PRODUCTION PLANNING FOR MANUFACTURING EXCELLENCE

Overview of the course:

The Indian economy has been growing at a fast and steady pace in the last two decades but the proportion of manufacturing is continuously decreasing. The Government of India has set a target of 25% share of manufacturing in GDP by 2025. Along with several other factors pertaining to the production level of a manufacturing organization, appropriate planning and control plays a decisive role in timely meeting customer requirements as well as in effectively utilizing resources. It also helps in identifying the needs for capacity expansion and in defining manufacturing strategy. For efficient, effective and economical operation of a manufacturing organization, it is essential to integrate the production planning and control functions. Production planning and subsequent production control follow requisite product design and process plan. Production planning and control addresses the issues of low productivity, inventory management and resource utilization. Production planning entails aggregate planning, scheduling, dispatching, inspection, quality management, inventory management, supply management and equipment management. Production control ensures achievement of required production target, optimum utilization of resources, quality management and cost savings.

The production planning department has to work closely with the marketing department, shop floor, and procurement department, among others, to prepare a workable plan keeping in view the marketing requirements. The process starts with forecasting of product demand (which includes confirmed orders), and then to effectively develop an efficient plan to enhance competitiveness of the organization. The proposed program will focus on introducing the participants to the mathematical analysis of various aspects of production planning and control. Among others, it will cover topics in inventory control, forecasting, aggregate production planning, and lot sizing. It will also introduce the state-of-the-art concepts of advanced planning and scheduling (APS), which addresses production planning and scheduling over a supply chain, and integrated production planning and distribution.

Modules	This course consists of one module. July 4–July 8, 2016 Number of participants for the course will be limited to fifty.
You Should Attend If You are	 Student of B. Tech, M. Tech, MBA, Ph. D. scholars and faculty from reputed academic institutions and technical institutions. Executives, Managers and planners from manufacturing, service and government organizations including R&D laboratories.
Fees	The participation fees for taking the course is as follows: Participants from abroad : US \$200 Industry/ Research Organizations: Rs. 5000 Academic Institutions: Rs. 2000 Research Scholars/students: Rs. 1000 (Rs. 500 for SC/ST students) The above fee includes all instructional materials, computer use for tutorials and assignments, laboratory equipment usage charges, free internet facility.

The Faculty



Professor Subhash C. Sarin is the Paul T. Norton Endowed Professor in the Grado Department of Industrial and Systems Engineering at Virginia Polytechnic Institute and State University, Blacksburg, Virginia, USA. His research interests are in the areas of production planning and scheduling, applied mathematical programming, and design and analysis of manufacturing systems. He has published several papers in the Industrial Engineering and Operations Research journals, and has co-authored two books in the production scheduling area (and has co-edited another book in the same area.) He has received several prestigious awards at the university, state, and national levels. He is a recipient of:

Institute of Industrial Engineers (IIE) Holzman Award as an Outstanding Educator in the Nation (for outstanding contributions in research, teaching and service); IIE David F. Baker Distinguished Research Awardfor significant contributions to the advancement of the industrial engineering profession through outstanding research activity (the highest research award given by the Institute); Alumni Award for Excellence in Graduate Advising (the highest graduate advising award given by Virginia Tech); Dean's Award for Excellence in Teaching; Pletta Award as Virginia's Outstanding Educator of the Year; and Sporn Award for Excellence in Teaching of Engineering Subjects, College of Engineering, Virginia Tech. He is also a recipient of several best paper awards. His research has consistently been sponsored by government agencies (NSF, DOE, USDA, among others) and industry. He has advised 25 Ph.D. and 52 M.S. students to the completion of their degrees. His students are well placed internationally in academia, government, and industry (as Deans, Department Heads, Directors of Research Laboratories and Government Agencies, Professors, CEOs, and Managers, among others.) His M.S. and Ph.D. students have won both IIE Outstanding Thesis and Dissertation Awards and Council of Supply Chain Management Professionals Outstanding Dissertation Award in national competitions. He has served as an Associate Director, Production and Information Systems, Center for High Performance Manufacturing, Virginia Tech, and he is also the Director of Electronics Manufacturing Research Laboratory. He has served on the editorial boards of many journals. He is a Fellow of the Institute of Industrial Engineers and a Full member of the Institute for Operations Research and the Management Sciences.



Prof. S. K. Garg is Pro Vice Chancellor and Professor in Delhi Technological University (Formerly Delhi College of Engineering). He is the founder Head of Delhi School of Management, DTU, offering two year full time MBA and Former Head, Department of Training and Placement. He was appointed as Independent Director to Navratna Public Sector Enterprise by GOI for a period of three years from 2012-2015. He is recipient of Dewang Mehta National Education Award for Best Professor in Operations and manufacturing in the year 2015. Prof.

Garg has more than 25 years of experience in industry, teaching and research. His teaching and research areas include Supply Chain Management, Manufacturing Process Automation and Technology Management, Operations Management, Materials Management, Operations Research, Manufacturing Strategy, Production Planning and Control etc. He has guided fourteen PhD thesis and five others are in progress, 70 M.Tech thesis and 50 B.Tech projects. He has published 175 papers including 75 in International Journals. He has authored course material on Production and Operations Management, Maintenance Management for IGNOU. Prof. Garg is member of the Editorial Boards of several International and National journals. He is reviewer of research papers of International Journals, Conferences and also Examiner to Ph.D and M.Tech. thesis of different universities. He is visiting faculty to I.I.T. Delhi., Indian Institute of Foreign Trade (IIFT), IMI, Delhi. etc. He has delivered Lecture in Distant Education programme of IITD and Radio Counseling of IGNOU, Staff Development programmes of Indian Oil, Vardhman Group, Summer/ Winter Schools and Executive Development Programs. He has visited Chile, USA and Germany to present paper and visit universities.

Course Coordinator

Prof. S K GARG Professor

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