



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

SCHOOL OF BUILDING AND MECHANICAL SCIENCES
DEPARTMENT OF AUTOMOBILE ENGINEERING



Date: 12.08.21

CIRCULAR

This to inform that a one credit course on "Automotive Component Modelling Using AutoCAD" will be conducted from 13.09.21 to 01.10.21 for the benefit of II-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 13.09.21.

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. II Year Automobile Engineering
2. File



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

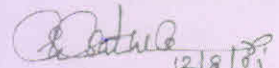
DEPARTMENT OF AUTOMOBILE ENGINEERING

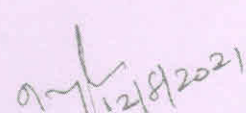
Date: 12/08/2021

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		Meet ID	
		From	To	Lecture	Practical		Total
	15	13/09/2021	01/10/2021	-	30		30
				✓ https://meet.google.com/uzw-mtcm-jbv			
10.	Pre-requisites for offering the course	:	NIL				
11.	Course offered to	:	Programme	Branch	Year/Semester		
			B. E	Automobile Engineering	II/IV		
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)	:	<table><tr><th>S. No.</th><th>Type</th><th>Max. Marks</th></tr><tr><td>1</td><td>Assessment – I (MCQ)</td><td>50</td></tr><tr><td>2</td><td>Assessment – II (Practical Examination)</td><td>50</td></tr><tr><td colspan="2">Total</td><td>100 Marks</td></tr></table>	S. No.	Type	Max. Marks	1	Assessment – I (MCQ)	50	2	Assessment – II (Practical Examination)	50	Total		100 Marks	
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		07/12/2021 (Signature of the HoD after verification)													
16.	Any other details	:	NIL													

The above proposal may kindly be approved.

1. 
 2. P. Saccu
 Course co-ordinator(s)


 HOD


 Chief Coordinator/Academic

Encl:

1. Copy of the syllabus

20VC003 - 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

Signature of the Head of Institution
S. SATHYANARAYAN

Signature of the Head of Department
S. SATHYANARAYAN

27/11/21

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KONGU ENGINEERING COLLEGE

(Autonomous)

PERUNDURAI – 638060

Department of Automobile Engineering

Attendance for one credit course



CERT No. 52-100-20796
ISO 9001:2015

Couse Code & Name: 20VC003 &Automotive Component Modelling Using AutoCAD

Year: II Year

Duration: 04/10/2021 to 22/10/2021

Semester: III

Time: 4.30 pm to 6.30 pm (2 Hours)

S. No	Roll No	Name of the student	04-10-21	05-10-21	06-10-21	07-10-21	08-10-21	09-10-21	11-10-21	12-10-21	13-10-21	13-10-21	18-10-21	20-10-21	21-10-21	22-10-21	25-10-21	Total hours Conducted	Total hours Absent	Total hours Present	% Of Attendance
1	20AUR001	ABINAYA S	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	0	30	100.00%
2	20AUR002	DHANUSH P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	0	30	100.00%
3	20AUR004	ELAMUGHILE	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	0	30	100.00%
4	20AUR007	HARIHARAN V R	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	0	30	100.00%
5	20AUR008	KAVIN KUMAR P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	0	30	100.00%
6	20AUR009	KAVIN M	A	P	P	P	P	A	P	A	P	P	P	P	P	P	P	30	3	27	90.00%
7	20AUR011	MOTHYS P N	P	P	A	P	P	P	P	P	P	P	P	A	P	A	P	30	3	27	90.00%
8	20AUR013	NARASIMMABHARATHI S	A	P	P	P	A	P	A	P	P	P	P	P	P	P	P	30	3	27	90.00%
9	20AUR014	NITHIYARASAN R	A	P	P	P	P	P	A	P	A	P	P	P	P	P	P	30	3	27	90.00%
10	20AUR016	SABARI P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	0	30	100.00%
11	20AUR017	SIBI SRINIVAS V R	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	0	30	100.00%
12	20AUR019	SOMESH S S	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	0	30	100.00%
13	20AUR020	SREENAVEEN S	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	30	0	30	100.00%
14	20AUR021	VAIRAVANT	P	A	P	P	P	P	P	P	P	A	A	P	P	P	P	30	3	27	90.00%
15	20AUR022	VASANTH C	A	P	P	P	P	A	A	P	P	P	P	P	P	P	P	30	3	27	90.00%



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PERUNDURAI - 638060

Department of Automobile Engineering

Attendance for one credit course

Course Code & Name: 20VC003 & Automotive Component Modelling Using AutoCAD

Year: II Year

Semester: III

Duration: 04/10/2021 to 22/10/2021

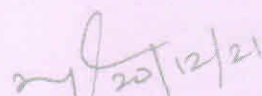
Time: 4.30 pm to 6.30 pm (2 Hours)



CERT. NO. 98-102-20738
DO. 05.01.2018

S. No	Roll No	Name of the student	Total hours Conducted	Total hours Absent	Total hours Present	% of Attendance
1	20AUR001	ABINAYA S	30	0	30	100.00%
2	20AUR002	DHANUSH P	30	0	30	100.00%
3	20AUR004	ELAMUGHIL E	30	0	30	100.00%
4	20AUR007	HARIHARAN V R	30	0	30	100.00%
5	20AUR008	KAVIN KUMAR P	30	0	30	100.00%
6	20AUR009	KAVIN M	30	3	27	90.00%
7	20AUR011	MOTHYS P N	30	3	27	90.00%
8	20AUR013	NARASIMMABHARATHI S	30	3	27	90.00%
9	20AUR014	NITHIYARASAN R	30	3	27	90.00%
10	20AUR016	SABARI P	30	0	30	100.00%
11	20AUR017	SIBI SRINIVAS V R	30	0	30	100.00%
12	20AUR019	SOMESH S S	30	0	30	100.00%
13	20AUR020	SREENAVEEN S	30	0	30	100.00%
14	20AUR021	VAIRAVAN T	30	3	27	90.00%
15	20AUR022	VASANTH C	30	3	27	90.00%
16	20AUR023	VASANTH T	30	0	30	100.00%
17	20AUL026	ANBUPRANAV B	30	3	27	90.00%
18	20AUL027	BARATHKUMAR S	30	0	30	100.00%
19	20AUL028	DHARANIDHARAN S	30	0	30	100.00%
20	20AUL031	JEEVAPRASANTH T	30	0	30	100.00%
21	20AUL033	KAMALESH M D	30	0	30	100.00%
22	20AUL036	MEHANATHAN K S	30	0	30	100.00%
23	20AUL039	NAGULAN P	30	0	30	100.00%
24	20AUL041	NITHISHKUMAR S	30	0	30	100.00%
25	20AUL043	ROHIT A S	30	3	27	90.00%


20/12/21
Course Coordinator


20/12/21
HOD/Auto



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SCHOOL OF BUILDING AND MECHANICAL
SCIENCES



DEPARTMENT OF AUTOMOBILE ENGINEERING

Degree & Branch	B.E & Automobile Engineering
Couse Code & Name:	20VC003 &Automotive Component Modelling Using AutoCAD
Academic Year	2021 – 2022
Class & Semester	II Year Auto & III Semester

MARK SHEET

Sl. No.	Roll No.	Name	Assessment - I (50)	Assessment - II (50)	Total (100)
1	20AUR001	ABINAYA S	36	40	76
2	20AUR002	DIHANUSH P	37	25	62
3	20AUR004	ELAMUGHIL E	36	45	81
4	20AUR007	HARIHARAN V R	36	50	86
5	20AUR008	KAVIN KUMAR P	36	45	81
6	20AUR009	KAVIN M	37	50	87
7	20AUR011	MOTHYS P N	37	50	87
8	20AUR013	NARASIMMABHARATHI S	38	50	88
9	20AUR014	NITHIYARASAN R	36	25	61
10	20AUR016	SABARI P	37	30	67
11	20AUR017	SIBI SRINIVAS V R	35	25	60
12	20AUR019	SOMESH S	37	50	87
13	20AUR020	SREENAVEEN S	39	45	84
14	20AUR021	VAIRAVAN T	39	45	84
15	20AUR022	VASANTH C	38	35	73
16	20AUR023	VASANTHI T	38	30	68
17	20AUL026	ANBUPRANAV B	34	40	74
18	20AUL027	BARATHKUMAR S	35	45	80
19	20AUL028	DHARANIDHARAN S	38	40	78
20	20AUL031	JEEVAPRASANTHI I	36	40	76
21	20AUL033	KAMALESH M D	38	30	68
22	20AUL036	MEHANATHAN K S	36	30	66
23	20AUL039	NAGULAN P	37	40	77
24	20AUL041	NITHISHKUMAR S	38	30	68
25	20AUL043	ROHIT A S	35	25	60

[Signature]
Course Coordinator

[Signature] 20/12/21
HoD/Automobile Engg.