

ELECTIVE COURSE

Course Title:

SUSTAINABILITY - ESG

Course Description:

Sustainability has become more than just a buzzword, and is part of the central narrative among governments, organizations, businesses and now classrooms. In this course, students will be introduced to the basic tenets of sustainability, what it entails, key concepts within sustainability and how to build a career in this domain. Additionally, they will be exposed to the social dimensions of sustainability, the energy transition, circular economy, biodiversity, air pollution, water pollution, soil pollution, environmental economics, ecological footprint and public policy in sustainability. Students will be given a holistic view of the subject and will learn what it entails to have a future in this field.

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Course Objectives:

- To give students a holistic understanding of sustainability, its various nuances and provide them with contextual information, which is relevant in the overall sustainability narrative, rather than making it too focused on one element.
- The course is meant to ignite curiosity among students for various topics under the vast umbrella of sustainability.
- To provide them with knowledge which makes them choose a career in sustainability.

Course Content:

1. Introduction to sustainability
 - What is sustainability and how it is different from ESG?
 - Concept of doughnut economics & planetary thresholds - how the tragedy of commons is a concept which works on a planetary level as well, the limits to economic growth and the concept of just sustainabilities.
2. Social Dimensions of Sustainability
 - Social aspects within sustainability.
 - Social dimensions like gender, health, education, poverty and why they form a critical part of sustainability, including how 13 of the 17 Sustainable Development Goals.
 - Corporate aspect of sustainability which are relevant to society like CSR and even supply chain considerations linked to social dimensions.

ELECTIVE COURSE

3. Energy Transition

- How fossil fuels need to be phased out?
- Renewable energy and how it is important.
- Carbon budget and how an RE transition will help safeguard from the 1.5-degree threshold, along with policy tools for renewable energy like RECs (renewable energy certificates).

4. Circularity

- 3R, 5R and 10R approach for waste - concepts of cradle to cradle, waste as a resource, and waste management's environmental and social dimensions, lifecycle of products.

5. Biodiversity, Conservation & Forests

- Ecosystem - its structure, components, energy pyramids.
- Biodiversity - importance, and factors regulating it, ecological hotspots and their importance, preservation of biodiversity, wildlife and conservation of medicine.
- Conservation - importance, and factors regulating it.
 - a. Forest conservation - Values and importance of forests, protection acts, management, sustainability, agroforestry etc.
 - b. Concept of ecosphere.

6. Water pollution

- Water management in order to be effectively sustainable.
- Water footprint of various activities and products, the concept of water stewardship and how water risks are determined.
- SDG 6 on Clean Water and Sanitation, the concept of WASH and water's relevance in the environment and social domain.

7. Air pollution

- Crisis and cause.
- Sustainable policy and key considerations.

8. Soil pollution

- Soil degradation.
- Bioremediation and regenerative farming.

9. Environmental Economics & Sustainability

- What is environmental economics? Scope and nature.
- Relation between green consumerism and SDGs.
- Strategies and challenges.

ELECTIVE COURSE

10. Ecological footprint

- Earth Overshoot Day, and the latent ecological footprint of various products and activities.
- Carbon footprint, and more specific footprints like palm oil footprint, water footprint.

11. Public Policy for Sustainability

- Role of regulators and what tools exist within public policy for accelerating sustainability.
- International agreements and treaties for sustainability like the Kyoto Protocol, the significant COPs till now and their relevance like COP21 (Paris Agreement), COP26 (Glasgow Pact), COP27 (loss & damage fund) and COP28 (fossil fuel phaseout).
- India's commitments and NDCs and the 17 Sustainable Development Goals and Agenda 2030 of the UN.

12. Careers in Sustainability

- Why sustainability is critical in the corporate and business context and will get a brief overview of sustainability in practice for businesses, with classes on sustainability reporting across various frameworks like GRI, SASB, BRSR, TCFD, etc.
- Concept of the hard-to-abate sector and why climate risk assessment is carried out by corporates.
- Methodologies used by different ESG rating agencies to assess the ESG performance of the company (Sustainalytics, MSCI, Refinitiv, Moody's, CDP etc.)
- Sustainable finance, ESG funds and how investors look at sustainability from the ESG lens.

References:

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ELECTIVE COURSE

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ELECTIVE COURSE

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- Look at <http://www.un.org/sustainabledevelopment/sustainable-development-goals/> --