MGE- 637 : Creativity and Innovative Thinking

Prerequisites for	Nil	
the course:		
Objective:	To create an awareness of the techniques for improving the flexibility and originality of thinking	
<u>Content:</u>	Creative thinking as a skill; Valuing diversity in thinking; Thinking preferences; Creativity styles; Creativity in problem solving: Problem Definition, Understanding & Representing; Pattern Breaking; Mind stimulation. General Strategies Idea-collection processes	6 Hours
	including Brainstorming/Brain-writing, The SCAMPER methods, Metaphoric thinking, Outrageous thinking; Mapping thoughts; Eight- Dimensional (8D) Approach to Ideation; Using Math and Science: Systematic logical thinking, Using math concepts;	8 Hours
	Systematic Inventive Thinking The TRIZ methodology; Levels of inventions; Evolution of technical systems; Ideality and the ideal final result (IFR); Stating contradictions and the contradiction table; Standards features and Inventive principles; Separation principles; Using physical, geometrical, and chemical effects, fields	8 Hours
	Decision and Evaluation Focused thinking framework; Six thinking hats, PMI (Plus, Minus, Interesting); Ethical considerations	5 Hours
	Introduction to intellectual property: Patents, Copyrights ©, Trademarks ®, Trade Secret, Unfair Competition	3 Hours
Pedagogy:	Lectures/ tutorials/laboratory work/ field work/ outreach activities/ project work/ vocational training/viva/ seminars/ term papers/assignments/ presentations/ self-study/ Case Studies etc. or a combination of some of these. Sessions shall be interactive in nature to enable peer group learning.	
<u>References/Readings</u>	 Edward DeBono, Six Thinking Hats, Penguin Books, Latest Edition Ed Catmull, &Amy WallaceCreativity, Inc.: Overcoming the Unseen Forces That Stand in the Way of True Inspiration, Kogan Page, Latest Edition Brian Clegg, Creativity and Innovation for Managers, Routledge; Latest Edition Luecke, Richard; Harvard Business Essentials – Managing Creativity andInnovation, Harvard Business School Press, Latest Edition Chris Griffiths, Melina Costi, The Creative Thinking Handbook- Your Step-by-Step Guide to Problem Solving in Business, Kogan Page, Latest Edition 	
Learning Outcomes	 To be familiar with processes and methods of creative problem solving: To enhance creative and innovative thinking skills 	