REGISTRATION DETAILS

The Registration fee includes instructional materials, laboratory, computer use, internet facility, tea and working lunch.

Accomodation for outstation participants will be charged separately. No TA/DA will be paid for any participants.

SELECTION AND MODE OF PAYMENT

Selected candidates will be intimated through email. They have to remit the necessary course fee to the Bank as per the details given below. Outstation participants requiring accommodation and boarding facilities have to make payment in addition to the course fee. In the case of faculty members and industry participants, the payment for accommodation shall be made separately.

Account Name :		DIRECTOR NIT CALICUT
Account No.	:	35909407299
Bank	:	State Bank of India
Branch Code	:	CREC, Chathamangalam, Kozhikode
IFSC	:	SBIN0002207
MICR Code	:	673002012
SWIFT Code	:	SBINPN BB392

Candidates registering early will be given preference in the shortlisting process. For any queries, please contact the host faculty.

ABOUT THE GIAN COURSE



MHRD, Govt. of India 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

Set in a picturesque landscape at the foothills of the Western Ghats, National Institute of Technology Calicut (NITC) is located about 22 kilometers north-east of Calicut City. National Institute of Technology Calicut is a Technical Institution of national importance set up by an Act of parliament(Act 29 of 2007) namely, the National Institute of technology Act 2007, which received the assent of the President of India on 5th June,2007. The provision of the Act have come into force with effect from 15th August,2007 as per Notification S.O.1384(E) dated 9th August, 2007 of the MHRD(Dept. of Higher Education),New Delhi. As per the provision of the said Act, this Institution runs on non profitable basis.

ABOUT THE DEPARTMENT

The Department of Architecture and Planning is committed to provide an academically strong platform for those aspirants who would make a good meatier and leave an enduring impression in the field of Architecture and Urban Planning. The Department of Architecture and Planning offers the Undergraduate (5 Year B.Arch.) Degree Program in Architecture. The Post Graduate Degree (2 Year M. Plan) Program in Urban Planning aims to produce generalist planning professionals of international quality who can adapt to any challenging planning situation.

The program envisages inculcating scientific diagnostic and urban management abilities in professional planners to understand planning issues holistically and equip them with predictive ability to analyze the outcome of economic, social, environment and energy impacts using simulation of future scenarios. The Department of Architecture and Planning has been ranked FIFTH in India among the Best Schools of Architecture by the OUTLOOK Survey published this week. This is the FOURTH time in a row (from 2014 onwards) the Department is maintaining its position in the TOP TEN Schools in India.

CONTACT DETAILS

Dr. Kasthurba A K (Professor)

Department of Architecture and Technology, National Institute of Technology Calicut.

HOST FACULTY



Kerala, India Phone : +495 - 2286905/01 (Office) | +91 9946006309 (Mobile) +91 9633974707

NIT Campus P.O., Kozhikode- 673601,

Email : kasthurba@nitc.ac.in |akkasthurba@gmail.com

For any further Assistance or Queries, please Contact:

0495 - 2286901







A SIX DAY GIAN COURSE ON SUSTAINABILITY & ENERGY MODELING OF TRADITIONAL ARCHITECTURE

DECEMBER 11-15, 2023

Call for Registration and Participation

INTERNATIONAL FACULTY

Dr. John Odhiambo Onyango School of Architecture, University of Notre Dame, USA

HOST FACULTY

Dr. Kasthurba A K Department of Architecture and Planning, National Institute of Technology Calicut, Kozhikode, Kerala, India

GIAN LOCAL COORDINATOR

Dr. N. Sandhyarani Dean(Research & Consultancy) National Institute of Technology Calicut Kozhikode, Kerala, India

DEPARTMENT OF ARCHITECTURE & PLANNING NATIONAL INSTITUTE OF TECHNOLOGY CALICUT

NIT CAMPUS P.O., KOZHIKODE - 673601, KERALA, INDIA

OVERVIEW OF COURSE

The tremendous urban infrastructure development worldwide, especially in developing countries necessitates sustainability and energy audit to minimize environmental and economic concerns, while leading to the social good. The design and construction of buildings have been evolved historically within societal cultural context. Innovations within the building industry have advanced over the years with the discovery of new materials, new methods of structural and thermal analysis, the human-technology interventions, energy crisis and concerns on issues of climate change. The mining, manufacturing and transporting of materials consumes lot of energy which contribute to environmental pollution. The environmental/ ecological issues and calamities are at rise often due to inefficient and unscientific building construction practices. It is imperative to apply sustainability concepts and energy efficient alternatives in building construction for future.

Traditional buildings are arguably sustainable in comparison to modernist contemporary buildings. There is popular trend to design and construct high performance buildings. Contextual benchmarking of energy performances of existing buildings against modernist building is a good methodology to evaluate this. This course has the objectives of providing architectural designers with tools and methods to make early design decisions that impact sustainability through the realmof energy performances. The objective of this course is to provide architectural designers and construction professionals with tools and methods to enable them to make early design decisions that affect sustainability in the area of energy performance.

Primary Objectives of the Course

- Develop knowledge of building energy modeling and simulation approaches, tools, reference standards and resources
- To construct simple energy models with calculations and tools conforming to good practice in the building professions
- To apply models to common building industry functions such as comparison of design alternatives, selection of equipment, energy audits and retrofits and code compliance.
- Evolve strategies and guidelines for efficient waste management for sustainable infrastructure development.
- To demonstrate sustainable construction techniques and natural building materials

COURSE CONTENT

01 Whole Building Modelling (BEM):

Climate + Architecture + Environmental Impacts, Types of Environmental Analysis + Thermal Exchange Building Envelope, Thermal Envelope-Strategies to address Conduction+Radiation+Convection, Waste Management Strategies & Sustainable Alternate Building materials/ technologies.

02 Heat and Moisture Modeling:

Thermal Envelope-Moisture loads (WUFI)

03 Heat and Thermal Analysis:

Thermal Envelope- Analysis

04 Sustainable Building Materials & Techniques Workshop Building materials + energy segment + climate action

DR. JOHN ODHIAMBO ONYANGO



Prof. John Onyango, Ph.D., is currently an Associate Professor of Architecture at the School of Architecture, University of Notre Dame (USA). He has a Doctor degree from the University of Glasgow (Scotland, UK); a Masters degree from University of Notre Dame, (USA); Certificate in Professional Practice & Management in Architecture (RIBA Part 3-Architect's License in the United Kingdom) from the Bartlett School of Architecture, University College London, (England, UK) and a Bachelor of Architecture (honors) degree from University of Nairobi (Kenya). John's research primarily focuses on Sustainability in the broad sense that takes holistic approaches to the creative practices at the building and urban design levels that is both interdisciplinary as well as multidisciplinary in collaboration with other colleagues in the allied fields such as engineering, sociology healthcare, and IT communications. He has participated in over 12 research projects worldwide and since 2012 secured over \$470k in competitive research grants. He is a founding member of the Zero Energy Mass Customization Network.

WHO CAN PARTICIPATE ?

- **01** Professionals from Training Organizations/ Research & Development Organizations/ Consultancy Firms/ Industries who are interested in practicing innovative training, teaching/ learning techniques.
- **02** Academicians working in the disciplines of engineering, technology, education and management at colleges/technical universities.
- **03** Students and Researchers who aspire a career in the construction industry

Stage-1: Web Portal Registration

Visit GIAN Website at the link:

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* as per instructions given there in. 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 again with the user ID and Password already created in Step 1. Click on *'Course Registration'* option at the top of Registration form. Select the Course titled *"Sustainability & Energy Modeling of* **Traditional Architecture"** from the list and click on *'Save'* option. Confirm your registration by clicking on *'Confirm Course'*. Also send the filled-in registration form to the **contact address**.

REGISTRATION FEES

FACULTY / SCIENTISTS	: Rs. 4,500/- + 19% tax
Participants from Industry	: Rs. 8,000/- + 19% TAX

STUDENTS & RESEARCH SCHOLARS : Rs. 2,000/- + 19% TAX

PARTICIPANTS / SCHOLARS FROM ABROAD : US\$ 250