



KONGU ENGINEERING COLLEGE
(Autonomous)
PERUNDURAI, ERODE - 638 060

SCHOOL OF BUILDING AND MECHANICAL SCIENCES
DEPARTMENT OF AUTOMOBILE ENGINEERING



Date: 15.09.21

CIRCULAR

This to inform that a one credit course on “Automotive Component Modelling Using AutoCAD” will be conducted from 04.10.21 to 22.10.21 for the benefit of IV-Year Automobile Engineering Students. The duration of the course is 30 hours and maximum student strength is limited to 40. Interested students are asked to enroll their names to Mr. S. Sathiskumar on or before 04.10.21.

Course Faculty

1. Dr. P. Somasundaram/Professor / KEC
2. Mr. S. Sathiskumar / Assistant Professor / KEC


Course Coordinator
(Mr. S. Sathiskumar)


HoD / Automobile Engg.,

Copy to:

1. IV Year Automobile Engineering
2. File

 Estd 1984	KONGU ENGINEERING COLLEGE (Autonomous) PERUNDURAI – 638060 INTERNAL QUALITY ASSURANCE CELL		 CERT No.: 99-100-20788 ISO 9001 : 2015
	Approval for Value Added Course (One Credits)		

Academic Year: 2021-2022 ODD Semester

DEPARTMENT OF AUTOMOBILE ENGINEERING

Date: 15/09/2021

1.	Academic Year	:	2021-2022	Semester :	ODD	
2.	Course Title	:	Automotive Component Modelling Using AUTOCAD	Credit(s):	One	
3.	Type of Course	:	New Course			
	• If "Already offered course",	:	Course Code:	Version:	01	
4.	Course Coordinator(s)	:	1. Mr. S. Sathiskumar 2. Dr. P. Somasundaram			
5.	Course offered by	:	Internal faculty			
6.	Name and designation of external resource persons	:	NIL			
7.	Details about external organization	:	NIL			
8.	Course fee for external experts		Max. number of students/Batch	Course fee / student		
	NIL		30	NIL		
9.	No. of days	Period	No. of hours			Venue
		From To	Lecture	Practical	Total	
	15	04/10/2021 22/10/2021	-	30	30 ✓	
			Automotive Embedded Lab			
10.	Pre-requisites for offering the course	:	NIL			
11.	Course offered to	:	Programme	Branch	Year/Semester	
			B. E	Automobile Engineering	IV/VII	
12.	Course Main Contents	:	Day 1	Basic commands: Point, Line, Circle, Arc, Polyline, Polygon, Rectangle		
		:	Day 2	Donut, Spline, Hatch, Fill, Object Snap, Grid Space, Layers, Move, Copy, Offset, Trim, Extend, Mirror, Array		

		: Day 3	Stretch, Fillet, Explode, Scale, Line Weight, Text, Mtext, and Leader.		
		: Day 4	Other Commands: Viewing, Geometry, Precision, Layers, Properties, Modifying, Blocks		
		: Day 5	Layouts, Notes and Labels, Dimensions, Printing, Exporting, Shortcuts.		
		: Day 6	Conversion of orthographic into isometric projection, Conversion of isometric into orthographic projection,		
		: Day 7	2D Modelling of automotive components: Crank Shaft, Cylinder, Piston		
		: Day 8	2D Modelling of automotive components: Gear, Connecting Rod		
		: Day 9	2D Modelling of automotive components: Clutch Plate.		
		: Day 10	2D Modelling of automotive components: Leaf Spring.		
		: Day 11	2D Modelling of automotive components: Steering Knuckle, Tie Rod.		
		: Day 12	2D Modelling of automotive components: Propeller Shaft		
		: Day 13	2D Modelling of automotive components: Coil Spring		
		: Day 14	2D Modelling of automotive components: Fly Wheel		
		: Day 15	2D Modelling of automotive components: Brake Pads, Chassis		
			Assignment / Project / Case Study/Others: (if any) -Nil-		
13.	Course Outcomes	:	After completing the course, the student will be able to: • Read and understand various AutoCAD drawings meant for automobile components • Convert orthographic projection into isometric projection and vice versa • Identify the mistakes or overlaps in the orthographic drawing		
14.	Course Assessment (Min. 2)	:	S. No.	Type	Max. Marks
			1	Assessment – I (MCQ)	50
			2	Assessment – II (Practical Examination)	50
				Total	100 Marks
15.	Verified that the content of this course is not offered to students partially/fully in regular curriculum of respective programme of the student. Certify that the course content, credits and grade are approved in the BOS meeting or approved by internal BOS members and will be ratified in the next BOS meeting				07/15/09/2021 (Signature of the HoD after verification)
16.	Any other details	:	NIL		

The above proposal may kindly be approved.

1.  15/9/21

2. P. Sathya 15/9/21
Course co-ordinator(s)

07/15/09/2021
HOD

07/15/09/2021
Chief Coordinator/Academic

Encl:

1. Copy of the syllabus of the course
2. Financial proposal from the external organization (if any)

18VAC35 - AUTOMOTIVE COMPONENT MODELLING USING AUTOCAD

L	T	P	Credit
0	0	2	1

Preamble This course provides knowledge on 2D modelling of automotive components by understanding 2D orthographic and isometric drawings using Auto CAD

List of Exercises / Experiments:

1.	Basic commands: Point, Line, Circle, Arc, Polyline, Polygon, Rectangle
2.	Donut, Spline, Hatch, Fill, Object Snap, Grid Space, Layers, Move, Copy, Offset, Trim, Extend, Mirror, Array
3.	Stretch, Fillet, Explode, Scale, Line Weight, Text, Mtext, and Leader.
4.	Other Commands: Viewing, Geometry, Precision, Layers, Properties, Modifying, Blocks
5.	Layouts, Notes and Labels, Dimensions, Printing, Exporting, Shortcuts.
6.	Conversion of orthographic into isometric projection, Conversion of isometric into orthographic projection,
7.	2D Modelling of automotive components: Engine Crank, Cylinder, Piston,
8.	2D Modelling of automotive components: Gear, Connecting Rod
9.	2D Modelling of automotive components: Clutch Plate.
10.	2D Modelling of automotive components: Leaf Spring.
11.	2D Modelling of automotive components: Steering Knuckle, Tie Rod.
12.	2D Modelling of automotive components: Propeller Shaft
13.	2D Modelling of automotive components: Coil Spring
14.	2D Modelling of automotive components: Fly Wheel,
15.	2D Modelling of automotive components: Brake Pads, Chassis

Total: 30

REFERENCES:

1.	"Learn about AutoCAD – An Introduction to AutoCAD Beginners", Autodesk User Manual.
2.	George Omura, Brian C. Benton, "Mastering AutoCAD 2019 and AutoCAD LT 2019", Wiley, 2018.
3.	Bill Fane, "AutoCAD For Dummies", Wiley, 2016.

COURSE OUTCOMES:

On completion of the course, the students will be able to

	BT Mapped (Highest Level)
CO1 Read and understand various AutoCAD drawings meant for automobile components	Applying (K3)
CO2 Convert orthographic projection into isometric projection and vice versa.	Applying (K3)
CO3 Identify the mistakes or overlaps in the orthographic drawing	Applying (K3)

Mapping of COs with POs and PSOs

COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	2	1		2						2				1
CO2	2			2										1
CO3	2	1		2										1

1 – Slight, 2 – Moderate, 3 – Substantial, BT- Bloom's Taxonomy

ASSESSMENT PATTERN - PRACTICAL

Test / Bloom's Category*	Remembering (K1) %	Understanding (K2) %	Applying (K3) %	Analyzing (K4) %	Evaluating (K5) %	Creating (K6) %	Total %
Assessment – MCQ (50 Marks)	20	30	50				100
Practical Examination (50 Marks)			100				100

S. SATHISHKUMAR
F. S. SATHISHKUMAR

17/11/21

unf



KONGU ENGINEERING COLLEGE
(Autonomous)
PERUNDURAI – 638060
Department of Automobile Engineering
Attendance for one credit course



CERT No: 99-100-20736
ISO 9001:2015

Estd: 1984

Couse Code & Name: 18VAC35 &Automotive Component Modelling Using AutoCAD

Year: IV Year

Semester: VII

Duration: 13/09/2021 to 01/10/2021

Time: 4.30 pm to 6.30 pm (2 Hours)

S. No	Roll No	Name of the student	13-09-21	14-09-21	15-09-21	16-09-21	17-09-21	20-09-21	21-09-21	22-09-21	23-09-21	24-09-21	27-09-21	28-09-21	29-09-21	30-09-21	01-10-21	Total hours Conducted	Total hours Absent	Total hours Present	% Of Attendance
1	18AUL049	HARIHARASUDHAN C	P	P	P	P	P	P	P	P	P	P	A	P	A	P	P	30	4	26	86.67%
2	18AUL051	KARTHEEBAN RAJ S	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	0	30	100.00%
3	18AUL053	LOGESHKAR DK	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	0	30	100.00%
4	18AUL054	NITHISH KUMAR P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	0	30	100.00%
5	18AUL055	PRABAKARAN M	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	0	30	100.00%
6	18AUL057	REVANTH G	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	0	30	100.00%
7	18AUL058	SARUKESH E	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	0	30	100.00%
8	18AUL059	SATHISH RAJA GEORGE A	P	A	P	A	P	P	P	P	P	P	P	P	P	P	P	30	4	26	86.67%
9	18AUL060	SOUNDAPPAN J	P	P	P	P	P	P	P	A	P	A	P	P	P	P	P	30	4	26	86.67%
10	18AUL061	SUGA PRASANTH R	A	P	A	P	P	P	P	P	P	P	P	P	P	P	P	30	4	26	86.67%
11	18AUL063	VIGNESH M	P	P	A	P	A	P	P	P	P	P	P	P	P	P	P	30	4	26	86.67%
12	18AUL064	VIGNESH N V R	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	0	30	100.00%
13	18AUL065	VIGNESH G	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	0	30	100.00%
14	18AUL066	VIJITH O M	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	0	30	100.00%
15	18AUR002	AKASH B	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	0	30	100.00%



KONGU ENGINEERING COLLEGE

(Autonomous)

PERUNDURAI - 638060

Department of Automobile Engineering

Attendance for one credit course

Course Code & Name: 18VAC35 & Automotive Component Modelling Using AutoCAD

Year: IV Year

Semester: VII

Duration: 13/09/2021 to 01/10/2021

Time: 4.30 pm to 6.30 pm (2 Hours)



CERT No: 196-100-20728
ISO 9001:2015

S. No	Roll No	Name of the student	Total hours Conducted	Total hours Absent	Total hours Present	% of Attendance
1	18AUL049	HARIHARASUDHAN C	30	4	26	86.67%
2	18AUL051	KARTHEEBAN RAJ S	30	0	30	100.00%
3	18AUL053	LOGESHKAR DK	30	0	30	100.00%
4	18AUL054	NITHISH KUMAR P	30	0	30	100.00%
5	18AUL055	PRABAKARAN M	30	0	30	100.00%
6	18AUL057	REVANTH G	30	0	30	100.00%
7	18AUL058	SARUKESH E	30	0	30	100.00%
8	18AUL059	SATHISH RAJA GEORGE A	30	4	26	86.67%
9	18AUL060	SOUNDAPPAN J	30	4	26	86.67%
10	18AUL061	SUGA PRASANTH R	30	4	26	86.67%
11	18AUL063	VIGNESH M	30	4	26	86.67%
12	18AUL064	VIGNESH N V R	30	0	30	100.00%
13	18AUL065	VIGNESH G	30	0	30	100.00%
14	18AUL066	VIJITH O M	30	0	30	100.00%
15	18AUR002	AKASH B	30	0	30	100.00%
16	18AUR003	BABU P	30	4	26	86.67%
17	18AUR004	BENSIGAR S	30	4	26	86.67%
18	18AUR005	BHARATH G	30	0	30	100.00%
19	18AUR006	DEEPAK CHAKRAWARTHI J	30	4	26	86.67%
20	18AUR009	DINESH S	30	0	30	100.00%
21	18AUR010	ELAMPARUTHI S	30	0	30	100.00%
22	18AUR011	GIRIDHAR A S	30	0	30	100.00%
23	18AUR013	GODWIN JOSHUA G	30	0	30	100.00%
24	18AUR014	GUHANESH K	30	8	22	73.33%
25	18AUR019	JAYAKUMAR B	30	0	30	100.00%
26	18AUR021	KARTHIKRAJ R	30	0	30	100.00%
27	18AUR022	KAVINRAJ S	30	0	30	100.00%
28	18AUR030	RAHUL P	30	4	26	86.67%
29	18AUR031	RASVANTH	30	4	26	86.67%
30	18AUR034	SARAN KARUNESH KUMAR J	30	0	30	100.00%
31	18AUR035	SARAVANAKUMAR N	30	0	30	100.00%
32	18AUR036	SHABESH R	30	0	30	100.00%
33	18AUR039	SRIRAM T	30	0	30	100.00%
34	18AUR041	SURYA R	30	8	22	73.33%
35	18AUR044	TAMILMANI S	30	4	26	86.67%
36	18AUR045	VETRI PRASATH K	30	0	30	100.00%
37	18AUR046	VIGNESH R	30	0	30	100.00%
38	18AUR047	YOKESVARAN R K	30	0	30	100.00%

[Signature]
Course Coordinator

[Signature]
HOD/Auto



KONGU ENGINEERING COLLEGE

(Autonomous)

PERUNDURAI, ERODE - 638 060



CERT No.: 99-100-20788
ISO 9001:2015

SCHOOL OF BUILDING AND MECHANICAL SCIENCES DEPARTMENT OF AUTOMOBILE ENGINEERING

Degree & Branch	B.E & Automobile Engineering
Couse Code & Name:	18VAC35 &Automotive Component Modelling Using AutoCAD
Academic Year	2021 – 2022
Class & Semester	IV Year Auto & VII Semester

MARK SHEET

Sl. No.	Roll No.	Name	Assessment - I (50)	Assessment - II (50)	Total (100)
1	18AUL049	HARIHARASUDHAN C	41	45	86
2	18AUL051	KARTHEEBAN RAJ S	30	50	80
3	18AUL053	LOGESHKAR DK	27	45	72
4	18AUL054	NITHISH KUMAR P	30	40	70
5	18AUL055	PRABAKARAN M	32	45	77
6	18AUL057	REVANTH G	35	40	75
7	18AUL058	SARUKESH E	40	45	85
8	18AUL059	SATHISH RAJA GEORGE A	33	45	78
9	18AUL060	SOUNDAPPAN J	18	50	68
10	18AUL061	SUGA PRASANTH R	40	40	80
11	18AUL063	VIGNESH M	30	45	75
12	18AUL064	VIGNESH N V R	40	50	90
13	18AUL065	VIGNESH G	19	50	69
14	18AUL066	VIJITH O M	35	40	75
15	18AUR002	AKASH B	37	40	77
16	18AUR003	BABU P	38	40	78
17	18AUR004	BENSIGAR S	41	40	81
18	18AUR005	BHARATH G	36	45	81
19	18AUR006	DEEPAN CHAKRAWARTHI J	29	45	74
20	18AUR009	DINESH S	42	50	92
21	18AUR010	ELAMPARUTHI S	40	50	90
22	18AUR011	GIRIDHAR A S	24	50	74
23	18AUR013	GODWIN JOSHUA G	36	50	86
24	18AUR014	GUHANESH K	30	45	75
25	18AUR019	JAYAKUMAR B	37	50	87
26	18AUR021	KARTHIKRAJ R	40	50	90
27	18AUR022	KAVINRAJ S	40	45	85

Sl. No.	Roll No.	Name	Assessment - I (50)	Assessment - II (50)	Total (100)
28	18AUR030	RAHUL P	34	40	74
29	18AUR031	RASVANTH	35	40	75
30	18AUR034	SARAN KARUNESH KUMAR J	39	40	79
31	18AUR035	SARAVANAKUMAR N	41	40	81
32	18AUR036	SHABESH R	32	45	77
33	18AUR039	SRIRAM T	40	50	90
34	18AUR041	SURYA R	40	40	80
35	18AUR044	TAMILMANI S	39	40	79
36	18AUR045	VETRI PRASATH K	40	45	85
37	18AUR046	VIGNESH R	41	40	81
38	18AUR047	YOKESVARAN R K	38	40	78

E. Sathya
29/11/21
Course Coordinator

P. Sathya
29/11/21

97/29/11/21
HoD/Automobile Engg.