



**GMR Institute of Technology, Rajam  
Andhra Pradesh**

(UGC-Autonomous Institution, Affiliated to JNTU Kakinada, Accredited by  
NBA and NAAC with A Grade)

&

**V. R. Siddhartha Engineering College,  
Vijayawada, Andhra Pradesh**

(UGC- Autonomous Institution, Affiliated to JNTU Hyderabad,  
Accredited by NBA and NAAC with A+ Grade)

**Department of Electrical and Electronics  
Engineering**

**Jointly Organizing**

One Week Faculty Development Programme  
on

**"Recent Advancements in Generation  
and Control in Modern Power Systems"**

**7<sup>th</sup> - 12<sup>th</sup> March, 2022**

**Organizing Committee**

**CHIEF PATRONS**

**Dr. C. Nageswara Rao  
PRESIDENT - SAGTE**

**Sri P. K. S. V. Sagar  
CEO - GMRVF**

**PATRONS**

**Dr. J. Girish  
Director Education  
GMRVF**

**Sri P. Lakshmana Rao  
Secretary - SAGTE**

**Sri M. Rajaiah  
Vice President - SAGTE**

**Dr. C. L.V. R. S.V. Prasad  
Principal, GMRIT**

**Dr. A. V. Ratna Prasad  
Principal, VRSEC**

**CONVENORS**

**Dr. P. Ramana  
Professor & HoD, GMRIT**

**Dr. P. V. R. L. Narasimham  
Professor & HoD, VRSEC**

**CO-CONVENORS**

**Dr. M. Rambabu  
Sr. Assistant Professor  
GMRIT**

**Dr. B. Venkateswara Rao  
Associate Professor  
VRSEC**



**GMRIT- an Overview**

Established in 1997, GMR Institute of Technology has come a long way since its inception and has carved a niche for itself in the corporate world. It is currently placed among the top 50 colleges in the country and among the top 5 colleges in the state of Andhra Pradesh. It offers Nine Under Graduate and Six Post Graduate programs. All B.Tech programs are accredited by NBA under tier-1 complying with Washington Accord and the college is accredited as an 'A' grade institution by NAAC for the three consecutive cycles. In the ranking done by NIRF-MHRD, GMRIT was put in the rank band 201-250 at the country level for the years 2020 and 2021. Further, GMRIT was declared as the 1st best Clean & Smart campus by AICTE.

The Department offers programs at both Undergraduate(B. Tech course in Electrical and Electronics Engineering) and Postgraduate (M. Tech course in Power and Industrial Drives) levels. It provides a strong mathematical and scientific foundation in Electrical and Electronics Engineering fundamentals. The course also addresses and develops abilities in the application of design processes to develop innovative Engineering solutions. The curriculum has been designed to create professional Electrical and Electronic Engineers, who can serve in the fields of core Electrical Engineering, Information and Communication systems and other related fields. At Postgraduate level, the Department has been offering M. Tech course in Power and Industrial Drives since 2007. The course focuses mainly on imparting theoretical and practical knowledge in the field of Power Electronics and its applications to electrical machines, drives, industrial equipment and power systems. Special Emphasis on design, modeling and analysis of conventional and advanced electrical machines are given in this programme.

**VRSEC- an Overview**

Velagapudi Ramakrishna Siddhartha Engineering College (VRSEC) is the first Private Engineering College in the united state of Andhra Pradesh (AP) and was established in the year 1977. VRSEC is offering 7 UG Programmes (B.Tech) and 9 PG Programmes (M.Tech) in Engineering with various specializations. In addition, the institute is offering PG Programmes of Masters in Business Management (MBA) and Masters in Computer Applications (MCA). All UG programs and 5 PG programs in engineering are accredited by NBA in Outcome Based Education Format (OBE). The total student intake of the institute is 1440 and total student strength of the college is about 5700. UGC has conferred the Autonomous status to the Institute in 2006. The institute bagged All India Rank 178 given by NIRF-MHRD in the year 2021. VRSEC was accredited by NAAC with 'A+' grade and certified with ISO 9001:2015.

The Department of Electrical and Electronics Engineering is established in the year of 1977. The department offers B.Tech program in Electrical and Electronics Engineering with an intake of 120 and M.Tech program in Power Systems Engineering with an intake of 18. Both UG and PG programs are accredited by National Board of Accreditation (NBA) under the outcome based education system for a period of 6 years and 2 years respectively. The department has been recognized as research center by JNTUK, Kakinada, India. The department has introduced various programs such as skill development, hands on sessions and technical workshops to strengthen the overall development of the students and faculty.



## Day

## Session-1 (10:30AM-12:00PM)

## Session-2 (3:00PM-4:30 PM)

**07/03/2022** "Relay Coordination in Power System Using etap"  
Dr. S. Kavaskar, Sr. Power System Engineer, Power Projects, Chennai



"Modern Trends in Power System Protection"  
Dr M Jaya Bharata Reddy, Professor, NIT-Trichy



**08/03/2022** "Lean Six Sigma- Advanced Maintenance Strategy"  
Dr. M. H. Naeem Hanoon Associate Professor, University of Technology Mara, Malaysia



"Control and Protection aspects of microgrids"  
Dr. Rajesh Kumar Patnaik, Asso. Professor, Dept. of EEE, GMRIT



**09/03/2022** "Microgrid energy management system "  
Dr. Vishnu Suresh, Assistant Professor, Wroclaw University of Science and Technology, 50-370 Wroclaw, Poland



"Battery fires in electric vehicles and energy storage systems".  
Dr. N. Goutham Kumar Assistant Professor (Group 'A' Gazetted, Non-Ministerial) Government of India Ministry of Home Affairs National Fire Service College



**10/03/2022** "Role of GIS in integrated power system for sustainable development"  
Dr. G.V.Nagesh Kumar Professor & Head Dept. of EEE, JNTUA College of Engineering Pulivendul.



"Transmission line pricing"  
Dr. G. Srinivasa Rao, Assoc.Professor, Department of EEE, VRSEC



**11/03/2022** "Methods for detecting and mitigating cyber-attacks in Automatic Generation Control systems"  
Dr. T. S. L. V. Ayya Rao, Asst. Professor, Dept. of EEE, GMRIT



"Power System Studies using MiPower"  
Dr. B. Srinivasa Rao, Professor, Department of EEE, VRSEC



**12/03/2022** "Power System Optimization"  
Dr D. Ramesh, Asst. Professor, Dept. of EE, Birsa Institute of Technology, Sindri, Dhanbad, Jharkhand



### About the FDP Programme

Electrical energy has grown immensely over two centuries because of flexibility it provides for its use. The variety of use has led its demand to increase monotonously. However, as the load or demand has increased practically one requirement is consistent. That is, to generate the amount required by the load at that very instant because this large amount cannot be stored for delivering this high amount of demand. Therefore, the generation of electrical energy is happening simultaneously as use it. In addition, our demand is always varying. Therefore, the generation is also varying with it. Apart from varying demand, the type of current we consume also varies. These variations put many constraints and conditions. This is the reason of the complex and big control rooms across the whole power system.

The concept of adopting suitable techniques to generate, control the power in the recent decades. The replacing of traditional power generation with renewable energy sources to reduce the carbon emission and make the process economical one. The main aim of this FDP titled "Recent Advancements in Generation and Control in Modern Power Systems" is to inculcate the knowledge of Gas insulated substations, use of various software's like Mipower, etap in power system, power system optimization techniques provide the sharing of knowledge among the faculty and participants community.

### Who can attend

Faculty/ Industry persons/ Research Scholars/ PG Students

### Registration

Registration Fee: **No Fee**

Last Date of Registration: **04/03/2022**

Confirmation of Participation: **05/03/2022**

Registration: **First come first served basis.**

**Registration link:**

**<https://forms.gle/TK7hmnXyxYs8xo18>**

This programme will be conducted using the Microsoft Teams Platform. The link will be shared through mail.

### Certificate of Participation

The certificate will be issued to the participants who attain 80% attendance.

### Faculty Cordinators

- 1.Dr. K. Karthick, Associate Professor, GMRIT.  
Mobile: 9894821761
- 2.Dr. G. I. Kishore, Sr. Assistant Professor, GMRIT.  
Mobile: 9161847237
- 3.Mr. J.S.V. Siva Kumar, Sr. Assistant Professor, GMRIT.  
Mobile: 9885520663
- 4.Mrs. J. Vimala Kumari, Assistant Professor, VRSEC,  
Mobile: 9701387118
- 5.Mr. P. Sowmith, Assistant Professor, VRSEC  
Mobile: 9703701510