

About the College

KKR & KSR Institute of Technology & Sciences popularly known as KITS has set for itself the mission to churn out professional deft, academically-bright and socially responsible individuals to contribute its wee bit to the knowledge society. The college is situated in a spacious 11 acres of land in an idyllic rural setting. Despite being a college with 15 years of academic standing, the college is making rapid strides in establishing good practices in teaching-learning processes. It's a pleasure to disclose the achievements made by the students of KITS in all spheres, of participation at the university level. It's proud moment for our institution and students who have topped the university in various faculties of Engineering. The college has good infrastructure and is making concrete efforts in building an industry-institute beneficial corridor through addressing both the potential resources of the region and also meeting the transnational technical requirements. Though main impetus of our college is technology, it also supports and encourages students to involve in various social service activities like Blood Donation, Donations to orphanages, old age homes, and poor feeding. College has NAAC accreditation of "A" Grade for 5 years, NBA accreditation for 3 years and permanent affiliation of JNTUK Kakinada. College got autonomous status in the year 2020.

About the Department

The Department of Electrical and Electronics Engineering (EEE) was established in the year 2008. The Department of EEE accredited by NBA. The department has been actively engaged in teaching and research in diverse fields of Electrical and Electronics Engineering. It offers B.Tech in EEE with an intake of 60 students. The department o EEE has adequate and well-qualified faculty spanning all major are as of Electrical Engineering. Apart from regular academics, the Department Association organizes activities such as workshops, Guest Lectures, Quiz, Group discussions, just a minute sessions, mock interviews, reasoning and aptitude tests etc to encourage and motivate students to achieve their goals. The Department also encourages the students to involve in different projects and to participate in technical, social and cultural events organized by other Institutions.

CHIEF PATRON

Sri. K. Subba Rao

Chairman,
KKR & KSR Institute of Technology and Sciences.

Sri. K. Sekhar

Secretary,
KKR & KSR Institute of Technology and Sciences.

PATRON

Dr. P. Babu

Principal,
KKR & KSR Institute of Technology and Sciences..

Dr. K. Hari Babu

Director(Academics)
KKR & KSR Institute of Technology and Sciences..

FDP Coordinator

Dr. Y.Rajesh Babu,

Associate Professor & Head
Department of EEE
KKR & KSR Institute of Technology and Sciences.

FDP Co-Coordinator

Mr.M.Raja Nayak,

Assistant Professor
Department of EEE
KKR & KSR Institute of Technology and Sciences.

Organizing Committee

Teaching and Non Teaching Staff of EEE,
KKR & KSR Institute of Technology and Sciences.

Contact Details

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Department of EEE
(NBA Accredited Department)
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**A One Week On-Line
Faculty Development Programme
(FDP)**

**ROLE OF POWER
ELECTRONICS IN ELECTRIC
VEHICLE TECHNOLOGY**

Sponsored by AICTE-ATL

25th to 30th November 2024



**DEPARTMENT OF
ELECTRICAL & ELECTRONICS
ENGINEERING**

**KKR & KSR INSTITUTE OF
TECHNOLOGY AND
SCIENCES**

(Autonomous)
Vinjanampadu, Guntur,
Andhra Pradesh-522017, India.

www.kitsguntur.ac.in

AICTE Training and Learning (ATAL) Academy

AICTE Training and Learning (ATAL) Academy is established to empower faculty to achieve goals of Higher Education such as access, equity and quality. It was felt that Training with latest tools and technologies is vital to keeping an institute competitive and more productive. Training is required for increasing the knowledge and skills of students to make them more employable to acquire global competencies.

Furthermore, the higher education system is passing through a transformational phase to cope up with the global trends. National Education Policy (NEP)-2020 is a light house for this journey of transformation. Quality teachers community is always a potential force to enforce the changes and plays a pivotal role in development of knowledge building, knowledge sharing and its dissemination. In the extant scenario with disruptive technological advancements, role of higher education teachers is more important than it ever was.

Objective of the FDP

- Grasp fundamental concepts of power electronics, including the role of converters, inverters, and power management in electric vehicle systems.
- Learn about different power semiconductor devices (e.g., IGBTs, MOSFETs) used in electric vehicles, their characteristics, and their impact on efficiency.
- Comprehend how DC-DC converters, DC-AC inverters, and other power electronic circuits operate and their importance in energy conversion for electric vehicles for Battery Charging.
- Understand how power electronics drive electric vehicle motors (AC and DC motors), control their speed, torque, and efficiency.

Contents of FDP

- Fundamentals of power electronics and their importance in EVs.
- DC-DC converters, inverters, and chargers used in EV systems.
- Motor control techniques for smooth and efficient EV operation.
- Battery management systems (BMS) for optimal performance and longevity.
- Real-world applications of power electronics in modern electric vehicles.

Outcomes of the FDP

- After the completion of FDP, the participants can
- Create an awareness of the need and importance of Power Electronics in EV Technology.
 - Impart knowledge on Modern Electric Drives and Control Techniques for EVs.
 - Design input filters for switched-mode power converters
 - Advanced power converters for various applications and Provide hands on exposure to real time digital control techniques.
 - Direct Current Fast Charging (DCFC) techniques for battery charging.
 - Hands on simulation practice of inverters, high gain converters, PV fed converters, resonant converters and its applications in EVs

Speakers

The FDP sessions delivered by Eminent Academicians from overseas , NITs , Universities , Industrial experts.

Session Timings

Daily (Online)

- Session -1 : 6PM to 7.30PM (IST)
- Session -2 : 7.30PM to 9PM (IST)

Eligibility

Faculty members and PG Students of AICTE approved institutions, research scholars, Industry Persons

Registration Fee Particulars

Registration is free

Number of seats

Participants are selected on first come first serve basis.

Important Information

- Course Registration free for all participants.
- All the sessions will be conducted through Online platform. The meeting links will be sent to the participants through Whatsapp/email.
- There will be an Inaugural Ceremony, 13 Technical sessions and Online test / quiz and a valedictory.
- An Online test will be conducted by the coordinator at the end of the program
- The certificates shall be issued to those participants who are registered on ATAL portal www.aicte-india.org/atal and attend the program with minimum 80% attendance and score minimum 70% marks in the test. For more details refer this link <https://atalacademy.aicte-india.org/FAQs>.
- An online test will be conducted by the coordinator at the end of the program.

Important Dates

Last Date for Resigation : 24-11-2024

How to apply

Registration has to done only through AICTE ATAL registration Link <https://atalacademy.aicte-india.org/signup>