### CHIEF PATRON

Sri. P. Subba Reddy, Chairman Smt. G. Srividya Reddy, Secretary

### PATRON

Dr. K. Ramesh Reddy, Principal

### PROGRAMME ADVISORS

Dr. P.V.D. Soma Sekhar Rao, Professor, Dean Academics

Dr. P. Sudhakar Rao, Professor, Dean R&D

### ORGANIZING COMMITTEE

#### Convener:

Dr. B. Venkateshulu, Professor, HOD-ECE Coordinator:

Dr. K. Ragini, Professor, ECE

### Co-coordinator:

Dr. C. Padmaja, Assistant Professor, ECE M. Bhavana, Assistant Professor, ECE

### Online Registration Link

https://atalacademy.aicte-india.org/login

Dr. K.Ragini(Coordinator) Mobile: 9849627161

Dr. C. Padmaja (Co-coordinator

### Important dates:

Last Date of Registration: 20th Jan'21

Announcement of selected candidates: 25th Jan'21

Schedule of the event: 1st Feb - 5th Feb'21

### Eligibility:

- Academicians: Faculty in any discipline from the engineering institutions.
- · Industry personne
- Research Scholars

### Registration:

No registration fee is charged for the programme, since the program is fully sponsored by AICTE, New Delhi.

Registration will be based on First Come

### First Serve basis.

Interested candidates are requested to complete online registration as early as possible; selection of candidates will be intimated by e-mail only. Digital certificate will be issued by the ATAL academy to the participants, who maintain an attendance of minimum 80% and score more than 60% in the assessment test that will be conducted on the last day of FDP.







AICTE TRAINING AND LEARNING (ATAL) SPONSORED FACULTY DEVELOPMENT PROGRAMME (FDP) On "Wearable Devices"

Organized by

DEPT. OF ELECTRONICS AND
COMMUNICATIONS ENGINEERING

Approved by AICTE, New Delhi & Affiliated to JNTUH, Accredited by NBA &NAAC, ISO 9001:2015 Certified, Shaikpet, Hyderabad, T.S.

PRINCIPAL

G. Narayanamma Institute of Technology & Science (for wome 'AUTONOMOUS)
Shaikpat Hyderabad - 500 104.

# $\mathsf{WD}$

### About the Institute

G. Narayanamma Institute of Technology & Science, a leading engineering college in Hyderabad for women founded by Late Sri G. Pulla Reddy garu in 1997, with the bjective of providing an excellent learning - acility for women to pursue education in engineering. The institute aims to promote Technical Education among Women to enhance and build-up a new generation of thinkers, innovators and planners in the technical realms of Science & Technology. GNITS received UGC autonomous status for 10 years from 2018 and is affiliated to Jawaharlal Nehru Technological University (JNTU-H), Hyderabad. It is approved by All India Council for Technical Education (AICTE), accredited by NAAC & NBA (AICTE) and ISO 9001:2015 Certified Institution.

### About Dept. of ECE

ECE Department was started in 1997 with an intake of 60 and in a short period, the intake was increased to 180.The Department introduced M. Tech. with specialization in Digital Electronics & Communication Engineering in 2007 with take of 18 students. There are 8 Joctorates in the Department. Amount of 2 crores is spent for establishment of labs. For the academic year 2018-19, the department got 25 lakhs of funding AICTE. The infrastructural facilities have been upgraded in the department with the extension of existing

# IS

and new laboratories in VLSI, Communications, Microwave and Signal processing domains.

The companies that have made good offers and absorbed our students are Delloitte, Infosys, Accenture, Powerwave, CAP Gemini, ADP, Apps Associates, Areva T & D, Broadcom, BTBP, CMC, Convergys, DuPont, HP, HSBC, MAQ Software, OSI Technologies, Redpine Signals, Satyam BPO, Sonata, TCS, Value Labs and Virtusa.

### About ATAL-FDP

AICTE Training And Learning (ATAL) Academy Faculty Development Programme (FDP)intends to conduct trainings faculty through financial assistance from AICTE to enable faculty members in the field of technical introspect and to learn techniques that can help prepare students for active and successful participants in a knowledge society.

### Objectives of this FDP:

- To provide an extended knowledge on Wearable devices using Internet of Things.
- To provide insight of various communication networks for wearable devices
- To explore recent research work in the field of Wearable Devices in association with IOT
- Applications of Wearable Devices with IOT

# FUTURE

### Contents

- Introduction to IoT and Wearable Devices
- Architecture of Wearable IoTs
- Low Power Embedded Systems in wearable Devices
- Communication Technologies for Wearable Devices
- Performance Analysis of Wireless Sensor Networks
- > LoRaWAN Devices
- Flexible and Stretchable electronics
- Wearable body Area Sensors
- Wearable Medical Devices
- > Management of wearable systems

### Resource Persons

- ✓ Professors from IIIT's
- ✓ Professors from IIT's
- ✓ Professors from NIT's
- Leading industry technocrats from industry handling the wearable devices and IO

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# AICTE Training And Learning (ATAL) Academy Faculty Development Programme (FDP) 2020-2021 on "Wearable Devices" (01-02-2021 to 05-02-2021)

S.No/Date	10 AM to 11.15 AM Session - 1	11.15 AM to 11.30 AM	11.30 AM to 12.45 PM Session - II	12.45 PM to 1.45 PM	2 PM to . Session	
01-02-2021	Inaugural function	B R E A K	Recent Emerging Trends in Biomedical Engineering and Health care	L U N C H BREAK	Wearable Electronics, Present and Future	
	Chief Guest: Dr. N C Shivaprakash		Dr.N C Shivaprakash, IISc, Bangolore		Dr. P. Sudhakar Rao, Professor, Dean R&D, GNITS	
02-02-2021	A Technology Overview of Wearable's		Overview of flexible wearable antennas		Communication Technologies in wearable devices	
	Mr. N. Venkatesh, Senior Dirctor, Engineering at Silicon Labs, Hyderabad.		Dr. Balwinder Singh National Institute of Technical Teachers Training and Research (NITTTR)		Dr. Sachin Chaudhari, Asst Professor,IIITH	
03-02-2021	Implantables in Health care		LoRaWAN Devices		Wearable Devices And Sensors	
	Amol Kodag ,Leader for the MEIC CVG Portfolio		Dr. Aflab M. Hussain , IIITH, Hyd.		Supraja, Research Scholar, IITH	
04-02-2021	Wearable Medical Devices		EMG based hand prosthetic		BIOMEMS	
	Dr. M. Malini Professor Dept.of BME, OU		Dr. Neeraj Sharma Professor, ,BHU		Prof. S. Raghavan, Dept. of ECE, NITT	
05-02-2021	Signal Processing in Wearable Devices		Stress Management		Examination	Valedictory Function
	Dr. Bikash chandra sahana ,NIT Patna		Dr. N.S. Murthy, Professor Vasavi College of Engg, Hyderabad			

Coordinator Dr.K.Ragini, Professor, ECE, GNITS

G. Narayanamma Institute of Technology & Science (for women) (AUTONOMOUS) Shaikpet, Hyderabad - 500 104







## ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi - 110 070

### AICTE Training And Learning (ATAL) Academy

### Certificate

This is certified that P.Roopa Ranjani, Assistant Professor of G.Narayanamma Institute of Technology and Science participated & completed successfully AlCTE Training And Learning (ATAL) Academy Online FDP on "Wearable Devices" from 2021-2-1 to 2021-2-5 at G.Narayanamma Institute of Technology&science.

Francis

Director ATAL Academies

K. Ragini

Coordinator

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# G.NARAYANAMMA INSTITUTE OF TECHNOLOGY & SCIENCE (For Women) (AUTONOMOUS)

Shaikpet, Hyderabad - 500104

Department: Electronics and Communication Engineering

2020-21

### REPORT

### AICTE ATAL FDP on "Wearable Devices"

Date of program: 01-02-2021 to 5-2-2021

Resource person: Dr.N C Shivaprakash, IISc, Bangolore, Dr. Balwinder Singh National Institute of Technical Teachers Training and Research (NITTTR), Dr. M. Malini Professor Dept. of BME,OU, Dr. Neeraj Sharma Professor, ,BHU

About the Program: This AICTE ATAL FDP provided extended knowledge on Wearable devices using Internet of Things. Some sessions provided insight of various communication networks for wearable devices. Many recent research work in the field of Wearable Devices in association with IOT were discussed. Applications of Wearable Devices with IOT are also discussed. This helps me to explore more techniques in my Ph. D work.

Signature of the Faculty member

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