Course title: Production and Operations Management						
Course Code: PPM 187	No. of credits: 3	L-	Γ-P distribution : 35-07-00	Learning hours: 42		
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:

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 tills the point of time and place of consumption. Therefore operations management involves everything an organization does and hence **every manager is an operationsmanager**.

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.

Course objectives

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.

Course Contents

Module	Topic	L	T	P
1	Generation of Four key deliverables:	4	0	0
	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.			
2	Defining an optimal model for POM Organisational	4	0	0
	set-up of the entityfollowing a five step approach:			
	Setting Vision & Rationale: Developing Vision: To			
	double size of the entityby Next 5/10 years and			
	further triple by .15/20 years to be within			
	the top three companies in particular product			
	category / taking the bestelements from three key			
	areas to build a robust growth strategy			
	Current POM Themes.Best Fit Extended Themes.			
	set-up and Resources: depending on the vision,			
	business needsDefining Implementation Plan and			

	Support (after having completeddevelopment of the			
2	PMO set-up as in the following chapters)	0		0
3	Vision Strategic Direction and Performance	8	0	0
	Objectives.Design Principles (Emerging from			
	managements perspectives for where.1			
	the POM set-up is and where it should be)			
	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.			
	Exiting Portfolio Shape and Direction: To be			
	developed on a speciallydesigned new Pyramidal			
	model.			
	Portfolio Needs, Activity Plans, Workload and			
	commitments: To besynthesised from the business			
	plans of the organisation (5yearplans/10year plans			
	or strategic intents), by understanding future 1			
	Resource requirements, supported by an activity-			
	driven model.			
4	Core functions and support-functions to be	15	7	0
	discussed in details:			
	Core Operation 1 : Production Operations			
	Defining operating philosophy			
	Planning production volumes and capacities			
	Analysing Operating facilities			
	Core Operation 2: Maintenance			
	Developing maintenance planning and strategy			
	Executing maintenance activities			
	Monitoring maintenance performance			
	Support Operation 1: Contracts & Procurement			
	Defining outsourcing philosophy			
	Developing sourcing strategy			
	Selecting suppliers			
	Managing suppliers			
	Reviewing supplier performance			
	Understanding total costs of procurement			
	Support Operation 2: Supply Chain Management			
	Managing supply chain			
	Managing orders			
	Managing inventory			
	Support Operation 3: Logistics			
	Managing warehouse			
	Managing transport			
5	Case Studies	4	0	0
	Strategic Considerations in Internationalization			

Choice of Markets			
Entry Options: Rapid / Beachhead			
Challenges.Managing Global Competitiveness:			
Identifying Bottlenecks in POM			
Total	35	7	0

Evaluation criteria

- Test 1 : Class Participation 20%
- Test 2: Individual assignments on mapping and redesigning differentorganizations 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:

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Course Reviewers:

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