

Sponsorship Certificate

Certified that Prof/Dr.....
.....

is an employee of our institution and is hereby sponsored for the TEQIP-II sponsored Faculty Development Program in “**Mathematical Foundations for Communications and Machine Learning**” at TKM College of Engineering, Kollam - 5.

Prof/Dr.....
.....

will be permitted to attend the full programme if selected.

Name and Signature of
the Head of the Institution

College Seal

Place:.....

Date:.....

How to apply

Application forms in the prescribed format duly filled up in all respects, along with the sponsorship certificate from the head of the institution, should reach the coordinator before the last date. Applications received after the declared date will not be considered.

Who can apply

Teachers of Electronics & Communication Engineering /Electrical and Electronics Engg/ Mechanical Engg/ Applied Electronics Department of Engineering colleges.

Course Fee

No course fee is charged for the participants. No TA/DA/accommodation will be provided to the participants.

Important Dates

Last date for submission of application form: 26th
January, 2023.

Intimation of selection: 27th **January, 2023** through
e-mail

Address for Communication

Coordinator,
Mathematical Foundations for Communications and Machine Learning,
Department of Electronics & Communication Engineering, T.K.M.
College of Engineering, Kollam, Kerala. Pin: 691 005, Telephone: 0474
2712024 (O)

Mail id: anzarsm@gmail.com
nishtkm@gmail.com

For more details contact

Dr. Nishanth N.
Phone: 9496314114

Dr. Anzar S. M.
Phone: 9447244119

TEQIP -II Sponsored Faculty Development Program



MATHEMATICAL FOUNDATIONS FOR COMMUNICATION AND MACHINE LEARNING

During

30th January to 3rd February 2023

Co-ordinators

Dr. Nishanth N

&

Dr. Anzar S. M.

Organized by

Department of Electronics & Communication
Engineering

T.K.M. College of Engineering,

Kollam, Kerala - 691 005



About the College

Thangal Kunju Musaliar College of Engineering (Autonomous) is one of the premier institutions of national importance in the field of higher technical education and basic and industrial research. It was established in 1958 as the first aided engineering college in the state of Kerala by the late Janab A Thangal Kunju Musaliar, an industrialist, philanthropist and great visionary who played a crucial role in giving a much-needed boost to the state's economy. The College, which started with three branches and 120 students, now has more than 720 students enrolled in its 8 undergraduate programmes. The college also offers postgraduate programmes in engineering, management and computer applications. All the B Tech and M Tech programmes have been accredited by the National Board of Accreditation. The institute has organized several symposia, seminars, conferences and workshops of national and international importance. The campus is located 5 km from Kollam on NH 744 and 70 km from Trivandrum International Airport.

About the Department

The Department of Electronics and Communication Engineering, TKMCE, Kollam was established in the year 1977. Since its inception, the department has achieved excellence in academic circles. At present, the B.Tech. Programme has an approved enrolment of 120. Since 2012, the department has also been offering an M.Tech. Programme in Communication Systems. The number of approved students is 18. The department is on the verge of being recognized as a research centre by the University of Kerala. It has signed MoU with many leading industrial and research organizations like Tata Elxsi, Tata Consultancy Services, Network Systems Private Limited (NEST) etc. for conducting research, consultancy and internship. The department has experienced faculty members with postgraduate and doctoral degrees from reputed institutions with international and national publications to their credit. The graduates of this department include many renowned technocrats, academicians and researchers working all over the world.

About TEQIP

Technical Education Quality Improvement Programme (TEQIP) was envisaged as a long-term programme of about 10-12 years duration to be implemented in 2-3 phases for transformation of the Technical Education System with the World Bank assistance. The reform process needs to be sustained and scaled-up for embedding gains in the system and taking the transformation to a higher level. To continue the development activities initiated through TEQIP-I, a sequel Project is planned as TEQIP-II.

The major objectives of TEQIP project are

- Strengthening Institutions to produce high quality engineers for better employability,
- Scaling-up postgraduate education and demand-driven Research & Development and Innovation,
- Establishing Centres of Excellence for focused applicable research,
- Training of faculty for effective Teaching, and
- Enhancing Institutional and System Management effectiveness.

About the Course

The Mathematical Foundations for Communication and Machine Learning course provides a comprehensive look at mathematical concepts and results important for the design, analysis and optimization of signal processing algorithms, modern communication systems and machine learning. It helps participants master key techniques and understand the current research literature, and provides a comprehensive overview of methods and applications from linear algebra, probability, stochastic processes and machine learning. In addition to discussing mathematical theory, sessions present examples that illustrate the use of different mathematical concepts to solve various applications in communication using machine learning tools. This course also helps participants understand basic and advanced results as well as current research trends in the interrelated fields of signal processing, telecommunications and machine learning. It provides all the necessary mathematical background to prepare participants for more advanced courses and to train professionals working in these fields.

Course Topics

Random Variables and Random Process

Linear Algebra

Basics of Machine Learning Algorithms

Channel Estimation etc..

TEQIP II Sponsored FDP on

“MATHEMATICAL FOUNDATIONS FOR COMMUNICATION AND MACHINE LEARNING ”

30th Jan - 3rd February, 2023

REGISTRATION FORM

1. Name:.....

(In block letters)

2. Age:..... Sex.: Male/Female

3. Designation:.....

4. Name of the Institution/Organization:.....

5. Address for communication:.....

6. Contact No:.....

7. Email:.....

8. Specialization:.....

9. Experience:.....

CERTIFICATE

Certified that the information furnished above is true to the best of my knowledge and belief. I agree to abide by the rules and regulations governing the conduct of the program.

Place:

Date :

Signature of the Applicant