

Karmaveer Bhaurao Patil College of Engineering, Satara

**Department of Mechanical Engineering** 

### **Project Work Evaluation Scheme**

Project work is an opportunity for the students to implement the knowledge gained while learning theory and practical courses and hence is an essential part of engineering education. Students get two opportunities to work on the projects during their undergraduate program.

1. Project Identification and Faculty Members allocation:

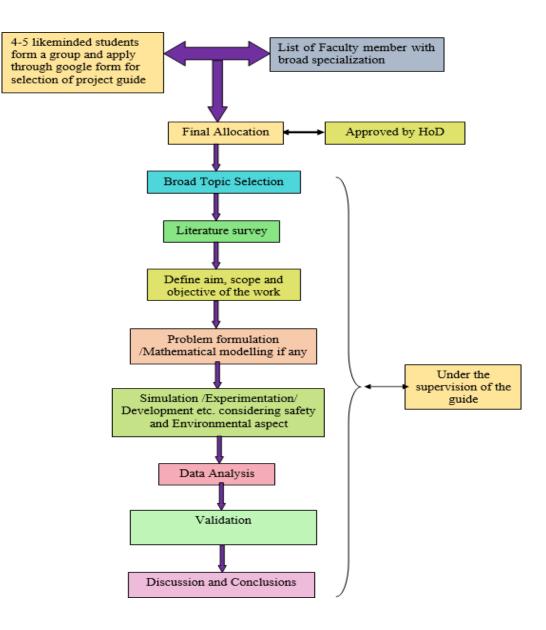


Fig. The flow chart for Project Selection and Allotment



# Karmaveer Bhaurao Patil College of Engineering, Satara Department of Mechanical Engineering

The first project work, "Technical project for community services," is carried out during the sixth semester of the program and the major project work during the seventh and eighth semester of the final year of graduation. The following procedure is followed for ensuring the quality of students' projects.

During the sixth semester, a dedicated faculty is assigned for each batch of students to guide the students. Students carry out projects, particularly for community services. In the final year project, Students are informed to form the project group comprising a maximum of four students in a group. It is expected that the group is diversified. i.e., comprising both bright and weak students, as well as boys and girls. Industries are identified for undergoing internship and project work the formal MOU is established with the industry. Students are informed about the available sectors. Faculty members choose the industry according to their area of interest Students give their preference for industry and guide. The mapping of the faculty-industry-students project group is done in the departmental meeting. Under the guidance of their guide, the project group visits the industry and discusses with the industry authorities. The project to be undertaken is finalized by the mutual understanding of the industry representative and the faculty. When the project work is not carried out in a specific industry, mainly when the nature of the project requires working with more than one industry or a research project, the project guide for the project group decides the nature of the project. The Head of Department / Project Coordinator allocates laboratory resources for in-house projects and allocates the number of days per week for working on the projects in the industry (if the project is being carried out in the industry). The Head of Department / Project Coordinator lists the types of projects based on design, analysis, development, manufacturing, environment, safety, etc. i.e., applicationbased, product development-based, or Research-based projects. All projects carried out by the students are categorized based on application-based projects, products-based, research-based, and review-based.

#### 2. Rubric for Project Assessment:

Project evaluation is carried out in 7th as well as 8th semester where students present their work before the guide and project guides panel from the same department. Evaluation is carried out based on various criterion of Rubrics and general criteria as follows:

- Project idea understanding and percentage of project completion
- Presentation, demonstration and documentation skills



#### **Department of Mechanical Engineering**

- Evaluation is carried out on individual basis as well as on team performance
- At the end of the academic year, students present and demonstrate their work to the expert from an industry/ Academician from other institution and the project guide

#### RUBRICS FOR PROJECT PHASE -I EVALUATION:

Sr. No	Agenda	Review Assessment Weightage (Percentage)	Over all Weightage (Percentage)
1	Synopsis Presentation-I	20	
2	Project Phase-I Evaluation	30	
3	Project Report Evaluation	30	
4	Evaluation by Guide	20	100

#### RUBRICS FOR PROJECT PHASE - II EVALUATION:

Sr. No	Particulars	Review Assessment Weightage ( Percentage )	Over all Weightage ( Percentage )
1	Project Phase II Evaluation	80	
2	Project Report Evaluation	20	100



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#### **Synopsis Presentation-I Evaluation:**

The synopsis presentation-I evaluation is carried out preferably to clear the student project idea and check if any duplication and improvement required. The total weightage for this review is 20% in overall marks. The marks distribution and rubrics is shown in the below table. The evaluation is done by guide

#### • Synopsis Presentation-I Evaluation Rubric:

PO		Max	Excellent	Good	Average	Score
Mapping		Marks	(91%-100%)	(75 %-90%)	(50% -74%)	
PO5,PO6, PO10 PO11, PO 12	Purpose of the Project	20	intended outcome of the project which includes information about the problem that was being solved or the need being met, clearly articulates the reasons and decision- making process used to	outcome of the project which includes information about the problem that was being solved or the need	Does not clearly explain the intended outcome of the project or provides little information about the problem that was being solved, the need being met, or why	
PO7, PO5, PO6	Literature survey and detailed analysis	20	select the project Detailed and extensive explanation of the specifications and the limitations of the existing systems	Moderate study of the existing systems; collects some basic information	the project was selected Minimal explanation of the specifications and the limitations of the existing systems; incomplete information	
	Objectives and		All objectives of the proposed work are well defined; Steps to	Incomplete justification to the objectives proposed; Steps are	Objectives of the proposed work are either not identified	



РО		Max	Excellent	Good	Average	Score
Mapping		Marks	(91%-100%)	(75 %-90%)	(50% -74%)	
PO5_PO6	Methodology	20	be followed to solve	mentioned but unclear;	or not well defined;	
105,100	of the	20	the defined problem	without justification to		
	Proposed		are clearly specified	objectives	improper	
	Work		are clearly specified	objectives	specification	
	WOIK		Future scope of the	Incomplete justification	Future scope of the	
	Future Scope,		proposed system is	to the future scope	proposed work are	
	Advantages		clearly defined;	proposed; Steps are	either not identified	
PO11,PO		20		mentioned but unclear;	or not well defined;	
		20	Advantages and			
	Disadvantages		disadvantages of the	without justification to	Incomplete and	
PSO1,PS			system clearly specified	advantages and	improper	
O2				disadvantages	specification	
					about advantages	
					and disadvantages	
				Slides are error-free and	Slides contain errors	
			Slides are error-free and	logically present the	and lack a logical	
PO10,			logically present the	main components of the	progression.	
PO9			main components of the	process and	Major aspects of	
	Presentati		process and	recommendations.	the analysis or	
	on Skills	20	recommendations.	Speakers are mostly	recommendations	
			Speakers are audible	audible and fluent on	are absent.	
			and fluent on their	their topic, and require	Speakers are	
			topic, and do not rely	minimal referral to	often inaudible	
			on notes to present or	notes.	often hesitant,	
			respond		often speaking in	
					incomplete	
					sentences.	
					Speakers rely	
					heavily on notes.	
					Total marks out	
					of 100	



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### • Project Phase-I Evaluation Rubric:

				Level of Achievemen	nt		
PO Mapping		Max Marks	Excellent (91%-100%)	Good (81-90 %)	Average (61% to 80 %)	Poor (40-60%)	Score
PO5, PO6	Design Methodolog y	40	Divison of problem into modules and good selection of computing framework Appropriate design methodology and properly	Divison of problem into modules and good selection of	Divison of problem into modules but inappropriate selection of computing framework Design methodology not defined properly	Modular	
PO8 PO9, PO10 PO11	Planning of Project Work and Team Structure	30	justification Time frame properly specified and being followed Appropriate distribution of project work	specified and being		specified In-appropriate	
PO10, PO11	Demo- nstration and Presentation	30	Objectives achieved as per time frame Contents of presentations are appropriate and well arranged Proper eye	Objectives achieved as per time frame Contents of Presentation are appropriate but not well arranged Satisfactory demonstration, clear	Objectives achieved as per time frame Contents of presentations are appropriate but not well arranged Presentation not Satisfactory and	No objectives achieved Contents of presentations are not appropriate and not well delivered Poor delivery of	



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	Level of Achievement										
PO Mapping			Excellent (91%-100%)	Good (81-90 %)	Average (61% to 80 %)	Poor (40-60%)	Score				
			contact with audience and clear voice with good spoken language	voice with good spoken language but eye contact not proper	average demonstration	presentation					
					Total Marks Out of 100						

#### • Project Report Evaluation Rubric:

				Level of Achieven	ient		
PO Mapping	Max Marks		Excellent (91%-100%)	Good (81-90 %)	Average (61% to 80 %)	Poor (40-60%)	Score
			Project report is	Project report is	Project report is	Project report not	
			according to the	according to the	according to the	prepared	
			specified format	specified format	specified format	according to the	
			References and	References and	but some mistakes	specified format	
PO10	Project	40	Citations are	citations are	In-sufficient	References and	
PO11,	Report		Appropriate and	appropriate but not	references and	citations are not	
PO12			well mentioned	mentioned well	citations	appropriate	
			Complete	Complete	Complete		
			explanation of the	explanation of the	explanation of the	Inappropriate	
			key concepts	key concepts	key concepts but	explanation of the	
			Strong	In-sufficient	little relevance to	key concepts	
	Descrip		description of the	description of the	literature	Poor description of	
	tion of		technical	technical	In-sufficient	the technical	
PO8,	Concep	40	requirements of	requirements of	description of	requirements of the	
PO5	ts and		the project Result	the project Results	the technical	project Results are	
	Technic		are presented in	are presented in good	requirements of the	not presented	
	al		very appropriate	manner	project Results	properly	



				Level of Achieven	nent		
PO Mapping	Max Marks		Excellent (91%-100%)	Good (81-90 %)	Average (61% to 80 %)	Poor (40-60%)	Score
	Details		manner		presented are not much Satisfactory		
PO10	Conclus ion and Discussi on	20	Project work is well summarized and concluded Future extensions in the project are well specified	Summary and conclusion not very appropriate	appropriate Future extensions in the project are specified	Project work is not summarized and concluded Future extensions in the project are not specified	
					Total Marks out of 100		



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### • Guide's Evaluation Rubric:

Level	of Achievement					
PO		Max	Excellent	Good	Average	Score
Mapping		Marks	(91%-100%)	(75 %-90%)	(50% -74 %)	
PO10, PO11	Working within a Team	25		views but requires guidance to	Makes little or no attempt to collaborate in a group situation	
PO5,PO6 PO12	Technical Knowledge and Awareness related to the Project	25	Extensive knowledge related to the project	Fair knowledge related to the project	Lack of sufficient knowledge	
PO8	Regularity	25			Irregular in attendance and inconsistent in work	
PO10, PO8	Presentation	25	Proper eye contact with audience and clear voice with good spoken language	good spoken language but less	Poor delivery of presentation	
				Total Marks out o	of 100	



# **Department of Mechanical Engineering**

#### **Project Phse II Evaluation Rubrics:**

			Level o	f Achievement			
PO		Max	Excellent	Good	Average	Poor	Score
Mapping		Marks	(91%-100%)	(81-90 %)	(61% to 80%)	(40%-60%)	
			Changes are made	Changes are made	Few changes	Suggestions	
			as per	as per	are made as per	during Project	
			Modifications	modifications	modification a	Phase-I	
PO8,	Incorporation	25	suggested during	suggested during	suggested	evaluation are	
PO10,	of Suggestions		Project Phase-I	Project Phase-I	during Project	not	
PO12			evaluation and new	evaluation and	Phase-I	incorporated	
			innovations added	good justification	evaluation		
			All defined	All defined	Some of the	Defined	
			objectives are	objectives are	defined	objectives are	
			achieved	achieved	objectives are	not achieved	
			Each module	Each module	achieved	Modules are	
			working well and	working well and	Modules are	not in proper	
			properly	properly	working well in	working form	
PO5, PO6	Project		demonstrated	demonstrated	isolation and	that further	
PO10,		25	All modules of	Integration of all	properly	leads to	
PO11	Demonstration		project are well	modules not done	demonstrated	failure of	
			integrated and	and system	Modules of	integrated	
			system working is	working is not	project are not	system	
			accurate	very satisfactory	properly		
					integrated		
			Contents of	Contents of	Contents of	Contents of	
			presentations are	presentations are	presentations are	presentation	
			appropriate and	appropriate and	not appropriate	are not	
			well delivered	well delivered	Eye contact	appropriate	
			Proper eye contact	Clear voice with	with few	and not well	
PO10	Presentation	25	with audience and	good spoken	people and	delivered	
			clear voice with	language but less	unclear voice		
			good spoken	eye contact with		Poor	
			language	audience		delivery of	



# Karmaveer Bhaurao Patil College of Engineering, Satara

	Level of Achievement									
PO Mapping		Max Marks	Excellent (91%-100%)	Good (81-90 %)	Average (61% to 80 %)	Poor (40%-60%)	Score			
						presentation				
PO8 PO10	Handling Questions	25	Answered all Questions with proper justification	Answered 80% questions	Answered 60% questions	Answered less than 40% question				
					Total Marks	Out of 100				



#### Karmaveer Bhaurao Patil College of Engineering, Satara

**Department of Mechanical Engineering** 

Sample Evaluation of Student

**Project Title: Gear Chamfering Machine** 



### KARMAVEER BHAURAO PATIL COLLEGE OF ENGINEERING SATARA

Program with Code: Mechanical Engineering

Academic Year 2021-2022

**Course : Synopsis Presentation-I Evaluation** 

#### Name of Student: KHILARE MUKUND HANMANT

PRN No.:51627020181161210012

Semester: VII

**Class:** 

**B.Tech** 

Sr No	Criteria	Max Marks	Excellent (91%-100%)	Good (75 %-90%)	Average (50% -74 %)	Score	
a)	Purpose of the Project	20		88%		17.6	
b)	Literature survey and detailed analysis	20		84%		16.8	
c)	Objectives and Methodology of the Proposed Work	20	92%			18.4	
d)	Future Scope, Advantages and Disadvantages	20		90%		18	
e)	Presentation Skills	20		86%		17.2	
	Total Marks out of 100						



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**Department of Mechanical Engineering** 



### KARMAVEER BHAURAO PATIL COLLEGE OF ENGINEERING SATARA

#### **Program with Code: Mechanical Engineering**

Academic Year 2021-2022

**Course : Project Phase -I Evaluation** 

Class: B.Tech

PRN No.:51627020181161210012

Semester: VII

Name of Student: KHILARE MUKUND HANMANT

Excellent (91%-Good Average Poor Sr No Criteria Max Marks Score 100%) (61% to 80 %) (40-60%) (81-90 %) 40 91% a) DesignMethodology 36.4 Planning of Project Work and Team 30 91% 27.3 b) Structure Demonstration and c) 30 86% 25.8 Presentation **Total Marks out of 100** 89.5



Karmaveer Bhaurao Patil College of Engineering, Satara

**Department of Mechanical Engineering** 

# ARMAVEER BHAURAO PATIL COLLEGE OF ENGINEERING SATARA Program with Code: Mechanical Engineering

Academic Year 2021-2022

**Course : Evaluation by Guide** 

Class: B.Tech

Name of Student: KHILARE MUKUND HANMANT

PRN No.:51627020181161210012

Semester: VII

Sr No	Criteria	Max Marks	Excellent (91%-100%)	Good (75 %-90%)	Average (50% -74 %)	Score
a)	Working within a Team	25		89%		22.25
b)	Technical Knowledge and Awareness related to the Project	25		86%		21.5
c)	Regularity	25		89%		22.25
d)	Presentation	25		87%		21.75
	Total Marks out of 100					



#### Karmaveer Bhaurao Patil College of Engineering, Satara

#### **Department of Mechanical Engineering**

Academic Year 2021-2022

**Course : Project Report Evaluation** 

Class: B.Tech Semester: VII

#### Name of Student: KHILARE MUKUND HANMANT

PRN No.:51627020181161210012

Sr No	Criteria	Max Marks	Excellent (91%-100%)	Good (81-90 %)	Average (61% to 80 %)	Poor (40%-60%)	Score
a)	Project Report	40		88%			35.2
b)	Description of Concepts and Technical Details	30		85%			25.5
c)	Demonstration and Presentation	30		87%			26.1
Total Marks out of 100						86.8	



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#### KARMAVEER BHAURAO PATIL COLLEGE OF ENGINEERING SATARA

#### Program with Code: Mechanical Engineering Academic Year 2021-2022

**Course : Project Phase -I** 

Class: B.Tech

PRN No.:51627020181161210012

Semester: VII

#### Name of Student: KHILARE MUKUND HANMANT

Sr No	Criteria	Assessment Weightage	Total Marks out of 100	Marks as per weightage
1	Synopsis Presentation-I	20%	88	18
2	Project Phase-I Evaluation	30%	90	27
3	Project Report Evaluation	30%	87	26
4	Evaluation by Guide	20%	88	18
		Total Marks out of	100	88

Conversion out of	25	22
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# KARMAVEER BHAURAO PATIL COLLEGE OF ENGINEERING SATARA Program with Code: Mechanical Engineering Academic Year 2021-2022

**Course : Project Phase -II Evaluation** 

Class: B.Tech Semester: VIII

Name of Student:

Sr No	Criteria	Max Marks	Excellent (91%-100%)	Good (81-90 %)	Average (61% to 80 %)	Poor (40%-60%)	Score
a)	Incorporation of Suggestions	25		85%			21.25
b)	Project Demonstration	25		90%			22.5
d)	Presentation	25			80%		20
c)	Handling Questions	25		82%			20.5
Total Marks out of 100						84.25	

PRN No.:



Karmaveer Bhaurao Patil College of Engineering, Satara

**Department of Mechanical Engineering** 

**KARMAVEER BHAURAO PATIL COLLEGE OF ENGINEERING SATARA** 

Program with Code: Mechanical Engineering Academic Year 2021-2022

**Course : Project Report Evaluation** 

Class: B.Tech Semester: VIII

Name of Student:

PRN No.:

Sr No	Criteria	Max Marks	Excellent (91%-100%)	Good (81-90 %)	Average (61% to 80 %)	Poor (40%-60%)	Score
a)	Project Report	40		86%			34.4
b)	Description of Concepts and Technical Details	30		85%			25.5
<b>c</b> )	Demonstration and Presentation	30		82%			24.6
Total Marks out of 100					84.5		



#### Karmaveer Bhaurao Patil College of Engineering, Satara

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### KARMAVEER BHAURAO PATIL COLLEGE OF ENGINEERING SATARA

Program with Code: Mechanical Engineering Academic Year 2021-2022

**Course : Project Phase -II** 

Class: B.Tech

PRN No.:

Semester: VIII

Name of Student:

Criteria Sr No **Assessment Weightage Total Marks out of 100** Marks as per weightage Project Phase -II Evaluation 80% 84.25 67.4 1 Project Report Evaluation 84.5 17 2 20% **Total Marks out of** 100 84

Conversion out of	50	42



### Karmaveer Bhaurao Patil College of Engineering, Satara

# **Department of Mechanical Engineering**

#### Project List 2022-23

Sr. No.	Title of project/ Project group	Type of Project Environmental / Industrial / Safety/ Research/ Societal/ Agricultural	Sponsored project
	Mulla Owais Kasam	Industrial	Technotronics Technologies LLP Company, Satara
	Ghone Kalam Shakil		
	Kurunde Hritik Anil		
1.	Mule Gaurav Anil		
	Takale Yogesh Sunil	Industrial	Technotronics Technologies LLP Company, Satara
	Bendre Omkar Sachindeo		
	Barge Ranjeet Manohar		
2.	Gore Rushikesh Raju		
3.	Dipak Ravindra Yadav	Industrial	Self Sponsored
	Aman Rajan Deshmukh		
	Sourabh Jagannath Waghmare		



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	Nikhil Ashok Kamble		
	Pranav V. Babar	Research	Self Sponsored
	Shaunak S. Abhayankar		
	Jaydeep G. Mane		
4.	Priti S. More		
	Shubham Shinde	Industrial	Self Sponsored
	Gajanan Bhokare		
	Anoop Disle		
5.	Pallavi Salunkhe		
	Chandana Abaji Dange	Industrial	Technotronics Technologies LLP Company, Satara
	Aditi Raju Jagdale		
	Shivrup Prakalp Chavan		
6.	Swaraj Vijay Shinde		



### Karmaveer Bhaurao Patil College of Engineering, Satara

	Rohan Suresh Yadav	Research	Self Sponsored
	Omkar Hindurao Chavan		
	Tejas Dilip Kadam		
7.	Shubham Yadav		
	Omkar Jagtap	Research	Self Sponsored
	Shubham Jagtap		
	Sachin Jadhav		
8.	Vinit Vitthal Sawant		
	Shinde Raj Vijay	Industrial	Rajas Engineering, Satara
	Nalawade Chaitanya Vijay		
	Manekar Nishant		
9.	Shinde Ketan		
	Omkar Suresh Kumbhar	Industrial	Phenix Polycontainers, Satara
	Atharva Ajay Jadhavrao		
	Shubham Satish Bhosale		
10.	Ajay Raju Pawar		



### Karmaveer Bhaurao Patil College of Engineering, Satara

	Pathan Ajahar Tajuddin	Industrial	Kavade Engineering, Satara
	Shinde Sanket Dattatray		
	Kesarkar Rohan Ratikant		
11.	Sapkal Tejas Sanjay		
	Pawar Rajat Shridhar	Industrial	Self Sponsored
	Sankpal Saish Prakash		
	Kanade Utkarsh Namdev		
12.	Kanade Chaitnya Namdev		
	Ashish Satish Raut	Industrial	Top Gear Transmissions, Addl. MIDC, Satara
	Rahul Pawar		
13.	Sourabh Sihasane		
	Harsha Phansalkar	Industrial	Top Gear Transmissions, Addl. MIDC, Satara
	Karan Jadhav		
	Ujjwal Gaikwad		
14.	Ashwin Dushade		



### Karmaveer Bhaurao Patil College of Engineering, Satara

### **Department of Mechanical Engineering**

	Kadam Yuvraj Vijay	Industrial	Self Sponsored
	Kadam Atharva Arun		
	Mandhave Ashish Vijay		
15.	Shinde Akash Ganesh		

### **Details of the projects Academic Year 2021-2022**

Sr. No.	Title of project	Type of Project (Environmental / Industrial / Safety/ Research/ Societal/ Agricultural)	Sponsored project
1.	Design & Development of Rotocure Cutting &	Industrial	Plot No. W-71, Additional MIDC M.I.D.C.
	Windup Unit		SATARA.
2.	Design and Development of Electric Vehicle	Environmental and Research	Non Sponsored
3.	Design & Development of Vibrating Bowl Feeder	Industrial	Innovative Automation Products
			B24 old MIDC, Satara
4.	Design & Development of CoreXY 3D Printer	Research	Non Sponsored



### Karmaveer Bhaurao Patil College of Engineering, Satara

5.	Rocker Bogie Mechanism In defence	Safety and Research	Non Sponsored
6.	Hydraulic scissor lift	Industrial	Shree tyres and services, At Saidapur Post Kondave ,
			near Ranjeet Gujar hostel
7.	COVID 19 Fighter Robot	Societal	Non Sponsored
8.	Design and Manufacturing of Industrial Fixture	Industrial	Abhijat Equipments Pvt. Ltd., 19/4, Molacha Odha, Satara
9.	Dual Axis Solar Tracker	Environmental	Non Sponsored
10.	Cost Reduction in Automobile Plunger Workpiece	Industrial	Shreyash Industries Plot No D 14 M.I.D.C Karad Dist Satara
11.	Material Carrying Lift	Industrial	Sagar Enterprises L-89/5, ADD M.I.D.C. Satara
12.	Design & Development of Stock Guide Linear Aseembly	Industrial	Plot No. W-71, Additional MIDC M.I.D.C. SATARA.
13.	Piston Ring Mounting Machine	Research	Non sponsored



### Karmaveer Bhaurao Patil College of Engineering, Satara

14.	Design & Development of Belt Conveyor	Industrial	Innovative Automation Products, B24 old MIDC,Satara
15.	Design and Development of Sugarcane node cutting machine	Agricultural	Non sponsored
16.	Design and Manufacturing of Industrial Fixture	Industrial	Abhijat Equipments Pvt. Ltd., 19/4, Molacha Odha, Satara



# **Department of Mechanical Engineering**

# **Details of the projects Academic Year 2020-2021**

Sr.No.	Title of Project	Sponsored project from	Name of the students in a project group	Project Guide
	Single Minute exchange of Dies (SMED)		Bhat Aniket Shrikrishna Babar Viraj Rajendra Rajmane Shrishailya Rajesh Mahamulkar Giriraj Sunil	Prof. D. A. Ghatge
	Design of Turn Table welding Rotator	AR Engineering MIDC, Satara,	Dhane Umesh, Chavan Prathamesh Bobade Adarsh Harshada Lalge	Dr. H. A. Mandave
	Carbon Layer Cleaner		Sanket rajendra chikane Prashant sanjay gaikwad Vikrant satish barge Vinit vijay Jadhav	Prof. D. A. Ghatge
	Design and Manufacturing of Automatic Dust sealing machine	Kavitsu Automation H-48/7 Add. MIDC Satara	Ghorpade Manoj Vijay Lohar Nilesh Parshuram More Shubham Suresh Mane Aishwarya Sanjay	Prof. P. L.Jadhav
	Design of Deburing machine	Kavitsu Automation Add. MIDC Satara	Yadav Omkar Anil Patsute Rohan Dnyandev Mane Yash Hemant Barge Swapnil Ramesh	Prof. A. M. Shaikh
	HPDC Die Manufacturing process	Maharshtra Scooters Ltd. C-1 MIDC Satara	Ajay Ashok Sutar Jyoti Vitthal Kharat Mohit Ankush Raskar Shubham Hanmant Jadhav	Prof. S.S. Patil
	Material Optimization of Planetary Gear box	Precision Gear Transmission W-44 Add. MIDC Satara	Snehal Sunil Sasane Satyam Sunil Shelar Omkar baliram shinde	Prof. S.S. Patil



		Gaurav shivram gaikwad	
Design and Development of Swing Grinding Fixtures	Dhanashree Pvt. Ltd. MIDC Satara	Shinde Ketan Shinde Akasha Uthale Pratik Zagade Swapnil	Prof. P. L.Jadhav
Rotary Table for multi-face operation	Top Gear Transmission M-70 Add. MIDC Satara	Abhijeet Bhanudas Godse Hardik sudhakar raut Shubham jaganath Khusape Nikhil ashok lokhande	Prof. A. M. Shaikh
Increase Productivity for Powder coating	Mutha Foundaries Pvt. Ltd. Satara	Abhishek Patole Shahrukh Mulani Shivam Avale Omkar Dorke	Prof. P. P. Patil
3D Printing of Dual wishbone type suspension system	Technotronics Technologies LLP. Plot No. 16 and 17 Shri Jai Bhavani Nagar Near Shivraj Petrol Pump Satara	Mane Komal Kale Dhanshree	Prof. M.Y.Shinde
Design and development of Bevel gear lapping machine	-	Shraddha Santosh Supekar Saurabh Sopan Jagdale Akshay Mansing Shedge Vihar Viram Shaha	Prof. D. A. Ghatge
Design and development of emergency of ventilator	Self Sponsored	Gourish Deshpande Sourabh Pujari Aditi Sawant Shivanjali Gadhave	Prof. N. V. Malavade
 Design and development of Screw Conveyor	Kavade Industies Pvt. Ltd. Add. MIDC Satara	Harshada Jagatap Aditya Kulkarni Suraj mane Pruthviraj Waikar	Prof. N. V. Malavade



Reduction in Power Consumption of	Mutha Engineering Pvt. Ltd. C-1 Add.	Lahigude shubham Mahesh	Prof. S.R. Nipanikar
Induction Furnace	MIDC, Satara	Bhosale Shubham Pradeep Bhutkar Hemant Tulashidas	
		Madane Akshay Manikrao	
Injection Mould		Dudhankar Jay Kapil	Dr. H. A.
storage rack	Technologies Add. MIDC Satara	Jadhav Ashwin Arjun Kumbhar Akash Gorakh	Mandave
		Dalavi Akash Ravindra	
Three Roller sugar	U U	Shreyas mahesh kapare	Prof. A.B.
crane Crushing Machine	Ltd. MIDC. Wai, Satara	Shivam pravin gaikwad Manish dilip kamble	Pisal
iviueinne	Suuru	Akash suresh gaikwad	
Domestic shredar	M/S Morya Pvt. Ltd.	Yash shinde	Prof.
machine	Add. MIDC Satara	kshitij mane	A.B.Pisal
		pranav Bodake	
		shafin naikude	

