

Society for Computer Technology and Research's **Pune Institute of Computer Technology** 

( Approved by AICTE & Government of Maharashtra, Affiliated to Savitribai Phule Pune University)

Accredited by NBA (All UG Programs) & NAAC A+ )

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### M.Tech. (Electronics and Communication) in Wireless Communication Technology

### **About Program**

The Department of Electronics & Tele Communication Engineering (E&TCE) established in 1996 offers an Undergraduate Program in Electronics and Telecommunication Engineering which is accredited by National Board of Accreditation for six time. It is also one of the most recognized programs amongst the student community with state of the art facilities, and the best placement track record in niche companies. It was also offering Master of Engineering (M.E) in Microwave since 2006-07 with an intake of 18 Students.

Currently the department is offering M.Tech in Electronics and Communication (Wireless Communication Technology)with an intake Capacity of 6 students keeping in view of the latest technological developments in the field of wireless communications.

Wireless communication systems have progressed at an exponential growth rate over the past few decades. All the stakeholders, including commercial solution providers, academic researchers, industries, wireless subscribers, technicians, standardization bodies, have all greatly benefited from the revolutionary changes led by most recent advances in wireless communication technologies. Latest technological advances including, software and cognitive radio, network and virtualization, massive MIMO, ultradensification, millimeter wave, and the introduction of new frequency bands enabled the change. Applications such machine-to-machine communications, internet of things, virtual and augmented reality, e-commerce, biomedical applications, unmanned aerial vehicles, and many more. Ever growing service requirements of high data rate, low latency, reliability, spectral efficiency, and energy efficiency are driving the research towards more wireless technological advances.

PICT's Electronics and Telecommunication department possesses a very talented group of individuals with state-of-the art expertise and infrastructure in this domain. In pursuit of excellence in this wireless communication domain, Department facilitated industry supported laboratory and a recognized National Instruments PICT NI LabVIEW academy with Universal Software Radio Peripheral (USRP), NI-MyDaQ, LabVIEW etc., in addition to many other laboratories. The laboratories include facilities such as microwave benches, microwave integrated circuit, radar, vector network analyzer and software such as AWR Microwave office, CADFEKO, MATLAB, HFSS, NI-LabVIEW to enable the students to carry out experiments and research in the field of wireless communication.

The curriculum for the M.Tech (Electronics and Communication-Wireless Communication Technology) has been developed with the help of experts from wireless communication domain reputed industry, academia and R&D institutions.

### M.Tech - Electronics & Communication Engineering Faculty



### Dr. Mousami V. Munot HOD, Associate Professor BE (Electronics & Telecommu

BE (Electronics & Telecommunication Engineering) MTech (Electronics & Telecommunication Engineering) PhD (Electronics & Telecommunication Engineering) Email: <u>hodetc@pict.edu</u>



#### Dr. Y. Ravinder Professor BE ( Electronics) ME (Electronics & Communication Engineering) Ph.D. (Electronics & Communication Engineering) Email: <u>yravinder@pict.edu</u>



Dr. R. Sreemathy Associate Professor BE(Electronics & Instrumentation Engineering) ME(Electronics Engineering) Ph.D. (Electronics Engineering) Email: <u>rsreemathy@pict.edu</u>



Mr. Sunil K. Khot Assistant Professor B.E.(Electronics) M.E. E&TC (Microwave) Email: sskhot@pict.edu

### **Technical Support Staff**

Mr. Suvidya R. Pawar

B.E.(Electronics), M.E. E&TC (Microwave) Email: <a href="mailto:srpawar@pict.edu">srpawar@pict.edu</a>

# Applied Wave Research (AWR) Training







# CAD FEKO Training









## Industrial Visit - GMRT, Khodad, Pune



## Industry Tie-Ups for M.Tech Final Year Projects





# Infrastructure - Equipped Laboratories























## Our Alumni



Name: Jayashri Kulkarni Institute: Research Associate, Baylor University, Waco, Texas, USA. Year of Passing: 2011



Name:- Prutha Kulkarni Institute:- VIIT,Pune Position: Assistant Professor. Received International Award for her research work at PICT,Pune Year of passing:- 2013



Name: Samruddha Thakur Organization: Philips Healthcare, Pune Position: System Engineer Year of Passing : 2013



Name:-Vishal Padwal Organization:- Qualcomm India Pvt. Ltd deputed by Collabera technologies Pvt. Ltd,Banglore Position: Sr.RF Engineer Year of passing:- 2013



Name:Harshal Hanmante Organization:IITM, Pune Position:Research Scholar Year of Passing:2018



Name:- Aditi Waghmare Organization:- EXL service ,Noida Position: Front End Developer Year of passing:- 2020

#### Salient Features of the Curriculum :

- 1. Curriculum is developed by the experts from the reputed academic organizations, industry and R&D institutions.
- 2. The curriculum is NEP 2020 compliant, and designed in accordance with the National Higher Education Quality Framework, National Credit Framework guidelines.
- 3. The state of the art and recent trends and developments in wireless technology.
- 4. Flexible, student centric and choice-based credit system offering many open electives and MOOCs.
- 5. Incorporates courses such as data analytics, machine learning applications for wireless technologies.
- 6. Facilitates self-learning, industry internships, industry-oriented courses.
- 7. Carrying out research work under many research domains supported by faculty with infrastructural support.
- 8. Major courses include Modern Technologies in Wireless Communications, MIMO, Massive MIMO, Cognitive Radio, 5G&6G, and many more latest technologies.
- 9. Every course includes case studies and seminar to expose the students to latest trends in the area

#### Salient Features of the Program

- 1. ALL the GATE qualified students receive stipend from AICTE
- 2. The majority of the students are placed in good companies with good packages.
- 3. Meritorious and deserving candidates may be considered for fee waiver.
- 4. Flexible and weekend academic activities.
- 5. Job opportunities at reputed research centers in Wireless Domain (SAMEER, IITM, RF Philips, BOSCH etc.)
- 6. Experienced PhD qualified faculty having expertise in the field of wireless communication, software defined radio, cognitive radio, and machine learning applications to cognitive radio.
- 7. Results 100% with average grade point above 8.
- 8. Expert lectures, and demonstrations facilitated, and industrial tours are organized in relevant industries.
- Facilitated students to carry out their M.Tech. Dissertation work in various state of the art technologies such as Cognitive Radio, MIMOs, Ternary Systems, Micro strip, Re-Configurable Antennas, Fractal Antenna, Textile Antennas Satellite Communication & Image Processing.
- 10. Many faculty members and students carried out and completed funded research projects and received grants from SPPU, AICTE, RGSTIC etc.
- 11. Good publications out of dissertations in various reputed journals & conferences.

Reach us at: <u>pgadmission@pict.edu</u>

For More information, Please visit

PICT E&TC Engineering Department :<u>https://www.pict.edu/ENTC-dept/</u>

Course Content: <u>M.Tech(Electronics and Communication)</u> Wireless Communication

Technology Syllabus.pdf