

The Registration fee includes instructional materials, tutorials, laboratory and computer use and free internet facility, refreshment and working lunch. Accommodation 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 e-mail. 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 is Rs. 3000/-, and in the case of students is Rs. 1500/-.

<b>Account Name</b>	DIRECTOR NIT CALICUT
<b>Account No.</b>	35909407299
<b>Bank</b>	State Bank of India
<b>Branch</b>	CREC, Chathamangalam, Kozhikode
<b>Branch Code</b>	002207
<b>IFSC</b>	SBIN0002207
<b>MICR Code</b>	673002012
<b>SWIFT Code</b>	SBINPN BB392

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

### ABOUT 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. The institute is a Higher Technical Institution of national importance set up by the NITSER Act 2007. The institution runs on non-profitable basis and is fully funded by the Government of India under the Ministry of HRD. It offers 10 U.G., 30 P.G. and Ph.D. programs in various disciplines.

URL: [www.nitc.ac.in](http://www.nitc.ac.in)

### ABOUT THE DEPARTMENT

<http://nitc.ac.in/index.php?url=department/index/12>

The Department of Mechanical Engineering, the largest Department in the Institute, offers B.Tech. (Mechanical Engineering), B.Tech. (Production Engineering) programmes, M.Tech. programmes in Industrial Engineering & Management, Manufacturing Technology, Thermal Sciences, Energy Engineering & Management, and Materials Science & Technology and Doctoral Degree programme.

### CONTACT DETAILS

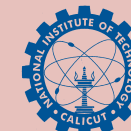
#### Dr. V. Madhusudanan Pillai

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For any assistance or queries, please contact  
**Nimmy J. S.** +91 9633057792 (M)



Government of India  
Ministry of Human Resource Development



समसो मा ज्योतिर्गमय

**GIAN**  
GLOBAL INITIATIVE OF ACADEMIC NETWORKS

## A Six Day GIAN Course on Manpower Planning Using Annualised Hours

December 26-31, 2016

Call for Registration and Participation

### INTERNATIONAL FACULTY

#### Prof. Krishna K. Krishnan

Chair, Industrial & Manufacturing Department  
Wichita State University  
Kansas, USA

### HOST FACULTY

#### Dr. V. Madhusudanan Pillai

Department of Mechanical Engineering  
National Institute of Technology Calicut  
Kozhikode, Kerala, India

### GIAN LOCAL COORDINATOR

#### Dr. Abraham T Mathew

Dean Research & Consultancy  
National Institute of Technology Calicut  
Kozhikode, Kerala, India

### DEPARTMENT OF MECHANICAL ENGINEERING

#### National Institute of Technology Calicut

NIT Campus P.O. Kozhikode - 673601, Kerala, India

## OVERVIEW OF THE COURSE

Manpower Planning is concerned with the determination of right number of people, right kind of people at the right place, right time, doing the right things for which they are suited for the achievement of goals of the organization. In a manpower planning scenario, the forecasted demand-hours and work-hours of manpower are matched. In a *seasonal demand* for manpower, employers may find difficulty to schedule the work-hours for minimising capacity shortage. Normally, fixed labour hours per period approach uses the same amount of work-hours in every period for every worker and this approach leads to overtime or subcontracting when the demand is more (hectic period), or poor labour utilisation when the demand is less (slack period). To overcome these situations, annualised hours is a method which provides flexibility in the use of human resources. In this method, the employees will be contracted for total annual hours and these hours are distributed irregularly in various periods of the planning horizon to meet the fluctuations in demand. The annual contracted hours will be based on the average work-hours per period and the actual work-hours per period may be different for different workers.

Annualised hours method of planning is a type of flexible working, which allows flexibility in efficiently planning manpower for the production system/service sector. This method of manpower planning is a variation in the arrangement of hours, where employees work to an annualised contract. They may work more hours or less hours at various times of the year to take account of seasonal peaks and troughs in the forecast. This system of worker-hour planning eliminates overtime in most instances, except where annual hours worked exceed the contractual annual hours. In annualised hours method of planning, generally, the pay system is structured in such a way that employees receive a fixed monthly payment, regardless of the number of hours they work during a month, so long as the total number of hours worked per year does not exceed the contractual annual hours.

## COURSE CONTENT

- Manpower scheduling methods and flexible working
- Manpower planning constructs: Demand-hour variability, cross training, relative efficiency and capacity shortage
- Work-hours and holiday weeks: Types of holiday weeks and weekly work-hours
- Key requirements for implementing annualised hours planning.
- Analysis of demand-hours, structure of tasks (jobs) in an organization and schedule of work-hours
- Annualised hours planning: objectives and scenarios possible for an organization
- Mathematical modelling of annualised hours planning
- Optimization software packages for solving annualised hours models



**Prof. Krishna K. Krishnan**, is currently the Chair of Industrial & Manufacturing Department, Wichita State University, Kansas. He worked as professor at Cleveland State University and Syracuse University before joining Wichita State University in 1996. His research encompasses various areas of manufacturing systems with emphasis on production systems, facilities planning, material handling and supply chain systems. He has published over 100 journal and conference papers. He won the WSU Polished Professor Award in the Years 1998, 2015, 2016 and was a Bombardier-Learjet Fellow during 2004 – 2007. He worked with companies such as Boeing Inc., Spirit Aerosystems, Cessna, and Hawker-Beachcraft. In addition, he has also received funding from National Science Foundation, Department of Transportation, etc. He served as advisor for 9 PhD and over 90 MS students, and he is currently advising 8 PhD and 6 MS students on their research.

## WHO CAN PARTICIPATE?

- Executives, managers, engineers and researchers from manufacturing, service and government organizations.
- students at all levels (BTech/ MSc/MTech/MBA/ PhD)
- Faculty from reputed academic institutions, management institutions and technical institutions.

## HOW TO REGISTER?

### 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 **“Manpower Planning Using Annualised Hours”** 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 FEE

Faculty / Scientists	Rs. 2,500/-
Participants from Industry	Rs. 20,000 /-
Students & Research Scholars	
■ With award of grade	Rs. 1,000/-
■ Without award of grade	Rs. 500/-
Students from abroad	US\$ 400
Other participants from abroad	US \$ 500

**Department of Mechanical Engineering**  
**National Institute of Technology Calicut**  
 Kozhikode -673 601, Kerala, India

**An International 6 day course, as per MHRD Scheme “Global Initiative of Academic Network (GIAN)”**

Name (Block Letters): ..... M /F

Designation/Professional Title: .....

Organization: .....

Address:.....

Tel..... Mobile.. ..... Email.....

Application ID (Generated during One-time registration at GIAN portal of IIT Kharagpur):.....

Course Fee: Covers only course materials without boarding and lodging

Students/Research Scholars: Rs. 1000/- (With award of grade), Rs. 500/- (Without award of grade)

Faculty/Scientists: Rs. 2500/-

Participants from Industry: Rs. 20,000/-

Participants from abroad: US\$400/-

Accommodation is available in Institute Guest House/Hostels on request against the advance payment on first come and first serve basis.

Accommodation Required: Yes/ No

If accommodation required, then Additional Charges for accommodation:

- Rs 1500 for Students.
- Rs 3000 for Faculty (Guest House-Twin Sharing Basis).

Food on actual basis.

Payment may be made through:

1. Demand Draft: In favour of “DIRECTOR NIT CALICUT” payable at Calicut.

DD /Cheque No: .....

Date: ....., Amount: .....

Bank: .....

**OR**

2. National Electronic Funds Transfer (NEFT) to the account “DIRECTOR NIT CALICUT” (Account Number: 35909407299) Bank: State Bank of India, IFSC Code: SBIN0002207, Swift Code: SBINPN BB392.

Date: .....

Signature of Candidate .....

**APPROVAL FROM AFFILIATED INSTITUTE OF CANDIDATE**

The applicant will be permitted to attend the above course, if selected.

Date: .....

.....  
 Signature and Seal of  
 Approving Authority