



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal - 500 043, Hyderabad, Telangana

COURSE CONTENT

ESG AND SUSTAINABILITY MANAGEMENT								
I Semester: MBA								
Course Code	Category	Hours / Week			Credits	Maximum Marks		
CMBE07	Elective	L	T	P	C	CIA	SEE	Total
		3	0	-	3	40	60	100
Contact Classes: 45	Tutorial Classes: Nil	Practical Classes: Nil			Total Classes: 45			
Prerequisite: Basic concepts of Sustainable Development Goals (SDGs)								
SDGs Mapped: SDG 12 (Responsible Consumption & Production), SDG 13 (Climate Action)								

I. COURSE OVERVIEW:

This course is designed to understand and implement ESG (Environmental, Social, Governance) principles and sustainability practices in organizations. It emphasizes the integration of environmental management, social responsibility, corporate governance, and ethical decision-making into strategic business operations. Students will learn to analyze ESG frameworks, apply sustainability strategies, and evaluate emerging trends to enhance organizational performance and stakeholder value.

II. COURSES OBJECTIVES:

The students will try to learn:

- I. The significance and evolution of ESG and sustainability in modern business.
- II. The environmental challenges, climate strategies, and sustainability initiatives.
- III. How to Examine social responsibility, stakeholder engagement, and employee wellbeing practices.
- IV. The governance principles, ethical practices, and risk management in organizations.
- V. The ESG strategies, technological innovations, and emerging trends with corporate vision and business strategy.

III. COURSE OUTCOMES:

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

- CO1 Understand ESG concepts, CSR, triple bottom line, and global frameworks including SDGs, GRI, SASB, and BRSR.
- CO2 Analyze environmental management systems, climate strategies, circular economy, carbon footprint, and renewable energy applications for sustainable business practices.
- CO3 Develop strategies for stakeholder engagement, diversity, equity, inclusion (DEI), ethical labor practices, and employee wellbeing initiatives.
- CO4 Identify gender gaps and promote gender equality and social sustainability in organizational contexts.
- CO5 Evaluate governance principles, ethical frameworks, transparency, anti-corruption measures, and global ESG standards for organizational accountability.
- CO6 Apply ESG strategies, technological innovations, and emerging global trends to align corporate vision, enhance value creation, and ensure sustainable business operations.

IV. COURSE CONTENT:

MODULE - I: Introduction to ESG and Sustainability (08)

The definition and importance of ESG in business; Historical evolution of ESG and sustainability concepts and the rise of ESG in corporate and investor agendas; Key concepts such as sustainability, corporate social responsibility (CSR), and the triple bottom line (people, planet, profit); Global frameworks and standards including the UN Sustainable Development Goals (SDGs), Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB) and Business Responsibility & Sustainability Reporting (BRSR)

MODULE - II: Environmental Management and Climate Strategies (10)

Climate change and its impact on business operations and strategy, Sustainable practices in manufacturing and operations, Environmental Management Systems (EMS), ISO 14001, Environment Impact assessment (EIA); Resource Management: focusing on water, energy, and waste reduction strategies; The concept of a circular economy: the Ellen MacArthur Foundation, Circular business models and value creation, Life cycle assessment (LCA); Carbon foot-printing and GHG Protocols: measure, report, and reduce greenhouse gas emissions; Scope 1, Scope 2 and Scope 3 emissions; environmental regulations and compliances, such as carbon taxes and emissions trading systems; Renewable energy and their applications, decarbonization, energy transition strategies

MODULE - III: Social sustainability and Stakeholder Management (09)

Social Responsibility and Community Engagement: Pyramid of corporate social responsibility (CSR), Community development and impact, stakeholder engagement, Stakeholder theory, Legitimacy theory; Human rights and ethical labour practices in global supply chains, Modern slavery and child labour prevention, Worker safety and occupational health management.

Diversity, Equity, and Inclusion (DEI) in the workplace, Importance of DEI in the workplace and strategies for promoting DEI and gender gap in senior management; Employee wellbeing and development: Employee engagement and retention strategies, Learning/Training and development programs, Mental health and work-life balance initiatives.

MODULE - IV: Governance and Ethics (10)

Corporate governance principles; Board composition, diversity and executive accountability; Anti-corruption, ethical decision-making and leadership in business, whistleblower policies; Data privacy and cybersecurity governance; Corporate disclosure and transparency practices, Stakeholder communication strategies, Greenwashing: Third-party assurance and verification; Risk management and investor perspectives and opportunities.

MODULE - V: Strategic ESG and Future Trends (08)

Aligning ESG with corporate mission, vision, and business strategy; Embedding ESG across value chains and decision-making; Technological Innovations in ESG: Utilizing technology to advance ESG goals: data analytics for ESG metrics, blockchain for supply chain transparency, Digital transformation and sustainability: smart grids, IoT for resource efficiency; Future Trends and Challenges: ESG in emerging economy.

V. TEXTBOOKS:

1. Kristyn Noeth, The ESG and Sustainability Desk book for Business: A Guide to Policy, Regulation, and Practice, A press; 1st edition, July 2024.
2. Tracy Dathe, Marc Helmold, René Dathe, Isabel Dathe, Implementing Environmental, Social and Governance (ESG) Principles for Sustainable Businesses: A Practical Guide in
3. Sustainability Management (Responsible Leadership and Sustainable Management) Springer International Publishing AG; 1st ed. 2024 edition
4. Crane, A., Matten, D., & Spence, L. Corporate Social Responsibility: Readings and cases in a global context (4th ed.), Routledge. 2019.

VI. REFERENCE BOOKS:

1. O'Connor, B., The ESG investing handbook: Insights and developments in environmental, social and governance investment. Harriman House, 2021.
2. C.V. Baxi and Ajit Prasad, Corporate Social Responsibility: Concepts and Cases – The Indian Experience,

Excel Books

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>