Selection and Mode of Payment

Selected candidates will be intimated through E-Mail. They have to remit the necessary course fee to the Bank as per the details given below.

<table>
<thead>
<tr>
<th>Account Name</th>
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<td>Account No</td>
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<tr>
<td>BANK</td>
<td>State Bank of India</td>
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<tr>
<td>Branch</td>
<td>REC Warangal (NIT Campus)</td>
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<tr>
<td>Branch Code</td>
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<td>IFSC Code</td>
<td>SBIN0020149</td>
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<tr>
<td>REC Warangal (NIT Campus)</td>
<td>506004011</td>
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</tbody>
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Candidates registering early will be given preference in the shortlisting process. For any queries regarding registration of the course, please contact the Course Coordinators:

Dr. P. Sreehari Rao  
Department of Electronics and Communication Engineering, NIT, Warangal – 506004, Telangana  
Tel: +91 8702462439 (O)  
+91 9441342324  
Email: patri@nitw.ac.in; patri.srihari@gmail.com

About GIAN Course

Ministry of Human Resource Development (MHRD), Government of India (GoI) has launched an innovative program titled “Global Initiative of Academic Networks (GIAN)” in Higher Education, in order to garner the best international experience. As part of this, internationally renowned Academicians and Scientists are invited to augment the Country’s academic resources, accelerate the pace of quality reforms and elevate India’s scientific and technological capacity to global excellence.

About the Institute and Warangal

National Institute of Technology, Warangal (NITW) formerly known as RECW is the first among seventeen RECs set up in 1959. Over the years, the Institute has established itself as a premier Institution in imparting technical education of a very high standard, leading to B.Tech, M.Tech, and Ph.D. programmes in various specializations of Science and Engineering streams. Warangal is known for its rich historical and cultural heritage. It is situated at a distance of 140 km from Hyderabad. Warangal is well connected by rail and road. National Institute of Technology, Warangal campus is 3 km away from Kazipet railway station and 12 km away from Warangal railway station.

About the Department

The Department of Electronics and Communication Engineering offers an undergraduate program in Electronics and Communication Engineering and three Postgraduate programs in EI, VLSI, and ACS Specializations. The Department has experienced faculty and well-established laboratories. The Department has a liaison with reputed industries and R&D organizations like DRDO, ISRO ECIL, Analog Devices Bangalore, and C-DAC.

Five Days GIAN Course on Design and Implementation of Smart Internet-of-Things (IoT) Systems In VIRTUAL MODE  
March 23rd - 27th, 2022  
Call for Registration and Participation

International Faculty  
Dr. Srinivas Katkoori  
University of South Florida  
Principal Coordinator  
Dr. Sreehari Rao Patri  
Co-Coordinator  
Dr. P. Muralidhar

Department of Electronics and Communication Engineering, National Institute of Technology Warangal - 506 004, Telangana, India
Overview of the Course

Internet-of-Things (IoT) is an ongoing technology transition with the goal of connect the unconnected. It has the great promise of positively changing the way humans live on this planet. IoT application domains are varied and diverse. Some examples are smart healthcare, smart transportation, smart home, smart farming, etc. There are three key technologies that are fueling the IoT revolution. First, is the fast and cheap computing, second, is the fast and high bandwidth communication and networking technologies, and third is the intelligent algorithms. Any IoT system architecture has at least three layers: edge layer, communication layer, and application layer. In the edge layer, smart edge nodes collect and filter data of interest. The collected data is then transmitted to the application layer through the communication layer. Typically, the communication layer consists of an established communication network such as the Internet or Wi-Fi. The application layer is housed at a data center where software applications are run to process the collected data and extract information that can aid in intelligent decision-making.

In this course, the students will learn about the conceptual architecture of an IoT application, the design challenges, the enabling IoT technologies (edge computing, fog computing, communication technologies, and data analytics), and two case studies. The students will have hands-on (VIRTUAL MODE) experience with IoT hardware and software in the form of tutorials and lab assignments.

Course Objectives

The primary objectives of the course are as follows:

- Introduce the participants to the basic concepts of an IoT architecture
- Teach the fundamentals of the three enabling IoT technologies, namely, computing, communications, and algorithms
- Study of specific case studies in two IoT application domains

International Faculty

Dr. Srinivas Katkoori is a Computer Science and Engineering faculty at the University of South Florida (USF), Tampa, FL. His research group has been actively conducting research on related topics such as low power digital VLSI design, reliable system design, Internet-of-Things (IoT), smart embedded systems, smart transportation, smart healthcare, etc. Dr. Katkoori has directed 16 doctoral dissertations and 41 Master’s Theses in the general discipline of Embedded Systems Design and Optimization. Dr. Katkoori serves on technical committees of several VLSI and embedded conferences. To date, he published over 150 peer-reviewed journal and conference papers. Five papers he has co-authored were nominated for best paper awards at 2003 ASPDAC, 2014 IFIP/IEEE VLSI SOC, and 2019 AsianHOST. 2020 IEEE iSES, 2021 IFIP IoT conferences. Two papers have been recognized with best paper award at 2020 IEEE iSES and 2021 IFIP IoT Conferences. Among notable professional service, Dr. Katkoori served on ACM SIGDA Board (2010-2013) as Treasurer, as an Associate Editor of IEEE Trans. on VLSI (2006-10), IEEE Embedded Systems Letters (ESL)(2021-current), as the vice-chair of IFIP Working Group 10.5 on Design and Engineering of Electronic Systems (2015-2020). Dr. Katkoori served as the General Chair of the 2019 2nd IFIP IoT Conference and 2020 IEEE International Symposium of Electronic Systems and Technical Program Chair/Co-Chair at 2021 IFIP IoT and 2020 and 2021 editions of ICCE Conferences. Dr. Katkoori received his Ph.D. degree from the University of Cincinnati in 1998. He is a senior

Who can participate?

This program is open to the Faculty, Post graduate students, Engineers from industry, Research Scholars working in the relevant areas and scientists at R&D laboratories.

How to Register?

Stage-1: Web Portal Registration

Visit [http://www.gian.iitkgp.ac.in/GREGN/index](http://www.gian.iitkgp.ac.in/GREGN/index) and create login User ID and Password. Fill up the blank registration form and do web registration by paying Rs. 500/- online through Net Banking / Debit / Credit card. This provides the user with lifetime registration to enroll in any number of GIAN courses offered.

Stage-2: Course Registration

Login to the GIAN portal with the user ID and Password already created in Step 1. Click on Course Registration option at the top of the Registration Form. Select the Course titled “Design and Implementation of Smart Internet-of-Things (IoT) Systems” from the list and click on the Save option. Confirm your registration by clicking on Confirm Course.

Registration Fee

<table>
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<th>Category</th>
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<tbody>
<tr>
<td>Faculty (Internal &amp; External) and Scientists from R&amp;D Labs</td>
<td>Rs. 2,000/-</td>
</tr>
<tr>
<td>Participants from Industry consultancy firms / Research organizations</td>
<td>Rs. 4,000/-</td>
</tr>
<tr>
<td>Students &amp; Research scholars</td>
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<tr>
<td>Without award of Grade</td>
<td>Rs 1,000/-</td>
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<tr>
<td>With award of Grade</td>
<td>Rs 1,500/-</td>
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<tr>
<td>Students from abroad</td>
<td>US $ 50</td>
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<tr>
<td>Faculty/Scientists/Industry Persons from abroad</td>
<td>US $ 100</td>
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The Registration fee includes instructional materials, laboratory use (virtual).