

REGISTRATION DETAILS

- ★ Registration will be on first come first serve basis
- ★ Registration Fee Rs. 300
- ★ Those who are willing to participate are requested to Register.

REGISTRATION LINK

<http://tinyurl.com/t85u42se>

IMPORTANT DATES

Last date for registration: 21st September, 2021

Extended date of registration : 26th September, 2021

Information of acceptance: 26th September, 2021

PAYMENT DETAILS

Account Holder Name : N. CHELLAMMAL
Account Number : 6864931193
Name of the Bank : Indian Bank
Branch : SRM University,
Kattankulathur, Chennai
IFSC Code : IDIB000S181
MICR Code : 600019171

All communications should be sent to:

Dr. C. Anuradha Asst.Prof / EEE

Mobile: 9840257150

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CHIEF PATRONS

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Shri. Ravi Pachamoothoo

Pro - Chancellor (Administration)

Dr. P. Sathyanarayanan

Pro - Chancellor (Academics)

Dr. R. Shivakumar, Vice President

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Vice chancellor, SRMIST

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Registrar, SRMIST

Prof. T.V. Gopal

Dean, CET, SRMIST

CONVENOR

Prof. K.Vijayakumar

Professor & HOD

Department of Electrical and Electronics Engg.,
SRMIST

COORDINATORS

Dr. A.Rathinam

Professor/EEE and Director - Alumni Affairs, SRMIST

Dr. N.Chellammal

Associate Professor,

Dept., of Electrical and Electronics Engg.,
SRMIST

ORGANIZING COMMITTEE MEMBERS

Dr. S.Vijayalakshmi, Asst. Prof / EEE

Dr. D.Maharajan, Asst. Prof / EEE

Dr. C.Anuradha, Asst. Prof / EEE

Dr. P.Suresh, Asst. Prof / EEE

Dr. Kuncham Sateesh Kumar, Asst. Prof / EEE



SRM

INSTITUTE OF SCIENCE & TECHNOLOGY
(Deemed to be University u/s 3 of UGC Act, 1956)

SIX DAYS ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP)

ENERGY MANAGEMENT AND CONTROL STRATEGIES FOR SMARTGRID

(27th SEPTEMBER – 4th OCTOBER, 2021)



Convenor

Prof. K.VIJAYAKUMAR

Coordinators

Dr. A.RATHINAM

Dr. N.CHELLAMMAL

Organized by

Department of Electrical and Electronics Engineering

College of Engineering and Technology

SRM Institute of Science and Technology

SRM Nagar, Kattankulathur - 603 203, Tamil Nadu, India

Supported by



IET The Institution of
Engineering and Technology



ABOUT SRM IST

SRM Institute of Science and Technology is one of the top ranking universities in India with over 50,000 students and 2,800 faculty members, offering a wide range of undergraduate, postgraduate and doctoral programs in Engineering, Management, Medicine and Health sciences and Science and Humanities. It has established itself as a premier centre for teaching, research and industrial consultancy in the country. It has world class infrastructure including smart classrooms, hi-tech labs, advanced instruments and equipments, research laboratories, modern library and Wi-Fi facility. SRM IST has been categorized as grade A University by Ministry of Human Resources Development (MHRD) Government of India and accredited by NAAC with 'A++' grade in 2018. SRM Institute of Science and Technology (formerly known as SRM University) has been awarded a Four Star rating by Quacquarelli Symonds ('QS'). Recently, SRM IST has been awarded the maximum 5 - Star rating on Teaching, Employability and Inclusiveness. Also it has been recognized as smart and clean campus with AICTE award.

ABOUT THE DEPARTMENT

VISION

To impart quality education in the field of Electrical & Electronics Engineering and to produce globally competent engineers to serve the society.

MISSION

To educate the student to become better practicing engineers to meet global excellence.

To provide better environment through latest developments in electrical engineering involving problem solving, design, practice and training.

To motivate the graduates to become a good leader, designer and researcher through industry-oriented trainings with social and ethical responsibilities.

The Department of Electrical and Electronics Engineering came into existence in the year 1992-1993 as a key entity of SRM Engineering College under the affiliation of University of Madras. Since then there has been a consistent development in all spheres including infrastructure

facilities, staff development and student development. The programme offered by the department under the University of Madras were brought under the ambit of Anna University from the year 2002. From 2003-2004 the department started functioning under SRM Institute of Science and Technology (Deemed University). The department now offers B.Tech (Electrical and Electronics Engineering), M.Tech - Power Electronic and Drives, M.Tech - Power Systems and Ph.D program under the College of Engineering and Technology, SRMIST. The department has 14 laboratories with modern equipments supported by special purpose software packages like MATLAB, PSPICE, PSIM, PSCAD, ETAP, MAGNET, POWER WORLD SIMULATOR etc. The B.Tech Electrical and Electronics Engineering programme of Kattankulathur Campus is accredited by the Engineering Accreditation Commission of ABET. It has over 70 faculty members whose areas of expertise and research include power electronics and power systems. The faculty members of the department have contributed to academics by publishing books, research articles in high-impact peer-reviewed journals, presenting papers in conferences, delivering guest lectures and invited talks. The department has tie-ups with recognized institutions, industries and R&D laboratories for student projects, training and research activities. The department has been recently awarded with AICTE-CII award for best industry linked institute under category Electrical Engineering in 2019.

ABOUT ONLINE FDP

In India, major part of the electricity is generated from fossil fuels. Increase in cost, depletion of fossil fuels, reliability and the growth of city infrastructure have become the major problems faced by the current power system industry. Therefore, today's power grid needs to be restructured with the micro-grid. The concept of micro-grid emerges as a new viable solution to meet the energy crisis by integrating distributed energy resources such as solar, wind etc... With various power generation sources and increased load demand, the future power grid needs to be intelligent and a better understanding of such smart power grid is needed in terms of generation, transmission and distribution. Therefore, the six days online FDP aims to address the issues and challenges related to Solar PV design, Grid integration, Control strategy in regulating efficient energy supply, protection, stability, application of intelligent control

techniques to revive the conventional power grid in to smart grid, communication networks and security problems related to smart grid. Hence this FDP will provide a platform for the participants to carry over rich knowledge on smart grid and explore multi-disciplinary research topics such as grid integration, controllers design using real time software, communication and cyber security.

TOPICS TO BE COVERED

- **Microgrid Protection and Stability**
- **Intelligent Control, Machine learning and its applications in Microgrid**
- **Smart Energy Hybrid Systems**
- **Control Strategies for Microgrid and Smartgrid**
- **Role of Smartgrid in EV Integrated Power Systems**
- **E mobility: Technical and Regulatory Challenges**
- **Smart Metering Technology and IoT**
- **Communication Networks in Smartgrid**
- **Controllers design using real time software**
- **Cyber Security in Smartgrid**
- **Grid Integration of RES & MPPT Algorithms**
- **Challenges in Hybrid Microgrid**
- **Configuration and Modelling of Hybrid Renewable Energy System in Microgrid**
- **Design of Power Electronic Interface for Microgrid**
- **Energy Storage Systems**

RESOURCE PERSONS

The sessions will be delivered by a pool of resource persons from leading prestigious academic institutions and industries. All the session will be conducted through online platform.

PARTICIPATION CERTIFICATE

The certificates shall be issued to those participants who have attended the program with minimum 80% attendance.

WHO CAN PARTICIPATE

The faculty members of the AICTE approved institutions, research scholars, UG and PG Scholars, participants from Government, Industry (Bureaucrats / Technicians / Participants from Industry etc.) and staff of host Institution.