Inventive ECE Projects for Students | Industry Experts.

ECE is the important branch in engineering studies which stands for Electronics and communication engineering. We offer ECE final year projects with various domains available in ECE field. We support ECE students to develop final year projects in **VLSI, FPGA, GSM, communication and ARM**. ECE students have great opportunity to do projects in either software or hardware field. We design software projects with various simulation tools and models. Hardware projects are designed using hardware such as FET, capacitor, Resistor, Gates and transistors. We support and guide **ECE students** do their projects with integration of hardware and software.

We assist research Scholars in implementing **ECE Projects** with best Customer Support. For more details contact us: +91 9790238391.

ECE Projects Domains .

- ➢ **Communication Projects.**
- ➢ **Embedded Projects.**
- ➢ **ARM Projects.**
- ➢ **Microcontroller Projects.**
- ➢ **Zigbee Projects.**
- ➢ **LabVIEW Projects.**
- ➢ **VHDL Projects.**
- ➢ **VLSI Projects.**
- ➢ **FPGA Projects.**
- ➢ **Robotics Projects.**
- ➢ **Signal Processing Projects.**
- ➢ **RFID Projects.**
- ➢ **GSM Projects.**
- ➢ **GPS Projects.**

Communication Projects

Customized Communication Projects for ECE Students

Based on your requirements enquire us to know more details.

Sample Communication Projects Topics are given below;

SI	Sample Communication Projects Titles.
ACP – CP01	A Visible Light Communication Link Protection Mechanism for Smart Factory.
ACP – CP02	A smart communication architecture for ambient assisted living.
ACP – CP03	Underwater wireless in-pipe communications system.
ACP – CP04	Ecofriendly data transmission in visible light communication.
ACP – CP05	Communication Optimization of Iterative Sparse Matrix-Vector Multiply on GPUs and FPGAs.
ACP – CP06	Secure communication scheme for wireless sensor networks to maintain anonymity.
ACP – CP07	A platform for converged, feature-based real-time communications.
ACP – CP08	Secure communication system for wearable devices wireless intra body communication.
ACP – CP09	Recent trends in multicarrier underwater acoustic communications.
ACP – CP10	Architecture and communication protocols for cognitive radio network enabled hospital.

Link to Communication Projects:

https://academiccollegeprojects.com/ece-projects/communication-projects

We assist Final Year Ece Students to implement Communication Projects.

Create Original **Innovative and Inventive Communication Projects** with us.

Embedded System Projects

Customized Embedded Projects for ECE Students Based on your requirements enquire us to know more details.

Sample Embedded System Projects Topics are given below;

SI	Top 50 2015 IEEE Embedded Projects Titles.
ACP – RP01	A model-based testing technique for component-based real-time embedded systems.
ACP – RP02	A Hardware Platform for Evaluating Low-Energy Multiprocessor Embedded Systems Based on COTS Devices.
ACP – RP03	Improving the Vertical Light Extraction Efficiency of GaN-Based Thin-Film Flip-Chip LED With Double Embedded Photonic Crystals.
ACP – RP04	Embedded Hypervisor Xvisor: A Comparative Analysis.
ACP – RP05	Water management system using dynamic IP based Embedded Webserver in real time.
ACP – RP06	A Method for Detecting Abnormal Program Behavior on Embedded Devices.
ACP – RP07	Test Generation for Embedded Executables via Concolic Execution in a Real Environment.
ACP – RP08	Energy efficient dual-issue processor for embedded applications.
ACP – RP09	Embedded system design for I&C of Prototype Fast Breeder Reactor.
ACP – RP10	Exploration and design of embedded systems including neural algorithms.

Link to Embedded System Projects:

https://academiccollegeprojects.com/ece-projects/embedded-system-projects

We assist Final Year Ece Students to implement Embedded Projects.

Create Original **Innovative and Inventive Embedded Projects** with us.

ARM Projects

Customized ARM Projects for ECE Students Based on your requirements enquire us to know more details.

Sample ARM Processor Projects Topics are given below;

SI	IEEE ARM Projects Titles.
ACP-ARM01	Axially Extended-Volume C-Arm CT Using a Reverse Helical Trajectory in the Interventional Room.
ACP-ARM02	Operator-based vibration control for an L-type arm of crane systems using piezoelectric actuator.
ACP-ARM03	Development of two degrees of freedom deterministic parallel robotic arm unit.
ACP-ARM04	Human hand tracking using MATLAB to control Arduino based robotic arm.
ACP-ARM05	Simulation and study of robotic slave arm operating envelope.
ACP-ARM06	Application of dual-arm robot in biomedical analysis: Sample preparation and transport.
ACP-ARM07	Real time kinect based robotic arm manipulation with five degree of freedom.
ACP-ARM08	Vision-based 3D motion reconstruction of octopus arm swimming and comparison with an 8-arm underwater robot.
ACP-ARM09	3-DOF Admittance Control Robotic Arm with a 3D Virtual Game for facilitated training of the hemiparetic hand.
ACP-ARM10	Redundancy resolution for dual-arm robots inspired by human asymmetric bimanual action: Formulation and experiments.

Link to ARM System Projects:

https://academiccollegeprojects.com/ece-projects/arm-projects

We assist Final Year Ece Students to implement ARM Projects.

Create Original **Innovative and Inventive ARM Projects** with us.

Microcontroller Projects

Customized Microcontroller Projects for ECE Students

Based on your requirements enquire us to know more details.

Sample Microcontroller Projects Topics are given below;

SI	IEEE Microcontroller Projects Titles.
ACP-MC01	The Design of a Test & Development Board for the Training of PIC18F4550 Microcontroller.
ACP-MC02	Low cost and efficient ECG measurement system using PIC18F4550 microcontroller.
ACP-MC03	8.3 A 10.5µA/MHz at 16MHz single-cycle non-volatile memory access microcontroller with full state retention at 108nA in a 90nm process.
ACP-MC04	Embedded Microcontroller Memories: Application Memory Usage.
ACP-MC05	Microcontroller based Tabla tuning system.
ACP-MC06	Performance analysis of microcontroller and FPGA based Signal Processing a case study on FIR filter design and implementation.
ACP-MC07	Application of wireless, embedded microcontroller circuit for a semi-active above-knee prosthesis with pneumatic cylinder.
ACP-MC08	Design & development of microcontroller based programmable ramp generator for AC-DC converter for simulating decay power transient in experimental facility for nuclear power plants.
ACP-MC09	Software-related EMI test pattern auto-generation for 2-stage pipeline microcontroller.
ACP-MC10	Period measurement with an ARM microcontroller.

Link to Microcontroller Projects:

https://academiccollegeprojects.com/ece-projects/microcontroller-projects

We assist Final Year Ece Students to implement Microcontroller Projects.

Create Original **Innovative and Inventive Microcontroller Projects** with us.

Zigbee Projects

Customized Zigbee based Projects for ECE Students Based

on your requirements enquire us to know more details.

Sample Zigbee Projects Topics are given below;

SI	IEEE ZigBee Projects Titles.
ACP-ZB01	Taming Cross-Technology Interference for WiFi and ZigBee Coexistence Networks.
ACP-ZB02	Protective Dummy-byte Preamble Padding for improving ZigBee packet transmission under Wi-Fi interference.
ACP-ZB03	Improving ZigBee Device Network Authentication Using Ensemble Decision Tree Classifiers With Radio Frequency Distinct Native Attribute Fingerprinting.
ACP-ZB04	ZIL: An Energy-Efficient Indoor Localization System Using ZigBee Radio to Detect WiFi Fingerprints.
ACP-ZB05	A time and energy efficient parking system using Zigbee communication protocol.
ACP-ZB06	Development of a voice-controlled home automation using Zigbee module.
ACP-ZB07	Enhanced ZigBee tree addressing for flexible network topologies.
ACP-ZB08	ZigBee-based irrigation system for home gardens.
ACP-ZB09	Coexistence of ZigBee-based WBAN and WiFi for Health Telemonitoring Systems.
ACP-ZB10	Design and Application of a VOC-Monitoring System Based on a ZigBee Wireless Sensor Network.

Link to Zigbee Projects:

https://academiccollegeprojects.com/ece-projects/zigbee-projects

We assist Final Year Ece Students to implement Zigbee Projects.

Create Original **Innovative and Inventive Zigbee Projects** with us.

LabVIEW Projects

Customized LabVIEW Projects for ECE Students Based on your requirements enquire us to know more details.

Sample LabVIEW Projects Topics are given below;

SI	IEEE LABVIEW Projects Titles.
ACP-LV01	Automation of shell and tube type heat exchanger with PLC and LabVIEW.
ACP-LV02	LabVIEW-based analysis of EEG signals in determination of sleep stages.
ACP-LV03	Design of virtual instrument for automatic temperature visualization in magnetic fields using LabVIEW in combination with fiber-optical temperature measurement.
ACP-LV04	LabVIEW implementation of fuzzy logic controller for heat exchanger process.
ACP-LV05	Development of LabVIEW based system for interfacing with GPS receiver.
ACP-LV06	Real time pupil-corneal reflection following with Labview.
ACP-LV07	Design and Analysis of IIR Notch Filter using LabVIEW.
ACP-LV08	Facial electromyography for characterization of emotions using LabVIEW.
ACP-LV09	Simulation time analysis of MATLAB/Simulink and LabVIEW for control applications.
ACP-LV10	PI control of level control system using PLC and LabVIEW based SCADA.

Link to LabVIEW Projects:

https://academiccollegeprojects.com/ece-projects/labview-projects

We assist Final Year Ece Students to implement LabVIEW Projects.

Create Original **Innovative and Inventive LabVIEW Projects** with us.

VHDL Projects

Customized VHDL Projects for ECE Students Based on your requirements enquire us to know more details.

Sample VHDL Projects Topics are given below;

SI	IEEE VHDL Projects Titles.
ACP-VHDL01	A novel VHDL implementation of UART with single error correction and double error detection capability.
ACP-VHDL02	Analysis of effects of using exponent adders in IEEE-754 multiplier by VHDL.
ACP-VHDL03	Implementation using VHDL of an ECG signal using CSP.
ACP-VHDL04	Deadlock detection in FPGA design: A practical approach.
ACP-VHDL05	Integrated Circuit Modeling for Noise Susceptibility Prediction in Communication Networks.
ACP-VHDL06	Real time implementation of a novel chaotic generator on FPGA.
ACP-VHDL07	Vehicle parking system implementation using CPLD.
ACP-VHDL08	Edge dedection application with FPGA based Sobel operator.
ACP-VHDL09	Comparisions of Robert, Prewitt, Sobel operator based edge detection methods for real time uses on FPGA.
ACP-VHDL10	Complex-multiplier implementation for pipelined FFTs in FPGAs.

Link to VHDL Projects:

https://academiccollegeprojects.com/ece-projects/vhdl-projects

We assist Final Year Ece Students to implement VHDL Projects.

Create Original **Innovative and Inventive VHDL Projects** with us.

VLSI Projects

Customized VLSI Projects for ECE Students Based on your requirements enquire us to know more details.

Sample VLSI Projects Topics are given below;

SI	IEEE VLSI Projects Titles.
ACP-VLSI01	The Diffusion Network in Analog VLSI Exploiting Noise-Induced Stochastic Dynamics to Regenerate Various Continuous Paths.
ACP-VLSI02	VLSI implementation of coupled MRF model using pulse-coupled phase oscillators.
ACP-VLSI03	Fully Reused VLSI Architecture of FM0/Manchester Encoding Using SOLS Technique for DSRC Applications.
ACP-VLSI04	Nonsmooth Optimization Method for VLSI Global Placement.
ACP-VLSI05	Crosstalk noise and delay analysis for high speed on-chip global RLC VLSI interconnects with mutual inductance using 90nm process technology.
ACP-VLSI06	A Nonlinear Analytical Optimization Method for Standard Cell Placement of VLSI Circuits.
ACP-VLSI07	Improvement in error resilience for compressed VLSI test data using Hamming code based technique.
ACP-VLSI08	High efficiency VLSI implementation of an edge-directed video up-scaler using high level synthesis.
ACP-VLSI09	High performance VLSI architecture for 2-D DWT using lifting scheme.
ACP-VLSI10	Low-Power VLSI Architectures for DCT/DWT: Precision vs Approximation for HD Video, Biomedical, and Smart Antenna Applications.

Link to VLSI Projects:

https://academiccollegeprojects.com/ece-projects/vlsi-projects

We assist Final Year Ece Students to implement VLSI Projects.

Create Original **Innovative and Inventive VLSI Projects** with us.

FPGA Projects

Customized FPGA Projects for ECE Students Based on your requirements enquire us to know more details.

Sample FPGA Projects Topics are given below;

SI	IEEE FPGA Projects Titles.
ACP-FPGA01	Hybrid adaptive clock management for FPGA processor acceleration.
ACP-FPGA02	A PUF-FSM Binding Scheme for FPGA IP Protection and Pay-Per-Device Licensing.
ACP-FPGA03	Software-based high-level synthesis design of FPGA beamformers for synthetic aperture imaging.
ACP-FPGA04	Real time implementation of a novel chaotic generator on FPGA.
ACP-FPGA05	170Gb/s FPGA to FPGA optical interconnects using a x12 14Gb/s onboard optics
ACP-FPGA06	A Modular Multilevel Converter Pulse Generation and Capacitor Voltage Balance Method Optimized for FPGA Implementation.
ACP-FPGA07	A 128-Channel, 710 M Samples/Second, and Less Than 10 ps RMS Resolution Time-to-Digital Converter Implemented in a Kintex-7 FPGA.
ACP-FPGA08	Linearized Torque Actuation Using FPGA-Controlled Magnetorheological Actuators.
ACP-FPGA09	750-kW interleaved buck converter dc supply control implementation in a low-cost FPGA.
ACP-FPGA10	A Novel Digital Duty-Cycle Modulation Scheme for FPGA-Based Digital-to-Analog Conversion.

Link to FPGA Projects:

https://academiccollegeprojects.com/ece-projects/fpga-projects

We assist Final Year Ece Students to implement FPGA Projects.

Create Original **Innovative and Inventive FPGA Projects** with us.

Robotics Projects

Customized Robotics Projects for ECE Students Based on your requirements enquire us to know more details.

Sample Robotics Projects Topics are given below;

SI	IEEE Robotics Projects Titles.
ACP-RP01	Future Trends in Marine Robotics [TC Spotlight].
ACP-RP02	1872-2015 - IEEE Standard Ontologies for Robotics and Automation.
ACP-RP03	Soft robotics for natural and adaptive motion generation.
ACP-RP04	The application of LeJOS, Lego Mindstorms Robotics, in an LMS environment to teach children Java programming and technology at an early age.
ACP-RP05	ReAct!: An Interactive Educational Tool for AI Planning for Robotics.
ACP-RP06	A Framework for Remote Field Robotics Competitions.
ACP-RP07	A novel and affordable robot kit for completion of the requirements for the Boy Scouts of America robotics merit badge.
ACP-RP08	P1872/D3, August 2014 - IEEE Approved Draft Standard for Ontologies for Robotics and Automation.
ACP-RP09	Robotics Narratives and Networks [History].
ACP-RP10	Designing Teacher Professional Development Workshops for Robotics Integration across Elementary and Secondary School Curriculum.

Link to Robotics Projects:

https://academiccollegeprojects.com/ece-projects/robotics-projects

We assist Final Year Ece Students to implement Robotics Projects.

Create Original **Innovative and Inventive Robotics Projects** with us.

Signal Processing Projects

Customized Signal Processing Projects for ECE Students

Based on your requirements enquire us to know more details.

Sample Signal Processing Projects Topics are given below;

SI	IEEE Signal Processing Projects Titles.
ACP-SP01	Undergraduate Students Compete in the IEEE Signal Processing Cup: Part 1 [sp Education].
ACP-SP02	An overview of multi-dimensional RF signal processing for array receivers.
ACP-SP03	A Bayesian Residual Transform for Signal Processing.
ACP-SP04	Combining Algebraic and Domain Testing to Design Adequate Test Cases for Signal Processing Algorithms.
ACP-SP05	An effective photoplethysmography signal processing system based on EEMD method.
ACP-SP06	Soft-Core Dataflow Processor Architecture Optimized for Radar Signal Processing.
ACP-SP07	Distributed signal processing for wireless EEG sensor networks.
ACP-SP08	An investigation into classification of infant cries using modified signal processing methods.
ACP-SP09	Assess Sleep Stage by Modern Signal Processing Techniques.
ACP-SP10	A Memristor-Based Continuous-Time Digital FIR Filter for Biomedical Signal Processing.

Link to Signal Processing Projects:

https://academiccollegeprojects.com/ece-projects/signal-processing-projects

We assist Final Year Ece Students to implement Signal Processing Projects.

Create Original **Innovative and Inventive Signal Processing Projects** with us.

Customized RFID Projects for ECE Students Based on your requirements enquire us to know more details.

Sample RFID Projects Topics are given below;

SI	IEEE RFID Projects Titles.
ACP-RFID01	Real-Time RFID Indoor Positioning System Based on Kalman-Filter Drift Removal and Heron-Bilateration Location Estimation.
ACP-RFID02	Fundamental bounds on RSS-based wireless localization in passive UHF RFID systems.
ACP-RFID03	PRLS-INVES: A General Experimental Investigation Strategy for High Accuracy and Precision in Passive RFID Location Systems.
ACP-RFID04	SPARTACUS: Self-Powered Augmented RFID Tag for Autonomous Computing and Ubiquitous Sensing.
ACP-RFID05	Proximity Detection with RFID: A Step Toward the Internet of Things.
ACP-RFID06	Hybrid WLAN-RFID Indoor Localization Solution Utilizing Textile Tag.
ACP-RFID07	A capacitively-loaded loop antenna for UHF near-field RFID reader applications.
ACP-RFID08	A novel hybrid powered RFID sensor tag.
ACP-RFID09	Design and performance of a flexible metal mountable UHF RFID tag.
ACP-RFID10	An overview of WSN and RFID network integration.

Link to RFID Projects:

https://academiccollegeprojects.com/ece-projects/rfid-projects

We assist Final Year Ece Students to implement RFID Projects.

Create Original **Innovative and Inventive RFID Projects** with us.

GSM Projects

Customized GSM Projects for ECE Students Based on your requirements enquire us to know more details.

Sample GSM Projects Topics are given below;

SI	IEEE GSM Projects Titles.
ACP-GSM01	GSM to UMTS Network Handover Vulnerability Testing Using Software-Defined Radio.
ACP-GSM02	SDR-Based Network Impersonation Attack in GSM-Compatible Networks.
ACP-GSM03	Ultra Wideband PIFA Antenna with Supporting GSM and WiMAX for Mobile Phone Applications.
ACP-GSM04	Comparative analysis of GSM coverage prediction with measurement results for urban areas using statistical nonparametric mapping.
ACP-GSM05	GSM based interactive voice response system for wireless load control and monitoring.
ACP-GSM06	SAR values comparison between GSM and 3G.
ACP-GSM07	Implementation of a modem which transmits digital data on GSM voice channel.
ACP-GSM08	UAV-based GSM network for public safety communications.
ACP-GSM09	Photosensitive security system for theft detection and control using GSM technology.
ACP-GSM10	GSM-based positioning for public transportation commuters.

Link to GSM Projects:

https://academiccollegeprojects.com/ece-projects/gsm-projects

We assist Final Year Ece Students to implement GSM Projects.

Create Original **Innovative and Inventive GSM Projects** with us.

GPS Projects

Customized GPS Projects for ECE Students Based on your requirements enquire us to know more details.

Sample GPS Projects Topics are given below;

SI	IEEE GPS Projects Titles.
ACP-GPS01	Capturing the Signature of Severe Weather Events in Australia Using GPS Measurements.
ACP-GPS02	GPS assisted Standard Positioning Service for navigation and tracking: Review & implementation.
ACP-GPS03	Validating the Variability of Snow Accumulation and Melting From GPS-Reflected Signals: Forward Modeling.
ACP-GPS04	Real-Time GPS Precise Point Positioning-Based Precipitable Water Vapor Estimation for Rainfall Monitoring and Forecasting.
ACP-GPS05	Network delay modeling for assisted GPS.
ACP-GPS06	Polarization performance study of a GPS antenna mounted on a small t-tail aircraft in landing position using EM modeling.
ACP-GPS07	A software post-processing method for GPS receiver's accuracy characterization.
ACP-GPS08	Understanding Taxi Service Strategies From Taxi GPS Traces.
ACP-GPS09	Net recovery of UAV with single-frequency RTK GPS.
ACP-GPS10	Simulating the Impact of Refractive Transverse Gradients Resulting From a Severe Troposphere Weather Event on GPS Signal Propagation.

Link to GPS Projects:

https://academiccollegeprojects.com/ece-projects/gps-projects

We assist Final Year Ece Students to implement GPS Projects.

Create Original **Innovative and Inventive GPS Projects** with us.