

### Details of Final Year Projects 2023-24

S. No.	Title of the project	In-house / Industrial Project	Members	Guide	Project classification	Factors considered	Mapping with POs and PSOs
1.	Fabrication of customized neck brace by additive manufacturing	In-house	K.Akilasekar A.J.Venkatesh	Dr.P.Udhaya kumar	Product	Safety, Standard	PO1,PO2,PO3,PO4, PO5,PO6,PO7,PO8, PO9, PO10, PSO1, PSO2, PSO3
2.	Alcoholic engine off mechanism	In-house	R.Komalavaradhan R.Harisudhan	Dr.P.Udhaya kumar	Product	Safety, Standard	PO1,PO2,PO3,PO4, PO5,PO6,PO7,PO8, PO9, PO10, PSO1, PSO2, PSO3
3.	CFD Analysis of mixed convection	In-house	A.Manoj Kumar S.Nithesh Kumar A.Pugazholi	Dr.M.R.Thansekhar	Research	Cost, Standard	PO1,PO2,PO3,PO4, PO5,PO6,PO7,PO8, PO9, PO10,PSO1, PSO2, PSO3
4.	Oxygen cylinder Safety unit	Industry	P.Sathya Narayanan V.ArunPandi M.Abhinav krishna	Dr.M.R.Thansekhar	Product	Safety, cost	PO1,PO2,PO3,PO4, PO5,PO6,PO7,PO8, PO9,PO10,PO11,PO12 PSO1, PSO2, PSO3
5.	CFD simulation of fluid flow in LID driven enclosure	In-house	Nivethitha Mary A K.Kishore Kannan K.A.Sivasankar	Dr.M.R.Thansekhar	Research	Cost, Standard	PO1,PO2,PO3,PO4, PO5,PO6,PO7,PO8, PO9, PO10,PSO1, PSO2, PSO3
6.	Interactive AI infused Chatbot for mental illness	In-house	S.Sarantheep sachena N.Santhosh S.Madan@Saravanan	Dr.P.Sabarinath	Research	Safety, Standard	PO1,PO2,PO3,PO4, PO5,PO6,PO7,PO8, PO9, PO10,PSO1, PSO2, PSO3
	Design and development	Industry	P.Kaleeswaran	Dr.P.Sabarinath	Product	Safety, cost	PO1,PO2,PO3,PO4,

7.	of pneumatic gripper for universal testing machine		Z.Mohammed Irfhan V.Sri muthu sankar				PO5,PO6,PO7,PO8, PO9,PO10,PO11,PO12 PSO1, PSO2, PSO3
8.	Pneumatic sheet metal cutting machine	In-house	M.Tharani tharan J.R.Karthikeyan B.K.Vignesh	Dr.D.Satheesh pandian	Product	Safety, Standard	PO1,PO2,PO3,PO4, PO5,PO6,PO7,PO8, PO9, PO10, PSO1, PSO2, PSO3
9	Development of Coating Material Using Flax seeds for Solar panel	In-house	T.Dharmavel K.Suresh Gopi	Dr.A.Hemalatha	Research	Safety, Standard	PO1,PO2,PO3,PO4, PO5,PO6,PO7,PO8, PO9, PO10,PSO1, PSO2, PSO3
10.	Reverse Engineering / Indigenization formulation for compressive piston using phenol formaldehyde (PF) composite	In-house	G.Sudharsan	Dr.A.Hemalatha	Application	Environment, cost, Safety	PO1,PO2,PO3,PO4, PO5, PO6,PO7,PO8, PO9, PO10,PO12 PSO1, PSO2, PSO3
11.	Automatic Solar seed sower machine	In-house	M.Althaf Khan Ghori C.Pandian R.M.Mukesh Selvam	Dr.C.Anbu meenakshi	Product	Safety, Standard	PO1,PO2,PO3,PO4, PO5,PO6,PO7,PO8, PO9, PO10, PSO1, PSO2, PSO3
12.	Evaporative cooling system for the storage of fresh tomato	In-house	A.Chandru M.Mugabalan L.Esakkiraj	Dr.C.Anbu meenakshi	Application	Environment, cost, Safety	PO1,PO2,PO3,PO4, PO5, PO6,PO7,PO8, PO9, PO10,PO12 PSO1, PSO2, PSO3
13.	Investigation of Al alloy composite joint using Friction stir welding	In-house	P.Saraan P.Dineshpandi R.Adithyan	Dr.D.Muthu Krishnan	Research	Standard	PO1, PO2, PO3, PO9, PSO1, PSO3
14.	Study of microstructure and mechanical properties of Friction stir welded	In-house	U.Karikalan S.Harish S.Bharathraj	Dr.D.Muthu Krishnan	Research	Standard	PO1, PO2, PO3, PO9, PSO1, PSO3

	joins of AA6101 – T6 and AA5052 alloy plates						
15.	Design and optimization of aircraft landing gear	In-house	B.Subash Aathavan G.Sakthi Kumar K.Dhinesh kumar	Dr.D.Muthu Krishnan	Product	Safety, Standard	PO1,PO2,PO3,PO4, PO5,PO6,PO7,PO8, PO9, PO10, PSO1, PSO2, PSO3
16.	Design and analysis of scissor unit	In-house	D,Manikandan P.K.Naveen Vishak N.Rooban	Mr.E.V.Ganesh babu	Application	cost	PO1,PO2,PO3,PO4, PO5, PO6,PO7, PO9, PO11,PO12 PSO1, PSO2, PSO3
17.	Design and optimization of heavy weight drone	In-house	M.P.Raghul S.Vijayraj R.Prasanna	Mr.E.V.Ganesh babu	Application	cost	PO1,PO2,PO3,PO4, PO5, PO6,PO7, PO9, PO11,PO12 PSO1, PSO2, PSO3
18.	Design and development of various agro waste enriched fuel blocks for domestic and industrial applications	In-house	K.Maheshsiva M.Omprakash G.Mukeshram	Mr.S.Nallathambi	Application	Cost, Safety and Standards	PO1,PO2,PO3,PO4, PO5, PO6,, PO9, PO10,PO12 PSO1, PSO2, PSO3
19.	Drill Bit Grinding Machine	In-house	R.Kishore P.Srinivasan Madhavan	Mr.S.Nallathambi	Product	Safety, Standard	PO1,PO2,PO3,PO4, PO5,PO6,PO7,PO8, PO9, PO10, PSO1, PSO2, PSO3
20.	Design and Optimization of Front Wheel Steering system with Moveable Head Light	In-house	Kallin C L Chand A.S.K.Hasan Ibrahim	Mr.S.Nallathambi	Product	Safety, Standard	PO1,PO2,PO3,PO4, PO5,PO6,PO7,PO8, PO9, PO10, PSO1, PSO2, PSO3
21.	Experimental investigation on Aluminium alloy AA6101 – T6 and AA7075 using Friction stir welding	In-house	N.Rajaranjith B.Dharsin Kumar K.Vigneshwaran	Mr.M.Mohanraj	Research	Standard	PO1, PO2, PO3, PO9, PSO1, PSO3
22.	Investigation on	In-house	R.Thejoswaran	Mr.M.Mohanraj	Research	Standard	PO1, PO2, PO3, PO9,

	Microstructure, & Tensile strength on Friction Stir Welding of AA6061 & AA6101 plates.		L.S.Ramnath M.S.Balaji				PSO1, PSO3
23.	Numerical simulation on the effect of friction stir welding parameters by using ANSYS software	In-house	M.Naveen Rajaa S.Siva surya M.Viswa siva	Mr.M.Mohanraj	Research	Standard	PO1, PO2, PO3, PO9, PSO1, PSO3
24.	Design optimization of brake caliper pin	In-house	M.Arun Kumar G.B.Manoj Prabhakar R.Sanjay	Mr.T.Samynathan	Application	cost	PO1,PO2,PO3,PO4, PO5, PO6,PO7, PO9, PO11,PO12 PSO1, PSO2, PSO3
25.	Design and optimization of chevron nozzle	Industry	M.S.Balaji S.KeerthiVasan A.Joel Jerry	Mr.T.Samynathan	Research	Standard	PO1, PO2, PO3, PO9, PSO1, PSO3
26.	Formulation of compound to develop PVC / PU floater for using in fish net applications	Industry	S.Gokul Prasath S.Nagoor Sheriff M.Sameer Dawood	Mr.T.L.Vijaya Kumar	Application	cost	PO1,PO2,PO3,PO4, PO5, PO6,PO7, PO9, PO11,PO12 PSO1, PSO2, PSO3
27.	Design and fabrication of efficient cleaning mechanism of photovoltaic (PV) panels	Industry	R.Manikandan M.S.Sivaprakash R.Harikrishna kanth	Mr.T.L.Vijaya Kumar	Application	cost	PO1,PO2,PO3,PO4, PO5, PO6,PO7, PO9, PO11,PO12 PSO1, PSO2, PSO3
28.	Automatic PV solar tracking system	Industry	S.SakthiVel S.Shaileshwaran K.S.Eswar Ram	Mr.T.L.Vijaya Kumar	Application	cost	PO1,PO2,PO3,PO4, PO5, PO6,PO7, PO9, PO11,PO12 PSO1, PSO2, PSO3
29.	Analysis of mechanical properties of LIMONIA ACIDISDIMA shell powder reinforced polyester composites	In-house	M.S.Sanjay Kumar T.P.Sivaprakash P.S.Sanjay	Mrs.B.Devi	Research	Standard	PO1, PO2, PO3, PO9, PSO1, PSO3
30.	Evaluation of mechanical	In-house	J.Divyesh	Mrs.B.Devi	Research	Standard	PO1, PO2, PO3, PO9,

	properties of hybrid neem bark and seed		M.Logith R.Sivakumar				PSO1, PSO3
31.	Design and fabrication of Agricultural wheel Sprayer	In-house	A.Logesh kannan G.Sudharsan B.Senthil kumar	Mrs.B.Devi	Product	Safety, Standard	PO1,PO2,PO3,PO4, PO5,PO6,PO7,PO8, PO9, PO10, PSO1, PSO2, PSO3

### Details of Final Year Projects 2022-23

S. No.	Title of the Project	In-House/ Industrial Project	Members	Guide	Project Classification	Factors Considered	Mapping with POs and PSOs
1.	Fabrication Of Customized Foot Insole By Additive Manufacturing	In-House	Yogesh Pandi S Arun J P Sanjai T	Dr.P.Udhayakumar	Product	Safety, Standard	PO1,PO2,PO3,PO4, PO5, PO6,PO7,PO8, PO9, PO10, PSO1, PSO2, PSO3
2.	Additive Manufacture Of Customized Hearing And Buds	In-House	Rishivanth P Vignesh P Nagoor Deen K	Dr.P.Udhayakumar	Product	Safety, Standard	PO1,PO2,PO3,PO4, PO5, PO6,PO7,PO8, PO9, PO10, PSO1, PSO2, PSO3
3.	Design And Analysis Of Alloy Wheel With Different Materials	In-House	Prakash K Pravin Kumar S J Abdul Kadhar Jain Alavudheen A	Dr.P.Sabarinath	Application	Standards	PO1,PO2,PO3,PO4, PO5, PO6, PO9, PO10, PO12 PSO1, PSO2, PSO3
4.	Structural Analysis Of Gas Turbine Blade	In-House	Nantha Kumar B Bharath G H Kishore Nath K S	Dr.P.Sabarinath	Application	Safety, Standards	PO1,PO2,PO3,PO4, PO5, PO6,PO7,PO8, PO9, PO10,PO11,PO12 PSO1, PSO2, PSO3
5.	Effect Of Header Shape On Flow Distribution Microchannels	In-House	Ari Kesavan M Premgopi K Aravindh A	Dr. C. Anbumeenakshi	Research	Cost, Standards	PO1,PO2,PO3,PO4, PO5, PO6,PO7,PO8, PO9, PO10, PSO1, PSO2, PSO3
6.	Characterization Of Eco Friendly Poly (Vinyl Alcohol) And Samanea Saman Pod	In-House	Kodeeswaran M Laxmi Narayanan S	Mr.T.L.Vijayakumar	Application	Environment ,cost,Safety	PO1,PO2,PO3,PO4, PO5, PO6,PO7,PO8, PO9, PO10, ,PO12 PSO1, PSO2, PSO3

	Shell Filler Reinforcement Biofilms		Tirukodi Sammars A				
7.	Influence Of Flcus Religlosa Bark Filler Mechanical Properties Of Polyester Composites	In-House	Arockia Nelson F Sadhaashivam T	Mr.T.L.Vijayakumar	Application	Environment ,cost,Safety	PO1,PO2,PO3,PO4, PO5, PO6,PO7,PO8, PO9, PO10,PO12 PSO1, PSO2, PSO3
8.	Evaluation Of Mechanical Properties Of Pithecellobium Dulce Shell Filler Based Epoxy Composite	In-House	Dhamodharan G I Nava Prasaath S Susil Sundar K	Mrs.B. Devi	Application	Environment ,cost,Safety	PO1,PO2,PO3,PO4, PO5, PO6,PO7,PO8, PO9, PO10,PO12 PSO1, PSO2, PSO3
9.	Digital Length Meter For Measuring Paper Roll	Industry	Mohamed Rashick A	Dr.P.Udhayakumar	Product	Time,cost	PO1,PO2,PO3,PO4, PO5, PO6,PO7,PO8, PO9, PO10,PO11,PO12 PSO1, PSO2, PSO3
10.	Mixed Convection In Square Enclosure- Combined Effect Of Baffle And Nanofluid.	In-House	Sharulatha K Venkatesh T R Yogeshwaran M	Dr. M. R. Thansekhar	Research	Cost, Standards	PO1,PO2,PO3,PO4, PO5, PO6,PO7,PO8, PO9, PO10,PSO1, PSO2, PSO3
11.	Smart Vehicular Driving System	In-House	Srivarshan R M Sundara Pandiyan J Sheikmohamed S	Dr.D. Satheeshpandian	Application	Environment , cost,safety	PO1,PO2,PO3,PO4, PO5, PO6,PO7,PO8, PO9, PO10,PO11,PO12 PSO1, PSO2, PSO3
12.	Blue Tooth Controlled Robotic Arm	In-House	Ajith Kumar G Bharath Kumar S	Dr. A. Hemalatha	Application	Cost, safety	PO1,PO2,PO3,PO4, PO5, PO6,PO7,PO8,

			Dinesh Kumar S				PO9, PO10, PSO1, PSO2, PSO3
13	Automatic Braking System Using Arduino To Enhance Safety	In-House	Karthick Babu V G Kishore Mayan M Vijay Shiva Sankar A	Dr. C. Anbumeenakshi	Application	Cost, safety	PO1,PO2,PO3,PO4, PO5, PO6,PO7,PO8, PO9, PO10, PSO1, PSO2, PSO3
14.	Automatic E-Vehicle Battery Cooling System	In-House	Premnath K S Pratheik Kumar O Durairaj P	Dr. D.Muthukrishnan	Application	Cost, safety, standards	PO1,PO2,PO3,PO4, PO5, PO6,PO7,PO8, PO9, PO10, PSO1, PSO2, PSO3
15.	Advanced Automatic Braking System For Enhanced Road Safety And Accident Prevention Using Ultra Sonic Sensor	In-House	Sankara Narayanan V K Maharishwar S Ragul G	Mr. E.V. Ganeshbabu	Application	Cost, standards	PO1,PO2,PO3,PO4, PO5, PO6,PO7,PO8, PO9, PO10, PSO1, PSO2, PSO3
16.	Advanced Automatic Voice Control Wheel Chair	In-House	Sivakumar J Naresh Kumar S N Vignesh Kumar G	Mr. E.V. Ganeshbabu	Application	Safety,standards	PO1,PO2,PO3,PO4, PO6,PO7,PO8, PO9, PO10,PSO1, PSO2, PSO3
17.	Fe Analysis Of Plastic Snap Fits	In-House	Thinesh Babu G Ganesh Kumar V Jesho Vesly J	Mr. S. Nallathambi	research	Environment ,standards	PO1,PO2,PO3,PO4, PO5, PO6,PO7,PO8, PO9, PO10, PSO1, PSO2, PSO3
18.	Auto Head Lamp Alignment And Dim/Bright Control For Automobile	In-House	Dinesh P Jaivignesh G Kalimuthu K B	Mr. S. Nallathambi	application	Safety,cost,st andards	PO1,PO2,PO3,PO4, PO5, PO6,PO7,PO8, PO9, PO10, PSO1, PSO2, PSO3



19.	Conjugate Mixed Convection In An Open Square Enclosure – Effect Of Baffle And Al <sub>2</sub> O <sub>3</sub> /Water Nanofluids	In-House	Yogeshwaran S S Umar Ali A Jeyakrishnan K	Dr.N. Nagasubramanian	Research	standards	PO1,PO2,PO3,PO4, PO5, PO6,PO7,PO8, PO9, PO10, PSO1, PSO2, PSO3
20	Heat Transfer In An Open Square Enclosure – Effect Of Partially Heting	In-House	Karthick Ayyappan B Senthil T B Nagakarthikeyan N	Dr.N. Nagasubramanian	Research	standards	PO1,PO2,PO3,PO4, PO5, PO6,PO7,PO8, PO9, PO10, PSO1, PSO2, PSO3
21	Analysis Of Natural Frequency In Cantilever Beam With Edge Crack	In-House	Anitha Rani G Vignesh K Saran Raam S	Mr. M. Mohanraj	Research	standards	PO1,PO2,PO3,PO4, PO5, PO6,PO7,PO8, PO9, PO10, PSO1, PSO2, PSO3
22	Numerical Investigation Of Mixed Convection In A Partially Heated Square Enclosure Using Al <sub>2</sub> O <sub>3</sub> /Water Nanofluid	In-House	Santhosh K Vishnu Ram J R Bharath Yusha V R	Mr.T. Samynathan	Research	standards	PO1,PO2,PO3,PO4, PO5, PO6,PO7,PO8, PO9, PO10, PSO1, PSO2, PSO3
23.	Analysis Of Mechanical Properties Coir Fibre Reinforced Polyster Composites	In-House	Bhuvaneshwaran B Mano C Devanandh B	Mrs. B. Devi	Application	Cost, environment	PO1,PO2,PO3,PO4, PO5, PO6,PO7,PO8, PO9, PO10, PSO1, PSO2, PSO3

### Details of Final Year Projects 2021-22

S. No.	Title of the Project	In-House/ Industrial Project	Members	Guide	Project Classification	Factors Considered	Mapping with POs and PSOs
1.	Numerical investigation of mixed convection heat transfer in a ventilated square enclosure having central blockage filled with Al <sub>2</sub> O <sub>3</sub> Nanofluid	In-House	Arun Kumar K Elango S Pooja T	Dr. N. Nagasubramanian	Research	Standards cost	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PSO1, PSO2, PSO3
2.	Joining of dissimilar aluminium alloys using of different tool materials by friction stir welding	In-House	Udhaya Kumar E S Sabari Rahul M Vijay R	Dr. R. Ashok Kumar	Product	Cost	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PSO1, PSO2, PSO3
3.	Design and Fabrication of power tiller machine	In-House	Dinesh M Jeya Murugan K Mukesh K	Dr. C. Anbumeenakshi	Product	Cost	PO1, PO2, PO3, PO4, PO9, PSO1, PSO2, PSO3
4.	CFD simulation of conjugate mixed convection in a partially heated square enclosure with thick baffle	In-House	Sunderlal T S B Sakthiisudarsan P Prithivi Raj S	Dr. M. R. Thansekhar	Research	Standards cost	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PSO1, PSO2, PSO3

	using $\text{Al}_2\text{O}_3$ nanofluid						
5.	Effect of single and double pass friction stir processing on micro-hardness and wear properties of 6061 / SiC surface composites	<b>In-House</b>	Mohamed Bazeer B Arkesh Nandak O S Mukeshkumar Bokil R	Dr. D. Muthukrishnan	Product	Cost	PO1, PO2, PO3, PO9, PO10, PO11, PO12, PSO1, PSO3
6.	Friction stir welding of dissimilar aluminium alloy with straight groove pin profile	<b>In-House</b>	Aathi Moorthy R K Kawashkar K Kumaravel N	Mr. T. Samynathan	Product	Cost	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PO12, PSO1, PSO2, PSO3
7.	Design development of enriched agro-waste based fuel blocks for various industrial application	<b>In-House</b>	Suresh Balaji E M Selva Guru R Yugenth M	Dr. P. Sabarinath	Product	Cost	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PO12, PSO1, PSO2, PSO3
8.	Friction stir welding of dissimilar aluminium alloys using different pin profiles	<b>In-House</b>	Aswin Ram P H Ajay Kumar D R B Deena Dhayalan K	Dr. R. Ashok Kumar	Product	Cost	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PO12, PSO1, PSO2, PSO3

9.	CFD analysis of hot and cold steam flow in an elbow	In-House	Gokul Raj R Guhan M Madhavan T B	Mr. M. Mohanraj	Research	Standards cost	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PO12, PSO1, PSO2, PSO3
10.	Design development of enriched agro-waste based fuel blocks for various industrial application	In-House	Dinesh Kumar G Dhivakar S Aakash K	Mr. S. Nallathambi	Product	Cost	PO1, PO2, PO3, PO4, PO9, PO10, PO11, PO12, PSO1, PSO2, PSO3
11.	Sensor embedded braking system	In-House	Pradeep K Prasanna J Sanjay B	Mr. E. V. Ganesh babu	Product	Cost	PO1, PO2, PO3, PO4, PO9, PO10, PO11, PO12, PSO1, PSO2, PSO3
12.	Experimental investigation of pentagonal structured solar drier	In-House	Anishkumar S Aravind R Karthick K	Dr. C. Anbumeenakshi	Product	Cost	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PO12, PSO1, PSO2, PSO3
13.	Natural fiber reinforced polymer composites	In-House	Rahul S Siddharth S Subash K	Dr. A. N. Balaji	Product	Cost	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PO12, PSO1, PSO2, PSO3
14.	Regenerative Braking System	In-House	Ashok Kumar M	Dr. P. Sabarinath	Product	Cost	PO1, PO2, PO3, PO6, PO9, PO10,

			Thirumalai Rajan C Sujith Kumar P				PO11, PO12, PSO1, PSO2, PSO3
15.	Wood chipping machine	In-House	Hussain Sheriff S Naga Arjun V Ajay M	Mr. T. Samynathan	Product	Cost	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PO12, PSO1, PSO2, PSO3
16.	Design and development of hollow cone swirling nozzle for commercial burner	In-House	Srivarshan L Mohan G Santhosh Kumar J	Mr. S. Nallathamabi	Product	Cost	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PO12, PSO1, PSO2, PSO3
17.	Fabrication and testing of tamirand and rice husk powder filled hybrid polyester reinforced composites	In-House	Abinesh Kumar M Mathankumar S Elantamil Rengaraj E	Mr. T. L. Vijayakumar	Product	Cost	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PO12, PSO1, PSO2, PSO3
18.	Analysis of mechanical properties of albezia lebeck seed filled luffa cylindrical fiber reinforced polyester composites	In-House	Siva Prakash S Priyadharshan M Vijay M	Mrs. B. Devi	Research	Standards cost	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PO12, PSO1, PSO2, PSO3

19.	Natural fiber reinforced polymer composite material	In-House	Sathish M Visva Ganesh S Prasanna Sabari M A	Dr. A. N. Balaji	Product	Cost	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PO12, PSO1, PSO2, PSO3
20.	Numerical study of conjugate mixed convection in a square enclosure with thick baffle using $Al_2O_3$ nanofluid	In-House	Aravindha Kumar Nr Jay S Vimal M	Dr. N. Nagasubramanian	Research	Standards cost	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PSO1, PSO2, PSO3
21.	Prototyping and analysis of HIP implant by rapid prototyping	In-House	Arjunkumar S Vignesh K S Sakthivel M	Dr. P. Udhayakumar	Product	Cost	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PO12, PSO1, PSO2, PSO3
22.	Fabrication of friction stir processing	In-House	Krishna Kumar B Thonnisethupathi A Madhan Kumar R	Mr. M. Mohanraj	Product	Cost	PO1, PO2, PO3, PO9, PO10, PO12, PSO1, PSO3
23.	Multi-axis Rotating Tilting tipper	In-House	Saravanapandi D Ramprabhu G Pandiya Rajan M	Mr. T. Samynathan	Product	Cost	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PO12, PSO1, PSO2, PSO3

### Details of Final Year Projects 2020-21

S.No	Project title	In-House/ Industrial Project	Members	Guide	Project Classification	Factors Considered	Mapping with POs and PSOs
1	DESIGN AND FABRICATION OF DOUBLE SIDE ROLLER IN HYDRAULIC BENDING MACHINE	Industry	B. AKASH P. VEERAMUTHUVEL J.S. VISHNUKUMAR M.R. SENTHIL KUMAR	Dr.P.SABARINATH	Application	Standards Cost	PO1, PO2,PO3, PO7, PO9, PSO1, PSO3
2	DESIGN AND FABRICATION OF MACHINED FIXTURE	Industry	M. DINESH KUMAR C.R. JAYANTH RAMNAN P. BALAMANIKANDAN M. LISPON RAJ	Dr.P.SABARINATH	Application	Cost	PO1,PO2,PO3,PO4 , PO5,PO6,PO9,PO10, PO11,PO12,PSO1, PSO2,PSO3
3	MULTI MACHINING OPERATIONS USING SCOTCH YOKE MECHANISM	In-House	L. SAKTHIVEL A. YOGEESHWARAN N. VIJAYPANDI	Dr.D.SATHEESH PANDIAN	Product	Cost	PO1,PO2,PO3,PO4 , PO5,PO6,PO9,PO10, PO11,PO12,PSO1, PSO2,PSO3
4	EXPERIMENTAL INVESTIGATION OF ABS BASED CELLULOSE COMPOSITE	In-House	S. AKASH L.D. VISHNUKUMAR M. JEYACHANDRAN	Dr.R.PANDIYARAJAN	Research	Standards Cost	PO1,PO2,PO3,PO4 , PO5,PO6,PO9,PO10, PO11,PO12,PSO1, PSO2,PSO3
5	INVESTIGATION ON MECHANICAL AND TRIBOLOGICAL PROPERTIES OF	In-House	V.KARTHIKEYAN R. KANNAN V.SURYA PRAKASH KUMARESAN R	Dr.D.MUTHUKRISHNAN	Research	Standards	PO1, PO2, PO3, PO9, PSO1, PSO3

	ALUMINIUM MATRIX COMPOSITE REINFORCED WITH FE, SIC AND BN FABRICATED BY STIR CASTING TECHNIQUE						
6	LPG REFRIGERATER WITH BURNER FUEL SYSTEM	In-House	M.SHIVAHARISH T.V. RISHINATH S. KASINATHAN	Mr.S.NALLATHAMBI	Application	Cost, Safety and Standards	PO1,PO2,PO3,PO4 , PO5, PO6,, PO9, PO10,PO12 PSO1, PSO2, PSO3
7	ANALYSIS IN SPARE PARTS MANAGEMENT	Industry	MUTHURAJ R NAGARJUNA EL	Dr.D.MUTHUKRISHNAN	Research	Standards	PO1,PO2,PO3,PO4 , PO5,PO9, PSO1, PSO3
8	OPTIMIZATION AND FAILURE ANALYSIS OF WEAVING MACHINE GEAR BOX	In-House	B.P. SANJAY M.VINOTHKUMAR	Mrs.B.DEVI	Research	Standards	PO1,PO2,PO3,PO4 , PO5,PO9, PSO1, PSO3
9	MANUAL ROTARY WELDING CONVERTED INTO AUTOMATIC ROTARY WELDING WITH ROBOTIC ARM	Industry	S. NASEEM MOHAMED S.P. ARJUN KUMAR M.R. PRASANNA	Mr.M.MOHANRAJ	Application	Safety and cost	PO1,PO2,PO3,PO4 , PO5, PO6,PO7, PO9, PO10,PO11,PO12 PSO1, PSO2, PSO3
10	MULTI PURPOSE MACHINE USING BEVEL GEAR	Industry	M.DIWAS M.PRITHIVI RAM M.AJAY	Dr.A.HEMALATHA	Application	Cost	PO1,PO2,PO3,PO4 , PO5, PO6,PO7, PO9, PO11,PO12 PSO1, PSO2, PSO3



11	DESIGN AND FABRICATION OF DOUBLE BEADING DIE IN HYDRAULIC END FORMING MACHINE	Industry	AKASH G	Dr.A.N.BALAJI	Application	Cost	PO1,PO2,PO3,PO4 PO5, PO6,PO7, PO9, PO11,PO12 PSO1, PSO2, PSO3
			RAGUL K				
			MUTHU HARIHARAN K				
			SHAIKH MOHAMMAD GHOUSE N				
12	NUMERICAL INVESTIGATION OF CONJUGATE HEAT TRANSFER IN A PARTIALLY HEATED SQUARE ENCLOSURE USING HYBRID NANOFLUIDS	In-House	M. AJITH	Mr.N.NAGASUBRAMANIAN	Research	Standards	PO1, PO2, PO3, PO9. PSO1, PSO3
13	PITCH CONTROL ROD THREAD CUTTER	Industry	RAMKUMAR M	Dr.A.HEMALATHA	Application	Standards	PO1,PO2,PO3,PO4 PO5, PO6,, PO9, PO10,PO12 PSO1, PSO2, PSO3
			MUTHUIRULAN G				
			NARAYANA MOORTHY B				
			T. MUTHU GANESH				
14	EXPERIMENTAL INVESTIGATION OF MECHANICAL CHARACTERISTICS OF E-CLASS FIBRE REINFORCED EPOXY COMPOSITE	In-House	RAJAPANDI K	Mr.E.V.GANESH BABU	Research	Standards	PO1, PO2, PO9. PSO1, PSO3
			RAJKUMAR D				
			MOHAMED AZARAP ALI M				
			MADURAI DURAI				
15	FABRICATION OF TURBOCHARGER FOR TWO WHEELER	In-House	SIVA PRAKASH R	Dr.D.SATHEESH PANDIAN	Product	Cost	PO1,PO2,PO3,PO4 PO5, PO6,PO7, PO9, PO11,PO12 PSO1, PSO2, PSO3
			VIGNESH RAMANA SUNDAR M				
			SELVA KUMAR CV				
16	DESIGN OF	Industry	G.S.GURU PRASAD	Dr.A.N.BALAJI	Application	Standards	PO1, PO2,PO3,

	PUNCHING DIE IN PNEUMATIC PRESSING MACHINE		K.HARI PRASATH			Cost	PO7, PO9, PSO1, PSO3
17	PERFORMANCE CHARACTERISTICS OF A BIODIESEL ( COTTON SEED ) FUELLED DIRECT INJECTION DIESEL ENGINE	In-House	J.JERALD AMALRAJ S.DURGESHWARAN S.JAGATHEESWARAN	Mr.T.L.VIJAYAKUMAR	Research	Standards	PO1,PO2,PO3,PO4 PO5,PO9, PSO1, PSO3
18	SOLID STATE JOINING ANALYSIS IN FINITE ELEMENT METHOD	In-House	LOGESHWARAN.A RAMKUMAR.J MANIKANDAN.P	Mr.M.MOHANRAJ	Research	Standards	PO1,PO2,PO3,PO4 PO5,PO9, PSO1, PSO3
19	COMBINED EFFECT OF REFRIGERATION WITH NANOPARTICLES AL2O3	In-House	RATHISH PANDIYAN R RAJ KUMAR K.S ARUN KUMAR J	Dr.K.J.NAGARAJAN	Research	Standards	PO1,PO2,PO3,PO5, PO9,PSO1, PSO3
20	MODE I FRACTURE TOUGHNESS PROPERTIES ANALYSIS OF RUBBER PARTICULATE REINFORCED POLYMER COMPOSITE	In-House	AZHAGU MANIKANDAN M PRABAKARAN S KUMARAVEL S	Dr.R.PANDIYARAJAN	Research	Standards	PO1, PO2, PO9. PSO1, PSO3
21	NUMERICAL INVESTIGATION OF CONJUGATE HEAT TRANSFER IN AN OPEN SQUARE ENCLOSURE	In-House	PRAVEEN S S SANTHOSH KUMAR N SHETANAN P	Dr.M.R.THANSEKHAR	Research	Standards	PO1, PO2, PO3, PO4, PO9. PSO1, PSO3

	USING AL2O3 NANOFLUID						
22	360 DEGREE FOUR WHEEL STEERING MECHANISM	In-House	A.GOKUL R.BALAMURUGAN P.NAGAARJUN	Dr.D.MUTHUKRISHNAN	Application	Cost and Standards	PO1,PO2,PO3,PO4 PO5, PO6,, PO9, PO10,PO12 PSO1, PSO2, PSO3
23	MECHANICAL PROPERTIES ANALYSIS OF ALUMINIUM 6065 FILLER REINFORCED POLYMER COMPOSITE	In-House	NAVEENKANNAN J.G JOTHILINGAM J NIRMALRAJ N	Dr.K.J.NAGARAJAN	Research	Standards	PO1,PO2,PO3,PO4 PO5,PO6,PO9,PO10, PO11,PO12,PSO1, PSO2,PSO3
24	DESIGN AND FABRICATION OF FLOOR CLEANING MACHINE	In-House	AJAYKUMAR A ANBARASAN S BALANAGESHWARAN M	Dr.P.UDHAYAKUMAR	Product	Cost	PO1,PO2,PO3,PO4 PO5, PO6,PO7, PO9, PO11,PO12 PSO1, PSO2, PSO3
25	FRICTION STIR WELDING MACHINE FOR ALUMINIUM ALLOY	In-House	MOORTHY P MANIKANDAN A DHINESH MURUGAN S	Dr.R.ASHOK KUMAR	Product	Standards Cost	PO1,PO2,PO3,PO4 PO5, PO6,PO7, PO9, PO11,PO12 PSO1, PSO2, PSO3
26	MECHANICAL PROPERTIES OF TREATED TAMARINDUS INDICA SEED AND TECTONA GRANDIS REINFORCEMENT EPOXY COMPOSITE	In-House	VIJAYAKUMAR K VISAK KUMAR B SOLAI BALA G	Dr.R.PANDIYARAJAN	Research	Standards	PO1,PO2,PO3,PO4 PO5,PO6,PO9,PO10, PO11,PO12,PSO1, PSO2,PSO3

	MATERIAL						
27	IMPLEMENTATION OF VORTEX BLADE LESS WIND MILL POWER GENERATION SYSTEM	In-House	HARISH KUMAR S SANTHOSH SIVAN S SESHABALAN E	Dr.R.ASHOK KUMAR	Application	Cost and Standards	PO1,PO2,PO3,PO4 PO5, PO6,, PO9, PO10,PO12 PSO1, PSO2, PSO3
28	HYDRAULIC PRESSURE COMPARATOR	Industry	ERIC MOSES R SOBANA K	Mr.T.L.VIJAYAKUMAR	Application	Cost and Standards	PO1,PO2,PO3,PO4 PO5, PO6,, PO9, PO10,PO12 PSO1, PSO2, PSO3
29	JOY STICK CONTROL CAR MECHANISM FOR PHYSICALLY CHALLENGED PEOPLE	In-House	KARUPPASAMY S NAVEEN KUMAR K J STEPHEN RAJ. Y	Mr.T.L.VIJAYAKUMAR	Application	Cost, Safety and Standards	PO1,PO2,PO3,PO4 PO5, PO6,, PO9, PO10,PO12 PSO1, PSO2, PSO3
30	EXPERIMENTAL INVESTIGATION OF PNEUMATIC SLOTTING MACHINE	In-House	ASHWATH NARAYANAN K R HARI HARAN P V SANTHOS KUMAR K S	Mrs.B.DEVI	Research and Application	Cost and Standards	PO1,PO2,PO3,PO4 PO5, PO6,, PO9, PO10,PO12 PSO1, PSO2, PSO3
31	FRACTURE TOUGHNESS ANALYSIS OF PALMYRA PALM WITH PROSOPIS JULIFLORA REINFORCED EPOXY COMPOSITES	In-House	SURESH KUMAR K M THANESH KUMAR M VIGNESH VETRIVEL U	Dr.D.MUTHUKRISHNAN	Research	Standards	PO1,PO2,PO3,PO4 PO5,PO6,PO9,PO10, PO11,PO12,PSO1, PSO2,PSO3
32	PACKAGING IMPROVEMENT THROUGH RE-STANDARDIZATION AND REDUCING QUALITY ISSUES	Industry	JEYA VIGNESH A KARHUNA AHARAN K K KARTHIKEYAN A	Mr.T.L.VIJAYAKUMAR	Application	Standards Cost	PO1, PO2,PO3, PO7, PO9, PSO1, PSO3

	OF OEM & TIER 1 CUSTOMER OF HTA						
33	GREEN DESALINATION	In-House	BANSHIDHAR MAHISH M M DHANUSHRAAM N S MARUTHASANKAR M	Dr.C.ANBUMEENAKSHI	Research and Application	Standards	PO1,PO2,PO3,PO4 PO5, PO6,, PO9, PO10,PO12 PSO1, PSO2, PSO3
34	DESIGN AND ANALYSIS OF VARIOUS SHAPES OF CYLINDER FINS WITH DIFFERENT MATERIALS	In-House	SANTHOSH S SENTHIL KUMAR K SHIVANESHAN R	Dr.D.SATHEESH PANDIAN	Research	Standards	PO1,PO2,PO3,PO4 PO5,PO9, PSO1, PSO3
35	DESIGN AND THERMAL ANALYSIS OF PISTON	In-House	SELVAGANAPATHY E VIJAYA RAGUNATHA BOOPATHI M VIGNESHWARAN K	Mr.T.L.VIJAYAKUMAR	Research	Standards	PO1,PO2,PO3,PO4 PO5,PO9, PSO1, PSO3
36	NUMERICAL INVESTIGATION OF NATURAL CONVECTION IN A PARTIALLY HEATED OPEN SQUARE ENCLOSURE USINGHYBRID NANOFLUIDS	In-House	GANESH PRABHU S GOKULAKRISHNAN P B JAYAVARDAN D	Dr.M.R.THANSEKHAR	Research	Standards	PO1, PO2, PO3, PO4, PO9. PSO1, PSO3
37	EVALUATING THE MECHANICAL PROPERTY OF BANANA FIBRE, LOOFA FIBRE AND	In-House	SIVA BUVANESHWARAN A SIDDHARTH S	Dr.R.ASHOK KUMAR	Research	Standards	PO1, PO2, PO9. PSO1, PSO3

	HYBRID SISEL FIBRE		PRATHIVANAN S				
38	IOT BASED WOVEN BAG CUTTING MACHINE	In-House	MANIKANDAN M PANDI M ARUN CHANDRAN S	Dr.S.PORSELVI	Application	Standards Cost	PO1, PO2, PO3, PO4, PO8, PO9, PSO1, PSO3
39	ANALYSIS OF MECHANICAL PROPERTIES OF TERMINALIA CHEBULA POWDER AND ITS POLYMER COMPOSITES	In-House	SYED MOHAMED ABUTHAL M VIJAYAKRISHNAN J VELLAYAPPA RAJA S VINITHKUMAR C	Mrs.B.DEVI	Research	Standards	PO1, PO2, PO9. PSO1, PSO3
40	PNEUMATIC PRESSURE COMPARATOR	In-House	ARJUNAN K KISHORE KANNAN R PRASANNA KUMAR N	Dr.C.ANBUMEENAKSHI	Application	Cost and Standards	PO1,PO2,PO3,PO4 , PO5, PO6,, PO9, PO10,PO12 PSO1, PSO2, PSO3
41	DESIGN AND THERMAL ANALYSIS OF HONEY COMB STRUCTURE	In-House	KISHORE R NISHANTH PRIYAN S SURYA PRAKASH L	Dr.C.ANBU MEENAKSHI	Research	Standards	PO1, PO2, PO3, PO9. PSO1, PSO3
42	EXPERIMENTAL INVESTIGATION AND PEOCESS PARAMETER OPTIMIZATION IN CNC TURNING ON EN24 STEELBY USING TAGUCHI TECHNIQUE	In-House	BAGAVATHI G BALAJI MURUGAN N KARTHIK NAGAN J	Mr.S.NALLATHAMBI	Research	Standards Cost	PO1,PO2,PO3,PO4 , PO5,PO6,PO9,PO10, PO11,PO12,PSO1, PSO2,PSO3

### Details of Final Year Projects 2019-20

S. No.	Title of the Project	In-House/ Industrial Project	Members	Guide	Project Classification	Factors considered	Mapping with POs and PSOs
1.	Effect of Cellulose Nano Fiber Waste Paper Cup on Mechanical Behaviour of Polyester Composite	In-House Project	Premkumar M Madhavan M VetriVel P	Dr.K.J.Nagarajan Assistant Professor Mechanical Engg.	Research	Standards	PO1, PO2, PO9. PSO1, PSO3
2.	Development of Automatic Solar Panel Mechanism	In-House Project	Sasti C B Vignesh N J B Veemanath A A	Dr.D.Satheesh Pandian Associate Professor Mechanical Engg.	Product	Standards Cost	PO1,PO2, PO3, PO4,PO7,PO9, PSO1, PSO3
3.	Elimination of Knurling Bur Defect In M 12 Hub Bolt Using Lean Concept	Industry project	Arunkumar C Kishore B Mohammed Adnan H	Mr.T.L.Vijayakumar Assistant Professor Mechanical Engg.	Application	Standards Cost	PO1,PO2,P03, PO4, PO7, PO9, PSO1, PSO3
4	Performance enhancement of solar PV panels by applying super hydrophobic coatings	In-House Project	Thilak R B Sukirthan P Priyadharsan M N	Dr.M.R.Thansekar Professor Mechanical Engg.	Research	Standards	PO1, PO2, PO3, PO4, PO9. PSO1, PSO3
5	Numerical investigation of novel designed cooling plate for fuel cells	In-House Project	A.Abinesh P.Balumurugan M.Duraivenkatraj	Dr.C.AnbuMeenakshi Associate Professor Mechanical Engg.	Research	Standards	PO1, PO2, PO3, PO9, PSO1, PSO3
6	Study of tool shoulder diameter on mechanical behavior of friction stir welded dissimilar AA6101-T6 and AA1350	In-House Project	K.G.Prasannakumar S.RaghavanYoughesh K.Vasuraman	Dr.R.Ashokkumar Assistant Professor,SG Mechanical Engg.	Manufacturing and research	Environment and Standards	PO1,PO2,PO3, PO5, PO6,PO7, PO9. PSO1, PSO2, PSO3

	aluminium plates						
7	Experimental and numerical analysis of friction stir welded AA2024 and AA7075 alloy	In-House Project	S Ajith GK Amareshnath	Dr.R.Pandiyarajan Assistant Professor, Mechanical Engg.	Manufacturing and research	Environment and Standards	PO1,PO2,PO3, PO5, PO6,PO7, PO9. PSO1, PSO2, PSO3
8	Automatic guider for cord winding in a two drum machine	Industry project	M Santhosh G Vellimalai C R Eswarlal	Mr.E.V.GaneshBabu Assistant Professor, Mechanical Engg.	Application	Standards Cost	PO1,PO2,P03, PO4, PO7, PO9, PSO1, PSO3
9	Analysis of mechanical and wear behaviour of SiC and ZrO <sub>2</sub> particulate reinforced with aluminium alloy metal matrix composite	In-House Project	Siranjeevi J Siva Surya Gk Sundara Subramanian N	Mr.E.V.GaneshBabu Assistant Professor, Mechanical Engg.	Manufacturing and research	Environment and Standards	PO1,PO2, PO3, PO5, PO6,PO7, PO9. PSO1, PSO2, PSO3
10	Preparation and characterization of alkali treated cocos nucifera var aurantica penducle fibres reinforced polyester resin composite	In-House Project	Balaji V Arun Sesathri T V S Muthuvadivelan M	Dr.K.J.Nagarajan Assistant Professor Mechanical Engg.	Research	Standards	PO1, PO2, PO9. PSO1, PSO3
11	Minimization of flow time of material movement by changing the flow path	Industry project	Hari Prasath K Karthikeyan R Karthikeyan S	Dr.P.Sabarinath Associate Professor Mechanical Engg.	Application	Standards Cost	PO1,PO2,P03, PO4, PO7, PO9, PSO1, PSO3



12	Design And Fabrication Of High Speed Four Way Hacksaw Machine	In-House Project	Abishek Infant David P Ajith Kumar P Mithun kumar R	Dr.P.Sabarinath Associate Professor Mechanical Engg.	Product	Standards Cost	PO1,PO2, PO3, PO4,PO7,PO9, PSO1, PSO3
13	Mechanical and wear analysis of Fe-Co-Cr-W-GNA nano composites synthesis using powder metallurgy	In-House Project	Deepak Raj.B Muthusamy V Rakesh Kumar J	Dr. G.R. Raghav Assistant Professor Mechanical Engg.	Manufacturing and research	Environment and Standards	PO1,PO2, PO3, PO5, PO6,PO7, PO9. PSO1, PSO2, PSO3
14	Corrosion and thermal analysis of Fe-Co- Cr-W-GNA nano composites synthesis using powder metallurgy	In-House Project	Manimaran.P Manish Pandian S Manoj B S R	Dr. G.R. Raghav Assistant Professor Mechanical Engg.	Manufacturing and research	Environment and Standards	PO1,PO2, PO3, PO5, PO6,PO7, PO9. PSO1, PSO2, PSO3
15	Machine Condition Monitoring In Milling Machine	In-House Project	Aswin K Krishna Kumar K Mahendran K	Dr.D.Satheesh Pandian Associate Professor Mechanical Engg.	Product	Standards Cost	PO1,PO2, PO3, PO4,PO7,PO9, PSO1, PSO3
16	Increasing The Production Rate Of Cement By Optimizing The Purging Time In Cement Mill Baghouse	Industry project	Selva Balaji Pandiyan R Suren Raaj B Gowri Sankar R	Dr.V.Sivaram Kumar Associate Professor Mechanical Engg.	Application	Standards Cost	PO1,PO2,P03, PO4, PO7, PO9, PSO1, PSO3
17	Improving The Effectiveness Of Engine Cooling System By Using Rain Water As Additional Coolant	Industry project	Prashanth N Praveen Kumar S Vasanth M	Dr.V.Sivaram Kumar Associate Professor Mechanical Engg.	Application	Standards Cost	PO1,PO2,P03, PO4, PO7, PO9, PSO1, PSO3

18	Productivity improvement in a steel product manufacturing industry by lean technique and automatic cooling bed system	Industry project	Rajesh Kannan R Saravana Pandi R Vijayakumar m	Mrs.B.Devi Assistant Professor Mechanical Engg.	Application	Standards Cost	PO1,PO2,P03, PO4, PO7, PO9, PSO1, PSO3
19	Analysis of mechanical properties of CNT filled jute fiber reinforced polyester composites	In-House Project	Prasannaraja K Rajapandi P Revanth Kumar S	Mrs.B.Devi Assistant Professor Mechanical Engg.	Manufacturing and research	Environment and Standards	PO1,PO2, PO3, PO5, PO6,PO7, PO9. PSO1, PSO2, PSO3
20	Cycle time and labour cost reduction in material cutting module by using guide ways in a small scale batch production industry	Industry project	Harishwar S J Hemanth Babu R S Kirannath P	Mr.T.L.Vijayakumar Assistant Professor Mechanical Engg.	Application	Standards Cost	PO1,PO2,P03, PO4, PO7, PO9, PSO1, PSO3
21	Wear and Mechanical properties of 6061-T6 Aluminium alloy, surface hybrid composites (TiC + Graphene) by FSP	In-House Project	Amarnath K S Elaiya Prabu A Sekar K	Dr. D. Muthukrishnan Assistant Professor Mechanical Engg.	Manufacturing and research	Environment and Standards	PO1,PO2, PO3, PO5, PO6,PO7, PO9. PSO1, PSO2, PSO3
22	Design to improve the accuracy of the (clean-out-of-place) COP sorter machine by seperating bobbin based on thread in it.	Industry project	Arunkumar M Saikrishna R Pradeep Kumar I	Mr.T.Samynathan Assistant Professor Mechanical Engg.	Application	Standards Cost	PO1,PO2,P03, PO4, PO7, PO9, PSO1, PSO3

23	Simulation of suspension system in automobile	In-House Project	Akhash Kumar P K Ramvignesh M G Suraj Kumar N M	Mr.T.Samynathan Assistant Professor Mechanical Engg.	Product	Standards Cost	PO1,PO2, PO3, PO4,PO7,PO9, PSO1, PSO3
24	Synergetic effect of conjugate heat transfer & water based nanofluid in multiple baffles attached partially heated square enclosure.	In-House Project	Judelyn Rajasri N Eashwara Dhinesh K Gokulnath P S Aanand Karthick G G R	Mr.N.Nagasubramanian Assistant Professor Mechanical Engg.	Research	Standards	PO1, PO2, PO3, PO9, PSO1, PSO3
25	On the effectiveness of conjugate heat transfer enhancement by hybrid nanofluids in the presence of baffle inside the square enclosure.	In-House Project	Saravanakumar T Ramkumar M Mathankumar m Balanagaraj S	Mr.N.Nagasubramanian Assistant Professor Mechanical Engg.	Research	Standards	PO1, PO2, PO3, PO9, PSO1, PSO3
26	Design and analysis of cylinder linear failure of BG locomotive	Industry project	Eswaran R	Dr.P.Udhayakumar Prof. & Head Mechanical Engg.	Application	Standards Cost	PO1,PO2,P03, PO4, PO7, PO9, PSO1, PSO3
27	Microstructural, Mechanical & Tribological behavior of powder metallurgy processed BN, SiC & RHA reinforced Al-based composites	In-House Project	Gokul K Bharadhidasan P Mohammed Thameem Ansari A	Mr.M.Mohanraj Assistant Professor Mechanical Engg.	Manufacturing and research	Environment and Standards	PO1,PO2, PO3, PO5, PO6,PO7, PO9. PSO1, PSO2, PSO3
28	Simulation of blow molding using ANSYS polyflow	In-House Project	Nirmal Kumar P R Pon Sankara Naveen R K	Mr.M.Mohanraj Assistant Professor Mechanical Engg.	Research	Standards	PO1, PO2, PO3, PO9, PSO1, PSO3

29	Characterization of baheda seed powder and it's polymer composites	In-House Project	Selvakumar S Udhayasabari R Vengadesh Prasath P	Dr.A.N.Balaji Professor Mechanical Engg.	Manufacturing and research	Environment and Standards	PO1,PO2, PO3, PO5, PO6,PO7, PO9. PSO1, PSO2, PSO3
30	Preparation of Aluminum metal matrix composites using powder metallurgy technique and analysis of wear properties	In-House Project	Sarathi A Vijay P Siva R	Dr.A.Hemalatha Professor Mechanical Engg.	Manufacturing and research	Environment and Standards	PO1,PO2, PO3, PO5, PO6,PO7, PO9. PSO1, PSO2, PSO3
31	Pollution control by recycling and reuse of used coolant in industries	Industry project	Yashwanth R	Dr.A.N.Balaji Professor Mechanical Engg.	Application	Standards Cost	PO1,PO2,PO3, PO4, PO7, PO9, PSO1, PSO3
32	Optimization techniques in turning operation by using Taguchi method	In-House Project	S.Aadhil Ismail K.Angunathan M.Hariharan	Dr.P.Sabarinath Associate Professor Mechanical Engg.	Research	Standards	PO1, PO2, PO3, PO9, PSO1, PSO3
33	Mechanical and micro structural properties of friction stir welding in dissimilar materials	In-House Project	R.Jayasurya M.Marimuthu L.Muthupandi	Dr.R.Pandiyarajan Assistant Professor, Mechanical Engg.	Manufacturing and research	Environment and Standards	PO1,PO2,PO3, PO5, PO6,PO7, PO9. PSO1, PSO2, PSO3
34	Experimental investigation of flow maldistribution in microchannel by using different inlet location	In-House Project	R.WasimAkram K.Guruvendran S.Muthukumar	Dr.C.AnbuMeenakshi Associate Professor Mechanical Engg.	Research	Standards	PO1, PO2, PO3, PO9, PSO1, PSO3

35	Effect of location of plates on friction stir welding of dissimilar AA6101-T6 and AA 1350 aluminium alloys	In-House Project	S.D.Jeyakisan P.J.Roopa Deepak T.S.R. Sathishkhanna	Dr.R.Ashokkumar Assistant Professor,SG Mechanical Engg.	Manufacturing and research	Environment and Standards	PO1,PO2,PO3, PO5, PO6,PO7, PO9. PSO1, PSO2, PSO3
36	Corrosion and wear analysis of aluminium alloy by stir casting	In-House Project	M.K.SharanBalaji M.Ulaganathan	Dr. D. Muthukrishnan Assistant Professor Mechanical Engg.	Manufacturing and research	Environment and Standards	PO1,PO2, PO3, PO5, PO6,PO7, PO9. PSO1, PSO2, PSO3
37	Creation of contamination control requiring newly constructed engine assembly	Industry project	M.Prasath	Dr. D. Muthukrishnan Assistant Professor Mechanical Engg.	Application	Standards Cost	PO1,PO2,P03, PO4, PO7, PO9, PSO1, PSO3
38	Design And Analysis Of Pressure Vessel For Electrolysis Process	Industry project	S.Suresh	Dr. D. Muthukrishnan Assistant Professor Mechanical Engg.	Application	Standards Cost	PO1,PO2,P03, PO4, PO7, PO9, PSO1, PSO3
39	A Multi purpose Machine for Drilling, Cutting and Shaping Operations	In-House Project	S.Kishorekumar R.Prasanna P.Sudhakaran	Mr.S.Nallathambi Assistant Professor Mechanical Engg.	Manufacturing and research	Environment and Standards	PO1,PO2, PO3, PO5, PO6,PO7, PO9. PSO1, PSO2, PSO3
40	Prediction of mechanical properties of Kusha fiber filled with carbon nano tube polyester reinforced composites	In-House Project	Muthukumar.M K.Rajasekar S Vasanth Kumar	Mr.S.Nallathambi Assistant Professor Mechanical Engg.	Manufacturing and research	Environment and Standards	PO1,PO2, PO3, PO5, PO6,PO7, PO9. PSO1, PSO2, PSO3

41	Composite of rice husk ash for partial replacement of cement	In-House Project	B.Muthupandi G.Rajesh P.Vairamuthu	Dr.S.Porselvi Assistant Professor Mechanical Engg.	Manufacturing and research	Environment and Standards	PO1,PO2, PO3, PO5, PO6,PO7, PO9. PSO1, PSO2, PSO3
42	Enhancing strength of Concrete using Beet root powder as a mortar for Cement	In-House Project	J.Justin Azaria Kirubaraj S.Sivakumar V.Veeramani raja	Dr.S.Porselvi Assistant Professor Mechanical Engg.	Manufacturing and research	Environment and Standards	PO1,PO2, PO3, PO5, PO6,PO7, PO9. PSO1, PSO2, PSO3
43	Preparation of aluminium metal matrix composite using powder metallurgy technique and analysis of Mechanical properties	In-House Project	A.Karthikeyan B.Muthumani K.K. Perumalprasad	Dr.A.Hemalatha Professor Mechanical Engg.	Manufacturing and research	Environment and Standards	PO1,PO2, PO3, PO5, PO6,PO7, PO9. PSO1, PSO2, PSO3

### Details of Final Year Projects 2018-19

S.No	Project Title	In-house / Industrial Project	Members	Name Of the Guide	Project Classification Product/ Application/ Research	Mapping with POs / PSOs
1	Device for. Measuring an Angle of Multiple Bend in Tube	Industry	O.S. DINESH M.HARISHANKAR A.ALAGAR RAM S.MATCHA KUMAR	Mr.T.L.VIJAY KUMAR	Application	PO1,PO2,PO3,PO4,PO6, PSO1,PSO2
2	Numerical Investigation of Conjugate Free Convection in a Baffle Attached Partially Heated Square Enclosure Using Al <sub>2</sub> O <sub>3</sub> /Water Nanofluid	In House	S.K.SRINIVASAN K.K.ACHUTHAN	Dr.M.R.THANSEKAR	Research	PO1, PO2, PO3,PO4, PO6,PO7, PO9, PO12 PSO1, PSO2, PSO3
3	Productivity Improvement and Reduction of Manpower in BEMD Winding Machine	Industry	C.SHYAMPRASATH P.D.ARAVIND KUMAR M.SATHISH T.MANO1 KUMAR	Mr.D.SATHEESH PANDIAN	Research	PO1, PO2, PO3,PO4, PO5, PO6, PO9, PO12
4	Numerical Investigation of Conjugate Heat Transfer	In House	E.K.HARISHLAL P.H.VIGNESH	Mr.N.NAGASUBRAMANIAN	Research	PO1, PO2, PO3, PO6, PO7, PO8, PO9, PO11 PSO1,PSO2,PSO3

	In a Square Enclosure With Multiple Baffle Using Al <sub>2</sub> O <sub>3</sub>					
5	Experimental Investigation of Microchannel Cooling Technique for A Flat Pv Pannel	In House	G.YOKESH NARAYANAN A.BOOPATHY MURUGAN G,HARIHARAN	Dr.C.ANBUMEENAKSHI	Research	PO1, PO2, PO3, PO4, PO6, PO7, PO11, PSO1, PSO2, PSO3
6	Microfiber Reinforced Polyester Composites Mechanical Properties Investigation	In House	E.PRABANJAN T.PRABHAKAR G.RAMPRASATH DEEPESHSHARAN	Mr.K.J.NAGARAJAN	Research	PO1, PO2, PO3, PO5, PO6, PO7, PO11, PSO1, PSO2, PSO3
7	Influence of Angle of Inclination at Interfacial Region an Mechanical Property During FSW (Less Than 90 Degree)	In House	S.M.SEETHARAM VIJAY S.SRIVATHSAN P.ROBERTJEBASING , S.SHRI RAM	Dr.R.ASHOK KUMAR	Research	PO1, PO2, PO4, PO6, po7, PO9, PSO1, PSO2, PSO3
8	Dual Brake Analysis in Heavy-Duty Automobile	In House	S.SUBBURAJ S.PRABHAKARAN S.HARISHKUMAR T.M.VIGNESHWARAN	Mr.A.M.NAGARAJAN	Application	PO1, PO2, PO4, PO5, PO7, PO9, PO11, PSO1, PSO2, PSO3
9	GAIT Analysis	In House	P.SURYAM.VISANTH K.PHILIPRAJ	Mr.KK.ARUNVIGNESH	Research	PO1, PO2, PO3,PO4, PO5, PO6,PO7, PO9,



						PO12 PSO1, PSO2, PSO3
10	Eco-Friendly energy Utilization Bicycles	In House	M.ARAVIND KUMAR S.ASHWINKUMAR P.SAKTHIVINOTH K.MANIKANDAN	Mr.NALLATHAMBI	Application	PO1, PO2, PO4, PO6, po7, PO9, PSO1, PSO2, PSO3
11	Metallurgical Characteristics of Friction Stir- Welding of Hybrid Metal Matrix Composite	In House	T.N.SOWMINARAYANAN A.E.SANTHOSHBABU R.SANGILPANDI B.R.SRIDHARADEVASHA BABU	Mr.R.PANDIYARAJAN	Research	PO1, PO2, PO3,PO4, PO5, PO6, PO9, PO12 PSO1, PSO2, PSO3
12	Design And Fabrication of Gear Conveyor	In House	B.MANIKANDAPRABHU R.BOOMUKILAN R.RAJIVGANDHI M.ABISHEK	Dr.P.SABARINATH	Product	PO1, PO2, PO3,PO4, PO5, PO6, PO9, PO12 P5O1, PSO2, PSO3 1
13	All-Weather Riding Jacket	In House	A.RAHUL K.SRINATH T.S.SANTHOSH G.RAKESH	Mr.M.SATHEESH KUMAR	Product	PO1, PO2, PO3, PO7, PO8, PO9, PO11 PSO1,PSO2,PSO3
14	Estimation for Capacity of Dehumidifier	Industry	R.SURYA M.SENTHIL KUMAR A.JOSHANDEEPANRAJ R.SARAVANAKUMAR	Dr.C.ANBUMEENAKSHI	Application	PO1, PO2, PO3,PO4, PO5, PO6, PO9, PO12 PSO1,PSO2,PSO3
15	Optimization of Welding Parameters On Straight Tube Butt Welding Machine to Improve The Quality of Welded Joints	Industry	BALAJI J R SHANMUGANATHAPANDI S VIGNESH J VIJAYARAJ J	Dr.C.ANBUMEENAKSHI	Research	PO1, PO2, PO3,PO4, POS, PO6, PO9, PO12 PSO1,PSO2,PSO3
16	Reduction of	Industry	DINESHWARAN RB	Mr. M. MANIKANDAN	Research	PO1, PO2, PO3,PO4,

	Cycle Time on Injection Moulding		PRADEEP KUMAR NS			PO5, PO6, PO12 PSO1, PSO2, PSO3
17	Design And Analysis of Hydraulic Crane Ropes	Industry	GOKUL RAMKI T.V	Dr. A. N BALAJI	Product	PO1, PO2, PO3,PO4, PO5, PO9, PO12 PSO1, PSO2, PSO3
18	Design and Model of Smart Rail Track	In-House	ASHWIN RAMACHANDRAN S.AJITH R.TAMILSELVAM	Dr.P.UDHAYAKUMAR	Product	PO1, PO2, PO4, PO5, PO6, PO7, PO9, PSO1, PSO2, PSO3
19	Conversion of Lpg-Operated Forklift Into Battery-Operated Forklift	Industry	N.P.ARAVIND N.R.HARISH BABU G.G.KISHORE KUMAR	Dr. A.N. BALAJI	Research	PO1, PO2, PO4, PO5, PO6, PO9, PSO1, PSO2, PSO3
20	Analysis of Mechanical Properties of Eggshell/ Terminally Chebulla-Filled Loofah Fiber Polyester Reinforced Composite	In-House	S.CHRISTOPHER MATHANRAJ J.JEYA VIGNESH M.NALLENDRAN	Mrs.B.DEVI	Research	PO1, PO2, PO4, PO6, PO7, PO9, PSO1, PSO2, PSO3
21	Analysis of Mechanical Properties of Salvadora Persica Stem Fiber Polyester Reinforced Composite	In-House	M.GOKUL G.N.SARAVANA KUMAR S.MANIVANNAN T.R.VIGNESH	Dr.P.SABARINATH	Research	PO1, PO2, PO3,PO4, PO5, PO9, PO12 PSO1, PSO2, PSO3

22	Study and Analysis of Scrap In Paint Stripping System	Industry	R.LEO BASTIN K.GOPIKA B.NANDHABALAN	Mr.T.L.VIJAYAKUMAR	Research	POI, PO2, PO3, PO4, : PO5, PO9, PO12 PSO1, PSO2, PSO3
23	Metallurgical Characterization of Friction Stir Welded of Hybrid Metal Matrix Composite	In-House	A.E.SANTHOSHBABU T.N.SOWMINARAYANAN B.R.SRIDHARADEVASHABABU R.SANGILIPANDI	Mr.R.PANDIYARAJAN	Research	POI, PO2, PO4, PO5, PO6, PO9, PSO1, PSO2, PSO3
24	Experimental and Numerical Investigation of Heat Transfer Performance of Wavy Microchannel With Altered Header Configurations & Nanofluid	In-House	SARAVANAN K S SATHISHKUMAR N S SIVARAM P VINOTH KANNAN R	Mr.M.SATHEESH KUMAR	Research	POI, PO2, PO4, PO6, PO7, PO9, PSO1, PSO2, PSO3
25	Refrigerator Incorporating Deep Frost Using Plate Freezing Technology	In-House	AKSHAY S B SAM PRADEEP J SHELTON VIAGUL M ARUN KUMAR	Mr. T. SAMYNATHAN	Research	PO1, PO2, P04, PO6, PO7, PO9, PSO1, PSO2, PSO3
26	Effect Of Contact Angle of Base Plates on Mechanical Property During	In-House	GOWTHAM.S JEYAMURUGAN.K GOKULRAM.R RENGARAJ. R	Dr.R.ASHOK KUMAR	Research	PO1, PO2, PO4, PO6, PO7, PO9, PSO1, PSO2, PSO3

	Friction Stir Welding (>90')					
27	Tribological Behavior of Aluminium Matrix-ZrO <sub>2</sub> And Reinforced Hybrid Composite Materials	In-House	R.VENKATESHM.PALMUTHU C.RADHA KRISHNAN P.MUTHU PANDI	Mr.PANDIYARAJAN	Research	PO1, PO2, PO4, PO5, PO6, PO9, PSO1, PSO2, PSO3
28	Combined S Crossed E Bike	In-House	D.MUHAMMED HALIK M.GOPALA KRISHNAN R.CHAKKARAVARTHI R.DHAMODHARAN	Dr.A.N.BALAJI	Product	PO1, PO2, PO4, PO6, PO7, PO9, PSO1, PSO2, PSO3
29	Experimental Investigation of Tribological Properties of Al- Sic-W-Mo Composites	In-House	R.DHAMODHARAN A.MANI PRABHU T.SHRIRAM KUMAR G.GNANAS KANDHAN DANIEL ILKIAH INBARAJ	Mr.RAGHAV	Research	PO1, PO2, PO4, PO6, PO9, PSO1, PSO2, PSO3
30	Experimental Investigation of Mechanical Wear And Corrosion Behavior of Co- TiC-BN-Gr Nanocomposite	In-House	M.K.LAKSHMAN ABIJITH G.M.KARTHICK S.S.GOWTHAM	Mr.MOHAN RAJ	Research	PO1, PO2, PO4, PO6, PO7, PO9, PSO1, PSO2, PSO3
31	Implementation of Vacuum in Manual Vertical Trimming	Industry	S.DEEPAN KUMAR M.SUBASH KUMAR V.KARAN	Mr.T.SAMYNATHAN	Application	PO1, PO2, PO4, POS, PO7, PO9, PSO1, PSO2, PSO3

	Machine					
32	Design and Fabrication of Automatic Dishwasher	In-House	T.V.THEERAJ VISHNU R.S.VISHWANATH V.I.SENTHIL KUMARAN SIVAKRISHNAN	Dr.PORSELVI	Product	PO1, PO2, PO4, PO6, PO7, PO9, PSO1, PSO2, PSO3
33	Design and Fabrication of Emergency Response Speed Breaker	In-House	R.BALA KRISHNAN V.GANESHPRAKASH R.S.GURU RATHINAM	Mr.K.K.ARUN VIGNESH	Product	PO1, PO2, PO4, PO5, PO6, PO9, PSO1, PSO2, PSO3
34	Study of Panel Fabrication and Fabrication of Fixture for Edge Bar Grinding	Industry	M.CHANDRU R.GOWTHAM VISHAL S.HARIHARA SUDHARSON M.TAMILARASAN	Mr.K.K.ARUN VIGNESH	Research	PO1, PO2, PO4, PO5, PO6, PO7, PO9, PSO1, PSO2, PSO3
35	Increasing the Operator Utilization and Eliminate the Headcount in Body Construction Engineering	Industry	A.ABDUL RAHUMAN M.S.ABDUR RAHMAN S.DINESH KUMAR	Mr.G.M.NAGARAJAN	Research	PO1, PO2, PO4, PO5, PO6, PO9, PSO1, PSO2, PSO3
36	Effect Of Nanographene Particles on Wear And Hardness Behavior At AA6063 Surface Composites Fabricated By	In-House	G.S.HARISH C.JONE MAXUAL I.KARANTHAMALAI MURUGAN N.K.YASHWANTH	Mr.MUTHU KRISHNAN	Research	PO1, PO2, PO4, PO5, PO7, PO9, PSO1, PSO2, PSO3

	Esp					
37	Strategy Creation for Effective Transportation Of Tyres	Industry	R.G.GOWTHAM RAJ V.K.NAGASRINIVASAN	Mr.G.R.RAGHAV	Application	PO1, PO2, PO4, PO6, PO7, PO9, PSO1, PSO2, PSO3
38	Vehicle Emerging Dust Collector	In-House	T.K.SIVA K.K.SRINIVASAN M.SIVA N.SATHAM HUSSAN	Dr.S.PORSELVI	Product	PO1, PO2, PO4, PO6, PO7, PO9, PSO1, PSO2, PSO3
39	Increasing the Production By Decontenting the Parts in Supermarket Area	Industry	M.ABINESH	Mr.T.SAMYNATHAN	Research	PO1, PO2, PO4, PO6, PO7, PO9, PSO1, PSO2, PSO3