



## GLOBAL INITIATIVE FOR ACADEMIC NETWORKS





National Coordinating Institute
INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

www.gian.iitkgp.ac.in

# HEALTHCARE OPERATIONS AND INNOVATION

#### Overview

The course deals with the managerial aspects of healthcare service provision industry. It includes service production processes and systems, supply chains, regional service distribution and networks, business- and revenue models, economic incentives, and information systems for healthcare operations management.

The course brings out the techno-managerial innovations in healthcare service provision in the purview of telemedicine. The course starts with an introduction to healthcare operations management and innovation. Subsequently, the course covers various issues in quality assurance and cost optimization of healthcare delivery, public healthcare infrastructure planning inclusive of rural area, and disaster management. Further, healthcare management issues are mapped on a two-dimensional grid structure. On one dimension, healthcare is divided into the seven Demand and Supply –based Operating logics (DSO), i.e. areas that are managed in a similar way across various clinical contents. These are: prevention, emergency, one visit, elective, cure processes, care processes, and projects. On the second dimension, each of the DSOs are examined and discussed in basic Operations Management terms, such as: demand structure (scheduled, random, free or forced choice, etc.), process types (standard, routine, non-routine), integration and coordination, quality and performance measurement, supply chains, revenue models, skill-sets and human resources. Finally, the strategies for developing information systems, knowledge management systems, and use of analytics for data-driven decision making in healthcare will be discussed.

The Business Model Canvas (BMC) would be used as a template for developing entrepreneurial ideas. Experienced practitioners will be invited to give talks on specific topics, such as healthcare infrastructure planning, patient information systems, entrepreneurial endeavors, and public policy. Each day will include 3-4 hours of interactive lecture sessions and case discussions. Some demo on simulation based study would also be included in the tutorial sessions. Total course would be delivered in a total of 30 contact hours.

**Modules** 

A: Innovations in Healthcare Operations Management : June 06 - June 17, 2016

B: Innovations in Healthcare Information Systems:

Modules A & B are integrated. Number of participants for the course will be limited to fifty.

Who Should Attend

- You are a healthcare practitioner interested in improving your service operations
- You are an entrepreneur interested in developing business models for healthcare services
- You are a researcher interested in healthcare operations management

**Fees** 

The participation fees for taking the course is as follows:

Participants from abroad : \$500
Industry/ Research Organizations: ₹30000
Academic Institutions: ₹10000

Bonafide students of Academic Institutions: ₹ 1000 (to be refunded after completion of course)

The above fees include all instructional materials, computer use for tutorials and assignments, laboratory equipment usage charges, 24 hr free Internet facility. The participants will be provided with accommodation on payment basis.

### The Faculty



Prof. Paul Lillrank has been Professor of Quality and Service Management at Aalto University since 1994. He has served as the Head of the Department of Industrial Engineering and Management for eight years and been Academic Dean of the schools MBA program. Professor Lillrank has conducted research in several service industries, such as software, telecom, airlines and retailing. During the recent past his focus has been in healthcare. He has been a pioneer in introducing industrial management methods to the study of healthcare service production. He has been a frequent speaker and advisor to several healthcare producers and government agencies.



Surgeon Rear Admiral Dr. V.K. Singh, VSM (Retd.), has completed Masters in Hospital Administration, Diplomate National Board in Hospital and Health Care Management and M Phil. Dr. Singh served in Armed Forces Medical Services of India for 37 years in various National & International assignments. Presently, he is Managing Director InnovatioCuris, Adjunct Professor-World Health Innovation Network,Odette School of Business, University of Windsor, Canada and Director Healthcare Asia for Lean Healthcare Excellence- Simpler. He is a Member of Telemedicine Society of India and Chairman Board- Indian Society of Health Professionals.



**Dr. Ram Babu Roy** is an Assistant Professor in the Rajendra Mishra School of Engineering Entrepreneurship at Indian Institute of Technology Kharagpur. He has worked as a Scientist in Defense Research and Development Organization (DRDO). His research interests include modeling and analysis of complex networked systems, Information systems, business intelligence and healthcare operations management.

#### Course Co-ordinator

Prof. Ram Babu Roy

Rajendra Mishra School of Engineering

Entrepreneurship

Phone: +91 -3222-282414

E-mail: rambabu@see.iitkgp.ernet.in

http://www.cep.iitkgp.ernet.in/iswt/courses

## Registration Process

Registration for GIAN courses is not automatic because of the constraints on maximum number of participants allowed to register for a course. In order to register for one or multiple non-overlapping courses, you have to apply online using the following steps:

- 1. Create login and password at www.cep. iitkgp.ac.in/gian
- 2. Login and complete the registration form.
- 3. Select courses
- 4. Confirm your application and payment information.
- 5. Pay ₹ 500 (non-refundable) through online payment gateway.

The course coordinators of the selected courses will go through your application and confirm your selection as a participant one month before the starting date of the courses. Once you are selected you will be informed and requested to pay the full fees through online payment gateway service.