GOVERNMENT COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

PLACEMENT **BROCHURE**

2021-22

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Training & Placement Cell

ABOUT

GOVERNMENT COLLEGE OF ENGINEERING - THANJAVUR

- **Government Engineering College (GCE), Thanjavur** is a government engineering college in Thanjavur, Tamilnadu, India. It was established in 2013 and offers various courses in UG in **Engineering** and it is accredited from UGC and it is affiliated to Anna University.ś

- **GCE THANJAVUR** is an college of national importance nurturing innovation and excellence amongst the student community to develop researches and leaders and empower the country with their contributions in various disciplines in the future.

- The institute offers undergraduate courses leading to the degree of **Bachelor of Engineering.** The Undergraduate students are admitted through Anna university counselling based on competitive student rankings in higher secondary examination.

- It is located 25 km from the city of Thanjavur and 40 km from the city of Trichy on Sengipatti - Gandharvakottai Main road.

- Government has allotted fund for laboratories, machineries and equipment's are purchased regularly. Government scholarships are dispersed to the students properly.

- We thank our CM for establishing this college for the welfare of the student’s society.

MESSAGE FROM THE **HEAD OF DEPARTMENT**

The Department of **Electrical and Electronics Engineering** at GCE Thanjavur. We take pride in our faculty, a team of highly capable and dedicated professionals, most of whom have academic and industrial experience and degrees from leading universities of the India. We provide ample opportunities to our faculty and students, through in house trainings, workshops and trainings outside the college campus for further growth and development in their areas of expertise.

Graduate will have the knowledge to adapt to the changing industrial needs and to become an entrepreneur to lead a successful professional career in lifelong learning. Graduates will involve in professional and ethical environment, to build effective communication skills, multidisciplinary and teamwork skills and to relate engineering issues to broader social context.

"SOLVING CHALLENGES OF RURAL INDIA"

Dr. P.Krishnamoorthy (M.Tech, P.hd.,)

Head Of Department,

Electrical and Electronics Engineering.

It gives me immense pride and pleasure to lead the Electrical and Electronics Engineering Department of this esteemed & prestigious institution. Electrical and Electronics Engineering (EEE) is the front runner because of its recent recognition and adoption by all industries and academia, thereby gaining self-confidence of our students to compete successfully with all competitive disciplines. We regularly revise our curriculum according to the need of today's research and industry applications. The primary focus of our curriculum is to convey technical know-how to students, promote their problem solving skills and innovation of new technologies. We carry out collaborative and interdisciplinary research in various industries and research centres worldwide.

"MODERN RESEARCH AND LAB FACILITY"

We have modern research and laboratory facility in the department. Our faculties have been conferred with many prestigious awards at National levels. We organise **National Level Technical Symposium and conferences** in the department. Our department looks forward to contribute in solving the technological challenges of the rural India with active participation from all sections of the society. The department takes pride in producing well rounded, professionally competent undergraduates and graduates.

STAFF PROFILE

Dr . R . Balamurugan
M.E., Ph.D.,

Dr . P. S . Prakash
M.E., Ph.D.,

Dr . R . Anandhakumar
M.E., Ph.D.,

Dr. S. Rajasomashekar
M.E., Ph.D.,

Dr. C. Mahalakshmi
M.E., Ph.D.,

Dr. M. Kalpanadevi
M.E., Ph.D.,

Mr. K. S. Gowthaman
M.E.,M.B.A.,(Ph.D.,)

Mr. M.Arunkumar
M.E., $(\overline{Ph.D.},)$

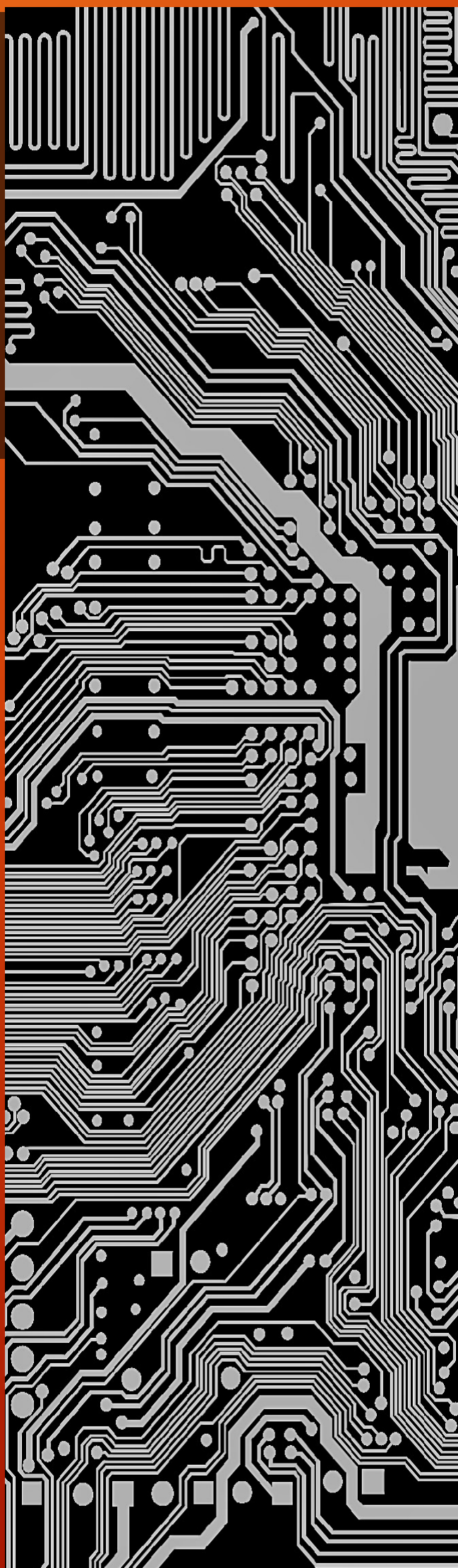
Mrs. S. Subalakshmi
M.E., $(\overline{Ph.D.},)$

Mr. M. Sivasubramani
M.E.,

ABOUT THE DEPARTMENT

Since the inception of the institution in 2013, the Department of **Electrical And Electronics** Engineering has been at the forefront of research and innovation, working on its primary objective of imparting quality education and training whilst leading on the innovation curve. The Department offers a comprehensive array of courses that encompass the **Undergraduate**, and **Doctoral levels.**

The Department of "**Electrical and Electronics Engineering**" was Established in the year of **2013-2014**. The Department offers the degree of **B.E** in "**Electrical & Electronics Engineering**" and the department has qualified staff members in various fields like **Electrical Machines, Drives and Control, Digital electronics etc.** The Department has well equipped laboratory for hands on session and also we develop some student research activities for their exposure. And specially give training to personal projects of our students.



LABORATORIES

❖ELECTICAL CIRCUITS LAB

This laboratory helps the students regarding the investigation of Ohm's Law, Kirchhoff's Laws, voltage and current division, mesh and nodal analysis, Thevenin and Norton equivalents, superposition, simple RL, RC, RLC circuits, phasors. Use of voltmeters, ammeters, ohmmeters and oscilloscopes. Identification of unknown elements. For infrastructural detail.

❖ELECTRICAL MACHINES LAB

This lab is purposely designed to teach the aspects of electrical machines .This laboratory is equipped with various electrical machines such as DC motors (Series motor, Shunt motor), DC generators (Series generator, Shunt generators), AC three phase motors (Induction motors, Synchronous motors), Alternators (Salient pole type and Cylindrical rotor type), single phase and three phase Transformers. Through hands-on experiments with real machines, students gain practical experience on transformers and various types of machine drives.The laboratory can also be used for project work related to electrical machines and energy conversion.

❖ ELECTRONICS LAB

This laboratory is well equipped with apparatus related to Network Theorems, Electronic Devices and Circuits, Linear and Digital Integrated Circuits, Power Measurement, Power Supplies ,Digital Storage Oscilloscopes, Signal Generators etc .The laboratory is used for the development of different applications with the help of various hardware prototypes and models in the area of analog and digital electronics.

❖ CONTROL AND INSTRUMENTATION LAB

This laboratory has three different sections, namely, Simulation Section, PC Interfacing Section and Workbench. In the Workbench, students are utilizing the basic equipment like Sensors, Transducers, Process Variable Measurement Modules, PID Controller Unit, Torque Measurements, Synchronous ,AC & DC Position control systems, Calibration of single and three phase energy meters . In the simulation section, simulation of analysis and design of control system in time and frequency domain have been carried out using computers. In the PC interfacing section, PC interfacing is carried out using Data Acquisition Cards along with Lab View Software with **NI ELVIS II** simulator.

❖ POWER ELECTRONICS

Complete Power Electronics experimentation and analysis related to AC & DC drives, AC to DC Converter, DC to AC Converter, Drive control, Choppers and FPGA based Inverter fed AC Drive, FPGA based buck-boost converter fed drive and SRM drive can be done in this laboratory . This lab is also equipped with computers for transient and simulation studies for power electronics and drives help of MATLAB and PSIM software. Also design of advanced convertors research work has been carried out with suitable CRO, current probe and Power quality analyzer.

❖ MICRO PROCESSOR AND MICROCONTROLLER

This laboratory is equipped with 8085/8086 Microprocessor, 8051 Microcontrollers, PIC, Arduino, Raspberry-Pi Microcontrollers and various interface cards such as traffic light controller, stepper motor interfacing, ADC & DAC Interfacing Cards, keyboard and digital controllers, DSP kit, FPGA based motor controller.

❖ ELECTRICAL SIMULATION LAB

Basic electrical simulation lab main aim is to develop the simulation skills. To generate various signals and synthesis for the engineering systems. To analyze harmonics in the systems. To analyze electrical circuit in simulation environment . Basic Operations on Matrices Generation of various signals and sequences (Periodic and Aperiodic), such as unit Impulse , Step, Square, Saw tooth, Triangular, Sinusoidal, Ramp, Sin . Operations on signals and sequences such as Addition, Multiplication, Scaling , Shifting, Folding, Computation of Energy, and Average Power Mesh and Nodal Analysis of Electrical circuits Application of Network Theorems to Electrical Networks Waveform Synthesis using Laplace Transform Locating the Zeros and Poles and Plotting the Pole-Zero maps in S plane and Z-Plane for the given transfer function Harmonic analysis of non-sinusoidal waveforms.

❖ RENEWABLE ENERGY SYSTEM LAB

Renewable energy resources laboratory is dedicated to train the students in renewable energy resources like solar, wind and fuel cells technology. Experiments in solar panels are helpful to the students to get the detail about working and performance the PV panels. The characteristics wind farm and fuel cell can be simulated in MATLAB platform that can promote research activities among the students.

FINAL YEAR (2018-2022)

PAPER PRESENTATION		WORKSHOP		INTERNSHIP	
TOTAL NUMBER OF PAPER PRESENTATION ATTENDED	TOTAL NUMBER OF STUDENTS ATTENDED	TOTAL NUMBER OF WORKSHOPS ATTENDED	TOTAL NUMBER OF STUDENTS ATTENDED	TOTAL NUMBER OF INTENSHIP ATTENDED	TOTAL NUMBER OF STUDENTS ATTENDED
20	30	10	20	3	54

PAST FINAL YEARS

PAPER PRESENTATION		WORKSHOP		INTERNSHIP		JOURNALS		CONFERENCE	
TOTAL NUMBER OF PAPER PRESENTATION ATTENDED	TOTAL NUMBER OF STUDENTS ATTENDED	TOTAL NUMBER OF WORKSHOPS ATTENDED	TOTAL NUMBER OF STUDENTS ATTENDED	TOTAL NUMBER OF INTENSHIP ATTENDED	TOTAL NUMBER OF STUDENTS ATTENDED	NUMBER OF JOURNALS PUBLISHED	TOTAL NUMBER OF STUDENTS	NUMBER OF CONFERENCE ATTENDED	TOTAL NUMBER OF STUDENTS ATTENDED
8	47	3	52	2	56	12	43	8	32

PASSEDOUT STUDENTS DETAILS

NUMBER OF STUDENTS WORK IN CORE COMPANY	NUMBER OF STUDENTS WORK IN SOFWARE COMPANY	NUMBER OF STUDENTS DOING HIGHER STUDIES
8	14	23