# GE1230: DRIVING ESG EXCELLENCE: SUSTAINABLE LEADERSHIP AND GOVERNANCE IN ENERGY AND ENVIRONMENTAL INDUSTRIES

**Effective Term**
Semester B 2024/25

## Part I Course Overview

**Course Title**
Driving ESG Excellence: Sustainable Leadership and Governance in Energy and Environmental Industries

**Subject Code**
GE - Gateway Education
**Course Number**
1230

**Academic Unit**
School of Energy and Environment (E2)

**College/School**
School of Energy and Environment (E2)

**Course Duration**
One Semester

**Credit Units**
3

**Level**
B1, B2, B3, B4 - Bachelor's Degree

**GE Area (Primary)**
Area 2 - Study of Societies, Social and Business Organisations

**Medium of Instruction**
English

**Medium of Assessment**
English

**Prerequisites**
Nil

**Precursors**
Nil

**Equivalent Courses**
Nil

**Exclusive Courses**

Nil

# Part II Course Details

**Abstract**

This undergraduate course is a comprehensive exploration of corporate governance, environmental responsibility, ethics, and organizational culture within the Energy industry. Students will examine how these factors interrelate and impact environmental challenges. Through real-world case studies and discussions, students will gain a deep understanding of the importance of responsible and sustainable practices in the Energy sector. It investigates the roles and responsibilities of various C-Suite executives, including the Chief Risk Officer (CRO), Chief Information Officer (CIO), Chief Operating Officer (COO), Chief Compliance Officer (CCO), Chief Human Resources Officer (CHRO), and Chief Executive Officer (CEO). Additionally, the course distinguishes between leadership and management in innovative settings, highlighting the importance of effective leadership in driving innovation and organizational success within the context of sustainable business corporations.

By understanding the roles of these C-Suite executives and the distinction between leadership and management in innovative settings, students gain insights into the role key stakeholders play in advancing sustainability and Environmental, Social and Governance (ESG) objectives.

**Course Intended Learning Outcomes (CILOs)**

| | CILOs | Weighting (if app.) | DEC-A1 | DEC-A2 | DEC-A3 |
|---|---|---|---|---|---|
| 1 | Develop a comprehensive understanding of corporate governance, ethics, and organizational culture. | 10% | | x | |
| 2 | Assess the roles and responsibilities of C-Suite executives in sustainable businesses.<br>Analyze the impact of C-Suite executives on governance, risk management, technology, operations, compliance, and human resources in sustainable business practices.<br>Apply knowledge of C-Suite roles to propose strategies for addressing sustainability challenges. | 20% | | x | |
| 3 | Differentiate between leadership and management, particularly in innovative settings within the Energy sector, and recognize their impact on driving organizational success within the context. | 15% | | x | |
| 4 | Apply knowledge of governance fundamentals, leadership styles, personal branding, and networking strategies in practical contexts through engaging group assignments and impactful presentations | 15% | | x | |
| 5 | Evaluate real-life case studies from Sustainable Businesses within the Energy industry and insights from industry leaders to gain practical insights into governance challenges and ethical leadership practices | 20% | | x | |

| | | | | | |
|---|---|---|---|---|---|
| 6 | Propose effective solutions to governance and ethical dilemmas through interactive case studies and collaborative group assignments, demonstrating the ability to apply learned concepts to real-world scenarios | 20% | x | x | x |

A1: Attitude
Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability
Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments
Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

**Learning and Teaching Activities (LTAs)**

| | LTAs | Brief Description | CILO No. | Hours/week (if applicable) |
|---|---|---|---|---|
| 1 | Lectures | Students will attend lectures which focus on exploring and understanding the basic concepts and analytical tools in corporate governance, ethics, and organizational culture | 1, 2, 3, 4, 5, 6 | 2 |
| 2 | Case Studies | Students will analyze real case studies of sustainable companies and demonstrate critical thinking skills by evaluating their situations in terms of corporate governance, ethics, and organizational culture. They will then recommend sustainable solutions to address the identified issues in these businesses. | 1, 2, 3, 4, 5, 6 | 1 |
| 3 | Guest Speaker | Students will attend talks delivered by guest speaker(s) who are senior leader(s) and expert(s) either from the energy industry or a sustainable business corporation. They will share their knowledge and experience. | 1, 2, 3, 4, 5, 6 | 1 |

**Assessment Tasks / Activities (ATs)**

| | ATs | CILO No. | Weighting (%) | Remarks (e.g. Parameter for GenAI use) |
|---|---|---|---|---|
| 1 | In-class quizzes: Students will take quizzes on the course materials throughout the course. | 1, 2, 3, 4, 5, 6 | 20 | |
| 2 | Assignments: Short case studies to assess students' knowledge and understanding in ESG, GRI, TCFD, corporate governance, ethics, and organizational culture in the context of sustainable business corporations | 2, 3, 4, 5, 6 | 40 | |
| 3 | Project: Group exercise where students work together to comprehensively analyze an innovative and novel energy technology with a focus on what leadership tools would be required to ensure the sustainability of the technology and business model | 1, 2, 3, 4, 5, 6 | 40 | |

**Continuous Assessment (%)**

100

**Examination (%)**

0

**Examination Duration (Hours)**

N/A

**Minimum Continuous Assessment Passing Requirement (%)**

30

**Minimum Examination Passing Requirement (%)**

N/A

**Additional Information for ATs**

To pass a course, a student must do ALL of the following:

1) obtain at least 30% of the total marks allocated towards continuous assessment (combination of assignments, pop quizzes, term paper, lab reports and/ or quiz, if applicable);

2) obtain at least 30% of the total marks allocated towards final examination (if applicable); and

3) meet the criteria listed in the section on Assessment Rubrics.

**Assessment Rubrics (AR)**

**Assessment Task**

1. Quizzes

**Criterion**

Ability to answer quizzes related to principles of sustainable leadership and governance in energy and environmental industries.

**Excellent (A+, A, A-)**

Excellent conceptual understanding of principles of sustainable leadership and governance in energy and environmental industries.

**Good (B+, B, B-)**

Good conceptual understanding of principles of sustainable leadership and governance in energy and environmental industries.

**Fair (C+, C, C-)**

Acceptable conceptual understanding of principles of sustainable leadership and governance in energy and environmental industries.

**Marginal (D)**

Marginally acceptable conceptual understanding of principles of sustainable leadership and governance in energy and environmental industries.

**Failure (F)**

Poor conceptual understanding of principles of sustainable leadership and governance in energy and environmental industries.

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**Assessment Task**

2. Assignments

**Criterion**

Ability to explain concepts, analyse and solve problems related to sustainable leadership and governance in energy and environmental industries.

**Excellent (A+, A, A-)**

Excellent understanding of concepts and ability to analyze and solve problems related to sustainable leadership and governance in energy and environmental industries.

**Good (B+, B, B-)**

Good understanding of concepts and ability to analyze and solve problems related to sustainable leadership and governance in energy and environmental industries.

**Fair (C+, C, C-)**

Acceptable understanding of concepts and ability to analyze and solve problems related to sustainable leadership and governance in energy and environmental industries.

**Marginal (D)**

Marginally acceptable understanding of concepts and ability to analyze and solve problems related to sustainable leadership and governance in energy and environmental industries.

**Failure (F)**

Poor understanding of concepts and ability to analyze and solve problems related to sustainable leadership and governance in energy and environmental industries.

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**Assessment Task**

3. Project

**Criterion**

Ability to identify problems and research gaps from literature and apply the concepts of sustainable leadership and governance in energy and environmental industries.

**Excellent (A+, A, A-)**

Excellent ability to identify and understand contemporary sustainability challenges and apply concepts learned in proposing solutions.

**Good (B+, B, B-)**

Good ability to identify and understand contemporary sustainability challenges and apply concepts learned in proposing solutions.

**Fair (C+, C, C-)**

Moderate ability to identify and understand contemporary sustainability challenges and apply concepts learned in proposing solutions.

**Marginal (D)**

Marginally acceptable ability to identify and understand contemporary sustainability challenges and apply concepts learned in proposing solutions.

**Failure (F)**

Poor ability to identify and understand contemporary sustainability challenges and apply concepts learned in proposing solutions

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# Part III Other Information

**Keyword Syllabus**

- Understand corporate governance, ethics, and organizational culture.
- Assess roles and responsibilities of C-Suite executives in sustainable businesses.
- Analyze the impact of C-Suite executives in sustainable business practices.
- Apply C-Suite knowledge to propose strategies for addressing sustainability challenges.
- Differentiate leadership and management in innovative settings.
- Apply governance fundamentals, leadership styles in practical contexts.
- Evaluate real-life case studies and insights to gain practical insights into governance challenges.
- Propose effective solutions to governance and ethical dilemmas through case studies.

**Reading List**

**Compulsory Readings**

| | Title |
|---|---|
| 1 | Power, M. (2005). Organizational responses to risk: The rise of the chief risk officer. In B. Hutter & M. Power (Eds.), Organizational Encounters with Risk (pp. 132-148). Cambridge University Press. https://doi.org/10.1017/CBO9780511488580.005 |
| 2 | Ross, J. W., & Weill, P. (2002). The Strategic Role of the Chief Information Officer. Sloan Center for Information Systems Research, MIT Sloan School of Management. Available at MIT DSpace: https://dspace.mit.edu/handle/1721.1/2758 |
| 3 | Goold, M., Macmillan, I., & Young, D. (2001). The changing role of the chief operating officer. Harvard Business Review, 79(3), 96-108. |

| | |
|---|---|
| 4 | Choueke, R., & Armstrong, R. (1998). The learning organisation in small and medium - sized enterprises: A destination or a journey? International Journal of Entrepreneurial Behaviour & Research, 4(2), 129-140. https://doi.org/10.1108/13552559810224585 |
| 5 | Jung, D. I., Chow, C., & Wu, A. (2003). Leadership and innovation: The moderating role of organizational culture. The Leadership Quarterly, 14(5), 525–544. https://doi.org/10.1016/S1048-9843(03)00044-3 |


**Additional Readings**

| | Title |
|---|---|
| 1 | Nil |

# Annex (for GE courses only)

**A. Please specify the Gateway Education Programme Intended Learning Outcomes (PILOs) that the course is aligned to and relate them to the CILOs stated in Part II, Section 2 of this form:**

Please indicate which CILO(s) is/are related to this PILO, if any (can be more than one CILOs in each PILO)

**PILO 1: Demonstrate the capacity for self-directed learning**

1, 2, 3, 4, 5, 6

**PILO 2: Explain the basic methodologies and techniques of inquiry of the arts and humanities, social sciences, business, and science and technology**

1, 2, 3, 4

**PILO 3: Demonstrate critical thinking skills**

5, 6

**PILO 4: Interpret information and numerical data**

1, 3, 4

**PILO 5: Produce structured, well-organised and fluent text**

1, 2, 3, 4, 5, 6

**PILO 6: Demonstrate effective oral communication skills**

1, 2, 3, 4, 5, 6

**PILO 7: Demonstrate an ability to work effectively in a team**

1, 2, 3, 4, 5, 6

**PILO 9: Value ethical and socially responsible actions**

5

**PILO 10: Demonstrate the attitude and/or ability to accomplish discovery and/or innovation**

1, 2, 3, 4, 5, 6

**B. Please select an assessment task for collecting evidence of student achievement for quality assurance purposes. Please retain at least one sample of student achievement across a period of three years.**

**Selected Assessment Task**

Group project: Through group project, students are required to analyse innovative technologies related to energy generation and/or conservation.

Related CILO(s): CILOs 1 - 6
Related GE PILO(s): PILOs 1 - 10 (except 8)