MANUFACTURING STRATEGY

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COURSE DURATION: 8 weeks (20 Jul’20 - 11 Sep’20)
EXAM DATE: 27 Sep 2020

INDUSTRIES APPLICABLE TO: Manufacturing companies like GM, Tata Motors, Tata Steel, Process industries such as ONGC, Mining industry like Coal India Limited, Construction companies like L&T, General Electric, R&D organizations

COURSE OUTLINE:
The aim of this course is to provide a treatment to manufacturing functions to gain competitive advantage. Normally, operation activities are considered reactive in nature. Therefore, organizations are not able to use operation function for competitiveness. W. Skinner wrote the seminal article in HBR in 1969 to highlight the role of manufacturing in corporate strategy. This course will discuss the process of formulation of manufacturing strategy and will also discuss various tools and techniques for making a world class organization. This course will have a right blend of theory and case discussions.

ABOUT INSTRUCTOR:
Prof. Rajat Agarwal is a member of faculty (Associate Professor) at Department of Management Studies, Indian Institute of Technology, Roorkee. He is also associate faculty member at Center of Excellence for Disaster Mitigation and Management and Center of Excellence for Transportation Management, IIT Roorkee. He administers various initiatives of IIT Roorkee in the field of IPR, incubation and entrepreneurship in different capacities. He initiated incubation centre at IIT Roorkee. He is co-coordinator of Design innovation centre at IIT Roorkee.

COURSE PLAN:
Week 01: (1) Manufacturing output (2) Operations Systems (3) Operations Strategy (4) Functional strategy within context of a firm (5) Functional dominance within corporate strategy
Week 02: (1) Concept of world class manufacturing organization (2) 6 Ps of Manufacturing (3) Skinners’ view and Hayes and Wheelwright framework of Manufacturing Strategy (4) Alternative paradigm of manufacturing strategy (5) Some generic manufacturing strategies I
Week 03: (1) Developing a manufacturing strategy (2) Understanding markets (3) The concept of order winners and qualifiers (4) Basic Characteristics and Specific Dimensions of Order Winners and Qualifiers (5) Some specific order winners and qualifiers I
Week 04: (1) Some specific order winners and qualifiers II (2) Some specific order winners and qualifiers III (3) Some specific order winners and qualifiers (Non operation related criteria) (4) Developing an Operations Strategy: Methodology (5) Developing an Operations Strategy
Week 06: (1) Deming’s approach to Quality (2) Business Excellence Awards (3) Process Choice (4) Process Choice: 3 Dimensional View (5) Product Profiling
Week 07: (1) Critical success factors for World Class Manufacturing (2) Value Added Engineering (3) Total Employee Involvement (4) HR theories for Operations Strategy (5) Flexible Manufacturing system
Week 08: (1) Concept of Focus wrt Manufacturing Strategy (2) Toyota production System I (3) Toyota production System II (4) World Class Manufacturing and India (5) Achieving World Class Status