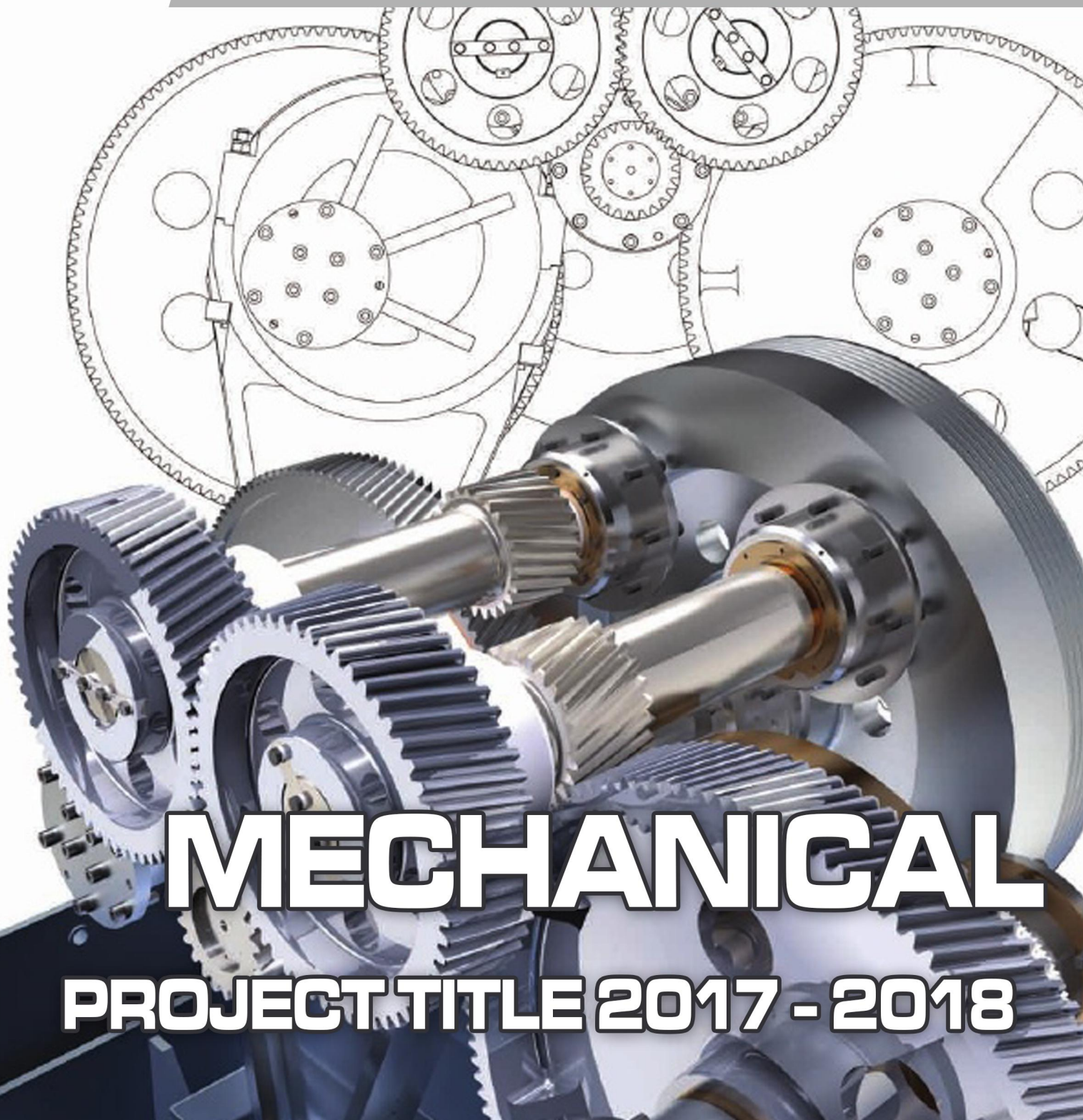




**SPIRO**  
SOLUTIONS PVT LTD



**MECHANICAL**

**PROJECT TITLE 2017 - 2018**

**TECHNOLOGY: MECHANICAL ENGINEERING**

**DOMAIN: THERMAL ENGINEERING**

<b>S. NO</b>	<b>PROJECT CODE</b>	<b>PROJECT TITLES</b>	<b>APPLICATION</b>
1	ITMT01	Cyclone separator with blower	Industry
2	ITMT02	Fabrication of miniature boiler	Industry
3	ITMT03	Solar still using PCM materials	Houses
4	ITMT04	Fabrication of three in one air-conditioner	Houses
5	ITMT05	Automated outdoor mist control system	Environment
6	ITMT06	Fabrication and performance analysis of solar water heater using porous medium and agitator	Houses & industry
7	ITMT07	Solar aided portable vacuum desalination system	Houses
8	ITMT08	Solar powered water lifter using giant wheel method	Agriculture & industry
9	ITMT09	Multi stage Hydro electric power plant	Power Plant
10	ITMT10	Swing electricity power generation system	Power generation
11	ITMT11	Fabrication of shell and tube heat exchanger	Exchanger
12	ITMT12	Design and fabrication of mini wind mill	Power Generation
13	ITMT13	Steam power plant	Power Generation
14	ITMT14	Fabrication of Reactor for converting Plastic into useful Fuel	Fuel System
15	ITMT15	Sea wave Power generation System	Power Generation

TECHNOLOGY: MECHANICAL ENGINEERING

DOMAIN: AUTOMOBILE ENGINEERING

S. NO	PROJECT CODE	PROJECT TITLES	APPLICATION
1	ITMA01	Fabrication of Treadmill Bicycle	Vehicle
2	ITMA02	Three Axis Modern Pneumatic Trailers	Vehicle
3	ITMA03	Automatic braking and bumper system for automobiles	Vehicle
4	ITMA04	Neodymium Magnetic Shock Absorber for automotive	Vehicle
5	ITMA05	Automatic Tyre Pressure Inflation System for automotive	Vehicle
6	ITMA06	Fabrication Of Solar Powered Wheel Chair For Disable Person	Human
7	ITMA07	Exhaust gas heat recovery for Power generation and Braking	Vehicle
8	ITMA08	Sensor operated electromagnetic clutch and braking system	Vehicle
9	ITMA09	Design and Fabrication of chainless bicycle	Vehicle
10	ITMA10	Easy folding mobile cycle	Vehicle
11	ITMA11	Fabrication of Solar Powered battery cycle	Vehicle
12	ITMA12	Performance of a Radiator with Water and Nanofluid	Cooling System
13	ITMA13	Hydrogen Engine	Vehicle
14	ITMA14	Production of Electric Power through Shock Absorber	Power Generation
15	ITMA15	On Board Diagnostic Control For Automobile Engine	Engine Condition

**TECHNOLOGY: MECHANICAL ENGINEERING**

**DOMAIN: FABRICATION AND MANUFACTURING**

<b>S. NO</b>	<b>PROJECT CODE</b>	<b>PROJECT TITLES</b>	<b>USES</b>
1	ITMF01	Solar Tracking System In Manual Rice Trans Planter	Agriculture
2	ITMF02	Semi-automatic Ironing Machine	Industry
3	ITMF03	Four Way Hacksaw	Industry
4	ITMF04	Pepper Separating Machine	Industry
5	ITMF05	Manually operated Road Cleaner	Environment
6	ITMF06	Design & fabrication of Vertical and Horizontal axis wind mill for low end power generation	Industry
7	ITMF07	Glass Cleaning Robot Using Scissor Lift Mechanism	Industry
8	ITMF08	Sand Cleaner Robot Using Vibrating Mechanism	Industry
9	ITMF09	Multi Spindle drill Head	Industry
10	ITMF10	Automatic Vegetable cutting Machine	Hotel
11	ITMF11	Fabrication of Exoskeleton Hydraulic support (Chair less chair)	Human
12	ITMF12	Fabrication of Mechanical Spider	Sewage
13	ITMF13	Fabrication of both cutting punching and grinding machine by electric power	Industry
14	ITMF14	Fabrication of Painting Machine using rack and Pinion Mechanism	Painting
15	ITMF15	Multi Axis Conveyors	Industry

TECHNOLOGY: MECHANICAL ENGINEERING

DOMAIN: HYDRAULICS AND PNEUMATICS SYSTEM

S. NO	PROJECT CODE	PROJECT TITLES	APPLICATION
1	ITMH01	Compressed Air Vehicle	Vehicle
2	ITMH02	Automatic Load Carry Robot For Industries Using Pneumatic Scissor Lift Mechanism	Industry
3	ITMH03	Automatic Sensor Operated Pneumatic Braking System	Vehicle
4	ITMH04	Pneumatic mobile crane	Industry
5	ITMH05	Multi axis welding mechanism	Industry
6	ITMH06	Design and fabrication of pneumatic tricycle	Human
7	ITMH07	Zig zag pneumatic lift	Industry
8	ITMH08	Design and fabrication of both cutting punching and grinding machine by pneumatic power	Industry
9	ITMH09	Easy handled handicapped vehicle by pneumatic power	Disabled
10	ITMH10	Design and fabrication of pneumatic engine	Automobile
11	ITMH11	Pneumatic Injection moulding Machine	Industry
12	ITMH12	Compressed air production and driven Bicycle	Vehicle
13	ITMH13	Pneumatic Inbuilt Jack using Rack and Pinion	Vehicle
14	ITMH14	Fabrication of Pneumatic Engine	Vehicle
15	ITMH15	Pneumatic multi axis Material handling End Effector	Industry



TECHNOLOGY: MECHANICAL ENGINEERING

DOMAIN: AUTOMATION AND MECHATRONICS

S. NO	PROJECT CODE	PROJECT TITLES	USES
1	ITMM01	Pick And Place Robot Using Conveyor Line Follower Mechanism	Industry
2	ITMM02	Fabrication of over speed indication and automated braking system for automotives	Vehicle
3	ITMM03	Vehicle ignition using face recognition system	Vehicle
4	ITMM04	Automatic work piece counting with belt conveyor	Industry
5	ITMM05	Automatic paint spraying robot using Scissor lift Mechanism	Industry
6	ITMM06	Automatic Brake Failure And Engine Overheating Alarm	Vehicle
7	ITMM07	Remote control wheel chair cum bed	Human
8	ITMM08	Automatic board cleaner	Seminar Hall
9	ITMM09	Poor Quality rejection using Conveyor automation	Industry
10	ITMM10	Automatic water spraying machine	Agricultural
11	ITMM11	Automatic Pipe Crawling Robot for Inspection Purpose	Oil Industry
12	ITMM12	Drainage Cleaning Robot	Sewage
13	ITMM13	Automatic Farm Genesis Robotic system	Agricultural
14	ITMM14	Robotic Arm for various Material Handling Purpose	Industry
15	ITMM15	Automatic garbage Separation system	Municipal

TECHNOLOGY: MECHANICAL ENGINEERING

DOMAIN: AGRICULTURAL

S. NO	PROJECT CODE	PROJECT TITLES	APPLICATION
1	ITAG01	Design and Fabrication of Grass cutter for agricultural	Agriculture
2	ITAG02	Solar Agricultural water pumping system	Agriculture
3	ITAG03	Solar operated sprayer for agricultural purpose	Agriculture
4	ITAG04	Hydro pump for agricultural application	Agriculture
5	ITAG05	Fabrication of pedal power ram type water pumping machine	Irrigation
6	ITAG06	Manual operated seeding machine	Agricultural
7	ITAG07	Sugarcane bud chipper	Agricultural
8	ITAG08	Coconut tree climbing and cutting machine	Agricultural
9	ITAG09	Solar grass cutter with linear blades by using scotch yoke mechanism	Horticulture
10	ITAG10	Agricultural Farm Vehicle	Agricultural

## Education Partners:



## Technologies and Domain used:

IEEE 2017, Java, J2ee, Android, Bigdata, Dot net, Arduino, Raspberry pi, IOT, Renewable, PHP, Embedded, Vlsi, Matlab, VB, Net working, Data Mining, Image Processing, Cloud Computing, Mobile Computing, Multimedia, Network Security, Soft Engg, Grid Computing, Automation, Robotics, Communication, RF, Zigbee, Blue tooth, GSM/GPS/GPRS, Power Electronics & Systems, Electrical, DSP, RTOS, Bio metrics, Civil, Analysis, Fabrication, Mechanical, CFD, FEA, etc.

## Features

- Latest 2017 IEEE, Science Direct, ACM based project concept and solutions.
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