

## **Nirma University**

Nirma University was established by the initiative of the NIRMA EDUCATION AND RESEARCH FOUNDATION (NERF). The University was established in the year 2003 as a statutory university under a special act passed by the Gujarat State Legislative Assembly. It is recognized by the University Grants Commission (UGC) under Section 2(f) of the UGC Act. The University is duly accredited by National Assessment and Accreditation Council (NAAC) with "A" Grade. The University is a member of Association of Indian Universities (AIU) and the Association of Commonwealth Universities (ACU).

Functioning under the aegis of NERF, the University consists of Institute of Technology, Institute of Management, Institute of Pharmacy, Institute of Law, Institute of Science, Institute of Architecture and Planning, Institute of Commerce, Department of Design. The University is identified with cutting edge research, robust academic programmes, quality teaching learning process and over-all personality development interventions of its students. The 110 acres sprawling state of art campus provides refreshing environment and stimulates intellectual growth and creativity.

## **About Institute of Technology**

Institute of Technology is a leading institute offering multidisciplinary undergraduate, postgraduate, MCA and PhD programmes in engineering. Institute is located in peaceful and sylvan surroundings, about 15 km from Ahmedabad Railway Station on Sarkhej Gandhinagar highway. The academic ambience provides full scope for development. The presence of the institute can also be felt by its alumni spread in national and multinational organizations as well as leading universities throughout the world. The institute provides an inspiring environment to all students to expand their intellectual dimension and recognize their hidden talents, not only in the technical field, but also in life skills.

## **Special Achievements**

- National Award for Engineering College having Best Clean and Green Campus for the year 2015 by Indian Society for Technical Education (ISTE).
- National Awards for the Best Teacher in Gujarat state, Best Chapter Award, Best Student Chapter Award several times by ISTE.
- Students won national ROBOCON competition in 2002, 2003, 2006, 2008, 2011, 2014, 2015 and represented India in International meets.
- Institute has been ranked in first 20 top Engineering Colleges across the country as per the survey published by various leading magazines.

## **About Centre For Continuing Education**

Nirma University has established a Centre For Continuing Education with the following objectives:

- To provide Need based Continuing Education, Knowledge, Training etc. in various fields to all stakeholders.
- To assist working professionals in the industry in widening their knowledge base and in improving their skills.
- To arrange Workshops, Lectures, Seminars, Services, on requests.
- To identify employment potential areas and to conduct competency based skilled development programme.
- To conduct Vocational Training to meet the specific needs of industrial businesses.
- To conduct short duration and long duration programmes in Management, Engineering and Technology, Pharmacy, Science, Law and Architecture.
- To conduct Training Programme for Competitive Examinations.
- To coordinate the continuing education programme offered by various Institutes at the University level.



## **Two Days Workshop On Remote Sensing Image Processing using Python**

**February 29-March 1, 2020**

Coordinators  
Dr. Tanish Zaveri,  
Dr. Bhupendra Fataniya  
Dr. Ruchi Gajjar



**Conducted By**  
Department of Electronics and Communication  
Engineering,  
Institute of Technology,  
Nirma University

**Organized By**  
Centre for Continuing Education  
Nirma University

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Sarkhej-Gandhinagar Highway  
Near Chharodi,  
Ahmedabad 382 481, Gujarat  
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## OBJECTIVE OF THE PROGRAM

Outcome Based Education (OBE) is today's requirement in Engineering Institutes to prepare skillful engineers, who can withstand against the fast changing world especially in mobile communication. This workshop is intended to provide participants with a detailed introduction of simulations for wireless communication systems. Bit Error Rate (BER) performance of various wireless systems such as Single Input Single Output (SISO), Single Input Multiple Output (SIMO), Multiple Input Single Output (MISO) and Multiple Input Multiple Output (MIMO), Orthogonal Frequency Division Multiplexing (OFDM) systems will be shown with simulations using open source software OCTAVE. Different techniques such as transmit beam forming, space time coding, combining techniques, spatial multiplexing and spectrum sensing will be used in the systems.

## OUTLINE OF CONTENT

- **Understanding Remote Sensing Imaginary:**  
Basics of Remote Sensing imaginary and Data formats used for different sensors, methods of image manipulation and Interpretation
- **Python Programming**  
Fundamental concepts of Python programming and example program for Image processing.
- **Open Source Library for Remote Sensing:**  
Introduction.
- **Performance of MISO system in fading environment:**
- Introduction of transmit diversity such as transmit beam forming and space time coding.

## RESOURCE PERSONS

The workshop will be conducted by experienced and senior faculty members of Electronics and Communication Engineering Department of Institute of Technology, Nirma University.

## IMPORTANT DATES

Receipt of Application : 15/02/2020  
Confirmation of Selection : 15/02/2020  
(By Email/Website)  
Commencement of Course : 15/02/2020

## FOR WHOM

Interested faculty members from Engineering colleges, polytechnics, persons from industries and R & D organizations, PG and Ph.D. students are requested to fill up the attached application form and return it to the Coordinators.

## COURSE REGISTRATION FEES

- a) Rs. 1200/- for engineering teachers
- b) Rs. 1500/- for applicants from industry
- c) Rs. 1000/- for External Students.
- d) Rs. 500/- for Nirma University students

Course materials will be provided to all the participants. Lunch and other expenses are to be borne by the participants. Registration charges are non-refundable. Participants are required to make their own arrangements for lodging, boarding and travelling. However, on request, the arrangement for lunch/accommodation can be made on chargeable basis. Fees can be paid by Cash/Demand Draft/Local Cheque. Demand Draft / Cheque should be drawn in favor of “Centre for Continuing Education, Nirma University” payable at Ahmedabad

**For further details, contact:**

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**Nirma University**  
**Centre for Continuing Education**  
**NAAC Accredited ‘A’ Grade**  
**APPLICATION FORM**

Two Days Workshop  
On

**“Remote Sensing Image Processing  
using Python”**  
**February 29-March 1, 2020**

1. Name Mr./Ms./Prof./Dr. ....
2. Age ..... years
3. Edu. Qualification (Highest).....
4. Designation .....
5. Organization .....
6. Internal/External Student.....
7. If Internal Student Specify Roll No.  
.....
8. Address .....  
.....  
Phone.....  
Email.....
9. Experience (years) in relevant area  
(if applicable)  
Academic:.....  
Industry:.....
10. Demand Draft/Cheque No..... Dated.....  
Bank with Branch:- .....

Date :

Place :

Signature of Participant

Certified that the above applicant is employed in our organization and the information stated by him/her is verified and found correct. We therefore, sponsor him/her to attend the short term training organized at your institute.

Signature of Sponsoring  
Authority with Seal