	IT Workshop	0	0	2	1
		Total	11	3	12	20

COMPUTER AIDED ENGINEERING GRAPHICS
(Course Code: ME201ES)

B. Tech. I Year II Sem.

L T P C
1 0 4 3

Course Objectives:

- To develop the ability of visualization of different objects through technical drawings
- To acquire computer drafting skill for communication of concepts, ideas in the design of engineering products

Course Outcomes: At the end of the course, the student will be able to:

- Apply computer aided drafting tools to create 2D and 3D objects
- sketch conics and different types of solids
- Appreciate the need of Sectional views of solids and Development of surfaces of solids
- Read and interpret engineering drawings
- Conversion of orthographic projection into isometric view and vice versa manually and by using computer aided drafting

UNIT – I:

Introduction to Engineering Graphics: Principles of Engineering Graphics and their Significance, Scales – Plain & Diagonal, Conic Sections including the Rectangular Hyperbola – General method only. Cycloid, Epicycloid and Hypocycloid, Introduction to Computer aided drafting – views, commands and conics

UNIT- II:

Orthographic Projections: Principles of Orthographic Projections – Conventions – Projections of Points and Lines, Projections of Plane regular geometric figures. Auxiliary Planes. Computer aided orthographic projections – points, lines and planes

UNIT – III:

Projections of Regular Solids – Auxiliary Views - Sections or Sectional views of Right Regular Solids – Prism, Cylinder, Pyramid, Cone – Auxiliary views, Computer aided projections of solids – sectional views

UNIT – IV:

Development of Surfaces of Right Regular Solids – Prism, Cylinder, Pyramid and Cone, Development of surfaces using computer aided drafting

UNIT – V:

Isometric Projections: Principles of Isometric Projection – Isometric Scale – Isometric Views – Conventions – Isometric Views of Lines, Plane Figures, Simple and Compound Solids – Isometric Projection of objects having non- isometric lines. Isometric Projection of Spherical Parts. Conversion of Isometric Views to Orthographic Views and Vice-versa –Conventions. Conversion of orthographic projection into isometric view using computer aided drafting.

UNIT – V:

Isometric Projections: Principles of Isometric Projection – Isometric Scale – Isometric Views – Conventions – Isometric Views of Lines, Plane Figures, Simple and Compound Solids – Isometric Projection of objects having non- isometric lines. Isometric Projection of Spherical Parts. Conversion of Isometric Views to Orthographic Views and Vice-versa –Conventions. Conversion of orthographic projection into isometric view using computer aided drafting.

TEXT BOOKS:

1. Engineering Drawing N.D. Bhatt / Charotar
2. Engineering Drawing and graphics Using AutoCAD Third Edition, T. Jeyapoovan, Vikas: S. Chand and company Ltd.

REFERENCE BOOKS:

1. Engineering Drawing, Basant Agrawal and C M Agrawal, Third Edition McGraw Hill
2. Engineering Graphics and Design, WILEY, Edition 2020
3. Engineering Drawing, M. B. Shah, B.C. Rane / Pearson.
4. Engineering Drawing, N. S. Parthasarathy and Vela Murali, Oxford
5. Computer Aided Engineering Drawing – K Balaveera Reddy et al – CBS Publishers

Note: - External examination is conducted in conventional mode and internal evaluation to be done by both conventional as well as using computer aided drafting.



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Khalsa Ibrahimpatnam, Sheriguda(V), Ibrahimpatnam(M), Ranga Reddy Dist., Telangana – 501510

Course: Computer Aided Engineering Graphics (C123)

Class: I-B.TECH CSE(AIML)

Course Outcomes

After completing this course the student will be able to:

- C123.1 : Read and interpret engineering drawings (Analyzing)
- C123.2 : Sketch conics and different types of solids (Applying)
- C123.3 : Draw projection of points, lines, planes and auxiliary planes(Creating)
- C123.4 : Appreciate the need of Sectional views of solids and Development of surfaces of solids (Evaluating)
- C123.5 : Apply computer aided drafting tools to create 2D and 3D objects (Remembering)
- C123.6 : Conversion of orthographic projection into isometric view and vice versa manually and by using computer aided drafting (Understanding)



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CO's Mapping with PO/PSO

Mapping of course outcomes with program outcomes:

High -3 Medium -2 Low-1

PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C123.1	3	-	-	-	-	-	-	1	-	1	-	-
C123.2	3	-	-	-	-	-	-	1	-	1	-	-
C123.3	2	-	-	-	-	-	-	1	-	1	-	-
C123.4	2	-	-	-	-	-	-	1	-	2	-	-
C123.5	3	-	-	-	-	-	-	1	-	2	-	-
C123.6	3	-	-	-	-	-	-	1	-	2	-	-
C123	2.6	-	-	-	-	-	-	1	-	1.5	-	-



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CO-PO mapping Justification

PO1. ENGINEERING KNOWLEDGE: Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

PO8. ETHICS: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO10: 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, give and receive clear instructions.

C123.1 Read and interpret engineering drawings (Analyzing)

	Justification
PO1	Student able to understand the fundamentals of engineering graphics(level 1)
PO8	Student able to apply the principle of scales, conics and Cycloidal curves (level 1)
PO10	Student can read and interpret the drawings for effective communication (level 1)

C123.2: Sketch conics and different types of solids (Applying)

	Justification
PO1	Student able to understand the fundamentals of Projection of points, lines and planes(level 1)
PO8	Student able to apply the principles of Projection of points, lines and planes(level 2)
PO10	Student can read and interpret the drawings for effective communication (level 2)

C123.3: Draw projection of points, lines, planes and auxiliary planes (Creating)

	Justification
PO1	Student able to understand the fundamentals of Projection of solids(level 2)
PO8	Student able to apply the principles of Projection of solids (level 3)
PO10	Student can read and interpret the drawings for effective communication (level 3)

C123.4: Appreciate the need of Sectional views of solids and Development of surfaces of solids (Evaluating)

	Justification
PO1	Student able to understand the fundamentals of Developments of surfaces (level 1)
PO8	Student able to apply the principles of Developments of surfaces (level 2)
PO10	Student can read and interpret the drawings for effective communication (level 2)

C123.5: Apply computer aided drafting tools to create 2D and 3D objects (Remembering)

	Justification
PO1	Student able to understand the fundamentals of Isometric projections(level 2)
PO8	Student able to apply the principles of Isometric projections (level 3)
PO10	Student can read and interpret the drawings for effective communication (level 1)

C123.6: Conversion of orthographic projection into isometric view and vice versa manually and by using computer aided drafting (Understanding)

	Justification
PO1	Student able to understand the fundamentals of Orthographics projections (level 1)
PO8	Student able to apply the principles of Orthographics projections (level 2)
PO10	Student can read and interpret the drawings for effective communication (level 1)



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Khalsa Ibrahimpatnam, Sheriguda(V), Ibrahimpatnam(M), Ranga Reddy Dist., Tlangana - 501 510

<https://siiet.ac.in/>

Lr. No. SIET/BR22/Academic Calendar/2022/02

Date: 15.12.2022

REVISED ACADEMIC CALENDAR I.B.TECH FOR THE ACADEMIC YEAR 2022-23 (BR22-REGULATIONS)

Dr. I. Satyanarayana,
Principal.

X3

To,
All the HOD's
Sir,

Sub: SIET (Autonomous)-Academic & Evaluation-Revised Academic Calendar for **I.B.Tech - I & II Semesters** for the academic year 2022-2023-Reg.

The approved Academic Calendar for **I.B.Tech - I & II Semesters** for the academic year 2022-23 is given below.

I-SEMESTER

S. NO	Description	Period		Duration
		From	To	
1.	Commencement of I Semester class work (including Induction programme)	03.11.2022		
2.	1 st Spell of Instructions	03.11.2022	28.12.2022	8 Weeks
3.	I Mid Examinations	29.12.2022	04.01.2023	1 Week
4.	Submission of First Mid Term Exam Marks to the Autonomous Section on or before	10.01.2023		
5.	2 nd Spell of Instructions	05.01.2023	02.03.2023	8 Weeks
6.	Second Mid Term Examinations	03.03.2023	09.03.2023	1 Week
7.	Preparation & Practical Examinations	10.03.2023	16.03.2023	1 Week
8.	Submission of Second Mid Term Exam Marks to the Autonomous Section on or before	16.03.2023		
9.	I Semester End Examinations	17.03.2023	01.04.2023	2 Weeks

II-SEMESTER

S. NO	Description	Period		Duration
		From	To	
1.	Commencement of II Semester class work	03.04.2023		
2.	1 st Spell of Instructions (including Summer Vacation)	03.04.2023	10.06.2023	10 Weeks
	Summer Vacation	15.05.2023	27.05.2023	2 Weeks
3.	I Mid Examinations	12.06.2023	17.06.2023	1 Week
4.	Submission of First Mid Term Exam Marks to the Autonomous Section on or before	23.06.2023		
5.	2 nd Spell of Instructions	19.06.2023	12.08.2023	8 Weeks
6.	II Mid Term Examinations	14.08.2023	19.08.2023	1 Week
7.	Preparation & Practical Examinations	21.08.2023	26.08.2023	1 Week
8.	Submission of Second Mid Term Exam Marks to the Autonomous Section on or before	26.08.2023		
9.	II Semester End Examinations	28.08.2023	09.09.2023	2 Weeks

Commencement of Class Work for II B.Tech I Semester - 11.09.2023

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<https://siiet.ac.in/>

Class: AI&ML-A Semester: II W.E.F-03-04-2023

LH:-D-105

	I 9:40- 10:30	II 10:30 - 11:20	III 11:20- 12:10	12:10- 12.45	IV 12.45- 1.35	V 1.35- 2.25	VI 2.25- 3.15	VII 3.15-4.00
MON	EC/BEE LAB			L U N C H	EC	EDC	BEE	PYTHON(T)
TUE	EDC	ODE	EC		PYTHON LAB			ODE(T)/EC(T)
WED	CAEG PRACTICE				BEE	ODE	EDC	EDC(T)/ BEE(T)
THU	BEE	ODE	BEE		ITWS LAB			EC(T)/ODE(T)
FRI	EC/BEE LAB				ODE	EC	EDC	LIBRARY
SAT	BEE	ODE	EC		CAEG PRACTICE			BEE(T)/EDC(T)

Course Code	Course Name	Name of the Faculty	Course Code	Course Name	Name of the Faculty
MA201BS	ODE-Ordinary Differential Equations & Vector Calculus	V.SRINIVAS	CH206BS	EC LAB Engineering Chemistry Laboratory	Dr.D.PREMALATHA/ K.MOUNIKA
CH203BS	EC-Engineering Chemistry	Dr.D.PREMALATHA	EE202ES	BEE LAB-Basic Electrical Engineering Laboratory	K.RAJASHEKAR/S. NISCHALA
ME201ES	CAEG-Computer Aided Engineering Graphics	M.YADHAGIRI	CS201ES	PYTHON Programming Laboratory	M.TEJASWI/P.BALU
EE201ES	BEE-Basic Electrical Engineering	K.RAJASHEKAR	CS203ES	ITWS-IT Workshop	N.KEERTHI CHANDANA/B.SWATHI
EC201ES	EDC-Electronic Devices & Circuits	P.ARUNA KUMARI			

[Signature]
Class In-Charge

[Signature]
Time Table Coordinator



[Signature]
Head of The Department

Sri Indu Institute of Engg. & Tech
Main Road, Sheriguda(V)
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Telangana-501 510



Computer Aided Engineering Graphics: Lesson Plan

L/H	Topic	TA/TM	Reference book
1	Introduction to Engineering Graphics	Lecture Method	T-1, R-1
2	Principles of Engineering Graphics and their Significance	Lecture Method	T-1, R-1
3	Scales – Plain	Lecture Method	T-1, R-1
4.	& Diagonal	Lecture Method	T-1, R-1
5.	Conic Sections- Ellipse methods	Lecture Method	T-1, R-1
6	Conic Sections- Parabola Methods	Lecture Method	T-1, R-1
7	Conic Sections – Hyperbola General Method	Lecture Method	T-1, R-1
8	Construction of Cycloid,	Lecture Method	T-1, R-1
9	Construction of Epicycloid	Lecture	T-1, R-1
10	Construction of Hypocycloid	Lecture Method,	T-1, R-1
11	Introduction to Computer aided drafting views, commands	Lecture Method,	T-1, R-1
12	and conics Orthographic Projections Principles of Orthographic Projections	Lecture Method	T-1, R-1
13	Introduction to Projections	Lecture Method	T-1, R-1
14	Conventions Projections of Points	Lecture Method	T-1, R-1
15	Projections of Lines	Lecture Method,	T-1, R-1
16	Projections of Plane regular geometric	Lecture Method	T-1, R-1
17	figures Auxiliary Planes	Lecture Method	T-1, R-1
18	Computer aided orthographic projections – points, lines and planes	Lecture Method	T-1, R-1
19	Introduction to Projections of Solids	Lecture Method	T-1, R-1
20	Projections of Regular Solids Auxiliary Views	Lecture Method	T-1, R-1
21	Sectional views of Right Regular Solids – Prism: triangular,square	Lecture Method	T-1, R-1
22	Prism: pentagonal,hexagonal	Lecture Method	T-1, R-1
23	Pyramid: triangular,square	Lecture Method	T-1, R-1
24	Pyramid: pentagonal,hexagonal	Lecture Method	T-1, R-1
25	Solid of revolution:Cylinder and	Lecture Method	T-1, R-1
26	Solid of revolution: Cone – Auxiliary views	Lecture Method	T-1, R-1
27	Computer aided projections of solids	Lecture Method	T-1, R-1
28	Sectional Views	Lecture Method	T-1, R-1
29	Introduction of Development of Surfaces	Lecture Method	T-1, R-1
30	Development of Surfaces of Right Regular Solids	Lecture Method	T-1, R-1
31	Prism	Lecture Method	T-1, R-1
32	Cylinder	Lecture Method	T-1, R-1

33	Pyramid	Lecture Method	T-1, R-1
34	Cone	Lecture	T-1, R-1
35	Intersection of solid	Lecture Method	T-1, R-1
36	Intersection of prism vs prism	Lecture Method	T-1, R-1
37	Cylinder vs Cylinder	Lecture Method	T-1, R-1
38	Development of surfaces using computer aided drafting	Lecture Method	T-1, R-1
39	Introduction of Isometric Projections	Lecture Method	T-1, R-1
40	Principles of Isometric Projection	Lecture Method	T-1, R-1
41	Isometric Scale	Lecture Method	T-1, R-1
42	Isometric Views	Lecture Method	T-1, R-1
43	Isometric Scale, Isometric Views Conventions	Lecture Method	T-1, R-1
44	Isometric Views of Lines, Plane Figures	Lecture Method	T-1, R-1
45	Simple and Compound Solids	Lecture Method	T-1, R-1
46	Isometric Projection of objects having non- isometric lines	Lecture Method	T-1, R-1
47	Isometric Projection of Spherical Parts.	Lecture Method	T-1, R-1
48	Conversion of Isometric Views to Orthographic Views	Lecture Method	T-1, R-1
49	Vice-versa –Conventions	Lecture Method	T-1, R-1
50	Conversion of orthographic projection into isometric view using computer aided drafting	Lecture Method	T-1, R-1
51	Practice sessions	Video Lecture Method	V-1
52	Practice sessions	Video Lecture Method	V-2
53	Practice sessions	Video Lecture Method	V-3
54	Practice sessions	Video Lecture Method	V-4
55	Practice sessions	Video Lecture Method	V-5
56	Practice sessions	REVISION	W-1,2,3
57	Practice sessions	REVISION	W- 4,5

TEXTBOOKS :

T-1 Engineering Drawing N.D. Bhatt / Charotar

T-2 Engineering Drawing and graphics Using AutoCAD Third Edition, T. Jeyapoovan, Vikas: S. Chand and company Ltd.

REFERENCES :

R-1 Engineering Drawing, Basant Agrawal and C M Agrawal, Third Edition McGraw Hill

R-2 Engineering Graphics and Design, WILEY, Edition 2020

R-3 Engineering Drawing, M. B. Shah, B.C. Rane / Pearson.

R-4 Engineering Drawing, N. S. Parthasarathy and Vela Murali, Oxford

R-5 Computer Aided Engineering Drawing – K Balaveera Reddy et al – CBS Publishers



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WEB REFERENCES :

- 1) <https://books.google.co.in/books?id=dgsbEAAAQBAJ&lpg=PP2&pg=PA22#v=onepage&q&f=true>
- 2) https://www.academia.edu/33675384/Introduction_to_AutoCAD_2004_pdf
- 3) <https://nptel.ac.in/courses/112103019>
- 4) https://www.academia.edu/83299582/Textbook_of_Engineering_Drawing

VIDEO REFERENCES :

- 1) <http://www.digimat.in/nptel/courses/video/105104148/L01.html>
- 1) <https://archive.nptel.ac.in/courses/112/102/112102304/#>
- 2) <https://archive.nptel.ac.in/courses/112/105/112105294/>
- 3) <http://www.nptelvideos.com/lecture.php?id=14722>
- 4) <https://www.youtube.com/@BSAUNIV>

**GAP WITHIN THE SYLLABUS – MAPPING TO CO. PO**

Vernier Scale, Comparative Scales, Scale of Chords, Involutives, Spirals, Helix, Development of oblique objects

Course Outcomes

After completing this topic the student will be able to:

1. Draw Vernier Scale, Comparative Scale and Scale of Chords. (Applying)
2. Draw Involutives, Spirals and Helix Curves (Applying)
3. Develop oblique surfaces using Development of surface Method (Applying)

Mapping of course outcomes with program outcomes:

High -3 Medium -2 Low-1

PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
1	2		-	-	-	-	-	3	-	2	-	-
2	3		-	-	-	-	-	2	-	2	-	-
3	2		-	-	-	-	-	2	-	3	-	-



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GAP BEYOND THE SYLLABUS-MAPPING TO PO/PSO

1. Regular industrial visits help students to know the information useful for knowledge upgradation.
2. Students are encouraged to take part in Technical Quizzes and various co-curricular activities to ensure their overall development
3. Teaching at least a few portions giving practical demonstration to create interest among the students
4. Introducing current Scientific and Technological innovations and development
5. Computer aided learning tools are also used for better visual display for the engineering graphics

Mapping to PO/PSO:

High -3 Medium -2 Low-1

PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
1	-	-	-	2	-	-	-	-	-	-	-	2
2	-	-	-	-	-	-	-	-	-	2	-	-
3	-	-	-	-	-	-	-	-	-	-	3	-
4	-	-	-	-	-	-	-	-	1	-	-	-
5	-	-	-	-	2	-	-	-	-	-	-	-



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CAEG LECTURE NOTES

<https://drive.google.com/file/d/1UKOvrVugYweJGpwkyTjkT16cE0ph9i-7/view?usp=sharing>



POWERPOINT PRESENTATION

Contents	
1.	Scales
2.	Engineering Curves - I
3.	Engineering Curves - II
4.	Loci of Points
5.	Orthographic Projections - Basics
6.	Conversion of Pictorial View into Orthographic Views
7.	Projections of Points and Lines
8.	Projection of Planes
9.	Projection of Solids
10.	Sections & Development
11.	Intersection of Surfaces
12.	Isometric Projections
13.	Exercises
14.	Solutions – Applications of Lines

PLAIN SCALE:- This type of scale represents two units or a unit and its sub-division.

PROBLEM NO. 1:- Draw a scale 1 cm = 1 m to read decimeters, to measure maximum distance of 6 m. Show on it a distance of 4 m and 6 dm.

CONSTRUCTION:- $R.F. = \frac{\text{DIMENSION OF DRAWING}}{\text{DIMENSION OF OBJECT}}$

a) Calculate R.F. = $\frac{1\text{cm}}{1\text{m}} = \frac{1}{100}$
 Length of scale = R.F. X max. distance
 = $\frac{1}{100} \times 600\text{ cm}$
 = 6 cms

b) Draw a line 6 cm long and divide it in 6 equal parts. Each part will represent larger division unit.
 c) Sub divide the first part which will represent second unit or fraction of first unit.
 d) Place (0) at the end of first unit. Number the units on right side of Zero and subdivisions on left-hand side of Zero. **Take height of scale 5 to 10 mm for getting a look of scale.**
 e) After construction of scale mention its RF and name of scale as shown.
 f) Show the distance 4 m 6 dm on it as shown.

R.F. = 1/100
PLANE SCALE SHOWING METERS AND DECIMETERS.

CONIC SECTIONS
 ELLIPSE, PARABOLA AND HYPERBOLA ARE CALLED CONIC SECTIONS BECAUSE THESE CURVES APPEAR ON THE SURFACE OF A CONE WHEN IT IS CUT BY SOME TYPICAL CUTTING PLANES.

OBSERVE ILLUSTRATIONS GIVEN BELOW.

Section Plane Through Generators
Ellipse

Section Plane Parallel to Axis.
Hyperbola

Section Plane Parallel to end generator.
Parabola

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PREVIOUS QUESTION PAPERS

<https://drive.google.com/file/d/17Mgybsa7J67ii-80tUNWb5fxfsPs216c/view?usp=sharing>

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Sheriguda(V), Ibrahimpatnam(M), R.R Dist., Telangana – 501 510

X3

BR22

I B.Tech II SEM I - Mid Examinations, June-2023

Set – I

Branch: CIVIL, ECE & CSE (AI&ML)

Date: 16-06-2023 (FN)

Subject: Computer Aided Engineering Graphics Marks: 20

Time: 2 Hours

Part-B

Answer any **FOUR** Questions. All Question Carry Equal Marks

4*5=20 Marks

1. Construct a diagonal scale of R.F = 1: 4000 to show meters and long enough to measure 500 meters. Indicate a length of 379 meters.

Remembering(L1)

2. A plot of ground is in the shape of a rectangle of size 160 mm and 100 mm. Inscribe an elliptical lawn in it. **Understanding(L2)**

3. Disc is rolling on a straight line without slipping. Draw the path traced out by a point on the circle for its one complete rotation. Draw a cycloid of a circle of diameter 50 mm for one revolution. Also, draw a tangent and a normal to the curve at a point 35 mm above the base line. **Analyzing(L4)**

4. Point E is lying 70 mm below the H.P. and 50 mm behind the V.P. 2. Draw the projections of the following points on a common reference line keeping the distance between their projectors 30 mm apart.

Analyzing(L4)

- (a) Point A is 20 mm below the H.P. and 50 mm in front of the V.P.
- (b) Point B is in the H.P. and 40 mm behind the V.P.
- (c) Point C is 30 mm in front of the V.P. and in the H.P.
- (d) Point D is 50 mm above the H.P. and 30 mm behind the V.P.
- (e) Point E is 20 mm below the H.P. and 50 mm behind the V.P.
- (f) Point F is in the V.P. and 50 mm below the H.P.

5. A 70mm long line 'PQ' has its end 'p' 20mm above the H.P and 30mm in front of the V.P. The line is inclined at 45° to the H.P and 30° to the V.P. Draw its projections.

Understanding(L2)

6. A cylinder of base diameter 50 mm and axis 65 mm rests on a point of its base circle on the H.P. Draw its projections when the axis is inclined at 30° to the H.P. and top view of the axis is perpendicular to the V.P.

Creating(L6)

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Sheriguda(V), Ibrahimpatnam(M), R.R Dist., Telangana – 501 510

I B.Tech II SEM II- Mid Examinations, August-2023

X3

BR22

Set – I



Branch: CIVIL, CSE (AI&ML) & CSE (IOT)

Date: 19-08-2023 (FN)

Subject: Computer Aided Engineering Graphics

Marks: 20

Time: 2 Hours

Part-B

Answer any **FOUR** Questions. All Question Carry Equal Marks

4*5=20 Marks

1. A pentagonal pyramid of 25mm edge of base and 60mm height is resting on the corner of its base on H.P and the slant edge containing that corner is inclined at 45° with HP Draw the projections of the solid, when its axis makes an angle of 30° with VP

Creating (L6)

2. A cone of base diameter 55 mm and axis 70 mm is resting on its base on the H.P. A section plane perpendicular to V.P. and inclined at 45° to H.P., bisects the axis of the cone. Draw the development of its lateral surface.

Applying (L3)

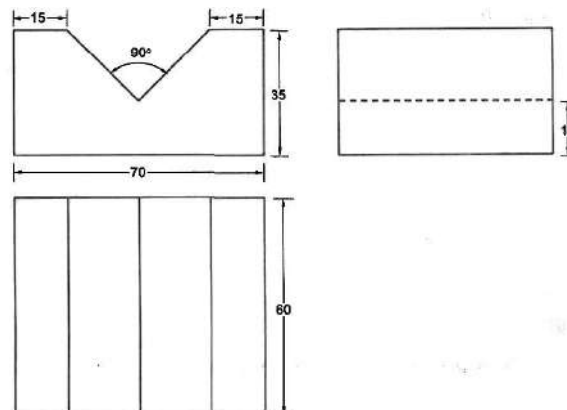
3. A cone of base circle diameter 40 and height 60 is resting on the ground on its base. It is cut by a section plane perpendicular to VP and inclined at an angle of 30° to HP. Section plane is passing through the axis appoint 20mm from the base of the cone. Draw the development of lateral surface of top part of the solid.

Applying (L3)

4. A cylinder of base diameter 50 mm and axis 70 mm is resting on ground with its axis vertical. It is cut by a section plane perpendicular to the V.P., inclined at 45° to the H.P., passing through the top of a generator and cuts all the other generators. Draw the development of its lateral surface. **Applying (L3)**

5. Draw the isometric view of the machine parts shown in figure 1. (All dimensions are in mm)

Understanding(L2)



6. Draw the isometric projection of a cone of base diameter 50 mm and axis 60 mm. The cone has its base on the H.P

Understanding(L2)

MID I & MID-II KEY link

<https://drive.google.com/file/d/1RpAeuJmuClssc8byHcYu1KAkIs8rYKVJ/view?usp=sharing>

MID-I & MID-II SAMPLE STUDENT SCRIPTS Link

<https://drive.google.com/file/d/1IbXFxQxRtSATZuz7jTltZoBmN72PLUJS/view?usp=sharing>

<https://drive.google.com/file/d/1rgilKiOHq3BpTzgzAyHTQif0qd2TBQzC/view?usp=sharing>



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I-MID CAEG ASSIGNMENT

1. Construct a scale of 1:40 to read metres and decimetres and long enough to measure up to 6 metres. Mark a distance of 4.7 m on it. **Understanding(L2)**
2. Construct a scale of 1:50 to read metres, decimetres and centimetres and long enough to measure up to 5 m. Mark a distance of 2.56 m on it. **Understanding(L2)**
3. Draw an ellipse when the distance of its focus from its directrix is 50 mm and eccentricity is $2/3$. Also, draw a tangent and a normal to the ellipse at a point 70 mm away from the directrix **Creating(L6)**
4. A point moves in a plane in such a way that the sum of its distances from two fixed points 100 mm apart is 130 mm. Name and draw the locus of this point. **Understanding(L2)**
5. Draw a parabola when the distance between its focus and directrix is 50 mm. Also, draw a tangent and a normal at a point 70 mm from the directrix. **Creating(L6)**
6. Draw a hyperbola when the distance of its focus from its directrix is 50 mm and eccentricity is $3/2$. Also, draw a tangent and a normal to the hyperbola at a point 25 mm from the directrix. **Creating(L6)**
7. Draw a cycloid of a circle of diameter 50 mm for one revolution. Also, draw a tangent and a normal to the curve at a point 35 mm above the base line. **Applying (L6)**
8. Draw the projections of the following points on a common reference line keeping the distance between their projectors 30 mm apart. **Understanding (L2)**
 - (a) Point A is 20 mm below the H.P. and 50 mm in front of the V.P.
 - (b) Point B is in the H.P. and 40 mm behind the V.P.
 - (c) Point C is 30 mm in front of the V.P. and in the H.P.
 - (d) Point D is 50 mm above the H.P. and 30 mm behind the V.P.
 - (e) Point E is 20 mm below the H.P. and 50 mm behind the V.P.
 - (f) Point F is in the V.P. and 50 mm below the H.P.
9. 70 mm long line PQ, has its end P 20 mm above the H.P. and 30 mm in front of the V.P. The line is inclined at 45° to the H.P. and 30° to the V.P. Draw its projections. **Understanding (L2)**
10. A rectangular plane of edges 35 mm and 70 mm is resting on an edge in the H.P. The surface is inclined to the H.P. such that the top view appears as a square. Draw its projections when the edge resting on the H.P. is inclined at 30° to the V.P. **Creating (L6)**



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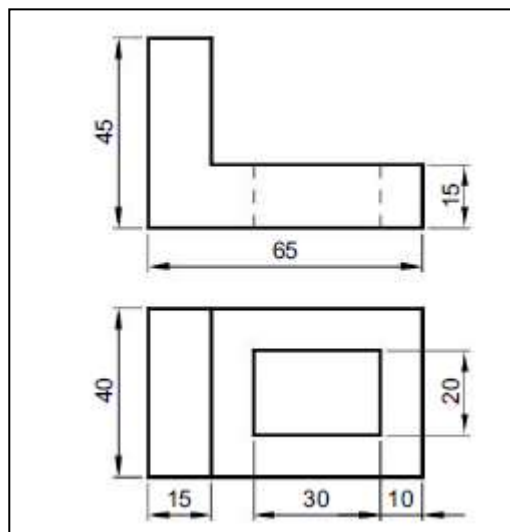
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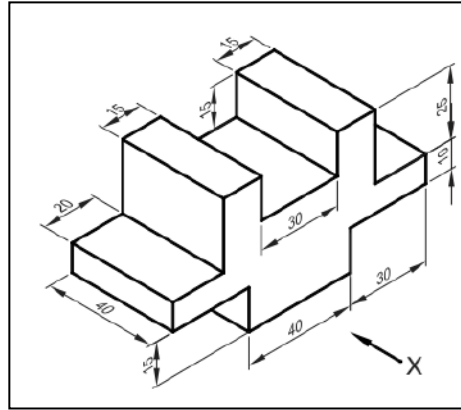
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II-MID CAEG ASSIGNMENT

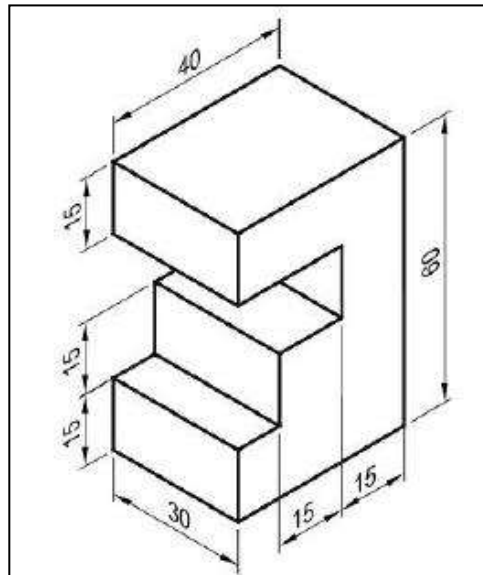
1. Draw the projections of a cube of edge 40 mm resting on one of its corners on the H.P. with a solid diagonal perpendicular to the V.P. **Applying (L6)**
2. A pentagonal pyramid of base side 30 mm and axis 60 mm rests on a corner of its base on the H.P. such that its apex is 55 mm above the ground. A vertical plane containing the corner of the base that lies on the H.P. and the axis is inclined at 30° to the V.P. Draw its projections. **Applying (L6)**
3. A hexagonal pyramid of base side 30 mm and axis 60 mm, has an edge of its base on the ground inclined at 45° to the V.P. and the axis is inclined at 30° to the H.P. Draw its projections. **Applying (L6)**
4. A pentagonal prism of base side 30 mm and height 60 mm rests on one of its base side on the H.P. inclined at 30° to the V.P. Its axis is inclined at 45° to the H.P. Draw its projections. **Applying (L6)**
5. A pentagonal prism of base side 30 mm and axis 70 mm is resting on its base on the H.P. with a rectangular face parallel to the V.P. It is cut by an auxiliary inclined plane (A.I.P.) whose V.T. is inclined at 45° to the reference line and passes through the mid-point of the axis. Draw the development of the lateral surface of the truncated prism. **Creating(L6)**
6. A cone of base diameter 50 mm and axis 60 mm is resting on its base on the H.P. A section plane perpendicular to V.P. and inclined at 45° to H.P., bisects the axis of the cone. Draw the development of its lateral surface. **Creating(L6)**
7. Draw the isometric view of the machine parts shown in figure (All dimensions are in mm). **Applying (L6)**



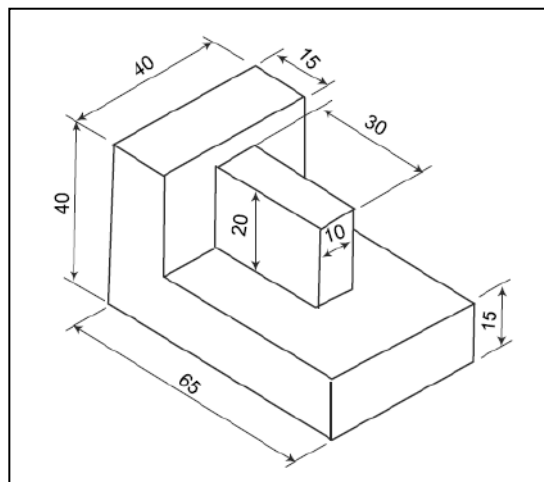
8. Draw the front view, top view and left side view of the following object shown in figure below. (All dimensions in the figure are in mm). **Applying (L6)**



9. Pictorial view of an object is shown in Fig.(a). Using first angle projection, draw Its.
 (i) front view,
 (ii) top view and
 (iii) side view. **Applying (L6)**



10. Draw the following views for the object shown in figure. All dimensions are in mm.
 (a) Front view
 (b) Top view
 (c) Left side view **Applying (L6)**



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I-MID & II-MID CAEG ASSIGNMENT PROOFS

MID-I & MID-II link

<https://drive.google.com/file/d/17nfNxVV6bgf4FeQoL9nG1RVYopsE2sfh/view?usp=sharing>

<https://drive.google.com/file/d/1e06IFiDydnUv4rsr0-JNswoGjFekCmmi/view?usp=sharing>



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SCHEME OF EVALUATION WITH CO and BTL MAPPING

SCHEME OF EVALUATION-CAEG(MID-I)(Set-I)		
<i>Instructions:</i>		
a) Any answer by alternate method should be valued and suitably awarded.		
b) All answers (including extra, stuck off and repeated) should be valued. Answers with maximum marks must be considered.		
Qn No	Description of Answer	Marks
1.	Finding length of scale	1
	Drawing of scale	3
	Showing units	1
2.	Drawing of rectangle	1
	Drawing of Ellipse	2
	Showing points	2
3.	Drawing of circle	2
	Showing complete Cycloidal curve	3
4.	Projection of points complete answer	5
5.	Projection of straight line answer in VP	2.5
	Projection of straight line answer in HP	2.5
6.	Projection of solid stage 1	1.5
	Projection of solid stage 2	1.5
	Projection of solid stage 3	2
TOTAL		20



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SCHEME OF EVALUATION-CAEG(MID-II)(Set-2)		
Instructions:		
a) Any answer by alternate method should be valued and suitably awarded.		
b) All answers (including extra, stuck off and repeated) should be valued. Answers with maximum marks must be considered.		
Qn No	Description of Answer	Marks
1	Projection of solid stage 1	1.5
	Projection of solid stage 2	1.5
	Projection of solid stage 3	2
2.	Cone front view and top view	2.5
	Development of surface of cone	2.5
3.	Cone front view and top view	2.5
	Development of surface of cone	2.5
4	Development cylinder front view and top view	2.5
5.	Development of cylinder	2.5
6.	Drawing of Isometric view	5
TOTAL		20

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Result Analysis:

CSE-AIML-A

Course Title	COMPUTER AIDED ENGINEERING GRAPHICS
Course Code	ME201ES
Programme	B.Tech
Year & Semester	I year I- semester
Regulation	BR22
Course Faculty	M Yadhagiri, Assistant Professor , H&S

Weak Students:

Weak Students:

S No	Roll no	Intermediate Marks	Internal-I Status (40)	Internal-II Status (40)
1	22X31A6605	61%	37	25
2	22X31A6637	62%	28	26
3	22X31A6635	62%	29	29
4	22X31A6624	64.9%	32	28
5	22X31A6619	65.5%	10	5
6	22X31A6625	66.9%	29	25
7	22X31A6641	69%	28	26
8	22X31A6643	69%	29	25
9	22X31A6633	70%	28	26
10	22X31A6634	71%	35	38

Advanced learners:

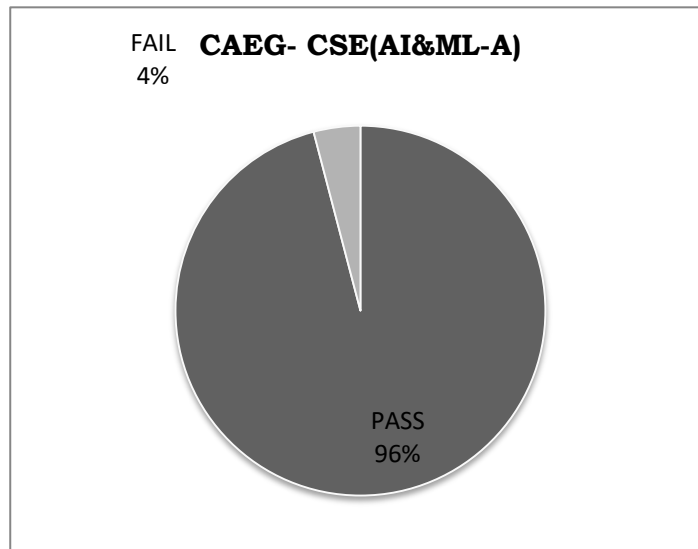
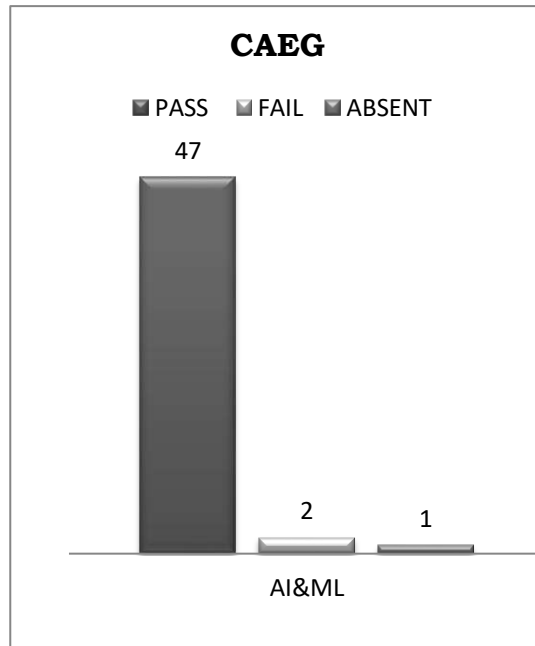
S No	Roll No	Intermediate Marks	Gate Material
1	22X31A6602	96.3%	Topics: Engineering Drawing, Scales, Conic Sections, Engineering Curves, Projections, Projection of Points, Lines and Planes, Projection of Solids, Development and Intersection of Solids, General Principles of Design, Safety, Work Study and Ergonomics, Fire Safety, Safety In Industries
2	21X31A6627	95.7%	
3	21X31A6616	95.4%	
4	21X31A6631	95.4%	
5	21X31A6629	94%	
6	21X31A6618	92.3%	
7	21X31A6646	91.6%	



RESULT ANALYSIS AT THE END OF SEMISTER

Branch : CSE-AI&ML-A

Subject: Computer Aided Engineering Graphics



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DEPARTMENT OF HUMANITIES AND SCIENCE REMEDIAL CLASSES TIME TABLE

DAY/ PERIOD	MON 4.00-5.00	TUE 4.00-5.00	WED 4.00-5.00	THUR 4.00-5.00	FRI 4.00- 5.00	SAT 4.00-5.00
CSE-A	M&C	PPS	BEE	CAEG	EC	M&C
CSE-B	BEE	M&C	CAEG	PPS	EC	BEE
CSE-C	EC	CAEG	BEE	M&C	PPS	EC

DAY/ PERIOD	MON 4.00-5.00	TUE 4.00-5.00	WED 4.00-5.00	THUR 4.00-5.00	FRI 4.00-5.00	SAT 4.00-5.00
DS	M&C	EC	BEE	PPS	CAEG	EC
CYBER	PPS	M&C	EC	CAEG	BEE	M&C

DAY/ PERIOD	MON 4.00-5.00	TUE 4.00-5.00	WED 4.00-5.00	THUR 4.00-5.00	FRI 4.00-5.00	SAT 4.00-5.00
AIML-A	AP	PPS	M&C	CAEG	AP	M&C
AIML-B	M&C	CAEG	PPS	AP	M&C	CAEG

DAY/ PERIOD	MON 4.00-5.00	TUE 4.00-5.00	WED 4.00-5.00	THUR 4.00-5.00	FRI 4.00-5.00	SAT 4.00-5.00
AI&DS	M&C	ENG	AP	PPS	AP	PPS
IOT	PPS	AP	M&C	CAEG	M&C	CAEG

DAY/ PERIOD	MON 4.00-5.00	TUE 4.00- 5.00	WED 4.00-5.00	THUR 4.00-5.00	FRI 4.00-5.00	SAT 4.00-5.00
ECE	AP	ENG	M&C	PPS	AP	PPS
CIVIL	CAEG	AP	M&C	PPS	M&C	CAEG


Head of the Department
Department of H&S
SRI INDU INSTITUTE OF ENGG & TECH
Sheriguda(V) Ibrahimpatnam (M) R.R. Dist-501 510


PRINCIPAL
Sri Indu Institute of Engineering & Tech.
Sheriguda(VIII), Ibrahimpatnam
R.R. Dist. Telangana-501 510.



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Humanities & Sciences

Course Outcome Attainment (Internal Examination-1)

Name of the facu	M YADHAGIRI	Academic Year:	2022-2023
Branch & Sectio	CSE AI&ML-A	Examination:	I Internal
Course Name:	CAEG	Year: I	Semester: II

S.No	HT No.	Q1a	Q1b	Q1c	Q2a	Q2b	Q2c	Q3a	Q3b	Q3c	Q4a	Q4b	Q4c	Q5a	Q5b	Q5c	Q6a	Q6b	Q6c	Obj	A2	viva /ppt
Max. Marks ==>		5			5			5			5			5			5			10	5	5
1	22X31A6601	4.5			5			5			5			4						10	5	5
2	22X31A6602	5			4.5			5			5			5						10	5	5
3	22X31A6603	4.5			5			4.5						4.5						9	5	5
4	22X31A6604	4			4			4						4						8	5	5
5	22X31A6605	4.5			5			4.5			4			4.5						8	5	5
6	22X31A6606	4			4			2												9	5	5
7	22X31A6607	5			5			5			4.5									10	5	5
8	22X31A6608	5			5			5			5									10	5	5
9	22X31A6609	4.5			4.5			5						5						8	5	5
10	22X31A6610	4.5			4.5															8	5	5
11	22X31A6612	4.5			5			4			4									10	5	5
12	22X31A6613	0			5			5						5						7	5	5
13	22X31A6614	5			4.5			5			5			5						9	5	5
14	22X31A6615	5			2			4												8	5	5
15	22X31A6616	5			5			5						5						8	5	5
16	22X31A6617	4.5			4			2			3									9	5	5
17	22X31A6618	5			5			5						4						9	5	5
18	22X31A6619																					
19	22X31A6620	4			4			2												7	5	5
20	22X31A6621	4			4			4												8	5	5
21	22X31A6622	5			5			5						5						9	5	5
22	22X31A6623	4			4			4.5						4						9	5	5
23	22X31A6624	5			4.5			4.5												8	5	5
24	22X31A6625	2			4.5			4												8	5	5
25	22X31A6626	5			5			5			5									10	5	5
26	22X31A6627	5			5			5						5						10	5	5
27	22X31A6628	4			4			4						4						9	5	5
28	22X31A6629	2			4			3												7.5	5	5
29	22X31A6630	5			5			4.5			4			5						7	5	5
30	22X31A6631	4			4			4						4						9	5	5
31	22X31A6632	4.5			4.5			4.5						4.5						10	5	5
32	22X31A6633	1			4.5						1			1.5			1			9	5	5
33	22X31A6634	4			4			4						4						9	5	5
34	22X31A6635	4			3			3						1						8	5	5
35	22X31A6636	4.5			1						4.5			4.5						8	5	5
36	22X31A6637	4			4			1									1			8	5	5
37	22X31A6638	5			5			5						4.5						10	5	5
38	22X31A6639	5			5			5			5			5						10	5	5
39	22X31A6640	5			4.5															9	5	5
40	22X31A6641	4.5			4.5															9	5	5
41	22X31A6642	3			4			4.5			4			4						8	5	5
42	22X31A6643	4			4			1						1						9	5	5
43	22X31A6644	4			2			4												8	5	5
44	22X31A6645	4			4.5			1						4						8	5	5
45	22X31A6646	4			4.5			4.5						3.5						9	5	5
46	22X31A6647	5			5			4.5						4						8	5	5
47	22X31A6648	4			4			4						4						8	5	5
48	22X31A6649	4			4.5			4												7	5	5
49	22X31A6650	5			4.5			4.5						4.5						6	5	5

Target set by the faculty / HoD	3.00	0.00	0.00	3.00	0.00	0.00	3.00	0.00	0.00	3.00	0.00	0.00	3.00	0.00	0.00	3.00	0.00	0.00	6.00	3.00
Number of students performed	37	0	0	21	0	0	26	0	0	26	0	0	17	0	0	29	0	0	50	50
Number of students attempted	41	0	0	34	0	0	33	0	0	34	0	0	19	0	0	30	0	0	50	50
Percentage of students scored more than target	90%			62%			79%			76%			89%			97%			100%	100%

CO Mapping with Exam Questions:

CO - 1																				
CO - 2																				
CO - 3	Y																			Y
CO - 4							Y													Y
CO - 5										Y			y							Y
CO - 6				Y												y				Y

Scored >Target	63%			98%			95%			85%			80%			71%				100%
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CO Attainment based on Exam Questions:

CO - 1																				
CO - 2																				
CO - 3	63%																			100%
CO - 4							63%													100%
CO - 5										63%			63%							100%
CO - 6				63%												63%				100%

CO	Subj	obj	Asgn	Overall	Level	ainment Le
CO-1						1 40%
CO-2						2 50%
CO-3	63%	100%	100%	100%	91%	3 60%
CO-4	63%	100%	100%	100%	91%	3.00
CO-5	63%	100%	100%	100%	91%	3.00
CO-6	63%	100%	100%		88%	3.00

Attainment (Internal 1 Examinati 3.00



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Humanities & Sciences

Course Outcome Attainment (Internal Examination-2)

Name of the fa		<u>M YADHAGIRI</u>													Academic Year:		2022-2023				
Branch & Secti		<u>AI&ML-A</u>													Examination:		<u>II Internal</u>				
Course Name:		<u>CAEG</u>													Year: <u>I</u>		Semester <u>II</u>				
S.N	HT No.	Q1a	Q1b	Q1c	Q2a	Q2b	Q2c	Q3a	Q3b	Q3c	Q4a	Q4b	Q4c	Q5a	Q5b	Q5c	Q6a	Q6b	Q6c	Obj1	A1
Max. Marks ==>		5			5			5			5			5			5			10	5
1	22X31A6601	1			4			3			4						5			8	5
2	22X31A6602				5			5			5						5			10	5
3	22X31A6603				5			5			4						5			10	5
4	22X31A6604				4			4			1						1			9	5
5	22X31A6605	4												4			1			7	5
6	22X31A6606				4			3			4									8	5
7	22X31A6607				5			5			5						5			10	5
8	22X31A6608				5			4			5						3			7	5
9	22X31A6609				4			4			3						4			7	5
10	22X31A6610				4			4												6	5
11	22X31A6612				3			3			1						2			6	5
12	22X31A6613				2						4			4			1			6	5
13	22X31A6614				5			5						5			5			10	5
14	22X31A6615				4						4						2			9	5
15	22X31A6616				5			5			5						5			9	5
16	22X31A6617				5			5			5									9	5
17	22X31A6618				5			5			5						5			10	5
18	22X31A6619																			8	5
19	22X31A6620	4			4						1									8	5
20	22X31A6621				3			1			3						1			7	5
21	22X31A6622				5			5			5						3			9	5
22	22X31A6623				4			4			3									9	5
23	22X31A6624				4			1			4									7	5
24	22X31A6625							4			1			4						9	5
25	22X31A6626				5			5						5			5			10	5
26	22X31A6627				5			5			5						5			9	5
27	22X31A6628				4			3			2									7	5
28	22X31A6629	4			3			3												10	5
29	22X31A6630				5			5						2			5			7	5
30	22X31A6631				4			4			4						4			8	5
31	22X31A6632				5			5			4						4			9	5
32	22X31A6633	1			4						3									9	5
33	22X31A6634				5			5			5						4			9	5
34	22X31A6635										3			2			5			9	5
35	22X31A6636	3									4						3			9	5
36	22X31A6637				3			3			1						1			9	5
37	22X31A6638				5			5			5						1			8	5
38	22X31A6639				5						5			5			5			8	5
39	22X31A6640																				
40	22X31A6641				4			4												8	5
41	22X31A6642				4			4			4									9	5
42	22X31A6643				3						3									9	5
43	22X31A6644				3			3			3									8	5
44	22X31A6645	1						3						3			3			9	5
45	22X31A6646							4			4			3			4			8	5
46	22X31A6647				5			5			5						3			8	5
47	22X31A6648	3			3			3			3									7	5
48	22X31A6649				4			4			4						2			7	5
49	22X31A6650				5			5			4						5			7	5

Target set by the faculty / HoD	3.00	0.00	0.00	3.00	0.00	0.00	3.00	0.00	0.00	3.00	0.00	0.00	3.00	###	0.00	3.00	0.00	0.00	6.00	3.00	3.00
Number of students performed above the target	18	23	0	37	0	0	38	0	0	26	0	0	1	0	0	15	0	0	45	50	50
Number of students attempted	38	23	0	46	0	0	43	0	0	36	0	0	2	0	0	19	0	0	48	50	50
Percentage of students scored more than target	47%	100%		80%			88%			72%			50%			79%			94%	100%	100%

CO Mapping with Exam Questions:

CO - 1																					
CO - 2																					
CO - 3	Y																			Y	Y
CO - 4							Y													Y	
CO - 5									Y			y								Y	
CO - 6				Y											y					Y	

% Students Scored >Target %	63%			98%			95%			85%			80%			71%				100%	63%
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CO Attainment based on Exam Questions:

CO - 1	63%																			100%	63%
CO - 2							63%													100%	
CO - 3									63%			63%								100%	
CO - 4				63%												63%				100%	
CO - 5	63%																			100%	63%
CO - 6							63%													100%	

CO	Subj	obj	aasgn	ppt	Overall	Level	Attainment Level	
CO-1							1	40%
CO-2							2	50%
CO-3	63%	100%	100%	100%	91%	3	3	60%
CO-4	63%	100%	100%	100%	91%	3.00		
CO-5	63%	100%	100%	100%	91%	3.00		
CO-6	63%	100%	100%		88%	3.00		

Attainment (Internal Examination-2) 3.00



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Humanities & Sciences

Course Outcome Attainment (University Examinations)

Name of the faculty	M YADHAGIRI	Academic Year:	2022-2023
Branch & Section:	AI&ML-A	Year / Semester:	I / II
Course Name:	CAEG		

S.No	Roll Number	Marks Secured	S.No	Roll Number	Marks Secured
1	22X31A6601	39	36	22X31A6636	21
2	22X31A6602	52	37	22X31A6637	22
3	22X31A6603	48	38	22X31A6638	34
4	22X31A6604	24	39	22X31A6639	43
5	22X31A6605	29	40	22X31A6640	A
6	22X31A6606	24	41	22X31A6641	24
7	22X31A6607	42	42	22X31A6642	35
8	22X31A6608	53	43	22X31A6643	24
9	22X31A6609	40	44	22X31A6644	12
10	22X31A6610	24	45	22X31A6645	26
11	22X31A6611	-	46	22X31A6646	36
12	22X31A6612	22	47	22X31A6647	44
13	22X31A6613	41	48	22X31A6648	34
14	22X31A6614	49	49	22X31A6649	29
15	22X31A6615	22	50	22X31A6650	42
16	22X31A6616	46	51		
17	22X31A6617	29	52		
18	22X31A6618	48	53		
19	22X31A6619	17	54		
20	22X31A6620	27	55		
21	22X31A6621	23	56		
22	22X31A6622	50	57		
23	22X31A6623	32	58		
24	22X31A6624	39	59		
25	22X31A6625	33	60		
26	22X31A6626	47	61		
27	22X31A6627	48	62		
28	22X31A6628	42	63		
29	22X31A6629	28	64		

30	22X31A663 0	39		65		
31	22X31A663 1	37		66		
32	22X31A663 2	28		67		
33	22X31A663 3	28		68		
34	22X31A663 4	30		69		
35	22X31A663 5	28		70		
Max Marks		60				
Class Average mark			34		Attainment Level	% students
Number of students performed above the target			26		1	40%
Number of successful students			50		2	50%
Percentage of students scored more than target			52%		3	60%
Attainment level			3			



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Humanities & Sciences

Course Outcome Attainment

Name of the faculty: [M YADHAGIRI](#) Academic Year: [2022-2023](#)

Branch & Section: [AI&ML-A](#) Examination: [I Internal](#)

Course Name: [CAEG](#) Year: [I](#)

Semester: [II](#)

Course Outcomes	1st Internal Exam	2nd Internal Exam	Internal Exam	University Exam	Attainment Level
CO1	3.00		3.00	2.00	2.30
CO2	3.00		3.00	2.00	2.30
CO3	3.00	3.00	3.00	2.00	2.30
CO4		3.00	3.00	2.00	2.30
CO5		3.00	3.00	2.00	2.30
CO6		3.00	3.00	2.00	2.30
Internal & University Attainment:			3.00	2.00	
Weightage			30%	70%	
CO Attainment for the course (Internal, University)			0.90	1.40	
CO Attainment for the course (Direct Method)			2.30		
Overall course attainment level					2.30



SRI INDU INSTITUTE OF ENGINEERING & TECHNOLOGY

Department of Humanities & Sciences

Program Outcome Attainment (from Course)

Name of Faculty: M YADHAGIRI	Academic Year: 2022-2023
Branch & Section: CSE-AIML-A	Year:
Course Name: CAEG	Semester:

CO-PO mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12		
C123.1	3	-	-	-	-	-	-	1	-	1	-	-		
C123.2	3	-	-	-	-	-	-	1	-	1	-	-		
C123.3	2	-	-	-	-	-	-	1	-	1	-	-		
C123.4	2	-	-	-	-	-	-	1	-	2	-	-		
C123.5	3	-	-	-	-	-	-	1	-	2	-	-		
C123.6	3	-	-	-	-	-	-	1	-	2	-	-		
C123	2.6	-	-	-	-	-	-	1	-	1.5	-	-		

CO	Course Outcome Attainment
CO1	2.30
CO2	2.30
CO3	2.30
CO4	2.30
CO5	2.30
CO6	2.30
Overall course attainment level	2.30

PO-ATTAINMENT

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO Attainment	2.6							1		1.5		

CO contribution to PO - 33%, 67%, 100% (Level 1/2/3)



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY
(UGC AUTONOMOUS INSTITUTION)

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(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)
Khalsa Ibrahimpatnam, Sheriguda(V), Ibrahimpatnam(M), Ranga Reddy Dist., Telangana – 501510

ATTENDANCE REGISTER

Link

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