SERBPOWER
PROMOTING OPPORTUNITIES FOR WOMEN IN EXPLORATORY RESEARCH

Short-Term Course
on
RF to THz Technologies for Next-Generation Communication and Sensing

Under Scientific Social Responsibility (SSR) Power Grant, ANRF

(Hybrid Mode)
06th - 10th January, 2025

Organized by

**Department of Electronics and Communication Engineering
National Institute of Technology Rourkela
Rourkela-769008, Odisha, India**

Coordinators
Dr. Situ Rani Patre
Dr. Sandip Ghosal

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About the Course

The Short-Term-Course on "RF-to-THz Technologies for Next-Generation Communication and Sensing" is designed to provide an in-depth understanding of emerging RF technologies, Machine Learning for RF, EDA tools and its application in next-generation communication and Sensing.

Highlights of the Programme

✓ Antennas for 5G and beyond
✓ AI/ML for Antennas
✓ UAV/Ground Penetrating Radar
✓ THz Communication/Through-Wall Imaging
✓ Metasurface/FSS/RIS/Absorber/RFID sensor
✓ Matching Network/Filters
✓ Computation Electromagnetics
✓ Hands-on FEKO/HFSS/MATLAB

Target Audience

UG/PG/MS/Ph.D. students/ research scholars, staff/faculty members, and industry professionals in the
area of next-generation RF-to-THz Technologies.

E-certificates will be provided to the registered participants upon successfully completing the course.

Registration Details

The registration fee (non-refundable) for various participants for attending the short-term course is given below:

Registration Type	Fee (including 18% GST)
Student/Technical Staff	Rs. 354/-
Faculty Member	Rs. 590/-
Industry Personal	Rs. 826/-

Note: NIT Rourkela students/staff/faculties are exempted from the payment of the registration fee.

Bank A/C Details for Paying Registration Fee: The registration fee is to be deposited in the following bank account:

Account Name	Continuing Education, NIT Rourkela
Account Number	10138951784
Bank Name	State Bank of India
Branch Name	NIT Rourkela Campus (2109)
IFS Code	SBIN0002109

Please register here after fee payment
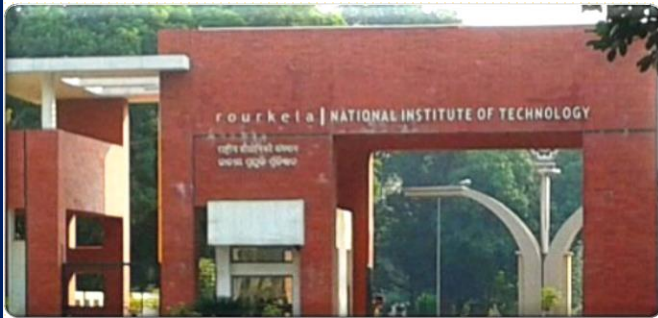**Registration Link:**
https://forms.gle/qRQnY12WX9mbFa9j6
Registration deadline 02/01/2025
Contact: Tel: +91-661-246-2479
Email: events.ece.nitrkl@gmail.com

National Institute of Technology Rourkela

NIT Rourkela is one of the country's premier national-level institutions for technical education and is funded by the Government of India. The government of India has elevated the Regional Engineering College, Rourkela to a deemed university under the name of National Institute of Technology Rourkela. Please visit https://www.nitrkl.ac.in/ to know more about NIT Rourkela.

Department of Electronics and Communication Engineering

The department offers various UG and PG programs with the mission to advance and spread knowledge in the areas of Electronics, Communication, RF and Microwave System, Instrumentation, Signal Processing and VLSI leading to creation of wealth and welfare of humanity. The department also offers M. Tech. and Ph. D. for regular as well as sponsored candidates. Please visit https://www.nitrkl.ac.in/EC/ to know more about the department of ECE.

Major facilities with RF and Microwave System Group

RF and Microwave System

The RF and Microwave research group was formed in 2020 with 1st batch of M. Tech in Microwave and Radar. Currently, the department offers M. Tech. in RF and Microwave Systems. The group aims to enhance the research and product development in the area of RF and Microwave System and extending towards emerging THz technologies. The RF and Microwave group offers training and research expertise in topics including active/passive RF components, filters, oscillators, antennas, RFID, GPR, Metasurface, RIS, THz, computational electromagnetics and AI/ML The faculties of RF and Microwave System group are handling research projects sponsored by NRF, ISRO and DRDO etc. The projects offer JRF/SRF/RA positions along with regular Ph. D.

Key Speakers

Academicians from premier institutions like IITs, NITs, State/Centrally Funded Universities, foreign universities, and scientists from ISRO and DRDO having expertise and experience in relevant domain knowledge.

Organizing Committee

PATRON

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