



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal - 500 043, Hyderabad, Telangana

COURSE CONTENT

CREATIVITY, INNOVATION AND ENTREPRENEURSHIP								
III Semester: MBA								
Course Code	Category	Hours / Week			Credits	Maximum Marks		
CMBE44	Elective	L	T	P	C	CIA	SEE	Total
		4	-	-	4	40	60	100
Contact Classes: 45	Tutorial Classes: Nil	Practical Classes: Nil			Total Classes: 45			
Prerequisite: Entrepreneurship and Design Thinking								
SDGs Mapped: SDG 8 (Decent Work & Economic Growth), SDG 9 (Industry, Innovation and Infrastructure)								

I. COURSE OVERVIEW:

This course provides a comprehensive understanding of creativity and innovation, focusing on the processes, environments, and tools that foster creative thinking and problem-solving. Students will explore creativity at the individual and organizational levels, examine barriers to creativity, and learn strategies to overcome them. The course also emphasizes innovation management, ideation methods, and the role of leadership in driving innovation, with a micro and macro perspective on organizational and economic contexts.

II. COURSES OBJECTIVES:

The students will try to learn:

- The knowledge of creative cerebration, creative Personality and motivation, creative Environment, creative technology.
- The structuring of ill, defined problems, creative problem solving-models of creative problem solving mechanisms of divergent thinking.
- The knowledge on creative intelligence abilities, a model of creative intelligence, convergent thinking ability, traits congenial to creativity.
- The systems approach to innovation, innovation in the context of emerging economies, organizational factors affecting innovation at the firm level.

III. COURSE OUTCOMES:

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

- CO1 Recall and describe the concepts, types, and criteria of creativity and methods for evaluating its quality.
- CO2 Apply models of creative problem-solving and techniques of divergent and convergent thinking.
- CO3 Analyze creative intelligence abilities, personality traits, and strategies for overcoming blocks to creativity.
- CO4 Evaluate innovation management processes, including ideation approaches and theories of new product development.
- CO5 Assess micro and macro perspectives of innovation, focusing on leadership, organizational factors, and emerging economies.
- CO6 Create innovative frameworks and solutions by integrating creativity, intelligence, and innovation strategies.

IV.COURSE CONTENT:

MODULE – I: THE CREATIVITY PHENOMENON (08)

Creative cerebration, creative Personality and motivation, creative Environment, creative technology, creativity training, puzzles of creativity, spiritual and social roots of creativity, essence, elaborative and expressive creativities, quality of creativity, existential, entrepreneurial and empowerment creativities criteria for evaluating creativity, credible evaluation, improving the quality of our creativity.

MODULE - II: MASTERING CREATIVE PROBLEM SOLVING: (09)

Structuring of ill, defined problems, creative problem solving-models of creative problem solving mechanisms of divergent thinking, useful mechanisms of convergent thinking, and techniques of creativity problem solving.

MODULE - III: CREATIVE INTELLIGENCE (09)

Creative intelligence abilities, A model of creative intelligence, convergent thinking ability, traits congenial to creativity, creative personality and forms of creativity, motivation and creativity.

Blocks to creativity, fears and disabilities, strategies for unblocking, energy for your creativity, designing creativogenic environment.

MODULE - IV: INNOVATION MANAGEMENT (09)

Concept of innovation, levels of innovation, incremental vs. radical innovation, inbound and outbound ideation- open and other innovative ideation methods, theories of outsourcing new product development: Transaction cost, resource based, resource dependence, knowledge based theories.

MODULE - V: MICRO AND MACRO PERSPECTIVES OF INNOVATION (10)

Systems approach to innovation, innovation in the context of emerging economies, organizational factors affecting innovation at the firm level, leadership and Innovations, open innovation, innovation framework, innovations developed by open technology communities.

V.TEXT BOOKS:

1. H. James Harrington, Creativity, Innovation, and Entrepreneurship: The Only Way to Renew Your Organization”, Taylor & Francis Inc., 2018.
2. U.Jerinabi, P.Santhi, “Creativity, Innovation and Entrepreneurship”, allied Publisher Ltd, May 2016.
3. Dr.Kalpana Maheshwari, “Creativity & Innovation”, Indra Publishing House, 2016.
4. Urvashi Makkar, Rinku Sanjeev, Sunayana Jain, “Innovation & Creativity Management”, Bharti Publications, 1st Edition, 2015.
5. Vinnie Jauhari, Sudanshu Bhushan,” Innovation Management, Oxford Higher Education”, 7th Edition, 2014.

VI. REFERENCE BOOKS:

1. Brian Clegg, Paul Birch,” Creativity”, Kogan Page, 7th Edition,2009.
2. P. N. Rastogi, “Managing Creativity for Corporate Excellence”, Macmillan publishers, 4th Edition, 2009.

VII. WEB REFERENCES:

1. www.open.edu/openlearn/money.../creativity...innovation/content-section---references
2. www.fpspi.org/pdf/InnovCreativity.pdf

VIII. E-TEXT BOOKS:

1. <https://books.google.co.in/books?isbn=8184248024>
2. https://www.researchgate.net/.../200746590_Entrepreneurial_Creativity_and_Innovation.