# **UG Projects**

* Snake Game in C - Fundamentals of Programming
* Optimization of Power Supply at a new home - Electrical Network Analysis
* Manga Recommendation System - OOP - C++
* A Three Digit Sequential Lock - Digital Logic Design - Proteus
* Mathematical Modeling of a 3D mechanical system - Engineering Mechanics - MATLAB
* Density Based Traffic System using ATMega8 Controller - Microprocessor Systems - Proteus and Embedded C
* Frequency Division Multiplexing and Audio Compression in MATLAB - Signals and Systems - MATLAB
* LiFi (Transmitting Sound with Amplifier and Solar Panel) - Communication Systems
* Computing and Visualizing the Discrete-Time Fourier Transform - Digital Signals Processing - MATLAB
* Facial Recognition using Eigenfaces - Digital Signals Processing - MATLAB
* Skin Color Classifier (Finding Bias in different Search Engines) - Machine Learning - Python
* Density Based Traffic Control System using Arduino - Linear Control Systems and Instrumentation and Measurements
* Object Detection using openCV and YOLOv2- Robotics-I - Python
* Fire Alarm Audio Classifier on ESP32 - Embedded Systems Design - Arduino (Embedded C) and Python for Training
* Part Separation using PLCs - Industrial Process Control- FXTRN

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# **UG Presentations**

* Moral Development in High Functioning Autism - Professional Ethics
* Revenue Streams - Entrepreneurship
* KHAAPA - Entrepreneurship
* EMS Lab’s Induction Generator (Working Principle) - Electrical Machines
* NUST Relief Campaign for Turkey and Syria and Blood Donation Drive - CSL - 1
* Renovating a Model Classroom to Inspire and Motivate Education at IMSG, NHC Islamabad - CSL - 2
* A comparative analysis between the Economic Systems: Capitalism vs Socialism - Engineering Economics
* Reclaim Your Heart by Yasmin Mogahed - Islamic Studies
* AutoCAD Projects/Labs - Engineering Drawing
* Case Study - Communication Skills - II
* WorkShop Practice
* Kashmir - Pakistan Studies
* The Dyatlov Incident - Communication Skills - I
* Review of the Book - Kite Runner - Communication Skills - I