



JAIPUR ENGINEERING COLLEGE  
AND RESEARCH CENTRE

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE  
JECRC Campus, Shri Ram Ki Nangal, Via-Vatika  
Tonk Road, Jaipur

Project Planning Calendar  
Session: 2024-25

S No.	Activity	Planned Date
1	Collection of Project Topics and specialization from faculties	7/12/2024
2	Formation of Project Assessment Committee and Project Coordinators	21/12/2024
3	Project Group Formation and Guide allotment	13/1/2025
4	Presentation of Projects Finalization	31/1/2025
5	Presentation of Rejected Projects	7/2/2025
6	Final Project List with Approval of Project Assessment Committee	21/2/2025
7	Submission of project registration form	1/3/2025
8	Literature Review submission	11/3/2025
9	Project Progress Presentation	28/03/2025
10	Project Progress Presentation	13/04/2025
11	Major Project Presentation-I	22/4/2025
12	Major Project Presentation-II	9/5/2025

Project Coordinator

HoD

**Jaipur Engineering College and Research Centre, Jaipur**

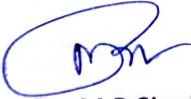
**Department of Mechanical Engineering**

Date: -07/12/2024

**Notice**

It is informed to all B.Tech VIII semester students that they have to submit their Major project Title to their project coordinator before 13 December 2024. Students can take maximum four students in their group. Students can select their guide in different specialization or area of interest in the mechanical department. List of all faculty members with their specialization given in the table

  
Dr. Fauzia Siddique  
(Project Coordinator)

  
Dr. M P Singh  
(HOD)

**Department of Mechanical Engineering**  
**Jaipur Engineering College and Research Centre, Jaipur**

Date: - 21/12/2024

**Notice**

It is informed to all B.Tech VIII semester students that they make their major projects under the supervision of their respective Guide. To ensure the quality of projects, department has drafted a committee named as **Project assessment Committee**. The following members will be the part of this Committee for the year 2024-2025.


S.NO.	Faculty name	Qualification	Designation	Role
1	Dr. M P Singh	B.E., M.Tech., Ph.D.	Professor	Chair
2	Dr. Fauzia Siddique	B.E., M.Tech., Ph.D.	Professor	Project coordinator
3	Dr. Bhuvnesh Bhardwaz	B.Tech., M.Tech.	Associate Professor	Project coordinator


The **Project assessment Committee** has decided the Project Marks distribution as per the given format

Presentation 1			Presentation 2			Paper Presentation (20)	Total
Content (1)	Communication Skills	Status (Progress)	Content (2)	Communication Skills	Status (Progress)		
10	15	15	10	15	15	20	100

- Content (1) includes Literature Review and Methodology
- Content (2) includes experiment/testing/case study and analysis

  
Dr. Fauzia Siddique  
(Project Coordinator)

  
Dr. Bhuvnesh Bhardwaz  
(Project Coordinator)

  
Dr. M P Singh  
(HOD)

**Jaipur Engineering College and Research Centre, Jaipur**

**Department of Mechanical Engineering**

Date: -13/01/2025

**Notice**

It is informed to all B.Tech VIII semester students that they have to present their Major project Title in form of PPT as per below given format and schedule. Guide is being allotted at the time of presentation as their specialization and recommendation.

**Presentation schedule**

<b>Group Number</b>	<b>Date</b>	<b>Venue</b>	<b>Timing</b>
A1 to A9	31-01-2025	CAD LAB	9:00-11.45 AM

**Presentation content:**

Title  
Novelty  
Project outcome  
Approximate budget  
Time schedule



**Jaipur Engineering College and Research Centre, Jaipur**  
**Department of Mechanical Engineering**

Date: - 29/01/2025

**Notice**

It is informed to all B.Tech VIII semester students that they have to present their Major project Title in form of PPT as per below given format and schedule. It will be decided at the time of presentation whether the title chosen is feasible to continue as project or not. Presence of respective project supervisor is mandatory at the time of presentation.


**Presentation schedule**

<b>Group Number</b>	<b>Date</b>	<b>Venue</b>	<b>Timing</b>
A1 to A9	31-01-2025	CAD LAB	9:00-11.45 AM

**Presentation content:**

Title  
Novelty  
Project outcome  
Approximate budget  
Time schedule

  
Dr. Fauzia Siddique  
(Project Coordinator)

  
Dr. M P Singh  
(HOD)

**Jaipur Engineering College and Research Centre, Jaipur**  
**Department of Mechanical Engineering**

Date: - 05/02/2025

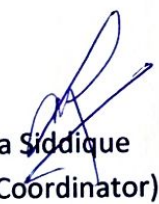
**Notice**


It is informed to all B.Tech VIII semester students that they have to present their Major project progress presentation for their internal assessment. Presence of respective project supervisor is mandatory at the time of presentation. Presentation schedule

<b>Group Number</b>	<b>Date</b>	<b>Venue</b>	<b>Timing</b>
A1 to A9	7-02-2025	CAD LAB	9:00-11.45 AM

Prepare your synopsis which includes following points.

1. Contents
2. Literature Review (At least 20 research/review papers of recent previous years)
3. Problem definition and objective.
4. Cost estimation of project in proper format.
5. Time Schedule

  
Dr. Fauzia Siddique  
(Project Coordinator)

  
Dr. M P Singh  
(HOD)


**Jaipur Engineering College and Research Centre, Jaipur**

**Department of Mechanical Engineering**


Date: - 21/02/2025

**Notice**

It is to inform all B.Tech VIII semester students that Final project list is displayed on notice board for your reference. If any query contact to project assessment committee.



Dr. Fauzia Siddique  
(Project Coordinator)



Dr. M P Singh  
(HOD)

**Jaipur Engineering College and Research Centre, Jaipur**

**Department of Mechanical Engineering**

Date: - 27/02/2025

**Notice**


It is to inform all B.Tech VIII semester students that they have to present their Major project presentation for their internal assessment. In this presentation you have to present the following

1. Abstract
2. Objective
3. Literature Review
4. Methodology and time activity chart

Presentation of your project work by ppt only. Kindly ensure to bring project progress sheet duly signed by project supervisor at the time of presentation.

<b>Group Number</b>	<b>Date</b>	<b>Venue</b>	<b>Timing</b>
A1 to A9	1-03-2025	CAD LAB	9:00-AM

  
Dr. Fauzia Siddique  
(Project Coordinator)

  
Dr. M P Singh  
(HOD)

**Jaipur Engineering College and Research Centre, Jaipur**

**Department of Mechanical Engineering**

Date: - 9/03/2025

**Notice**

It is to inform all B.Tech VIII semester students that they have to present their Major project presentation for their internal assessment. In this presentation you have to present the following

1. Cost estimation details along with materials purchased.
- 2 Status of project progress (Design, Testing, Analysis and Fabrication etc.)
3. Progress report form signed through guide/supervisor

Presentation of your project work by ppt only. Kindly ensure to bring project progress sheet duly signed by project supervisor at the time of presentation.

**Group Number**

A1 to A9

**Date**

11-03-2025


**Venue**

CAD LAB

**Timing**

9:00-AM

  
Dr. Fauzia Siddique  
(Project Coordinator)

  
Dr. M P Singh  
(HOD)

**Jaipur Engineering College and Research Centre, Jaipur**

**Department of Mechanical Engineering**

Date: -26/03/2025

**Notice**


It is to inform all B.Tech VIII semester students that they have to present their Major project presentation for their internal assessment. In this presentation you have to present the following

- 1 Presentation of project in a given format (PPT) (already sent)
2. Fabricated or Design Project
3. Project report in soft copy (in a given format, already sent)

Presentation of your project work by PPT only. **Kindly ensure to bring your project and project progress sheet duly signed by project supervisor at the time of presentation.**

<b>Group Number</b>	<b>Date</b>	<b>Venue</b>	<b>Timing</b>
A1 to A9	28-03-2025	CAD LAB	9:00-11.45 AM

  
Dr. Fauzia Siddique  
(Project Coordinator)

  
Dr. M P Singh  
(HOD)

**Jaipur Engineering College and Research Centre, Jaipur**  
**Department of Mechanical Engineering**

Date: -19/04/2025

**Notice**


It is to inform all B.Tech VIII semester students that they have to present their Major project presentation for their internal assessment. In this presentation you have to present the following

- 1 Presentation of project in a given format (PPT) (already sent)
2. Fabricated or Design Project
3. Project report in soft copy (in a given format, already sent)
4. Progress report form signed through guide/supervisor
- 5 Research Paper on your project

Presentation of your project work by PPT only. **Kindly ensure to bring your project and project progress sheet duly signed by project supervisor at the time of presentation.**

<b>Group Number</b>	<b>Date</b>	<b>Venue</b>	<b>Timing</b>
A1 to A9	22-04-2025	CAD LAB	9:00-11.45 AM

  
Dr. Fauzia Siddique  
(Project Coordinator)

  
Dr. M P Singh  
(HOD)

Date: -5/05/2025

**Notice**


It is to inform all B.Tech VIII semester students that they have to present their Major project presentation for their internal assessment. In this presentation you have to present the following

- 1 Presentation of project in a given format (PPT) (already sent)
2. Fabricated or Design Project
3. Project report in soft copy (in a given format, already sent)
4. Progress report form signed through guide/supervisor
- 5 Research Paper on your project

Presentation of your project work by PPT only. **Kindly ensure to bring your project and project progress sheet duly signed by project supervisor at the time of presentation.**

<b>Group Number</b>	<b>Date</b>	<b>Venue</b>	<b>Timing</b>
A1 to A9	9-05-2025	CAD LAB	9:00-11.45 AM

  
Dr. Fauzia Siddique  
(Project Coordinator)

  
Dr. M P Singh  
(HOD)

## JECRC, JAIPUR

## DEPARTMENT OF MECHANICAL ENGINEERING

S.No.	Faculty Name	Specialization
1	Dr.M.P.Singh	Manufacturing system engineering
2	Dr. Fauzia Siddiqui	Industrial and production Engineering
3	Dr.Bhuvnesh Bhardwaj	Manufacturing Engineering
4	Sh.Dayal Singh Rathore	Production Engineering
5	Sh.Lalit Kr.Sharma	Manufacturing system engineering
6	Sh.Abhishek Kumar	Manufacturing System Engineering (MSE)
7	Sh. Akhilesh Paliwal	Production and Industrial
8	Sh.Satya Prakash Saini	Metallurgical & Materials engineering
9	Sh. Yogesh Dubey	Manufacturing System Engineering
10	Dr. Man Mohan Siddh	Production Engineering Industrial Engineering
11	Sh. Hukam chand nagar	Thermal engineering
12	Sh. Nitin Chhabra	Production engineering
13	Sh. Ravi Yadav	Production engineering
14	Sh.Dilip prajapati	Manufacturing System Engineering
15	Dr Manoj Gupta	Design Engineering
16	Sh. Jitendra Gupta	Manufacturing System Engineering



# JECRC, JAIPUR

## DEPARTMENT OF MECHANICAL ENGINEERING

S.No.	Faculty Name	Specialization	Project suggested by Faculty
1	Dr.M.P.Singh	Manufacturing system engineering	Design of Air compressed engine Solar Refrigerator Design of dehumidifier Taper turning /tool attachment on lathe M/c Dish washer
2	Dr. Fauzia Siddiqui	Industrial and production Engineering	Six Sigma Implementation pedal operated power generation system paper recycle machine Automatic bike stand using sensor power generation through turbine Wheel chair
3	Dr.Bhuvnesh Bhardwaj	Manufacturing Engineering	Fiber composite Application based APP Development circular refrigerator Special purpose tool
4	Dr.Manoj Gupta	Design Engineering	Portable Air Compressor with Auto Cutoff. Electrolux refrigerator sliding wear behaviour of composite Human Safety device Special purpose tool
5	Sh.Dayal Singh Rathore	Production Engineering	fabrication of welding slag cleaninf machine experimental investigation in arc welding parameters to reduce residual stress analysis to analysis and experimental investigation of weld characteristics for a single pass TIG welding with welding welding machine
6	Sh.Lalit Kr.Sharma	Manufacturing system engineering	Gearbox Fabrication of 3D printing machine Wheelchair

		Vehicle
		Fabrication of mini water purification plant Dust collection system in rice production/ Dust/wood chip separation casting cupola Paperless factory system Gear turnover device in machining cell Truck trailer side material transfer plates
7	Sh. Abhishek Kumar	Manufacturing System Engineering (MSE)
8	Sh. Akhilesh Paliwal	Production and Industrial
9	Sh. Satya Prakash Saini	Metallurgical & Materials engineering
10	Sh. Yogesh Dubey	Manufacturing System Engineering
11	Sh. Man Mohan Siddh	Production Engineering Industrial Engineering
		Motorized Screw Jack solar refrigerator Automatic wheel chair cum bed Automatic ventilator for windows Paper shredding machine Drinking water from ocean water Fabrication of shearing machine. Fabrication of Bending machine Analysis of mechanical properties on S-1 tool steel after welding. Analysis of mechanical properties on EN8 after welding. Study of TIG, MIG & Arc welding optimization using genetic algorithms. Six Sigma Implementation Supply Chain Management Lean Six Sigma Lean Manufacturing Supply Chain Quality Elimination of carbon particles from exhaust gas

12	Sh. Hukam chand nagar	Thermal engineering	for various cooling fluids. Effect of blended fuels on C.I engines SOLAR WATER PUMP pedal power generator physical characteristics of bio composite mechanical properties of composite sliding wear behaviour of composite physical characteristics of glass fiber composite composite Injection moulding machine Hydraulic and pneumatic hacksaw machine Fabrication and design of Chop saw fabrication and design of Beam engine Robotic arm PCB Manufacturing Water jet cutting tool Automatic pneumatic paper cutting machine Design and fabrication of automated portable hammering machine abrasive jet Machining solar cooker
13	Sh. Nitin Chhabra	Production engineering	
14	Sh. Ravi Yadav	Production engineering	
15	Sh. Dilip prajapati	Manufacturing System Engineering	
16	Sh. Jitendra Gupta	Manufacturing System Engineering	Six Sigma Implementation fabrication of multiple cutting operation machine multispindle cutter

**JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE, JAIPUR**  
**DEPARTMENT OF MECHANICAL ENGINEERING**  
 Project list with pos

B.Tech VIII SEM Section (2024-25)

Group no.	Roll No.	Team Members	Title of project	Project Guide	Evaluation (10)				Total (10)	Relevance with PO'S	Remarks
					Usefulness of the project (3)	Safety (2)	Ethics & Communication (2)	Project Management (3)			
A1	22EJCM005	LAKSHYA DEEP SINGH TANWAR	Design analysis of internal combustion Go Kart and its component	Dr. Manoj Gupta	1	2		2	7	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	
	22EJCM022	LOKESH BAIRWA									
	21EJCM005	AJAYRAJ SINGH TANWAR									
A2	21EJCM002	ADITYA YADAV	To Measure hand Vibration with 7 semi bno005 9dot accelerometer		1	2		7	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12		
	21EJCM009	ANSHUL GARG									
	21EJCM013	ARZOO SONI									
A3	21EJCM026	NOOTENDRA KUSHWAH	Analysis of Microstructure of MIG welded EN8 Sample after the tensile test using various welding parameters.	Mr. Yogesh Dubey	1	2	2	7	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12		
	21EJCM032	RISHUBH DEWAT									
	22EJCM000	DEEPAK KUMAR									
A4	22EJCM020	DESHANT JAIN	Meeting the oxygen demand for sustainable development, a case study of liquid tree		1	2	2	7	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12		
	21EJCM027	PRASHANT AGNIHOTRI									
	21EJCM014	GAURAV KHANDELWAL									
A5	21EJCM029	PRINCE GUPTA	Analysis of Microstructure of MIG welded C-45 Sample after the Charpy impact test using various welding parameters.	Mr. Ravi Yadav	1	2	2	7	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12		
	22EJCM002	GARVIT RATHOR									
	21EJCM030	RAHUL GAHLAWAT									
A6	21EJCM028	PRAVEEN KUMAR	Restore RC Car and changed the damaged part	Mr. Nitin Chhabra	1	2	2	7	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12		
	21EJCM019	KRISHNA SHARMA									
	21EJCM016	HARSH JAIN									
A7	21EJCM015	GAURAV KUMAR YADAV	Solar Scarecrow with Sound Sensing	Dr. M.P. Singh	2	2	8	8	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12		
	21EJCM008	ANSHURAJ SHARMA									
	21EJCM007	ANANT JHALANI									
A8	22EJCM035	VAIBHAV SHRIVASTAVA	Design of Low-Cost Refrigeration System using LPG	Dr. Bhunesh Bhardwaj	2	2	2	8	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12		
		AADITYA PRAJAPAT									
		ARMAN									
A9		MOHD SAMEER MANSOORI	3D Printed Prototype of Flapping Wing Mechanism	Mr. Abhishek Kumar	1	2	2	7	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12		
		VAIBHAV SHRIVASTAVA									
	21EJCM010	ANUJ KHANDELWAL									
	21EJCM011	APOORV NANDKEOLYAR									
	21EJCM020	KRISHNA VYAS									
	21EJCM031	RAVI GUPTA									
	21EJCM004	ADITYA SINGH MAHLUR									
	21EJCM025	MOHAMMAD AQIB									
	21EJCM023	MANMOHAN PARASHAR									

  
HOD

Project Coordinator 

**JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE , JAIPUR  
DEPARTMENT OF MECHANICAL ENGINEERING**

**Project list with pos  
B.Tech VIII SEM Section (2024-25)**

Group	Roll No.	Team Members	Title of project	Project Guide	Signature	Remarks
A1	22EJCME005	LAKSHYA DEEP SINGH TA	Design analysis of internal combustion Go Kart and its compoent	Dr. Manoj Gupta		
	22EJCME022	LOKESH BAIRWA				
	21EJCME005	AJAYRAJ SINGH TANWAR				
	21EJCME002	ADITY YADAV				
A2	21EJCME009	ANSHUL GARG	To Measure hand Vibration with 7 semi bno005 9dof accelerometer	Mr Lalit Sharma		
	21EJCME013	ARZOO SONI				
	21EJCME026	NOOTENDRA KUSHWAH				
	21EJCME032	RISHUBH DEWAT				
A3	22EJCME200	DEEPAK KUMAR	Analysis of Mircostructure of MIG welded EN8 Sample after the tensile test	Mr. Yogesh Dubey		
	22EJCME201	DESHANT JAIN				
	21EJCME027	PRASHANT AGNIHOTRI				
	21EJCME014	GAURAV KHANDELWAL				
A4	21EJCME029	PRINCE GUPTA	Meeting the oxygen demand for sustainable development , a case study of liquid tree.	Dr. Fauzia Siddiqui		
	22EJCME202	GARVIT RATHOR				
	21EJCME030	RAHUL GAHLAWAT				
	21EJCME028	PRAVEEN KUMAR				
A5	21EJCME019	KRISHNA SHARMA	Analysis of Mircostructure of MIG welded C-45 Sample	Mr. Ravi Yadav		
	21EJCME016	HARSH JAIN				
	21EJCME015	GAURAV KUMAR YADAV				
A6	21EJCME008	ANSHRAJ SHARMA	Restore RC Car and changed the damaged part	Mr. Nitin Chabbra		
	21EJCME007	ANANT JHALANI				
	22EJCME035	VAIBHAV SHRIVASTAVA				
A7		AADITYA PRAJAPAT	Solar Scarecrow with Sound Sensing	Dr. M.P. Singh		
		ARMAN				
		MOHD SAMEER MANSOO				
		VAIBHAV SHRIVASTAVA				
A8	21EJCME010	ANUJ KHANDELWAL	Design of Low-Cost Refrigeration System using LPG	r. Bhuvnesh Bhardw		
	21EJCME011	APOORV NANDKEOLYAR				
	21EJCME020	KRISHNA VYAS				
	21EJCME031	RAVI GUPTA				
A9	21EJCME004	ADITYA SINGH MAHUR	3D Printed Prototype of Flapping Wing Mechanism	Mr. Abhishek Kuma		
	21EJCME025	MOHAMMAD AQIB				
	21EJCME023	MANMOHAN PARASHAR				



JAIPUR ENGINEERING COLLEGE  
AND RESEARCH CENTRE

**Jaipur Engineering & Research Centre  
Department of Mechanical Engineering**

A1

**Project Progress Report**

Branch:	Mechanical Engineering	Year:	4th Year
Group No:		Semester/Division:	8th Sem.
Project Title:	Design and analysis of internal combustion (I.C) engine and its component		
Group members name:	Lakshya Deep Singh, Aditya Yadav, Lokesh Bainswa, Ajay Raj Tomwar		
Name of Guide:	Dr. Manoj Gupta		

Sr.No.	Date	Work Done	Signature of Student	Signature of Guide
1	16/01/25	Literature Survey	Lakshya	
			Lokesh	
			Aditya Yadav	
			Ajay	
2	10/02/25	Problem Definition and Objectives	Lakshya	
			Lokesh	
			Aditya Yadav	
			Ajay	
3	25/02/25	Overall Methodology Chart	Lakshya	
			Lokesh	
			Aditya Yadav	
			Ajay	
4	5/03/25	Material Availability and Procurement (mfg. project)/Identification of design procedure (Design Project) etc.	Lakshya	
			Lokesh	
			Aditya Yadav	
			Ajay	
5	17/03/25	50% project completion	Lakshya	
			Lokesh	
			Aditya Yadav	
			Ajay	
6	21/03/25	Fabrication/ Design and analysis/ data processing, etc.	Lakshya	
			Lokesh	
			Aditya Yadav	
			Ajay	
7	22/04/25	Testing/ Data Interpretation/Results and conclusion	Lakshya	
			Lokesh	
			Aditya Yadav	
			Ajay	
8		Thesis/Report Writing	Lakshya	
			Lokesh	
			Aditya Yadav	
			Ajay	

Project Coordinator

MOD




JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE, JAIPUR

DEPARTMENT OF MECHANICAL ENGINEERING

MOJOR PROJECT REGISTRATION FORM

SESSION 2024-2025

1. Team members:

Roll No.	Name of student	Signature
21	Lakshydeep Singh Tanwar	
22	Lokesh Baiswa	Lokesh
05	Ajay Raj Singh Tanwar	
21ETJCMEO02 (ME04)	ADITY YADAV	

2. Title of project:

Gro-Kart (Edgeline Championship)

Design And Analysis of Internal Combustion Gro-Kart Vehicle

3. Type of Project: Fabrication/  Design/ Experimental/ Theoretical/ Industrial/ Industrial case study/ Industrial Survey/ Industrial Management/ Productivity/ Robotics/ Software and Other (specify) -

4. Date of commencement:

5. Planned Duration:


6. Brief Summary of Project: (attach extra sheet if required)


The objective of this project is to design and develop a Gro-kart car that is safe, efficient, and fun to drive.

7. Expected benefits:

8. Name of supervisor: Mr. Manoj Gupta

I agree to be supervisor of the projects

  
(Mr. Manoj Gupta)  
(Signature of the Supervisor)

  
Project coordinator

Project Progress Report

Branch:	Mechanical	Year:	4 <sup>th</sup> yr
Group No:		Semester/Division:	8 <sup>th</sup> Sem
Project Title:	Hand Arm Vibration measurement using BN0055		
Group members name	Anshul Garg, Anzoo Soni, Nootendra, Rishubh		
Name of Guide:	Mr. Lalit Kumar Sharma		

Sr.No.	Date	Work Done	Signature of Student	Signature of Guide
1	31/01/25	Literature Survey	Anshul Anzoo Nootendra Rishubh	Lalit
2	10/2/25	Problem Definition and Objectives	Anshul Anzoo Nootendra Rishubh	
3	28/2/25	Overall Methodology Chart	Anshul Anzoo Nootendra Rishubh	Lalit
4	19/03/25	Material Availability and Procurement (mfg. project)/Identification of design procedure (Design Project) etc.	Anshul Anzoo Nootendra Rishubh	Lalit
5	16/04/25	50% project completion	Anshul Anzoo Nootendra Rishubh	Lalit
6	28/04/25	Fabrication/ Design and analysis/ data processing, etc.	Anshul Anzoo Nootendra Rishubh	Lalit
7	2/05/25	Testing/ Data Interpretation/Results and conclusion	Anshul Anzoo Nootendra Rishubh	Lalit
8	5/05/25	Thesis/Report Writing	Anshul Anzoo Nootendra Rishubh	Lalit

Project Coordinator

  
HOD

A-2

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE (JECRC) JAIPUR  
MECHANICAL ENGINEERING DEPARTMENT

MINOR / MOJOR PROJECT REGISTRATION FORM 2024-2025

1. Team members:

Roll No.	Name of student	Signature
21EJCHE009	Anshul Garg	Anshul
21EJCHE013	Arun Soni	Arun
21EJCHE026	Nootendra Kushwah	Nkushwah
21EJCHE032	Rishabh Dewat	Rishabh

2. Title of project:

To measure Hand Arm Vibration

3. Type of Project: Fabrication/Design/Experimental/Theoretical/Industrial/Industrial case study/IndustrialSurvey/IndustrialManagement/Productivity/Robotics/Software and Other (specify)

4. Date of commencement:

5. Planned Duration:

6. Brief Summary of Project: (attach extra sheet if required)

This project uses BNO-055 9dof sensor to measure the hand arm vibration frequency & help in safety analysis

7. Expected benefits: Help us to capture basic vibration data & its analysis

8. Name of supervisor: Mr. Lalit Kumar Sharma

I agree to be supervisor of the projects

*(Handwritten Signature)*  
(Signature of the Supervisor)

*(Handwritten Signature)*  
Project coordinator



Project Progress Report

Branch:	Mechanical Engineering	Year:	4th year
Group No:		Semester/Division:	8th sem.
Project Title:	Analysis of microstructure of MIG welded EN8 sample after the tensile test using various welding parameters		
Group members name	DEEPAK KUMAR, MAURAV KHANDELWAL, DESHANT JAIN, PRASHANT ANNEHOTRE		
Name of Guide:	Mr. YONESH DUBEY		

Sr.No.	Date	Work Done	Signature of Student	Signature of Guide
1	16/01/2025	Literature Survey	Maarav Deepak Prashant Deshant	Yonesh 16/1/25
2	06/02/2025	Problem Definition and Objectives	Maarav Deepak Prashant Deshant	Yonesh 6/2/25
3	13/02/2025	Overall Methodology Chart	Maarav Deepak Prashant Deshant	Yonesh 13/2/25
4	22/02/2025	Material Availability and Procurement (mfg. project)/Identification of design procedure (Design Project) etc.	Maarav Deepak Prashant Deshant	Yonesh 22/2/25
5	08/03/2025	50% project completion	Maarav Deepak Prashant Deshant	Yonesh 8/3/25
6	10/03/2025	Fabrication/ Design and analysis/ data processing, etc.	Maarav Deepak Prashant Deshant	Yonesh 10/3/25
7	01/04/2025	Testing/ Data Interpretation/Results and conclusion	Maarav Deepak Prashant Deshant	Yonesh 01/4/25
8	09/05/25	Thesis/Report Writing	Prashant Maarav Deepak Deshant	Yonesh 09/05/25

Project Coordinator

HOD

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE, JAIPUR

DEPARTMENT OF MECHANICAL ENGINEERING

MOJOR PROJECT REGISTRATION FORM

SESSION 2024-2025

1. Team members:

Roll No.	Name of student	Signature
ME-36	DEEPAK KUMAR	Deepak
ME37	DESHANT JAIN	Dehant
ME27	Prashant Agnihotri	Prashant
ME14	Aravind Khandelwal	Aravind

2. Title of project:

Analysis of microstructure of MIG Welded EN8 Sample after the tensile test using various welding parameters.

3. Type of Project: Fabrication/ Design/ Experimental/ Theoretical/ Industrial/ Industrial case study/ Industrial Survey/ Industrial Management/ Productivity/ Robotics/ Software and Other (specify) -

4. Date of commencement:

5. Planned Duration:

6. Brief Summary of Project: (attach extra sheet if required)

To find the microstructure of EN8 steel sample after MIG welding and Tension test utilising various and different welding parameters.

7. Expected benefits:

8. Name of supervisor: Mr. Yogesh Dubey

I agree to be supervisor of the projects









  
(Signature of the Supervisor)




Project coordinator

**Project Progress Report**

Branch: Mechanical Engineering Year: \_\_\_\_\_  
 Group No: \_\_\_\_\_ Semester/Division: 8th Sem.  
 Project Title: meeting the oxygen Demand for sustainable Development. Green Liquid tree.  
 Group members name: Prince, Garvit, Rahul, Praveen  
 Name of Guide: Fauzia Siddiqui Mam

Sr.No.	Date	Work Done	Signature of Student	Signature of Guide
1		Literature Survey Green solutions for urban sustainability & photobioreactors for Algae cultivation on Facades and Artificial Trees.	Garvit Prince Rahul Praveen	
2		Problem Definition and Objectives This study evaluates the Green liquid Tree System - an architectural photobioreactor integrating microalgae cultivation into urban structures.	Garvit Prince Rahul Praveen	
3		Overall Methodology Chart Design a high-efficiency photobioreactor (CWR) with minimal environmental impact by selecting optimal materials and components.	Garvit Prince Rahul Praveen	
4		Material Availability and Procurement (mfg. project)/Identification of design procedure (Design Project) etc. • Glass or Transparent Tank • microalgae culture • solar Panels • water circulation system. • CO <sub>2</sub> Diffuser & Nutrient supply.	Garvit Prince Rahul Praveen	
5		50% project completion 100% project completion	Garvit Prince Rahul Praveen	
6		Fabrication/ Design and analysis/ data processing, etc. 1) CO <sub>2</sub> absorption from air 2) photosynthesis by microalgae 3) oxygen release 4) mixing and circulation 5) Algae growth & Harvesting.	Garvit Prince Rahul Praveen	
7		Testing/ Data Interpretation/Results and conclusion Results and Conclusion, Data Analysis completed	Garvit Prince Rahul Praveen	
8		Thesis/Report Writing Thesis, Report writing completed	Garvit Prince Rahul Praveen	

HOD 

Project Coordinator

**JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE (JECRC) JAIPUR**  
**MECHANICAL ENGINEERING DEPARTMENT**  
**MINOR / MOJOR PROJECT REGISTRATION FORM 20..A.-20...5**

1. Team members:

Roll No.	Name of student	Signature
ME 38	Garvit Rathor	Garvit
ME 29	Prince Gupta	Prince Gupta
ME 30	Rahul Chahalawat	Rahul
ME 29	Ravleen Kumar	Ravleen

2. Title of project:

Meeting the oxygen demand for sustainable  
 Development - a case study of Green liquid Tree

3. Type of Project: Fabrication/Design/Experimental/Theoretical/Industrial/Industrial case study/Industrial Survey/Industrial Management/Productivity/Robotics/Software and Other (specify)

4. Date of commencement:

5. Planned Duration:

6. Brief Summary of Project: (attach extra sheet if required)


urban areas face a serious challenge with air pollution and low oxygen levels to help address this, we explored a nature-inspired solution called the Green liquid Tree.

7. Expected benefits:

8. Name of supervisor: Dr. Fauzia Siddique Mam

I agree to be supervisor of the projects

Project coordinator 

  
 (Signature of the Supervisor)

AS

Project Progress Report

Branch:	Mechanical	Year:	4th Year	
Group No.:		Semester/Division:	8th Sem.	
Project Title:	Analysis of Microstructure of MIG-welded EN-8 Sample After Charpy Test.			
Group members name:	Haresh Jain, Gaurav Yadav, Krishna Sharma.			
Name of Guide:	Ravi Yadav sir. / Dr. M. P. Singh			
Sr.No.	Date	Work Done	Signature of Student	Signature of Guide
1	22/03/25	Literature Survey	Haresh Krishna	(M)
2	23/03/25	Problem Definition and Objectives	Haresh Krishna	(M)
3	25/03/25	Overall Methodology Chart	Haresh Krishna	(M)
4	10/04/25	Material Availability and Procurement (mfg. project)/Identification of design procedure (Design Project) etc	Haresh Krishna	(M)
5	17/04/25	50% project completion	Haresh Krishna	(M)
6	21/04/25	Fabrication/ Design and analysis/ data processing, etc	Haresh Krishna	(M)
7	01/05/25	Testing/ Data Interpretation/Results and conclusion	Haresh Krishna	(M)
8	09/05/25	Thesis/Report Writing	Haresh Krishna	(M)

Project Coordinator

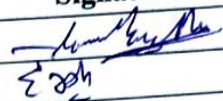
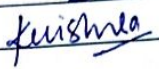

HOB

**JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE (JECRC) JAIPUR**

**MECHANICAL ENGINEERING DEPARTMENT**

**MINOR / MOJOR PROJECT REGISTRATION FORM 20.....-20.....**

1. Team members:

Roll No.	Name of student	Signature
21EJCE015	Gaurav Yadav.	
21EJCE016	Hrush Jain	
21EJCE019	Krishna Sharma.	

2. Title of project:

study of microstructure & mechanical properties of EN8 steel.

3. Type of Project: Fabrication/Design/Experimental/Theoretical/Industrial/Industrial case study/Industrial Survey/Industrial Management/Productivity/Robotics/Software and Other (specify)

4. Date of commencement:

5. Planned Duration:

6. Brief Summary of Project: (attach extra sheet if required)

The project aims to understand how different welding conditions (parameters) affect internal structure of EN8 using Charpy impact test.

7. Expected benefits: EN8 steel will lead to stronger & reliable welded joints after tensile & impact.

8. Name of supervisor: Dr. M.P Singh.

I agree to be supervisor of the projects

  
(Signature of the Supervisor)

Project coordinator 

A-6

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE (JECRC) JAIPUR  
MECHANICAL ENGINEERING DEPARTMENT

MINOR / MOJOR PROJECT REGISTRATION FORM 20....-20....

1. Team members:

Roll No.	Name of student	Signature
	Anant Jhalani	
	Varibhav Shrivastava	
	Ansh Raj Mahaveer Sharma	Ansh Sharma

2. Title of project:

Design and Analysis of NITRO-RC car

3. Type of Project: Fabrication/Design/Experimental/Theoretical/Industrial/Industrial case study/Industrial Survey/Industrial Management/Productivity/Robotics/Software and Other (specify)

4. Date of commencement:

5. Planned Duration:

6. Brief Summary of Project: (attach extra sheet if required)

this project present the design and performance analysis of a Nitro-powered RC car it involves chassis design engine integration and simulation using CAD. For tool the study validate result thru real-world the understanding scale automotive system


7. Expected benefits:

8. Name of supervisor: Dr. Mang Gupta

I agree to be supervisor of the projects

Project coordinator



  
(Signature of the Supervisor)



JAIPUR ENGINEERING COLLEGE  
AND RESEARCH CENTRE

**Jaipur Engineering & Research Centre  
Department of Mechanical Engineering**

(A-6)

**Project Progress Report**

Branch:		Mechanical Engineering	Year:	4 <sup>th</sup> YEAR
Group No.			Semester/Division:	8 <sup>th</sup> Sem
Project Title:		Restoration of RC car and Damaged Part		
Group members name		Anant Jhalani, Ansh, Vaibhav Shivastava		
Name of Guide:		Dr. Manoj Gupta (Referee) M.E.		
Sr.No.	Date	Work Done	Signature of Student	Signature of Guide
1	22/02/25	Literature Survey	Ansh Jhalani 	
2	23/03/25	Problem Definition and Objectives	Ansh Jhalani 	
3	28/03/25	Overall Methodology Chart	Ansh Jhalani 	
4	10/04/25	Material Availability and Procurement (mfg. project)/Identification of design procedure (Design Project) etc.	Ansh Jhalani 	
5	17/04/25	50% project completion	Ansh Jhalani 	
6	21/04/25	Fabrication/ Design and analysis/ data processing, etc.	Ansh Jhalani 	
7	01/05/25	Testing/ Data Interpretation/Results and conclusion	Ansh Jhalani 	
8	09/05/25	Thesis/Report Writing	Ansh Jhalani 	

Project Coordinator

HOD

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE, JAIPUR

DEPARTMENT OF MECHANICAL ENGINEERING

MOJOR PROJECT REGISTRATION FORM

SESSION 2024-2025

1. Team members:

Roll No.	Name of student	Signature
ME-19	Krishna Shalima.	<i>Krishna</i>
ME-16	Hansh <del>Yadav</del> Jain	<i>Hansh</i>
ME-15	Gaurav Yadav.	<i>Gaurav Yadav</i>

2. Title of project:

*Analysis of Charpy Impact-Strength results of MIG welded C-45 low carbon steel utilising various welding parameters*

3. Type of Project: Fabrication/ Design/ Experimental/ Theoretical/ Industrial/ Industrial case study/ Industrial Survey/ Industrial Management/ Productivity/ Robotics/ Software and Other (specify) -

4. Date of commencement:

5. Planned Duration: 60 days

6. Brief Summary of Project: (attach extra sheet if required)

*cut sample of C-45 (55x10x10) with v-notch. then using MIG welding making with different welding parameters. then to check the strength of welded joint we will do Charpy impact test to find out best welding parameter.*

7. Expected benefits: To get the best welding parameter

8. Name of supervisor: Mr. Ravi Yadav

I agree to be supervisor of the projects

*(Signature of the Supervisor)*  
*(Ravi Yadav)*  
 9/12/24

Project coordinator *(Signature)*

A-7

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE, JAIPUR

DEPARTMENT OF MECHANICAL ENGINEERING

MOJOR PROJECT REGISTRATION FORM

SESSION 2024-2025

1. Team members:

Roll No.	Name of student	Signature
1.	Aditya Prajapat	Aditya
2.	Arman	Arman
3.	Sameer Mansoori	Sameer
4.	Vaibhav Arasthi	Vaibhav

2. Title of project:

[Solar Scarecrow with Sound Sensing]

3. Type of Project: Fabrication/ Design/ Experimental/ Theoretical/ Industrial/ Industrial case-study/ Industrial Survey/ Industrial Management/ Productivity/ Robotics/ Software and Other (specify) -

4. Date of commencement:

5. Planned Duration:


6. Brief Summary of Project: (attach extra sheet if required)


Scarecrow have proven to be effective in keeping the birds away from fields as birds are problem so the system provide sound detectors to detect birds, sensing sound using speaker etc to make the field secure.

7. Expected benefits:









8. Name of supervisor: Mr. Mahendra pratap Singh sir

I agree to be supervisor of the projects

  
(Signature of the Supervisor)

  
Project coordinator

Project Progress Report

Branch		Mechanical Engineering		Year	4th year
Group No.				Semester/Division	VIII
Project Title:		Solar Scarecrow with Sound Sensing			
Group members name		Aaditya, Sameer, Arman, Vaibhav			
Name of Guide:		Dr. MP Singh			
Sr.No.	Date	Work Done	Signature of Student	Signature of Guide	
1	16/01/25	Literature Survey	Aaditya		
			Sameer		
			Arman		
			Vaibhav		
2	07/02/25	Problem Definition and Objectives	Aaditya		
			Sameer		
			Ahaj.		
			Vaibhav		
3	13/02/25	Overall Methodology Chart	Aaditya		
			Sameer		
			Ahaj.		
			Vaibhav		
4	22/02/25	Material Availability and Procurement (mfg. project)/Identification of design procedure (Design Project) etc.	Aaditya		
			Sameer		
			Ahaj.		
			Vaibhav		
5	09/03/25	50% project completion	Aaditya		
			Sameer		
			Ahaj.		
			Vaibhav		
6		Fabrication/ Design and analysis/ data processing, etc.	Aaditya		
			Sameer		
			Ahaj		
			Vaibhav		
7		Testing/ Data Interpretation/Results and conclusion	Aaditya		
			Sameer		
			Ahaj		
			Vaibhav		
8		Thesis/Report Writing	Aaditya		
			Sameer		
			Ahaj		
			Vaibhav		



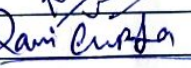
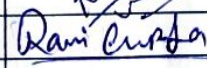
Project Coordinator

  
HOD

A-8

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE (JECRC) JAIPUR  
MECHANICAL ENGINEERING DEPARTMENT  
MINOR / MOJOR PROJECT REGISTRATION FORM 2024-2025

1. Team members:

Roll No.	Name of student	Signature
21EJCME010	Arvi Khandelwal	
21EJCME011	Apoorv Nandkeolyar	
21EJCME020	Krishna Vyas	
21EJCME031	Ravi Gupta	

2. Title of project:

Low Cost Refrigeration System using LPG

3. Type of Project: Fabrication/Design/Experimental/Theoretical/Industrial/Industrial case study/Industrial Survey/Industrial Management/Productivity/Robotics/Software and Other (specify)

4. Date of commencement:

5. Planned Duration:

6. Brief Summary of Project: (attach extra sheet if required)

A low-cost refrigeration system using an LPG cylinder is an unconventional setup where the cooling effect is achieved by utilizing the expansion of LPG as it passes through a capillary tube or nozzle and evaporates.

7. Expected benefits:

8. Name of supervisor: Dr. Bhunesh Bhardwaj

I agree to be supervisor of the projects



(Signature of the Supervisor)

  
Project coordinator



JAIPUR ENGINEERING COLLEGE  
AND RESEARCH CENTRE

**Jaipur Engineering & Research Centre**  
**Department of Mechanical Engineering**

**Project Progress Report**

Branch:		Mechanical Engineering	Year:	2025
Group No:		A8	Semester/Division:	
Project Title: Low cost refrigeration system using LPC				
Group members name: Apoorv Nandkeedhar, Anuj, Krishna vyas, Ravi				
Name of Guide: Dr. Bhupnesh Bhardwaj				
Sr.No.	Date	Work Done	Signature of Student	Signature of Guide
1	20/3/25	Literature Survey	Ravi Gupta Anuj K. Vyas	[Signature]
2	19/3/25	Problem Definition and Objectives	AM Ravi Gupta Anuj	[Signature]
3	27/3/25	Overall Methodology Chart	Ap Ravi Gupta Anuj	[Signature]
4	4/4/25	Material Availability and Procurement (mfg. project)/Identification of design procedure (Design Project) etc	Ravi Gupta Anuj	[Signature]
5	16/4/25	50% project completion	Ravi Gupta Anuj	[Signature]
6	23/4/25	Fabrication/ Design and analysis/ data processing, etc.	Ravi Gupta Anuj	[Signature]
7	28/4/25	Testing/ Data Interpretation/Results and conclusion	Ravi Gupta Anuj	
8	30/4/25	Thesis/Report Writing	Ravi Gupta Anuj	

Project Coordinator

HOD

Project Progress Report

Branch:	Mechanical Engineering	Year:	4 <sup>th</sup> Year
Group No:	A-9	Semester/Division:	8 <sup>th</sup> Sem
Project Title:	3-D Printed Botolype of Flapping Wing Mechanism		
Group members name:	Aditya Singh, Manmohan Parashar, Mohammed Agib, Aditya Khurana		
Name of Guide:	Mr. Abhishek Kumar		

Sr.No.	Date	Work Done	Signature of Student	Signature of Guide
1	28 Jun 2025	Literature Survey	Asighk	[Signature]
			Manmohan	
			Mohammed Agib	
2	8 Feb 2025	Problem Definition and Objectives	Asighk	[Signature]
			Manmohan	
			Mohammed Agib	
3	21 Feb 2025	Overall Methodology Chart	Asighk	[Signature]
			Manmohan	
			Mohammed Agib	
4	6 Mar 2025	Material Availability and Procurement (mfg. project)/Identification of design procedure (Design Project) etc.	Asighk	[Signature]
			Manmohan	
			Mohammed Agib	
5	15 Mar 2025	50% project completion	Asighk	[Signature]
			Manmohan	
			Mohammed Agib	
6	27 Apr 2025	Fabrication/ Design and analysis/ data processing, etc.	Asighk	[Signature]
			Manmohan	
			Mohammed Agib	
7	30 Apr 2025	Testing/ Data Interpretation/Results and conclusion	Asighk	[Signature]
			Manmohan	
			Mohammed Agib	
8	2 Apr 2025	Thesis/Report Writing	Asighk	[Signature]
			Manmohan	
			Mohammed Agib	

Project Coordinator

HOD

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE (JECRC) JAIPUR

MECHANICAL ENGINEERING DEPARTMENT

MINOR / MOJOR PROJECT REGISTRATION FORM 20....-20....

Ag

1. Team members:

Roll No.	Name of student	Signature
(2) EJCME04	Aditya Singh Mahua	Aditya Mahua
(2) EJCME23	Manmohan Parashar, <del>Abhishank Ag</del>	Manmohan
(2) EJCME25	Mohammed Aqub	Mohammed Aqub
(2) EJCME03	Aditya Khosla	Aditya Khosla

2. Title of project:

3-D Printed prototype of flapping wing mechanism

3. Type of Project: Fabrication/Design/Experimental/Theoretical/Industrial/Industrial case study/IndustrialSurvey/IndustrialManagement/Productivity/Robotics/Software and Other (specify)

4. Date of commencement:

5. Planned Duration:

6. Brief Summary of Project: (attach extra sheet if required)

Design and 3-D printed flapping wing mechanism in solidwork and integrating electronics like motor, esc, receiver battery transmitter.

7. Expected benefits: Knowledge of bionic drones, and Additive manufacturing

8. Name of supervisor: Abhishank Kumar

I agree to be supervisor of the projects

Abhishank Kumar

(Signature of the Supervisor)

Project coordinator

# PROJECT SYNOPSIS

(a1)

## INTRODUCTION:

TITLE: Design And analysis of internal combustion Go kart and its component.

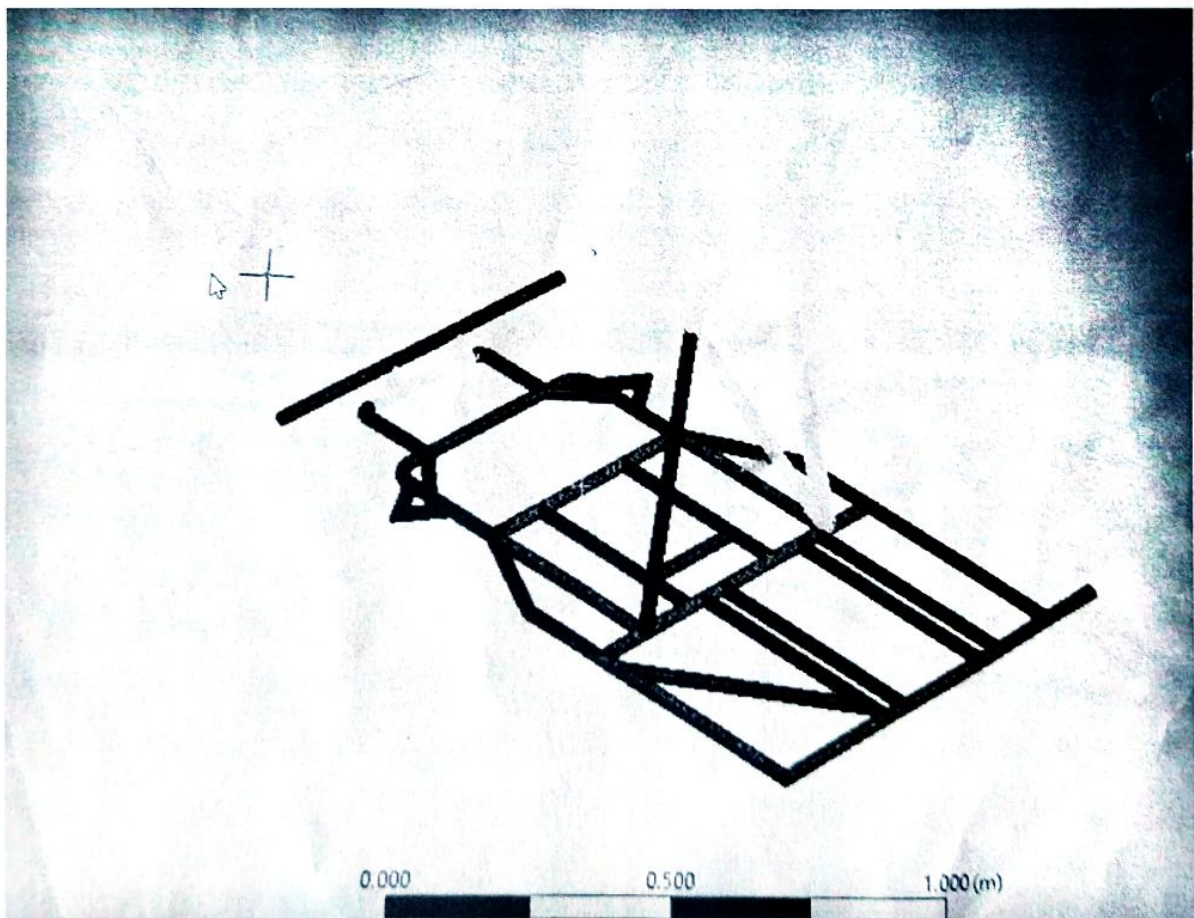
Type of Project: Fabrication and Analysis, Software.

Type of Project: Fabrication and Analysis, Design

Duration of Project: 60 to 80 Days

Shape of Sample:

Characteristics	Details
Design	Solidworks
Proto	Plastic Pipe
Analysis	Ansys
Chassis	AISI4130



Team Members:

S.NO.	Name Of Students	Class Roll No.	RTU Roll No.
1.	Ajayraj Singh	ME-05	21EJCME005
2.	Adity yadav	ME-04	21EJCME002
3.	Lkshaydeep	ME-21	22EJCME021
4.	Lokesh	ME-22	22EJCME022

### METHODOLOGY:

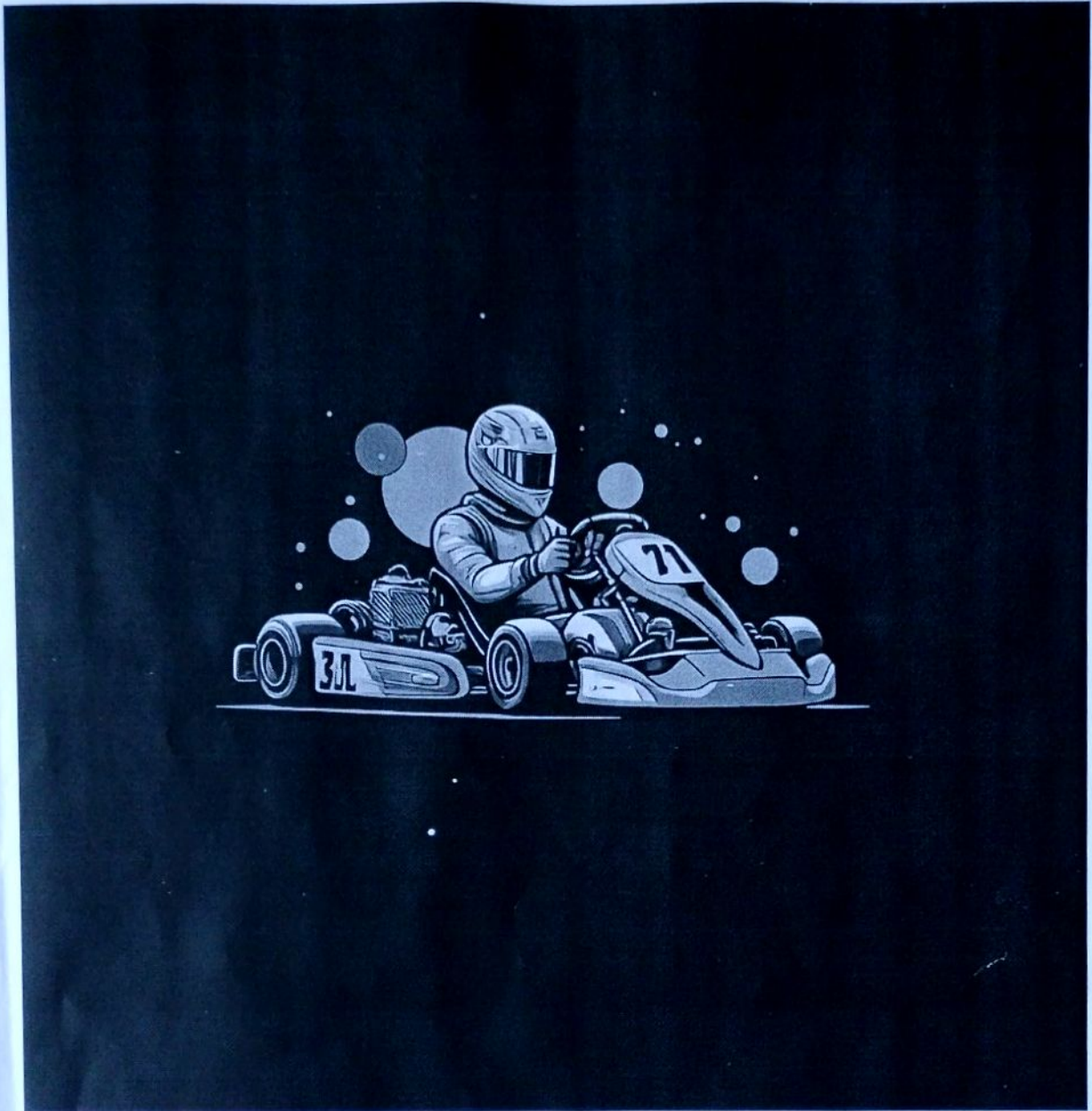
- 1) Obtaining the raw material and changing it in desired shape as given in the figure above by using machining and polishing.
- 2) Welding the AISI4130 steel by MIG/TIG welding.

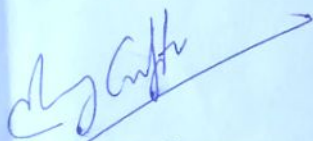
S.NO.	Parameters	Current	Voltage(V)	Gas flow Rate(L/Min)
1.	Parent Metal			
2.	Sample 1	70	9.5	9.0
3.	Sample 2	80	10	9.5
4.	Sample 3	90	10.5	10
5.	Sample 4	100	11	10.5

- 3) Conducting tensile test on AISI4130 MIG welded samples.
- 4) Note the various welding Parameters.
- 5) And lastly finding the microstructural changes on MIG welded AISI 4130 steel.

### BUDGET:

MATERIAL PURCHASE AISI4130	L= 18 M	17000\	-		
Protovalidation		800\-			
ENGINE		25000\	-		
FABRICATION		3000\-			
TESTING		3000\-			
ALL COMPOINENT		50000\	-		



  
Faculty coordinator  
Signature