

Course title: Production and Operations Management				
Course Code: PPM 187	No. of credits: 3	L-T-P distribution: 38-07-00	Learning hours: 45	
Pre-requisite course code and title (if any): NA				
Department: Department of Business and Sustainability				
Course coordinator:		Course Instructor :		
Contact Details :				
Course Type: Core		Offered in: Semester III		
Course Description:				
<p>Any or every organization is a system of operations, whether or not called ‘operations’. Ultimate goal or purpose of such a system being production of goods and/or services and to carry them till the point of time and place of consumption. Therefore operations management involves everything an organization does and hence every manager is an operations manager.</p> <p>Production and Operations Management (POM) focuses on carefully managing the processes to produce and distribute products and services." Conventionally speaking Major, overall activities under POM, include product creation, development, production and distribution. Major functions of POM include Managing purchases, Inventory control, Quality control, Storage, Logistics and Evaluations. Focus will be efficiency and effectiveness of the processes.</p>				
Course objectives				
<p>One of the most critical areas for success in any business enterprise is how Production and Operations are managed. In the ‘Productions and Operations Management’ course an attempt will be made to integrate the courses studied by the students like statistics, economics, finance, organizational behaviour and strategy into a consolidated production and operation related decisions.</p>				
Course Contents				
Module	Topic	L	T	P
1	Generation of Four key deliverables: Review of existing Organisation set-up for ‘Production and Operations’. Best Practices of Indian and International companies Re-designing the set-up to global standards Support Systems & Policies necessary for such an International set-up.	4	0	0
2	Defining an optimal model for POM Organisational set-up of the entity following a five step approach:	4	0	0

	<p>Setting Vision & Rationale: Developing Vision: To double size of the entity by Next 5/10 years and further triple by .15/20 years to be within</p> <p>the top three companies in particular product category / taking the best elements from three key areas to build a robust growth strategy</p> <p>Current POM Themes. Best Fit Extended Themes.</p> <p>set-up and Resources: depending on the vision, business needs Defining Implementation Plan and Support (after having completed development of the PMO set-up as in the following chapters)</p>			
3	<p>Vision Strategic Direction and Performance Objectives. Design Principles (Emerging from managements perspectives for where.1</p> <p>the POM set-up is and where it should be)</p> <p>Best Practices (Determined above II(2) and shortlisted on the criteria of SWOT for the respective organisation. Building a future operating model for the entity will need to sustain strengths and remove weaknesses.</p> <p>Exiting Portfolio Shape and Direction: To be developed on a specially designed new Pyramidal model.</p> <p>Portfolio Needs, Activity Plans, Workload and commitments: To be synthesised from the business plans of the organisation (5yearplans/10year plans or strategic intents), by understanding future 1</p> <p>Resource requirements, supported by an activity-driven model.</p>	8	0	0
4	<p>Core functions and support-functions to be discussed in details:</p> <p>Core Operation 1 : Production Operations</p> <p>Defining operating philosophy</p> <p>Planning production volumes and capacities</p> <p>Analysing Operating facilities</p> <p>Core Operation 2: Maintenance</p> <p>Developing maintenance planning and strategy</p>	18	7	0

	<p>Executing maintenance activities</p> <p>Monitoring maintenance performance</p> <p>Support Operation 1: Contracts & Procurement</p> <p>Defining outsourcing philosophy</p> <p>Developing sourcing strategy</p> <p>Selecting suppliers</p> <p>Managing suppliers</p> <p>Reviewing supplier performance</p> <p>Understanding total costs of procurement</p> <p>Support Operation 2: Supply Chain Management</p> <p>Managing supply chain</p> <p>Managing orders</p> <p>Managing inventory</p> <p>Support Operation 3: Logistics</p> <p>Managing warehouse</p> <p>Managing transport</p>			
5	<p>Case Studies</p> <p>Strategic Considerations in Internationalization</p> <p>Choice of Markets</p> <p>Entry Options : Rapid / Beachhead</p> <p>Challenges. Managing Global Competitiveness: Identifying Bottlenecks in POM</p>	4	0	0
	Total	38	7	0
<p>Evaluation criteria</p> <ul style="list-style-type: none"> • Test 1 :Class Participation20% • Test 2: Individual assignments on mapping and redesigning different organizations on specific new models introduced in the classand/or pre-announced quizzes/class tests20% • Test 3: Presentation 20% • Test 4: Written Exam 40% 				

Learning Outcome:

After completing the course the participants shall develop an understanding on how to create a production entity with focus on -

- Production Base
- Financial (Cost) Performance .
- Technical and Operational capabilities .
- Human Capabilities,

Pedagogical approach

- Lectures
- Illustrative cases and case discussions (groups)
- Assignments (Individual / group).

Materials:

- 1) B Malakooti (2014), 'Operation and Production System with Multiple Objectives', Wiley
- 2) S N Chary (2013) . 'Production and Operation Management', 5th Edition, Tata Mac Graw Hill

Additional information (if any)**Student responsibilities**

The students are expected to submit assignments in time and come prepared with readings when provided.

Prepared by:

Dr Vinod Kumar Jangid

Course Reviewers:

- 1) Dr. N M Ahuja, ONGC,
- 2) Mrs. PomilaGarga, ONGC Videsh Limited (OVL)