

## Core Projects

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- **5G Microstrip Bandpass Filter Design for Sub6 GHz Frequency Range**, Undergrad Thesis
- **Home Automation: AC-Light-Fan Control**, Course - Robotics and Automation Laboratory
- **SkyWatch: A Drone Surveillance System for Disaster Management**, Course - Robotics and Automation Laboratory
- **Electrical Service Design of a 10 Storeyed 2 Unit Apartment Building**, Course - Electrical Service Design Laboratory
- **Smart Irrigation System**, Course - Microprocessor and Embedded Systems Laboratory
- **Water Level Indicator Using 74 Series IC and 7 Segment Display**, Course - Digital Electronics Laboratory
- **Variable DC Battery Charger with Auto Cutoff Feature and Deep Discharge Control**, Course - Power Electronics Laboratory
- **Development of Floating Garbage Cleaning Robot for Water Body Surface**, Course - Control Systems I Laboratory
- **Brain Tumor Detection**, Course - Digital Signal Processing I Laboratory
- **Live Temperature and Humidity Monitoring over Internet**, Course - Communication Systems I Laboratory
- **Detection of Faults in Electrical Power Transmission Line**, Course - Power System I Laboratory
- **Rewinding of 4 Pole 3-Phase Squirrel Cage Induction Motor**, Course - Energy Conversion Laboratory
- **Modulation & Demodulation of Voice Signals using GUI**, Course - Numerical Technique Laboratory
- **Frequency Sweep Analysis of Transistor Amplifiers: MOSFET and BJT Low-Frequency Gain Investigation**, Course - Electronic Circuits I Laboratory
- More Details on <https://github.com/SudiptoPramanik/Undergrad-Projects>