



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal - 500 043, Hyderabad, Telangana

COURSE CONTENT

BUSINESS PROCESS REENGINEERING								
I Semester: MBA								
Course Code	Category	Hours / Week			Credits	Maximum Marks		
CMBD07	Elective	L	T	P	C	CIA	SEE	Total
		3	0	-	3	40	60	100
Contact Classes: 40	Tutorial Classes: Nil	Practical Classes: Nil			Total Classes: 40			
Prerequisite: Basic concepts of management								

I. COURSE OVERVIEW:

This course is designed to equip the knowledge and skills required to lead or participate in BPR initiatives within organizations. It emphasizes not only the technical aspects of process redesign but also the importance of managing people and aligning the organization's culture with the new processes. Additionally, ethical and sustainability considerations are integrated into the course to reflect the evolving nature of BPR in today's business landscape.

II. COURSES OBJECTIVES:

The students will try to learn:

- I. The Understand concepts and philosophy of Business Process Reengineering.
- II. Learn various BPR and alternate methodologies – TQM, Work Study, ISO standards practiced in the industry.
- III. Discuss and analyze the role of Information Technology and change management in the implementation of BPR.
- IV. Expose practically BPR implementation and best practices through research papers and case discussions.

III. COURSE OUTCOMES:

At the end of the course students should be able to:

- CO1 Understand the generic process framework and its relevance in business management.
- CO2 Apply BPR methodologies to analyze and transform a business process in a practical case.
- CO3 Evaluate a case study on "Pillsbury: Customer Driven Reengineering" and its lessons in BPR.
- CO4 Assess the risks associated with BPR and ways to mitigate them.
- CO5 Explore Total Quality Management (TQM), ISO 9000, Six Sigma, and their relevance in process improvement.
- CO6 Explain the elements and applications of ERP systems in BPR.

IV. COURSE CONTENT:

MODULE - I: PROCESS VIEW OF BUSINESS (08)

Definition and Dimensions of Business Process, Generic Process Framework, the Capability Maturity Model Integration (CMMI), Design Process and Design Quality, Requirement Engineering, Design Concepts.

MODULE - II: BPR: METHODOLOGIES AND TECHNIQUES & APPLICATIONS (10)

Introduction and History of BPR, Definition and Benefits of BPR, BPR Model, BPR Methodology Selection Guidelines, Steps to implement BPR: Reengineering Approaches: a) Big Bang Approach, b) Incremental Approach, c) Evolutionary Approach, BPR Methodologies: a) Hammer/Champy Methodology, b) Davenport Methodology, c) Manganelli/Klein Methodology, d) Kodak Methodology; Comparison of various Methodologies. Case: Dabbawala of Mumbai, A Case Analysis using BPR methodologies.

MODULE - III: CRITICAL SUCCESS FACTORS ANALYSIS (09)

Reengineering Success Factors, Risks associated with BPR, Barriers to BPR, Case: Analysis on “Pillsbury: Customer Driven Reengineering”, Barriers Management, Case: “Walmart China- Supply Chain Transformation”.

MODULE - IV: BPR Vs. OTHER IMPROVEMENT APPROACHES (10)

Optimization Techniques, Process Simplification, Case: “Aviation Spare Parts Supply Chain Management Optimization at Cathay Pacific Airways Ltd”. TQM: ISO 9000 – QMS/EMS/IMS, Quality Policy, Quality Manual, SIPOC, Procedure Manual, Work Sheets, Quality Audit, Six Sigma, QMS, ISO in Higher Education Institutions, IACBE Accreditation in Education, Restructuring, 5 S Technique, Benchmarking, Work Study, Knowledge Management.

MODULE - V: INFORMATION TECHNOLOGY AND BPR (08)

Role of IT in Reengineering, Criticality of IT in Business Process, BPR Team Characteristics, Threads of BPR in Various Phases, Case: “Otis Elevator: Accelerating Business Transformation with IT”, BPR, SAP and ERP, Elements of ERP, Applications of ERP.

V. TEXTBOOKS:

1. Roger S. Pressman “Software Engineering – A Practitioner’s Approach, 6th Edition. Tata Mc-Graw- Hill International Edition. 2005,
2. Siddiqui Moid & Khwaja R.H., “The Acrobatics of Change”, 7th Reprint. Sage Publications India Pvt. Ltd. New Delhi, 2010.
3. Jayanti Natarajan., “Business Process Reengineering”, TMH, New Delhi, 2002
4. Kapoor Rajneesh, “Business Process Redesign”, Global Business Press, Delhi, 2001.
5. Richard Johnson Management “Processes for Quality Operations. Vision Books”, 2001.
6. Dimitris, N. Chorafas, “Integrating ERP, CRM, Supply Chain Management and Smart Materials”, Auerbach Publications, May 2001.

VI. REFERENCE BOOKS:

1. Radhakrishnan, S. Balasubramanian. “Business Process Reengineering, Text and Cases”, Prentice Hall of India, New Delhi, 2010.

VII. WEB REFERENCES:

1. <https://www.phindia.com>
2. <https://www.cambridgescholars.com>
3. <https://www.taylorfrancis.com>

VIII. E-TEXT BOOKS:

1. <https://link.springer.com>
2. <https://www.kobo.com>