

Branch Name:	MANAGEMENT
Program Code:	MS301
Course Name:	Technology and Management
Course Code:	1MS3010901
Pre-requisite Course:	Principles of Management, Basics of Information technology

Course Objectives:

This course approaches the management of technological innovation from a resource/knowledge-based view, which sees technological innovations as a driving force of competitive advantage of organizations through a combination of internal resources and external linkages. Students are introduced to the theories, models, tools and practical cases from industries by understanding what technological innovations are, why they are important, and what are needed to enable and manage technological innovations within and outside of the boundary of organizations. Although most attention will be paid to innovations made by industrial firms, relevant issues of innovations at levels of individual, team, network of organizations, and industry will be addressed as well.

Teaching and Examination Scheme:

Teaching Scheme (Hours per week)				Evaluation Scheme (Marks)				
Lecture (L)	Tutorial (T)	Practical (P)	Credit	Theory (Marks)		Practical (Marks)		Total (Marks)
				University Assessment	Continuous Assessment	University Assessment	Continuous Assessment	
4	-	-	4	60	40	-	-	100

Subject Contents:

Sr. No.	Contents	Total Hours	Weight
1	- Introduction to Management of Technology - The Role of Technology in The Creation of Wealth	12	25%
2	- Critical Factors in Managing Technology - Management of Technology: The New Paradigms	12	25%
3	- Technology Life Cycles - The Process of Technological Innovation - Competitiveness	12	25%
4	- Business Strategy and Technology Strategy - The Acquisition and Exploitation of Technology - Technology Transfer	12	25%

Course Pedagogy:

The pedagogy of the subject involves Lectures, Case Discussions, and Real Life Business Scenarios. Students will be given group tasks and assignments. In Movie based learning, students will watch a movie based on management concept and shall be required to submit an assignment which will be part of their continuous evaluation process.

Suggested Readings:

a. Books

1. Management of Technology The Key To Competitiveness And Wealth Creation: Tarek M. Khalil

b. Journals/Magazines

- 1) Journal of Information Technology
- 2) Journal of Artificial Intelligence Research

Evaluation Scheme:

Sr. No.	Component	Weight
1	University Examination * For the written examination, the open book examination may be opted by the paper setter appropriately	60%
2	Internal Assessment -Depending on the need and objectives of the subject, internal assessment should include minimum three of the following sub- components; <i>Class Test, Quiz, Assignments, Case Presentation, Class Participation, Projects, Team/Individual Assignments.</i> -The weightage of a sub-component should not exceed 50% of internal assessment component weight. -The bifurcation of sub-components shall be communicated by the instructor before commencement of the academic sessions.	40%

Course Learning Outcomes (CLO): On completion of this course, the students will be able to:

CLO	Description	Bloom's Taxonomy Level
CLO1	Students will be able to describe major theories, background work, concepts and research output in the field of technical management	1. Remember
CLO2	Students will demonstrate a clear understanding of the concepts, tools & techniques used by technical executives in developing and executing strategies and will appreciate its integrative and interdisciplinary nature.	3 Apply, 4 Analyze
CLO3	Students will be able to demonstrate effective application of technical tools & techniques to practical situations for diagnosing and solving organizational problems	3 Apply, 4 Analyze
CLO4	Students will be able to demonstrate the capability of making their own decisions in technical domain.	2. Understand 6 Create
CL05	Students will be able to develop their capacity to think and execute technical programs.	3 Apply, 4 Analyze 5 Evaluate

Mapping of CLOs with Pos & PSOs

Course Learning Outcomes	Program Outcomes (POs)								Program Specific Outcomes (PSOs)	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CLO1	H	M		L	L	M	L	H	M	
CLO2	H	H	L	H		M				
CLO3	H	L	H			L		L		M
CLO4	H	H		H					H	
CLO5			H			H	M	H		

H: High, M: Medium, L: Low