AIT Extension
Executive Education & Professional Development Services

AIT Certificate Course on
Carbon Footprint & LCA Fundamentals for ESG Frameworks

Jointly Organized by
Office of Sustainable Campus (AIT-OSC) & AIT Extension (AITE)

14–15 March 2026

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Background

With climate and ESG disclosure becoming a common expectation of government, financial institutions, and markets, organizations from all industries face mounting pressure to measure, manage, and reduce their environmental impacts in a consistent, credible manner. Studies of carbon footprint, LCA studies, and ESG frameworks have increasingly become integral tools for regulatory compliance, risk management, investment decisions & long-term sustainability strategy.

These tools are increasingly used in sectors such as industry, manufacturing, infrastructure, energy, and construction systems, as well as agri-food systems, higher education institutions, and public sector organisations and services, where organisations are required to demonstrate accountability for emissions (Scopes 1, 2, and 3), product life-cycle impacts, and ESG performance. # Beyond governance, carbon footprinting and LCA support cost optimization, efficiency gains, sustainable sourcing, product design, and innovation, while ESG frameworks help organizations manage climate risk as well as social responsibility and governance integrity.

Target Audience

This course is designed for a diverse group of professionals and stakeholders involved in sustainability, ESG, and climate-related decision-making, including:

- Sustainability, ESG, and CSR professionals
- Environmental and energy managers
- Corporate strategy, risk, and compliance officers
- Engineers, planners, and technical professionals involved in operations and procurement
- Consultants and auditors working on carbon accounting, LCA, or ESG reporting
- Faculty members, researchers, and graduate students in sustainability-related fields Government officers and policymakers involved in climate and sustainability initiatives
- Industry professionals seeking practical skills in carbon footprinting and ESG frameworks

Unlock the Power of Carbon Insights and LCA with AIT's ESG Masterclass

Join the AIT Certificate Course on Carbon Footprint & LCA Fundamentals for ESG Frameworks, a joint initiative by the Office of Sustainable Campus (AIT-OSC), and AIT Extension (AITE) of the Asian Institute of Technology (AIT). This hands-on program is designed to transform complex data into decisive actions—equipping you with the practical, decision-oriented skills needed to integrate carbon accounting and life-cycle assessment into your everyday business strategy.

Bridge the Gap: Learn how to translate technical assessment methods into clear, actionable ESG strategies that resonate with stakeholders and drive real impact.

Strategic Application: Gain the tools to turn raw data into tangible sustainability plans, ensuring your organization not only meets regulatory requirements but also leads in environmental stewardship. Real-World Context: Engage with case studies and scenario-based learning that mirror the challenges you face on your campus or in your company.

Whether you're a sustainability officer, a corporate strategist, or a campus leader, this course gives you the knowledge to make data-driven decisions that elevate both performance and purpose. Enroll today and bring your ESG ambitions to life!

Course & Fee Details

Duration:	2 Days
Format:	In-person / Online (as applicable)
Proposed dates:	14th–15th March 2026
Target group:	20-30 participants
Course fee:	11,000 THB or 350 USD per person (In-Person)
	9,500 THB or 300 USD per person (Online)

Early Bird Registrations: 9,500 THB or 300 USD per person (in-Person)
(Until 15 February) 8,000 THB or 250 USD per person (online)

Discount Options:
- Additional discounts are available for AIT students, Staff, Alumni, and group registrations
- Industry : 3 + 1 free (25% discount)

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Asian Institute of Technology (AIT)
For registration & details, Please scan the QR :

This intensive two-day program equips participants with the knowledge and skills to assess organizational carbon footprints, an understanding of Life Cycle Assessment (LCA) methods, and to evaluate ESG frameworks. Practical sessions, brainstorming workshops, and case studies ensure participants leave with actionable strategies for sustainability leadership.

Brief course content of each topic

1. **Foundations of Sustainability and Carbon Footprint**
   - Understanding sustainability principles and global climate challenges
   - Overview of the Greenhouse Gas Protocol (Scopes 1, 2, and 3)
   - Methods of data collection and emission factor application
   - Practical case: Calculating an organizational carbon footprint

2. **Tools and Techniques for Carbon Footprint Assessment**
   - Databases for carbon accounting (e.g., GHG Protocol tools, TGO database, IPCC)
   - Reporting requirements and best practices
   - Identifying hotspots and reduction opportunities
   - Case studies from industries and higher education institutions

3. **Life Cycle Assessment (LCA) Methodology**
   - Goal and scope definition, functional unit, and system boundaries
   - Inventory analysis: data collection and classification
   - Impact assessment: common methodologies (CML, ReCiPe, TRACI)
   - Interpretation and validation of LCA results

4. **Practical Application of LCA in Organizations**
   - Product and process evaluation through LCA
   - Decision-making for design, procurement, and sustainability strategy
   - Hands-on group exercise with sample datasets
   - Challenges and opportunities in applying LCA at the organizational level

5. **Introduction and Application of ESG Frameworks**
   - Understanding Environmental, Social, and Governance dimensions
   - Key frameworks: GRI, SASB, TCFD, ISSB, and EU CSRD
   - ESG indicators, metrics, and benchmarking
   - Applying ESG frameworks to evaluate organizational performance and risks
   - Linking ESG assessment with carbon footprint and LCA results

Together, these topics ensure participants:

1. Understand the fundamentals of carbon footprinting, LCA, and ESG.
2. Apply practical tools and techniques.
3. Interpret frameworks for informed decision-making.
4. Integrate sustainability into organizational strategies.
5. Develop actionable insights for implementation

Learning outcomes

- Understand and apply organizational carbon footprint assessment methods.
- Gain practical insights into life cycle assessment methodology and tools.
- Interpret and apply ESG frameworks effectively.
- Develop actionable sustainability strategies for organizational implementation.

Day 1: Foundations of Carbon Footprint and Life Cycle Assessment (LCA)

Time	Session
9:00 – 10:00	Introduction to Sustainability
10:00–10:15	Coffee Break
10:15 – 12:00	Organizational Carbon Footprint Assessment
12:00–1:00	Lunch Break
1:00 – 2:30	Introduction to Life Cycle Assessment (LCA)
2:30–2:45	Coffee Break
2:45–4:30	LCA Assessment Techniques

Day 2: ESG Frameworks and Organizational Application

Time	Session
9:00–10:00	Introduction to ESG (Environmental, Social, Governance)
10:00–10:15	Coffee Break
10:15–12:00	ESG Framework Assessment Techniques
12:00–1:00	Lunch Break
1:00–2:00	Guest Lecture on Industry Insights
2:00–3:00	Brainstorming Workshop: Application at Organizational Level
3:00–3:15	Coffee Break
3:15–5:00	Participant Presentations & Feedback