



IIT Madras CODE and School of Sustainability IITM offer Certificate Program on

SUSTAINABILITY FOR INDIAN BUSINESSES



code.iitm.ac.in

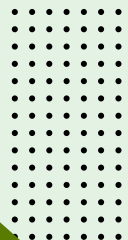




TABLE OF CONTENTS

About the Course	03
Course Instructors	04
Module 1	
Essentials of Sustainability	05
Module 2	
Measuring, Reporting and Re-assessing Sustainability	06
Module 3	
Sustainability Toolkit	07
Module 4	
Actioning Sustainability	08

CODE





Why this course?

- 1) Build confidence & competence in actioning Sustainability from a cradle-to-grave
- 2) Shape the right mindset via refreshing the nuts and bolts of Sustainability
- 3) Develop a critical knowledge of the existing and upcoming sustainability frameworks and of business implications of India's shifting Policy Landscape

About this course:

The goal of this 8-week program is to familiarize learners with the multi-dimensional nature of sustainability in connection with its real-world implications. Through communicating the existing (and upcoming) toolkit for imagining sustainable Industry Landscape in India at the backdrop of India's changing policy frameworks, the course inculcates a systemic view into sustainability in tandem with equipping learners to ideate practical sustainable scenarios for their respective industries.

Mode:

This course comprises of 30 hours of recorded videos and 10 hours of ONLINE interactive sessions with the faculty and 5 hours of in-person interaction with the faculty

Eligibility:

There are no prerequisites to the program, however, the criterion for the intended audience may automatically assume a technical or managerial background essential for the respective industry.

Intended audience:

This "refresher" certificate program is open to any 'mid career' industry professional in India.

Course Fees:

Rs 35000/- + GST

[Register Here](#) >>

Course Instructors



Prof. Satyanarayanan Seshadri
Dept. of Applied Mechanics and
Biomedical Engineering, IIT Madras



Dr Charuta Kulkarni
Principal Scientist, School of
Sustainability, IIT Madras



Prof. Venkatraman Srinivasan
Dept. of Civil Engineering, IIT Madras



Prof. Indumathi Nambi
Dept. of Civil Engineering,
IIT Madras



Dr Kaushal Kumar Jha
Adjunct Faculty, Dept. of Engineering Design, IIT Madras,
CEO, Center for Excellence in Energy and
Telecommunications (CEET), IIT Madras



Dr Rahul Muralidharan
R & D Specialist,
The Energy Consortium, IIT Madras



Dr Christoph Woiwode
Visiting Professor, Indo-German
Centre For Sustainability, IIT Madras



Prof. Ashwin Mahalingam
Dept. of Civil Engineering, IIT Madras



Mr Madhavan Nampoothiri
Dept. of Management Studies,
IIT Madras
Co-Founder, NordESG, Germany



Dr Parama Roy
Adjunct Faculty, Dept. of Civil
Engineering, IIT Madras
Executive Director, Okapi Research and
Advisory Pvt Ltd



Mr Raghuttama Rao
CEO, Gopalakrishnan-Deshpande Centre for
Innovation & Entrepreneurship, IIT Madras



Prof. Santosh Kumar Sahu
Dept. of Humanities and Social Sciences
IIT Madras



Prof. Vinu R
Dept. of Chemical Engineering,
IIT Madras



Prof. Sivakumar Palaniappan
Dept. of Civil Engineering,
IIT Madras



Prof. Ravindra Gettu
Dept. of Civil Engineering,
IIT Madras



Prof. Rajnish Kumar
Dept. of Chemical Engineering,
IIT Madras



Mr E. Nandakumar
CEO, International Centre for
Clean Water, IIT Madras



Module 1: Essentials of Sustainability

Instructors



Prof. Satyanarayanan Seshadri

Dept. of Applied Mechanics and
Biomedical Engineering, IIT Madras

Dr Charuta Kulkarni

Principal Scientist, School of Sustainability,
IIT Madras

Prof. Venkatraman Srinivasan

Dept. of Civil Engineering, IIT Madras

Prof. Indumathi Nambi

Dept. of Civil Engineering, IIT Madras

Dr Kaushal Kumar Jha

Adjunct Faculty, Dept. of Engineering Design,
IIT Madras
CEO, Center for Excellence in Energy
and Telecommunications (CEET), IIT Madras

Dr Rahul Muralidharan

R & D Specialist, The Energy Consortium,
IIT Madras

Dr Christoph Woiwode

Visiting Professor, Indo-German Centre
For Sustainability, IIT Madras

Prof. Ashwin Mahalingam

Dept. of Civil Engineering, IIT Madras

Module description

This introductory module speaks about the nuts and bolts of Sustainability and dives into the concept of circularity in the context of today's world. It scaffolds into brainstorming why sustainability makes sense for the businesses, helping shape the mindset essential for ideating real-world sustainable business strategies.

Concepts covered

- What is Sustainability and what is NOT Sustainability
- Climate Change, Risks, Adaptation
- Water Resources and Management
- Waste Management and Circular Economy
- Renewable Energy and Energy Efficiency
- Natural Resource Management
- Socio-cultural Dimensions and Resources for Sustainable Transformations
- The Business Case for Sustainability

Learning outcomes

- Systemic view into sustainability
- Elements of circularity in the system
- Sustainability-profitability trade-offs and synergies

Module 2: Measuring, Reporting and Re-assessing Sustainability

Instructors

Mr Madhavan Nampoothiri

Dept. of Management Studies,
IIT Madras
Co-Founder, NordESG, Germany.

Dr Parama Roy

Adjunct Faculty, Dept. of Civil Engineering, IIT Madras
Executive Director, Okapi Research and
Advisory Pvt Ltd

Dr Rahul Muralidharan

R & D Specialist,
The Energy Consortium, IIT Madras

Mr Raghuttama Rao

CEO, Gopalakrishnan-Deshpande
Centre for Innovation & Entrepreneurship,
IIT Madras

Prof. Santosh Kumar Sahu

Dept. of Humanities and Social Sciences,
IIT Madras



Module description

The module provides a critical review of the existing sustainability frameworks (e.g. ESG) to support envisioning practical sustainable scenarios beyond ESG. The module unfolds the Corporate Scenario Analysis toward Climate-related Risks and Opportunities as an intrinsic mechanism, thereby making a way for weaving external mechanisms (e.g. Public Private People Partnerships; Small-Medium Enterprises and Grassroot-level Innovations) in implementing sustainability. The discussion is rooted in the geopolitical context of India and its shifting Policy Landscape that, in turn, has implications for industries.

Concepts covered

- ESG Assessment
- Intrinsic and Extrinsic Sustainability Scenarios
- State and Fate of Reporting Frameworks
- India's Policy Landscape and its Business Implications

Learning outcomes

- How can we measure sustainability better using existing frameworks, both quantitatively and qualitatively?
- Why is it essential to go beyond the existing ESG reporting frameworks?
- How fine-tuning the intra-organizational policies can make a way for implementing external and socially-just means of implementing sustainability?
- Where is India in terms of defining climatic and environmental goals and what are its business implications?

Module 3: Sustainability Toolkit

Instructors

Prof. Ashwin Mahalingam
Dept. of Civil Engineering, IIT Madras

Prof. Vinu R
Dept. of Chemical Engineering, IIT Madras

Prof. Sivakumar Palaniappan
Dept. of Civil Engineering, IIT Madras

Prof. Ravindra Gettu
Dept. of Civil Engineering IIT Madras

Prof. Sathyanarayanan Seshadri
Dept. of Applied Mechanics and
Biomedical Engineering, IIT Madras

Prof. Rajnish Kumar
Dept. of Chemical Engineering, IIT Madras

Mr E. Nandakumar
CEO, International Centre for Clean Water,
IIT Madras

Prof. Santosh Kumar Sahu
Dept. of Humanities and Social Sciences,
IIT Madras

Module description

As the name suggests, the module offers the toolkit for ideating Sustainability pathways from a cradle-to-grave. The discussion goes on introducing upcoming toolkits toward carbon and water measurements and gets into the mechanics of environmental economics, thinking aloud its limitations and ways forward.

Concepts covered

- Life Cycle Assessment (LCA): Significance, Stages, Tools, Challenges, Examples
- Carbon and Water Footprint Measurement Frameworks
- Environmental Policies and Practices
- Biomass Resource Mapping

Learning outcomes

- Existing and upcoming frameworks for measuring and reporting sustainability
- Elements of environmental economics





Module 4: Actioning Sustainability

Instructors

Prof. Sathyanarayanan Seshadri

Dept. of Applied Mechanics and
Biomedical Engineering, IIT Madras

Mr Raghuttama Rao

CEO, Gopalakrishnan-Deshpande Centre
for Innovation & Entrepreneurship, IIT Madras

Prof. Rajnish Kumar

Dept. of Chemical Engineering, IIT Madras

Prof. Ashwin Mahalingam

Dept. of Civil Engineering, IIT Madras

Module description

The final module is embedded with hands-on strategies on actioning Sustainability in the respective business settings. It will help put Sustainability in context of Indian and global scenarios to the extent that can positively influence the process of ideating, planning, implementation, and troubleshooting.

Concepts covered

- Case Studies from the Developed and Developing Worlds
- Crafting a Sustainable Strategy for Your Business
 - Selecting Relevant Framework(s)
 - Delineating Key Result Areas/Key Responsibility Areas
 - Identifying Periodic Review and Troubleshooting Mechanisms
- Review of Best Sustainability Practices and Key Takeaways
- Benchmarking - Global Standards and Application
- Energy and Water Audits - Global Standards and Application

Learning outcomes

- International and national view into sustainability management
- Peer-learning through industry-specific case studies
- Development of action items for effectively implementing sustainable pathways



Contact Us

Centre for Outreach and Digital Education (CODE)
3rd Floor, IC & SR Building, IIT Madras, Chennai - 600 036.
Call : +91 (44) 2257 4900, +91 (44) 2257 4904 (Mon - Fri 9:00 am - 6:00 pm)

For any queries write to us:

✉ anupama@nptel.iitm.ac.in | ✉ jayabala@nptel.iitm.ac.in