VIT®

Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

5G

Short Term Training Programme on
Emerging Technologies for 5G Mobile Communication

27th to 29th November 2019

Vellore Institute of Technology (VIT)

VIT was founded in 1984 as Vellore Engineering College by the Chancellor G. Viswanathan. From its humble beginning, the institution has grown exponentially to that of having more than 33,000 students. Students from all the states of India and from more than 50 countries are studying at VIT. University status was conferred in 2001 by MHRD Govt. of India in recognition of its excellence in academics, research and extracurricular initiatives. Currently, VIT has 4 campuses in Vellore, Chennai, Amravati (AP) and Bhopal (MP).

The National Institutional Ranking Framework (NIRF) of the MHRD, Government of India, has identified VIT as the best Private Engineering Institution in India in the year 2016, 2017, 2018 and 2019. VIT has been awarded as No.1 Private Institution for Innovation (ARIIA 2019 Award) by Govt. of India. VIT has gone for accreditation by NAAC [India], IET [UK], and ABET [USA] and follows world class academic processes. VIT is the first and only University in India to get 4-star rating from QS, the world universities ranking organization. Govt. of India recognizes VIT as an Institute of Eminence (IoE) in 2019 to become the world's best.

Organized by
Department of Communication Engineering
School of Electronics Engineering (SENSE)
Vellore Institute of Technology (VIT),
Vellore - 632014.

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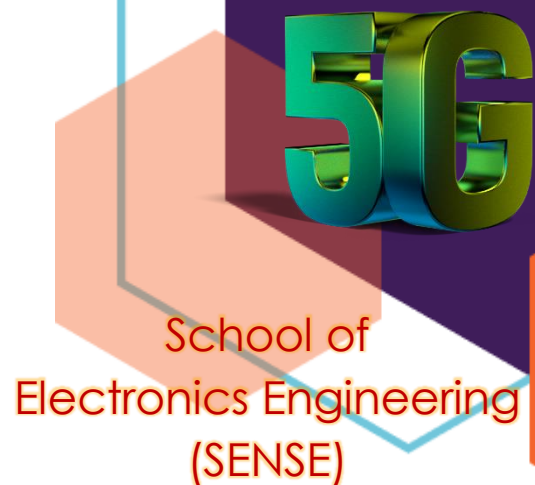*School of Electronics Engineering (SENSE)*

COORDINATORS

Dr. R.K.Mugelan and Dr. T.Ilavarasan
Assistant Professor (Senior)
Department of Communication Engineering
School of Electronics Engineering (SENSE)

School of Electronics Engineering (SENSE)

School of Electronics Engineering (SENSE) at Vellore Institute of Technology was established for imparting state-of-the-art knowledge in Electronics and Communication Engineering and allied areas. B.Tech. Electronics and Communication Engineering is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. Eligible Students are placed on campus and many of them are placed in core companies every year.

The school has set up laboratories with excellent infrastructure in the areas of Electronics, Communication, VLSI, Embedded, Sensors and Nanotechnology. The latest simulation tools are used to cater to various specializations and are equipped with facilities for measurement, characterization and synthesis of experimental as well as theoretical results. Students are encouraged to take up their final year projects abroad too. The School has many industry sponsored advanced laboratories for carrying research and development. MoUs with many Foreign Universities, Research Organizations and Industries facilitate student and faculty exchange. Faculty are actively involved in R&D activities and are working on research projects funded by government organizations like DRDO, ISRO (RESPOND), BRNS and agencies like DST.

About the Programme

The objective of the programme is to provide strong theoretical background along with practical experience in the field of 5G wireless Communication. In 5G Wireless Communication, leaders in the field describe state-of-the-art research in applying the latest methodologies in the context of tomorrow's most important wireless applications, ranging from next-generation cellular telephony and personal communication services, to nomadic computing and wireless multimedia.

Representatives of industries and academia have started to look into the technological developments toward the next generation (5G), as the rollout of 4G mobile communication networks take place. mm wave communication, Software Defined Radio, HetNets, algorithms and architectures have an increasing important role to play in meeting the central challenges faced in the design of advanced wireless communication systems.

COURSE CONTENT

- ❖ Road Map of 5G
- ❖ 5G Requirements
- ❖ Modulation Schemes and Waveforms
- ❖ Green Communication in 5G
- ❖ Het-Nets
- ❖ Massive MIMO and Interference Cancellation
- ❖ Antenna Design towards 5G
- ❖ Role of FSO in 5G communication
- ❖ Backhaul challenges in 5G mobile communication
- ❖ HANDS ON training on MATLAB (5G Tool box) and OPTSIM (FSO System)

Resource Persons

Communication Technology experts from **ISRO, NITs,** and **VIT** will be facilitating the training programme

Eligibility

The training programme is open to Industry personnel, engineering Faculties, Research Scholars and UG/PG students.

Total Seats available: 40

Registration Fee

Category	Fee (Inclusive of GST)
Industry Personal	**Rs. 2,950/-**
Faculty	**Rs. 2,360/-**
Research Scholars/UG/PG	**Rs. 1,770/-**

Important Dates

Last date of Registration : 22-11-2019
Confirmation of participation : 24-11-2019

Venue

Technology Tower (TT), VIT Vellore: TT-312

5G

For fee payment please visit the below link:

http://info.vit.ac.in/Events-VIT/Emerging_Technologies/apply.asp

For Registration please visit the below link:

https://forms.gle/MghWTC43dZp9i48p9

❖ **Accommodation** will be provided for the participants of STTP (First come First serve basis) on **ADDITIONAL CHARGES of Rs.413 (per night inclusive of tax)** in the college hostel (Dormitory) if requested.

Participants of the STTP will be permitted to attend the
"INDUSTRY-ACADEMIA Conclave on wireless Communication"
To be held at VIT on **free of charge** basis

Contact:

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