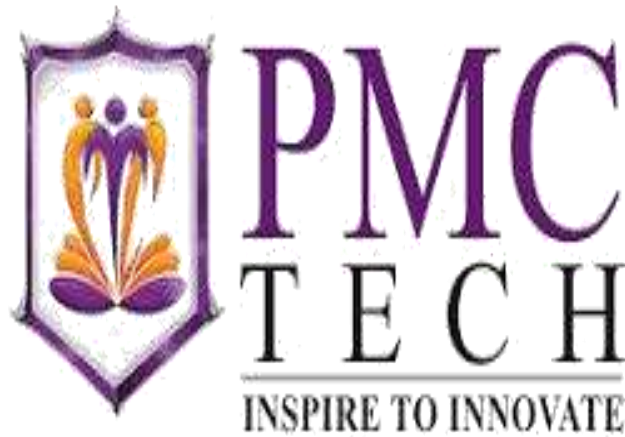


# PMC TECH

**Er Perumal Manimekalai Polytechnic College,  
Hosur-635117**



**Department of Mechanical Engineering (Tool&Die)**  
**Academic Report- 2024-2025 (ODD Semester)**

**Er.PERUMAL MANIMEKALAI POLYTECHNIC COLLEGE**

**Vision of the Institution:**

PMC Tech –Polytechnic College shall emerge as a premier Institute for valued added technical education coupled with Innovation, Incubation, Ethics and Professional values.

**Mission of the Institution:**

1. To foster the professional competence through excellence in teaching and learning.
2. To nurture overall development of students by providing Quality Education & Training.
3. To provide innovative environment to learn, innovate and create new ideas for the betterment of oneself and society.

**DEPARTMENT OF MECHANICAL TOOL & DIE ENGINEERING**

**Vision of the Department:**

To Develop eminent, innovative professional Tool and Die Diploma holders by imparting value added education, embedded with employable skills

**Mission of the Department :**

- To provide competency based quality Tool and Die Engineers by strong theoretical and practical training.
- To provide breeding ground for innovation and leadership through skill development in Tool Design.
- To enhance continual career development and improve employability skills.

### PROGRAMME EDUCATIONAL OBJECTIVES

Our Diploma students will be able to

- PEO1:** Have a successful career in the field of the Tool and Die Engineering Design, Manufacturing, Maintenance and Inspection.
- PEO2:** Become a skilled technician in handling various convention and non convention machines by adopting new technologies.
- PEO3:** Fulfill the demands of industries with good communication, positive attitude and team spirit.

### PROGRAMME SPECIFIC OUTCOMES

- PSO1:** Prepare Tool drawing and make Die Mould part by operating Conventional and Non conventional machines.
- PSO2:** Design and fabricate jigs, fixtures, press tools and plastic moulds for customer needs.
- PSO3:** Apply knowledge and skills with design and development of a project work in the field of Tool and Die making.

### PROGRAMME OUTCOMES

- PO1: Basic and Discipline specific knowledge:** Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.
- PO2: Problem analysis:** Identify and analyse well-defined engineering problems using codified standard methods.
- PO3: Design/ development of solutions:** Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.
- PO4: Engineering Tools, Experimentation and Testing:** Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.
- PO5: Engineering practices for society, sustainability and environment:** Apply appropriate technology in context of society, sustainability, environment and ethical practices.
- PO6: Project Management:** Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.
- PO7: Life-long learning:** Ability to analyse individual needs and engage in updating in the context of technological changes.

**Content:**

S.No	Content	Page No
1	Faculty Details	5
2	Student Name List	7
3	Value Added Course	12
4	Industrial Visit	14
5	Internship Training	15
6	International Day Drug against Program	16
7	Exploring 3D Printing Technology	17
8	Motivational Program	18
9	Gramiya kalai Nigalchi	18
10	Training Program for Ashok Leyland Employees	19
11	Independence Day Celebration	19
12	Faculty Development program	20
13	Blood Camp	20
14	Naan Muthalvan	21
15	NCC Program	22
16	POCSO awareness program	22
17	Agapori	23
18	Yoga Program	23
19	Swachhta Campaign	24
20	Bureau of Indian Standards Conference	24
21	Cyber Crime Awareness Program	25

**Faculty Details :**

The following faculty's are working in this Department in the year of 2024-2025

S.No	Name of the Faculty	Designation	
1	Mr R.Ramachandran	Head of the Department	
2	Mr C.Prakash	Head of the Department	
3	Mr P.Rajasekar	Lecturer	
4	Mr P.Rajasekar	Lecturer	
5	Mr P.Vinoth Kumar	Lecturer	
6	Mr M.Prabhakaran	Lecturer	
6	Mr V.Kalaimani	Lecturer	

7	Mr L.Arunachalam	Lecturer	
8	Mr R.Singaravel	Lecturer	
9	Mr S.Bharathi	Lecturer	
10	Mr P Vignesh	Lecturer	

Students Name List :

I Year

S No	Reg No	Student Name
1	25218449	ABISHEK S
2	25218450	AMEEN ZAID A
3	25218451	ANTONYRAJ K
4	25218452	ARIF M
5	25218453	BARATH S
6	25218454	CHARAN V
7	25218455	GANAPATHI M
8	25218456	GOPI N
9	25218457	GOWTHAM A
10	25218458	JAGADESH V
11	25218459	JAIPRAKASH K
12	25218460	JEEVA KRISHNAN H
13	25218461	JEKSON BORO R
14	25218462	KALIYAPPAN S
15	25218463	KANISH M
16	25218464	KARTHICK M
17	25218465	KAYUAM Y
18	25218466	KIRUBA P
19	25218467	KISHORE L
20	25218468	LAKSHMANAN S
21	25218469	LAKSHMI NARAYANA P
22	25218470	LINGESH N
23	25218471	LOGANATHAN K M
24	25218472	MAHENDRA V
25	25218473	MALLESH S
26	25218474	MANICKAM P
27	25218475	MANISHANKAR M
28	25218476	MOHAMED FAIZ M
29	25218477	MOHAMMED IMRAN M
30	25218478	MOHAMMED KHALID A

S.No	Reg No	Student Name
31	25218479	MOORTHY S
32	25218480	MOUNESH V
33	25218481	MUNIKRISHNA Y
34	25218482	NITHIN KUMAR C
35	25218483	NITHISH V
36	25218484	PRASANTHKUMAR G
37	25218485	PRAVEEN M
38	25218486	PREETHAM M
39	25218487	PUNITH P
40	25218488	RAGHUL M
41	25218489	RANJITH KUMAR C
42	25218490	RANJITH KUMAR P
43	25218491	RISHIKESAVAN H
44	25218492	RISHIKESH S
45	25218493	SACHIN B
46	25218494	SIRANJEEVI S
47	25218495	SRIHARI S
48	25218496	SURIYA M
49	25218497	SURIYA PRAKASH M
50	25218498	TEJASH A
51	25218499	THARUN C
52	25218500	THARUN KUMAR G
53	25218501	VARSHITH N
54	25218502	VARUN C
55	25218503	VENKATESH G
56	25218504	VIJI R
57	25218505	VINAY C
58	25218506	VINAY S M
59	25218507	YASWANTH A
60	25218508	YOGESH U



Second Year :

S.No	Reg No	Name of the Students
1	24219869	ABISHEK V
2	24219870	ANAND Y
3	24219872	APSARKHAN Y
4	24219873	ARAVINDAN S
5	24219875	ASWANTH S
6	24219876	ASWIN M
7	24219877	ATUL S
8	24219878	BHARATH Y
9	24219879	BOOPATHI G
10	24219881	DHANANJAI D
11	24219882	DHARSHAN M
12	24219883	DILIP K
13	24219884	DINAGARAN C
14	24219886	GNANAPRAKASH M
15	24219887	GOKUL S
16	24219888	HARIHARAN N
17	24219889	HARIHARASUDHAN L
18	24219890	HARISH S
19	24219891	HEMANTH S
20	24219893	KARTHICK K
21	24219894	KARTHICK K
22	24219895	KEERTHAN KUMAR G
23	24219896	KISHAN V
24	24219897	KISHORE M
25	24219898	LIKITH M
26	24219899	LOKESH L
27	24219900	MADESH V
28	24219901	MAGESHKUMAR S
29	24219902	MANUCHARAN C
30	24219904	MOHAN MURALI R
31	24219905	MUTHU SELVAN N
32	24219907	NETHAJI M
33	24219909	PARTHA SARATHI S

34	24219911	PUNITKUMAR S
35	24219912	PURUSHOTHAMAN K
36	24219913	PUSHPALINGAM A
37	24219914	RAGHUL R
38	24219915	RAKESH RAM P
39	24219916	REEHAN I
40	24219919	SAKTHIVEL V
41	24219921	SANTHOSH S
42	24219922	SATHISH S
43	24219924	SIVAKUMAR N
44	24219926	SRIKANTH R
45	24219927	SRIKANTH V
46	24219928	SUGAVANAM T
47	24219929	SUJITH M
48	24219930	SUMAN P
49	24219931	SURESH E
50	24219932	UDHAY K
51	24219933	UDHAYA KUMAR A
52	24219934	VEDADRI P
53	24219935	VINAY KUMAR M
54	24219936	VINAY S
55	24219937	YASWANTH R
56	24219938	YESHWANTH N
57	24219939	YESWANTHA I
58	24219940	YUVARAJ S
59	24219941	YUVARAJ T
60	24295743	AKASH M
61	24295745	DHARANISH M
62	24295746	KATHIRVEL T
63	24295747	LOKETHKUMAR P
64	24295748	MADHAN KUMAR V
65	24295750	NIRANJAN S
66	24295751	SEKAR T
67	24295752	THIMMARAJ S
68	24295753	VENKATESH M
69	24295754	VIJAY K
70	24295755	YOGANANTHAN C

## Third Year :

S.No	Reg No	Name of the Students
1	23223051	ARUN KUMAR R
2	23223054	DILIP R
3	23223055	DINESH G
4	23223056	GANESH KUMAR S
5	23223057	GNANAPRAKASH G
6	23223058	HEMA KUMAR V
7	23223060	KIRAN KUMAR V
8	23223061	KISHORE K
9	23223062	KISHORE R
10	23223063	LEELADHARAN S
11	23223064	MAHADEVAN S
12	23223065	MANIGANDAN R
13	23223066	MANOJKUMAR B
14	23223067	MOHAN K
15	23223069	NARESH M
16	23223070	NAVEEN KUMAR M
17	23223072	NIRANJAN M
18	23223073	NIRMAL KUMAR V
19	23223074	NITHISHKUMAR N
20	23223076	PRAKASH G
21	23223077	PRAVEEN KUMAR M
22	23223079	PUGAZENTHI P
23	23223081	RAJAMANICKAM R
24	23223082	SANJAY Y
25	23223083	SHRAVAN S
26	23223084	SIVARAJKUMAR K
27	23223085	SRIDHAR A
28	23223086	SRIKANTH C
29	23223087	SUJITH N
30	23223089	SUWIN SALAMAN RAJU S
31	23223091	THILAK KUMAR B
32	23223092	THULASINATHAN S
33	23296826	NARAYANAN V
34	23296827	RAGAVENDIRAN V

**Value added Course :**

**Topic : Plastic Muld design by using Creo software**

**Date : 16.12.2024 to 20.12.2024**

**Resource Person : SVAIC Team**

Our third year students has participated in value added course for Plastic mould design by using creo software They learned how to design a mould using this software and how to manufacture a product from the designed mould.

**Value-added courses are essential in today's competitive job market. Here are some reasons why value-added courses are important:**

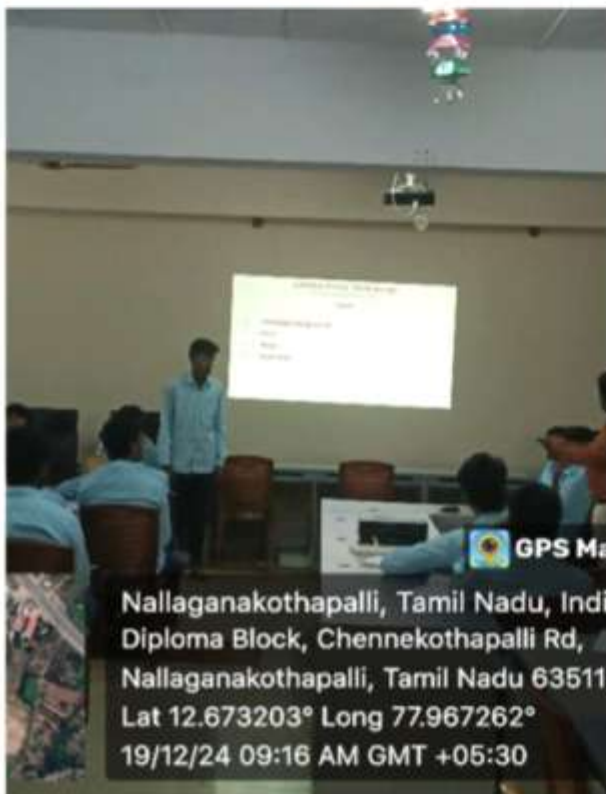
**Importance of Value-Added Courses :**

1. Enhanced Employability: Value-added courses make students more employable by providing them with specialized skills and knowledge.
2. Increased Earning Potential: Studies have shown that individuals with specialized skills and certifications tend to earn higher salaries.
3. Improved Career Prospects: Value-added courses can lead to better career prospects, including promotions and new job opportunities.
4. Development of Soft Skills: Many value-added courses focus on developing soft skills, such as communication, teamwork, and problem-solving.
5. Staying Up-to-Date with Industry Trends: Value-added courses help students stay current with the latest industry trends and technologies.
6. Networking Opportunities: Value-added courses provide opportunities to network with professionals in the industry.
7. Personal Growth and Development: Value-added courses can lead to personal growth and development, including increased confidence and self-esteem.

Creo is a 3D CAD (Computer-Aided Design) software developed by PTC (Parametric Technology Corporation). It is a powerful tool used for designing, simulating, and analyzing products in various industries, including aerospace, automotive, consumer products, and industrial equipment.

**Importance of Plastic Mold Design :**

Plastic mold design is essential for several reasons. Firstly, it directly affects the quality of the final product. A poorly designed mold can lead to defects, such as sink marks, warping, or uneven surfaces, which can compromise the product's functionality and aesthetic appeal. Secondly, a well-designed mold can significantly reduce production costs by minimizing material waste, reducing cycle times, and increasing the mold's lifespan.



**Industrial Visit :**

**Company :** ALF Engineering Pvt Ltd, Hosur

**Date :** 01.08.2024

**Year / Sem :** II & III / III & V

**Company Profile :**

Alf Engineering Pvt Ltd is a leading OE manufacturer of automotive Chassis, and currently manufactures over 1400 frames/day from its plants across India.

Alf Engineering Pvt Ltd is also the largest manufacturer engaged in the indigenous design and development of hydroformed components for the automotive industry, A Hydroforming facility is operational at Nasik, with a design centre to support customers in design & development.

ALF also manufacturers and supplies assemblies and parts for suspensions - both front and Rear. They include cradles, control arms & links.

Growing recognition...In the recent years more companies have come to accept the competence and commitment of ALF to develop critical Hydroformed components /assemblies for chassis & suspension..



### Internship :

Our students has go to implant training for leading industries its help to In-plant training is a type of training where students or trainees are placed in a real-world industrial setting to gain practical experience and skills. This type of training is essential for students, especially those pursuing technical courses.

**Company : Ashok Leyland**

**Date : 23.12.2024 to 27.12.2024**

#### Company Profile:

Ashok Leyland is an Indian multinational automotive manufacturer, It is owned by the Hinduja Group. It was founded in 1948 as Ashok Motors which became Ashok Leyland in the year 1955 after collaboration with British Leyland. Ashok Leyland is the second largest manufacturer of commercial vehicles in India the third largest manufacturer of buses in the world, and the tenth largest manufacturer of trucks.

#### III Year

S. No	Name of the Student	Industry name
1	KISHORE R	Ashok Leyland Ltd, Hosur
2	KISHORE K	
3	SRIKANTH C	
4	LEELATHARAN S	
5	THILAK KUMAR B	
6	MOHAN K	
7	SHRAVAN S	
8	GNANAPRAKASH G	
9	MANOJ KUMAR B	
10	MAHADEVAN S	



## International Day Drug against Program :

Date : 01.07.2024

Our department NSS, NCC & YRC participated in a Drug awareness Program

The International Day Against Drug Abuse and Illicit Trafficking is a significant day that aims to raise awareness about the dangers of drug abuse and illicit trafficking. It promotes action and cooperation among governments, civil society, and individuals to prevent drug abuse and combat illicit trafficking.

### Objectives:

1. Raise Awareness: To raise awareness about the dangers of drug abuse and illicit trafficking.
2. Promote Action: To promote action and cooperation among governments, civil society, and individuals to prevent drug abuse and combat illicit trafficking.
3. Support Victims: To support victims of drug abuse and illicit trafficking.





**Exploring 3D Printing Technology :**

3D printing, also known as additive manufacturing, is a process of creating physical objects from digital designs by layering materials such as plastics, metals, and ceramics.

Our students participated in a 3D Printing conference at Cambridge School, Krishnagiri

**Name of the Students :**

Selvan V.Sakthivel  
Selvan T. Sugavanam

**Date :** 3&4 / 12 /2024



## Motivational Program

Year : II

Date : 09.07.2024

**Resource Person : Mr Raghunath  
Relax Training, Chennai**

The Second year students of our department participated in the training program and learned about the morals to follow in the life and the necessary ways to progress in life



## Gramiya kalai Nigalchi :

Gramiya Kalai Nigalchi is a concept that aims to promote awareness and appreciation of rural arts and culture. It involves recognizing the value of traditional rural art forms, such as music, dance, theater, and crafts, and promoting them as an integral part of our cultural heritage.

Date : 23.07.2024



**Training Program for Ashok Leyland Employees :**

Our department faculty's provided training to new employees at Ashok Leyland Ltd, Hosur  
Trained with how to measure linear and angular measurements and equipment handling

**Date :** 31.07.2024



**Independence Day Celebration :**

The Students of our department participated in the 78 th independence day function held  
in our college and conduct mime show on 15.08.2024



**Faculty Development program :**

ATAL Faculty development program has conducted at Er Perumal Manimekalai Polytechnic College, on 17.08.2024 to 22.08.2024 our department faculty Mr P.Rajasekar is participate in this FDP program

**Topic : Robotics and Process Automation**



**Blood Camp :**

Students and Faculty of our department participated in the blood donation camp organized by our college Youth Red Cross and Government Medical College Hospital Krishnagiri and donated blood on 04.09.2024



Naan Muthalvan :

**Topic : Industry 4.0**

**Year / Sem : III / V**

**Date : 05.09.2024 to 20.09.2024**

**Objective :**

Industry 4.0 refers to a trend or concept in the current manufacturing industry that focuses on automation of processes and data exchange.

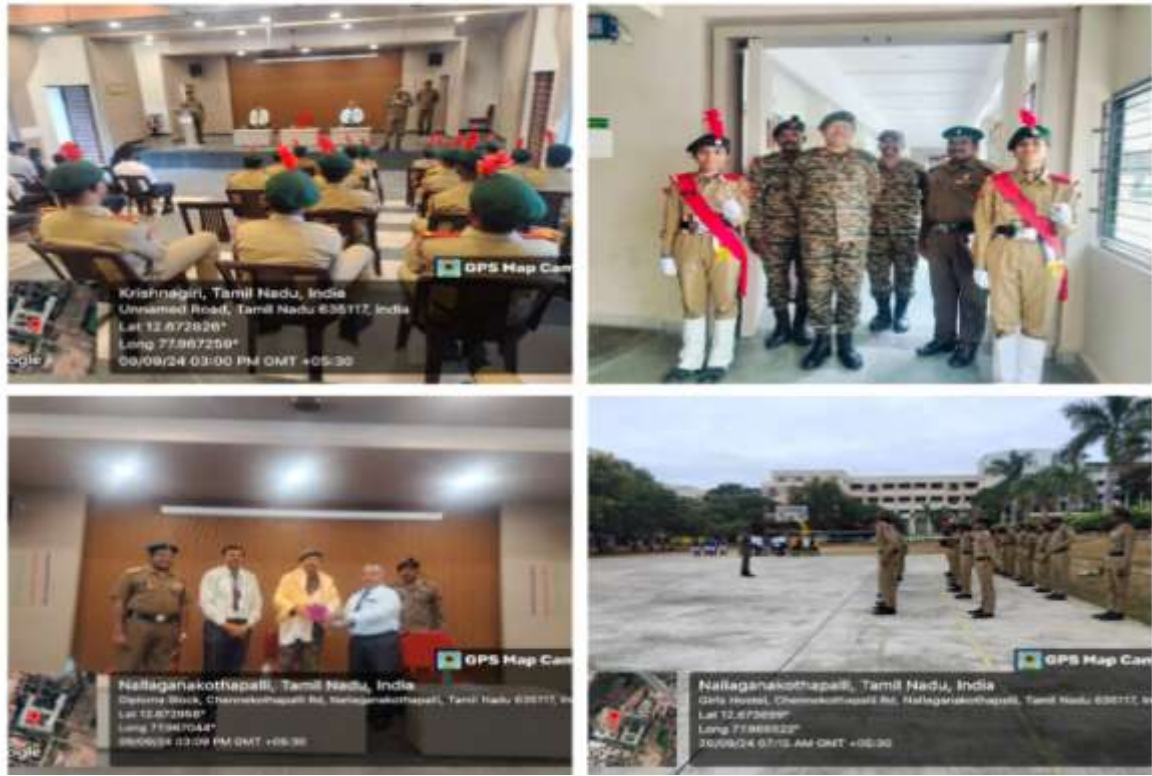
- ✓ Modeling and simulation.
- ✓ IoT and sensor data integration.
- ✓ Data analysis and visualization.
- ✓ Artificial Intelligence and Machine Learning.

Our department Third year students Selvan S.Leelatharan & Selvan V.Ragavendiran is received best project development award HACKATHAN 2024 IN Naan Muthalvan Program



**NCC Selection :**

The National Cadet Corps (NCC) is a youth organization in India that aims to develop the character, discipline, and patriotism of young people.



**POCSO awareness program**

1. To create awareness among students about the POCSO Act and its provisions.
2. To educate students about the importance of consent, safe touch, and unsafe touch.
3. To empower students with the knowledge and skills necessary to protect themselves from child sexual abuse



**Agapori :**

The Second and Third year students from our department participated in the Agapori program on 12.09.2024



**Yoga Program :**

**Year : I & II (Lateral Entry)**

**Date : 03.09.2024 to 10.09.2023**

Yoga is a practice that connects the body, breath, and mind. It uses physical postures, breathing exercises, and meditation to improve overall health. Yoga was developed as a spiritual practice thousands of years ago

Our First Year and Second Year(Lateral Entry) students from our department participated in the yoga program and received yoga training



**Swachhta Campaign :**

The Swachh Bharat Mission (SBM) is a nationwide campaign in India to improve sanitation, hygiene, and cleanliness on 02.10.2024



**Bureau of Indian Standards Conference :**

The Bureau of Indian Standards (BIS) is a national standards body that promotes and enforces standards for products and services in India. Our faculty member Mr C.Prakash attended in this conference on 22.10.2024





**Cyber Crime Awareness Program :**

The objective of this program is to educate and raise awareness among women and girls about cybercrimes and crimes against women, and to empower them with the knowledge and skills necessary to protect themselves online and offline.on 29.11.2024



**THANK YOU**