PROJECTS BY HOSHANG PATEL TECH

Dept	Civil	Mechanical	Chemical	EXTC	Computer
You want to float the topic for major project	Write yes if you are floating the topic for final year project				
1.Temperature Controlled Hotplate for Soldering/Desoldering: This project involves designing a hotplate capable of precise temperature control, essential for soldering and desoldering electronic components, ensuring efficient and safe assembly and disassembly processes.					
2.IoT Home Automation: Controlling Appliances Remotely and Security: This project focuses on developing a system that enables users to remotely control home appliances via the Internet, while also incorporating security features such as motion sensors and camera surveillance for enhanced home security and monitoring.					Sanil Surve--7775822657
3.Self-Balancing Robot (Single/Two Wheels): This project aims to create a robot capable of maintaining its balance autonomously, either on a single wheel or with a two-wheel configuration, utilizing sensors and feedback control algorithms for stability in motion.				YES Bagdade Yasar (E&TC)-70387 74701	
4.Solar Data Logger: This project involves developing a system to log and analyze data from solar panels, providing valuable insights into their performance and efficiency over time, aiding in optimization and maintenance.					

5.Light Spectral Meter for Agriculture: This project aims to create a device capable of measuring and analyzing the spectral composition of light in agricultural settings, aiding farmers in optimizing light conditions for plant growth and health.					
6.Robotic Arm for Industrial Application: This project focuses on designing a robotic arm suitable for industrial applications, equipped with precision control and capable of performing various tasks such as assembly, sorting, and manipulation in manufacturing environments.					
7.Solar Panels Cleaning System: This project aims to develop an automated cleaning system for solar panels, ensuring maximum efficiency by removing dust and debris, thus enhancing energy production in solar installations.					
8.Mini EV Bike with Solar Charging: This project focuses on designing a compact electric bike with a solar charging system, offering sustainable and eco-friendly transportation solutions for short-distance commuting.					
9..Battery Operated Portable Oscilloscope with Color LCD: This project aims to develop a portable oscilloscope powered by batteries and featuring a color LCD display, enabling engineers and technicians to conduct waveform analysis and troubleshooting tasks in various field conditions.					

10..Pick & Place Machine/Robot: This project involves designing a pick and place machine or robot capable of automatically picking up components and placing them with precision, enhancing efficiency in manufacturing and assembly processes.				
11.Solar Cell Tester with Graph: This project aims to create a device for testing and analyzing the performance of solar cells, providing graphical representations of key parameters such as voltage, current, and efficiency for research and quality control purposes.				
12.Universal Remote Controller: This project focuses on developing a universal remote controller capable of operating multiple electronic devices, offering convenience and simplicity for users by consolidating control functions into a single device.				
13.Multi-Screen Display System: This project involves designing a system capable of driving multiple display screens simultaneously, offering expanded visual real estate for applications such as gaming, digital signage, and professional presentations.				
14.Build a PLC with Software: This project aims to build a Programmable Logic Controller (PLC) along with the necessary software for industrial automation applications, providing a customizable and flexible solution for controlling machinery and processes.				
15.Multi-Screen Display System: This project involves designing a system capable of driving multiple display screens simultaneously, offering expanded visual real estate for applications such as gaming, digital signage, and professional presentations.				

16..DC to AC 230V Inverter with Line Sync and Auto Bypass: This project involves designing an inverter capable of converting DC power sources to AC power at 230V, with features such as line synchronization and automatic bypass for ensuring stable and reliable power supply in various applications.				
17.Universal Programmable Power Supply for Lab: This project focuses on developing a versatile programmable power supply suitable for laboratory use, offering adjustable voltage and current outputs with precise control and monitoring capabilities for various experimental setups.				
18.Build a 3D Printer: This project involves constructing a 3D printer capable of additive manufacturing, enabling users to create three-dimensional objects layer by layer from digital designs, offering customization and prototyping capabilities in various fields.				
19.3D Scanner: This project aims to create a device capable of capturing three-dimensional data from real-world objects, enabling the creation of digital models for applications such as reverse engineering, quality inspection, and virtual reality content creation.				
20. Creating a technically simple yet effective solution for cleaning solar panels on street lights, streamlining maintenance processes and ensuring optimal energy output.				

21Reverse engineering the AC helmet available at Hoshang Patel Tech Centre to enhance its efficiency, integrating advanced technologies and innovative design modifications for improved performance and user experience.					
22.Upgrading the control mechanism of BLDC fans by replacing traditional remotes with advanced regulators, enhancing user convenience, energy efficiency, and overall functionality.					
23.Developing an IoT-enabled mobile application to remotely control and monitor street lights, allowing for efficient management of lighting schedules, energy consumption, and maintenance tasks for enhanced urban infrastructure.				YES Aditya Shinde (E&TC) - 74477 56889	