

ONE WEEK FACULTY DEVELOPMENT PROGRAMME ON

Recent Developments on MEMS Actuators & Sensors

(2nd – 6th May 2022)

Organised By



**Department of Electronics &
Communication Engineering ,
Rajiv Gandhi University**
(A Central University),
Itanagar, Arunachal Pradesh

<https://rgu.ac.in>

ABOUT THE PROGRAMME

The NEP- 2020 focuses on interdisciplinary studies and research by involving multidisciplinary domains of engineering, science, and its application to social science.

Micro electro mechanical systems (MEMS) is an interdisciplinary domain as it involves concepts of various domains such as electronics, mechanical engineering, electrical engineering, mechatronics, and material science. The MEMS systems are built up and fabricated by integration of Sensors and Actuators that are capable of sensing and processing micron sized movements of mechanical elements. Nowadays, the integration of MEMS technology and complementary metal oxide semiconductor (CMOS) technology is widely being exploited for the design and development of advanced Microsensors and Systems. These advanced sensors and systems are finding widespread applications in automotive industries, consumer electronics, biosensing and biomedical, aerospace engineering, and defence systems.

The purpose of this FDP course is to give a broad introduction to the development trends and perspectives of the future sensors and MEMS/NEMS. It will provide participants with necessary fundamental knowledge and experience in the design and fabrication of MEMS and Microsensors. The topics include basic sensing and actuating principles, materials, fabrication technologies and electronics for MEMS and Microsensors. The course will also cover current literature, MEMS markets and applications.

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PROGRAMME OBJECTIVES

- To revisit the fundamentals of MEMS Actuators & Sensors.
- To understand basic principles involved in development of MEMS devices
- To familiarise with basic fabrication process of MEMS systems
- To explore various applications of MEMS Actuators and Sensors
- To look on the current developing trends in MEMS Actuators and Sensors
- To enable candidates to formulate research problems in MEMS Discipline

REGISTRATION FEE

There is **no registration fee** for participants. The certificates will be issued on satisfactory attendance of at least 80%.

TARGET PARTICIPANTS

- Academicians and Faculty from various Universities/ Institutions.
- Researchers interested in exploring this new multidisciplinary MEMS field.
- Research Scholars from various institutions
- Industry participants are also welcome.

ABOUT THE UNIVERSITY



The Rajiv Gandhi University (formerly Arunachal University) is the premier institution for higher education in the state of Arunachal Pradesh located at the picturesque tabloid of Rono Hills approximately 25 km away from the state capital Itanagar. Late Smt. Indira Gandhi, the then Prime Minister of India, laid the foundation stone of the University on 4th February 1984 at Rono Hills. Ever since its inception, the University has been trying to achieve excellence and fulfill the objectives as envisaged in the University Act. The University was recognized as a Central University in the year 2007 established under the Act of Parliament. Being the lone Central University of the State at present there are Thirty-Six (36) Departments and Three (03) Institutes functioning under Eleven (11) Academic Faculties. The faculty members have been actively engaged in research activities. The University has been maintaining its academic credibility and has been recognized by UGC as a center with potential for excellence. Rajiv Gandhi University (RGU), the lone central varsity in Arunachal Pradesh, has secured the second position among all central varsities in the country.

Rajiv Gandhi University, Arunachal Pradesh has also been awarded the title of Best Central University of the Year 2020 during the 3rd Himalayan Educators Summit-2020 & 3rd Divya Himgiri Himalayan State Education Excellence Award-2020 to recognize the efforts of leading educational institutes of the Himalayan States that are substantially contributing to the Education sector.

REGISTRATION LINK

The registration can be done using followings:

<https://forms.gle/Vz3jwTqQMBBdmMpe9>

OR



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