



GUJARAT TECHNOLOGICAL UNIVERSITY

Program Name: Diploma Engineering

Level: Diploma

Branch: Civil Engineering / Environmental Engineering

/Mining Engineering

Subject Code : DI05000251

Subject Name : The Science of Happiness and Wellbeing

w. e. f. Academic Year:	2026-27
Semester:	5 th
Category of the Course:	MOPEC

Prerequisite:	Basic ability for self-reflection, observation, and participation in discussions
Rationale:	<p>In contemporary academic and professional environments, there is increasing recognition that technical competence alone is insufficient for overall success and quality of life. Students often face stress, uncertainty, and challenges related to mental wellbeing, interpersonal relationships, and work-life balance.</p> <p>The course “The Science of Happiness and Wellbeing” is designed to address these gaps by providing a scientific, evidence-based understanding of happiness integrating concepts from psychology, neuroscience, and social sciences</p>

Course Outcome:

After Completion of the Course, Student will able to:

No	Course Outcomes	RBT Level
01	Explain scientific concepts of happiness and wellbeing	R,U,A
02	Analyze determinants influencing happiness	R,U,A
03	Apply mindfulness and emotional intelligence techniques	R,U,A
04	Evaluate strategies for improving personal and professional wellbeing	R,U,A
05	Develop sustainable practices for long-term happiness and social contribution	R,U,A

*Revised Bloom's Taxonomy (RBT)

Teaching and Examination Scheme:

Teaching Scheme (in Hours)			Total Credits L+T+ (PR/2)	Assessment Pattern and Marks				Total Marks
L	T	PR	C	Theory		Tutorial / Practical		
				ESE (E)	PA(M)	PA(I)	ESE (V)	
3	0	0	3	70	30	0	0	100



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Course Content:

Unit No.	Content	No. of Hours	% of Weightage
1. Foundations and Determinants of Happiness	Operationalizing happiness: Definitions and perspectives Hedonic vs Eudaimonic wellbeing Operationalizing happiness: definitions, scope, and perspectives Hedonic vs Eudaimonic wellbeing The science of happiness: interdisciplinary approach Constructs and measurement of happiness (scales, indices) Pre-assessment of happiness and baseline evaluation Biological factors: genetics, brain chemistry Psychological factors: personality, cognition, mindset Socio-cultural influences: family, environment, culture Role of education, income, and lifestyle Case studies and interaction of determinants	10	25
2. Theories, Myths, and Inner Dynamics of Happiness	Common myths about happiness Scientific exploration of “What makes us happy?” Positive psychology principles Internal dynamics of happiness Key ingredients: gratitude, optimism, resilience, purpose Evidence-based approaches to happiness Case discussions and reflective exercises Self-learning and assessment activities	8	15
3. Mindfulness and Emotional Intelligence	Introduction to mindfulness: concept and significance Scientific and neurological basis of mindfulness Techniques: breathing, awareness, meditation Guided mindfulness practice sessions Assessing mindfulness outcomes Emotional Intelligence (EI): concepts and models Components of EI: self-awareness, self-regulation, empathy, social skills Role of emotions in happiness EI assessment tools and skill development Managing emotions in social contexts	10	25
4. Happiness in Work and Life	Happiness at workplace: productivity, engagement, creativity Innovation and positive organizational behavior Managing stress and daily hassles Work-life balance: importance and challenges	8	15



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	Strategies for achieving balance Time management and lifestyle interventions Relationship between happiness and efficiency Case studies and applied exercises		
5. Sustaining and Spreading Happiness	State vs trait happiness Long-term happiness strategies Habit formation and behavioral change Personal happiness development plan Role of relationships and social networks Creating happiness through altruism and service Community wellbeing and social responsibility Sharing and sustaining happiness practices Post-assessment and evaluation of change Course reflection and future applications	9	20
	Total	45	100

Suggested Specification Table with Marks (Theory):

Distribution of Theory Marks (in %)					
R Level	U Level	A Level	N Level	E Level	C Level
20	30	50	-	-	-

Where R: Remember; U: Understanding; A: Application, N: Analyze and E: Evaluate C: Create (as per Revised Bloom's Taxonomy)

References/Suggested Learning Resources:

(a) Books:

S. No.	Title of Book	Author	Publication with place, year and ISBN
1	Authentic Happiness: Using the New Positive Psychology to Realize Your Potential for Lasting Fulfillment	Martin E. P. Seligman	Atria Books ISBN-13 : 978-0743222983
2	Positive Psychology: The Science of Happiness and Flourishing	William Compton & Edward Hoffman	SAGE Publications, Inc ISBN-13 : 978-1071931073



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S. No.	Title of Book	Author	Publication with place, year and ISBN
3	Positive Psychology: The Science of Happiness and Human Strengths	Alan Carr	Routledge ISBN-13 : 978-1583919910
4	Handbook of Positive Psychology	C. R. Snyder	OUP USA ISBN-13 : 978-0199862160
5	Happiness & Wellbeing	Alok Ranjan	Prabhat Prakashan Pvt. Ltd. ISBN-13 : 978-9355626912

(b) Open source software and website:

1. <https://greatergood.berkeley.edu>
2. <https://ppc.sas.upenn.edu>
3. <https://www.coursera.org>
4. <https://www.edx.org>
5. <https://worldhappiness.report>
6. <https://www.oecdbetterlifeindex.org>
7. <https://www.mindful.org>
8. <https://www.actionforhappiness.org>
9. Miracle of Mind app

List of Laboratory/Learning Resources Required:

- Computer system / laptop with internet connectivity
- Projector / smart classroom facility
- Audio system for guided sessions (meditation, videos)
- Access to online learning platforms

Suggested Project List:

- a. Conduct a self-assessment using standard happiness scales
- b. Conduct a Happiness Survey in Campus
- c. Track sleep, diet, and daily activities for 7 days, Correlate with mood/happiness levels and Present graphical analysis
- d. Conduct Happiness Awareness Campaign in college or your locality
- e. Conduct a small activity (e.g., visit school/NGO)-Engage in positive interaction or awareness session and reflect on social impact



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Suggested Activities for Students:

- a. Happiness Self-Assessment & Reflection
- b. Classroom Happiness Poll & Discussion
- c. Myth vs Reality Debate
- d. Gratitude Practice Activity
- e. Guided Mindfulness Session
- f. Emotional Intelligence Role Play
- g. Stress Mapping Exercise
- h. Reflective Journaling
- i. Random Acts of Kindness Activity

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