

GLOBAL INITIATIVE OF ACADEMIC NETWORK (GIAN)

Ministry of Human Resources Development
Government of India

COURSE ON **Urban Disaster Risk Reduction using Geospatial Technologies** 11 – 22 December, 2018 Venue



JNTUH College of Engineering, Kukatpally,
Hyderabad

About GIAN:

Govt. of India approved a new program titled Global Initiative of Academic Networks (GIAN) in Higher Education aimed at tapping the talent pool of scientists and entrepreneurs, internationally to encourage their engagement with the institutes of Higher Education, viz., all IITs, IIMs, Central Universities, IISc Bangalore, IISERs, NITs and IIITs subsequently cover good State Universities where the spinoff is vast. The GIAN website may be visited for detailed information.

Overview

India has experienced rapid growth in population and urbanization since 1970s. People gradually started migrating from rural to urban areas for better living. This has caused urban centers to sprawl and heavily populated thus exceeding the capacities on all facilities and infrastructure causing serious vulnerability to natural and man-made disasters in urban centers. Frequency of hazard has also grown due to inadequate or outdated drainage, narrow roads, highly dense human dwelling in slums. In recent times several disasters are emerging such as urban flooding, urban fire, earthquake, diseases / epidemics after disasters and cyclones. There is a need to understand these hazard and vulnerability issues in urban centers.

An inclusive approach of studying urban environment using remote sensing and UAV data in the environment of Geographic Information Systems (GIS) need to be adopted to understand the issues of changing urban landscape and resulting threat of urban disasters. Geographic Information Systems (GIS) have the capability of integrating varied sources of data and analyzing them for generating useful information for decision making. For remote sensing data processing Quantum GIS open source software will be used to train participants in carrying out GIS related database development, preprocessing and analysis for DRR in urban environment.

Number of participants is limited to fifty

Benefits of Attending the Course (Course Objectives):

Candidates who have attended the course will understand the various urban disasters due to rapid urbanization and familiarize with geospatial technologies for creating pre and post disaster urban land use and land cover maps. Develop the state-of-the-art skill on using GIS for Disaster Risk Reduction planning and also help improving the knowledge and understanding of the participants and enabling to visualize from research and future point of view.

Who should attend:

This course is intended to provide students, teachers, researchers, executives, engineers and researchers from manufacturing, service and government, organizations including NGOs and R&D laboratories.

Students at all levels (BTech/MSc/MTech/PhD) or Faculty from reputed academic institutions and technical institutions are invited to attend.

For the participation in the course, registration with GIAN is mandatory.

Registration to the portal is one-time affair and will be valid for the lifetime of GIAN. Once registered in the portal, an applicant will be able to apply for any number of GIAN courses as and when necessary. One-time Non-refundable fee of Rs. 500/- is to be charged for this service. For registration, the website is: www.gian.iitkgp.ac.in/GREGN/index

Course Fee:

The participation fees for taking the course is as follows:

Participants from abroad (US dollars):	\$500
Industry/ Research Organizations	: Rs. 5000/-
Academic Institutions	: Rs. 3000/-
Full time Students	: Rs. 1000/-
Full time SC/ST students	: Rs. 500/-

There will be a concession of 50% of the fee for the faculty working in the constituent and affiliated colleges of JNTUH. The above fee includes all instructional materials, computer use for tutorials and assignments, laboratory equipment usage charges, 24 hours free internet facility, Tea, Snacks, Lunch.

Evaluation and Grading

There will be evaluation at the end of each module on the understanding of the concepts by the participant made during the course. Based on the evaluations finally a letter grade will be awarded to the participant. A completion certificate shall also be issued.

The Faculty



Prof Nitin Kumar Tripathi:

Professor in Remote Sensing (RS) and Geographical Information Systems (GIS) in Asian Institute of Technology (AIT), Thailand as with over 30 years' experience in teaching, research and projects. He has also served as the Leader of Information and Communication Technology (ICT) and Coordinator for the RS and

GIS field of study. He has earlier served in various administrative positions in AIT such as Dean-School of Engineering and Technology, Director- Academic Quality Assurance and Accreditation, Chairman- Academic Development Review Committee, and Director-Unified Program. He is currently President of IIT Alumni Association Thailand. He has worked at National Institute of Technology, Allahabad, India (1988-89) and Indian Institute of Technology (IIT), Kanpur in India (1989-99) before joining AIT in the year 2000. He has earned several awards including Young Scientist Award from department of Atomic Energy, India, AICTE Career Award for Young Teacher, MHRD-India, Osaka City University Distinguished Scientist Award, Japan and several others including best paper awards in conference papers. He was awarded Distinguished Alumni Award by National Institute of Technology Warangal in 2016. Prof Tripathi was actively involved in Indian Society of Remote Sensing and Indian Society of Geomatics. He was active member of Asian Conference on Remote Sensing and launched the first Asian Journal of Geoinformatics from AIT in the year 2001. Later he launched another International Journal of Geoinformatics in 2015 and is Editor-in-Chief since 2005. He is in editorial board of Journal of Remote Sensing published by Springer. He has been serving on the advisory board of a number of international journals including International Journal of Remote Sensing, International Journal of Imaging, Disaster Advances, and others. Dr. Tripathi has a total of 182 publications to his credit (2 book, 11 chapters in books, 109 research papers in peer reviewed Journals and 60 conference papers) majorly in peer-reviewed international journals. He is an acclaimed researcher in the field of remote sensing and GIS Applications and is highly cited in peer reviewed journals. His Scopus H-Index is 17 with 1015 citations and in Google Scholar H-Index 23 with 2005 citations He has very impressive Research Gate Score as 36 with H-index 21. He has supervised 38 Doctoral and 128 Masters theses.



Dr. M.V.S.S Giridhar: Is working as Associate Professor in Centre for water resources, Institute of Science and Technology, JNT University; Hyderabad (JNTUH). He Graduated in Civil engineering from Nagarjuna University (1993) and did his M.Tech (Water Resources Development and Management) from Indian institute of Technology (IIT), Kharagpur (1995). He obtained his Ph.D in Civil Engineering from Jawaharlal Nehru Technological University Hyderabad in 2007. He is an academician having 20 years of teaching, research and administrative experience. He was coordinator for the World Bank funded project TEQIP- II (Technical Education Quality Improvement Programme Phase II-IST, JNTUH) and for TEQIP-III. He was also coordinator for the Centre for Earth Atmospheric Weather Modification Technology CEAWMT, IST, JNTUH. He also worked as Additional Controller of Examinations of the university from 2010 to 2014. Dr. Giridhar has participated in more than 50 Conferences at national and international level on themes related to his subject expertise to share his views in the field of water resources. With the funds received from the Central Ground Water Board, MoWR, AICTE, he constructed 24 recharge bore wells in the University campus and every year more than 10.0 crore liters of rainwater is being harvested and recharged into the aquifers after proper filtration. Dr. Giridhar has published 130 research papers in various National/International Journals/conferences. He guided one Ph.D student and also guided 32 M.Tech dissertations. He has organized several national and international conferences and workshops. He published three international proceedings and six national proceeding as an editor, nine training programs in the area of Geospatial applications for water resources and environmental engineering. He is a Member of institution of Engineers and a member of various reputed professional bodies.

About the JNTUH:

The J.N.T University was in existence since 1972. It is a teaching and research oriented university consisting of 4 constituent engineering colleges JNTUH College of Engineering, Hyderabad (JNTUHCEH), JNTUH College of Engineering, Jagityala (JNTUHCEJ), JNTUH College of Engineering, Manthini (JNTUHCEM), JNTUH College of Engineering, Sulthanpur (JNTUHCES) and more than 400 affiliated colleges. In addition to the constituent colleges, the other units of JNTUH are School of Information Technology (SIT), Institute of Science and Technology (IST), School of Management Studies (SMS) and Academic Staff College (ASC). The university has numerous collaborative, teaching and research programs with universities from abroad and within India and with industries in the state of Telangana. The university offers engineering programs at both UG and PG level and many science and humanities programs at PG level. In addition, university also offers Ph. D. in engineering, science and humanities disciplines.

Contact Information:

Course Coordinators

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