

**Short Term Course**  
**On**  
**Digital Transformation in Productivity and Supply Chain:**  
**Quality, IoT, Cloud, Industry 4.0, Blockchain and Digital**  
**Communication**

**Date: 29<sup>th</sup> Nov to 13<sup>th</sup> Dec (Module 1) and 20<sup>th</sup> Dec to 27<sup>th</sup>  
Dec (Module 2) | Venue- Online**



**To be Organized**  
**by**



**Vinod Gupta School of Management**  
**Indian Institute of Technology Kharagpur**  
**Kharagpur 721302**  
**INDIA**

## **INTRODUCTION**

With the advancement of computational technology, digital transformation has become an inevitable part of business strategy. For gaining competitive advantage through data driven decision making, tools and concepts such as IoT, Cloud, Industry 4.0, Blockchain and Digital Communication has become inevitable skillset that every manager should be aware of, at least at a basic level. On the other hand, in a manufacturing and/or process industry Quality remains a key factor even in the age of digital transformation. The amalgamation of the whole leads to success in the business productivity and supply chain efficiency. In this program, we help managers to connect these dots to ensure that they become digitally literate. The program helps future managers to be technology ready.

## **OBJECTIVES OF THIS COURSE**

- This programme will teach the participants about the key concepts of digital transformation in productivity and supply chain efficiency
- It will also teach the participants how the digital tools can be used in business
- The programme will help the participants use the acquired skills in solving assignments and case studies.

## **KEY FEATURES**

- Learn from IIT Kharagpur faculty and industry leaders
- 20 hours interactive training (4 hours each on 5 days)
- Certificate from VGSOM and IIT Kharagpur, Continuing Education Program

## COURSE CONTENTS

| SLNO            | Topics   | Teaching Sessions | Date     |
|-----------------|--|-------------------|----------|
| <b>Module 1</b> |  |                   |          |
| 1               | Introduction to Digital Transformation: Its role in productivity and supply chain efficiency               | 2 hr              | 29.11.20 |
| 2               | Introduction to Industry 4.0   | 2 hrs             | 29.11.20 |
| 3               | Key knowledge about Internet of Things: Evolution, Adoption, Business Models, Pricing and Key Technologies | 4 hrs             | 06.12.20 |
| 4               | What is cloud business? Why, when, and how of Cloud? Cloud Adaptation Strategy, Scope for IOCL             | 4 hrs             | 13.12.20 |
| <b>Module 2</b> |  |                   |          |
| 5               | Quality in the age of digital transformation   | 2 hrs             | 20.12.20 |
| 6               | Block-chain in Production and Supply Chain Management  | 2 hrs             | 20.12.20 |
| 7               | Digital Communication: In bound and out bound  | 2 hrs             | 27.12.20 |
| 8               | Capstone Group Project Presentation  | 2 hrs             | 27.12.20 |

## PEDAGOGY

The methods consist of lecture sessions, hands-on-exercises, discussion on cases and live problems.

Academicians with proven knowledge, Industrial experience, and demonstrable and related areas will deliver lectures and analyze case studies.

4 Online quiz will be taken on the course, marks will be given based on individual performance in the quiz and the final performance in the group presentation

## TARGET PARTICIPANTS

Top performing managers of Indian Oil Corporation

## **FACULTY MEMBERS**

### **Prof Pradip Kumar Ray**

Professor Pradip Kumar Ray is the Dean of Vinod Gupta School of Management, IIT Kharagpur and a professor at the Department of Industrial and Systems Engineering of Indian Institute of Technology (IIT), Kharagpur, India. His research interests include Productivity Management/Modeling and Analysis of Manufacturing and Service Organizations, Quality Design and Control, Total Quality Management, Process Optimization, Ergonomics/Human Factors Engineering, Safety Engineering, Modelling and Analysis of Healthcare Management Systems, and Industrial/Production System Sustainability.

### **Dr. Swagato Chatterjee**

Dr. Swagato Chatterjee, an IIT-IIM alumni, has a rich client base for MDP and consultancy projects on analytics: Ernst & Young, Yes Bank, CSC, Namura, Mitsubishi, Toyota, GE, Times of India, Coca-cola, Indian Oil, BEL, NTPC, HPCL, Philips, Piramal, RPG Group etc. He brings in a mixture of industry experience and academic knowledge in the class to cater to audience of different seniority levels.

### **Dr. Saini Das**

Dr. Saini Das has served as a faculty member at IIM Indore for three years before joining IIT Kharagpur. She also worked as a software engineer at Infosys Technologies Ltd. prior to her PhD. Her major teaching interests and competencies are in the areas of business analytics, information security risk management in networks, management information systems (MIS), e-commerce technology & applications, data privacy and digital piracy. Prof. Das has taught in many management development programs across industries. She has authored papers in many national and international journals of repute

### **Prof. Surojit Mukherjee**

Prof. Mookherjee's experience includes 15 yrs of industrial research, manufacturing, operations, joint venture set up in the field of metal cutting tool and powder metallurgy. Post his industrial stint, he migrated to SAP project implementation and management, Business consulting, IT Outsourcing, Program management and IT Service sales for global clients. During this period of 18 years, he worked with Pricewaterhouse Coopers and IBM India.

### **Dr. Biswarup Ghosh**

Biswarup Ghosh teaches Marketing Management, International Marketing & Strategic Marketing courses at VGSOM. He has more than 30+ years Healthcare Industry experience & worked as Head of Healthcare at Linde India Ltd (Part of Linde Group, Germany), Director South East Asia at STERIS India Ltd (wholly owned subsidiary of STERIS Corporation USA), General Manager -Marketing at DatexOhmeda (Part of GE Healthcare USA), Zonal Business Head at BOC India Ltd (Part of BOC Plc. UK ). He has extensive industry experience on General Management, Establishing Indian entity of large US MNC, Managing P & L of large Healthcare Business of India & Indian Subcontinent, International Marketing exposure in Singapore, Thailand & Malaysia markets. He did his PhD in Plasma Physics & MBA from VGSOM, IIT Kharagpur

## **COURSE COORDINATORS AND ADDRESS FOR COMMUNICATION**

### **Course coordinator**

Dr. Swagato Chatterjee  
Assistant Professor (Marketing and Analytics)  
Vinod Gupta School of Management,  
Indian Institute of Technology Kharagpur  
Kharagpur, West Bengal, India-712302  
Tel: 03222-283870, +91-9343931795(M)  
Email: [swagato@vgsom.iitkgp.ac.in](mailto:swagato@vgsom.iitkgp.ac.in)