

## Course Introduction

# **IN 00.41: Climate Change Challenges and Responses 1(1-0)**

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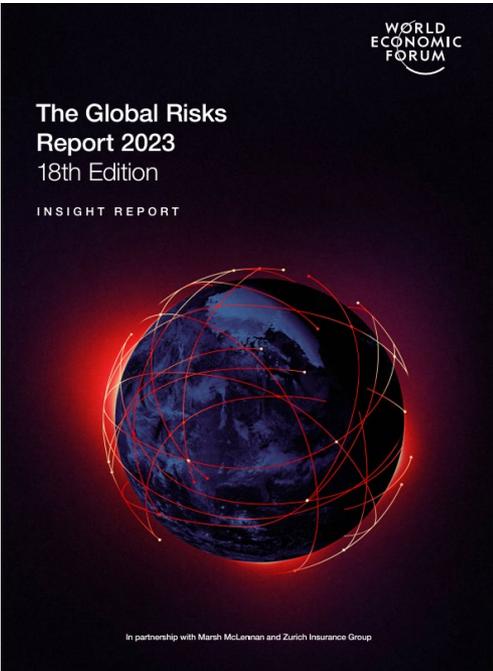
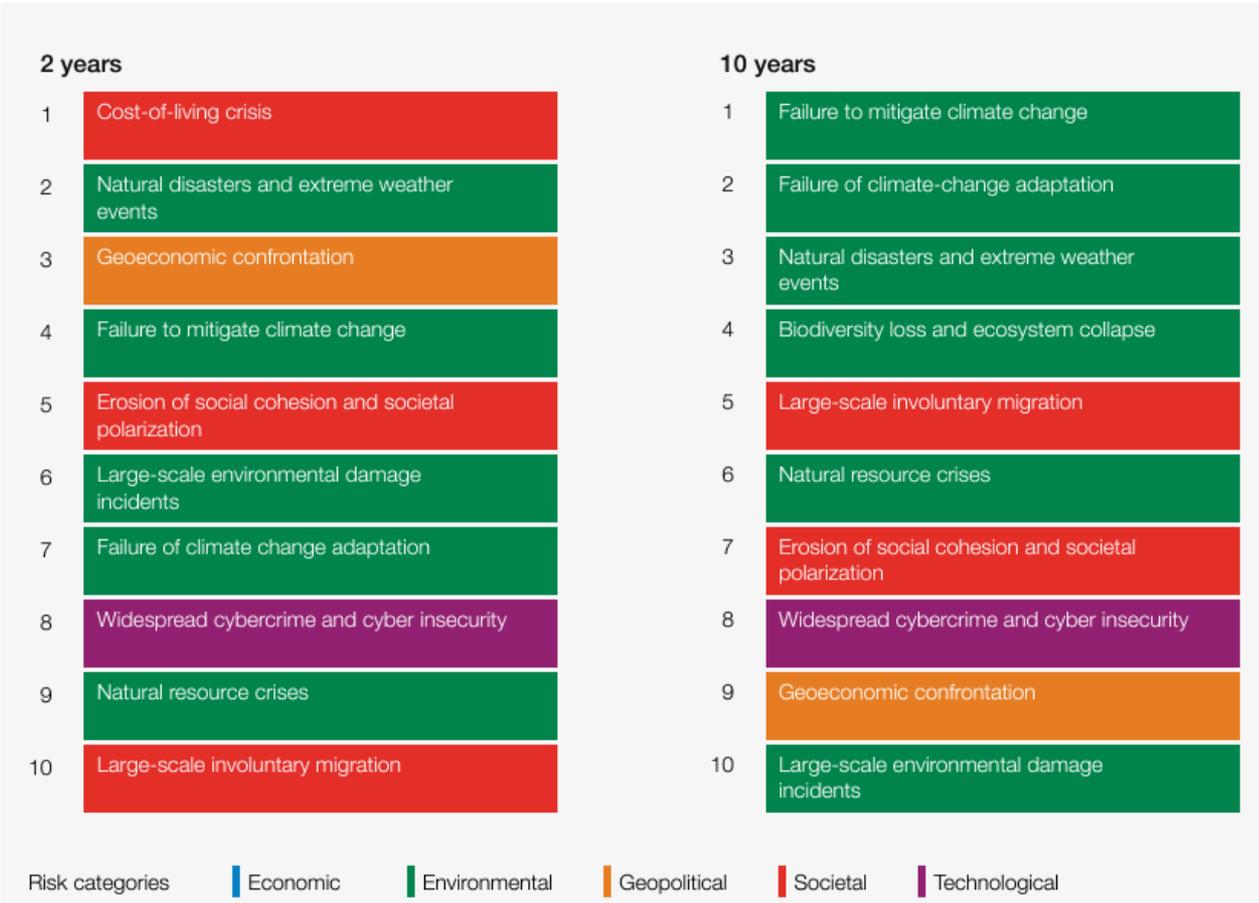
# What people say about climate change?



- **Climate change is not science fiction, it's is real...**
- **"Climate change is the greatest threat to our existence** in our short history on this planet. Nobody's going to buy their way out of its effects."
- **"Climate change knows no borders...**
- **"By polluting the oceans, not mitigating CO<sub>2</sub> emissions and destroying our biodiversity, we are killing our planet. Let us face it, there is no planet B."**
- **"The world is reaching the tipping point beyond which climate change may become irreversible.**
- **"Climate change is the single greatest threat to a sustainable future** but, at the same time, addressing the climate challenge presents a golden opportunity to promote prosperity, security and a brighter future for all."
- **"Climate change is a terrible problem, and it absolutely needs to be solved. It deserves to be a huge priority."**
- .....

# Global risks ranked by severity over the short and long term

"Please estimate the likely impact (severity) of the following risks over a 2-year and 10-year period"



World Economic Forum Global Risks Perception Survey 2022-2023. Risks Perception Survey brings together leading insights from over 1,200 experts across the World Economic Forum's diverse network.



[https://www3.weforum.org/docs/WEF\\_Global\\_Risks\\_Report\\_2023.pdf](https://www3.weforum.org/docs/WEF_Global_Risks_Report_2023.pdf)



## IN 00.41: Climate Change Challenges and Responses 1(1-0)

### Course objective

to provide a wide-ranging contemporary debate and progresses linked with climate change for enhancing students' knowledge base and critical thinking in their respective field of profession.

# Learning Outcomes

- Describe the contemporary and relevant climate change issues
- Discuss the impact and vulnerability associated with climate change
- Analyze available mitigation and adaptation options
- Explain the required enabling environment (climate finance, policies) for addressing climate change issues

# Seminar topics

Topic	Lecture topic	Date	Speaker(s)
0	Course introduction	16 Jan, Tue 2-4 pm	Prof. Shobhakar Dhakal, Prof. Rajendra Shrestha, Dr Bindu Nath Lohani, AIT
1	Climate Change and International Climate Negotiations: where do we stand and where to go from here?	18 Jan, Thu 2-4 pm	Prof. Shobhakar Dhakal, AIT
2	Sustainable Development: historical evolution, milestones, and Current Status	23 Jan, Tue 2-4 pm	Dr Bindu Nath Lohani, AIT
3	Global Energy Perspectives 2023 Asian Energy Perspectives /Outlook	25 Jan Thu 2-4 pm	Dr Priyantha D.C. Wijayatunga, Senior Director, Energy Sector Office, Asian Development Bank, Manila (confirmed)
4	Just Transition Panel (includes Energy Transition) Deep Carbonization Pathways with Country Examples ETM and Climate Change and Transport Sector	30 Jan Tue 2-4 pm	Prof. Shobhakar Dhakal/ Dr Bindu Lohani  Prof Tae Yong Jung, Graduate School of International Studies, Yonsei University, South Korea  Mr. Toru Kubo, Senior Director for Climate Change, Resilience, and Environment, Asian Development Bank  Prof. Oliver Lah, TU Berlin, Coordinator of Urban Electric Mobility Initiative (UEMI)

# Seminar topics

Topic	Lecture topic	Date	Speaker(s)
5	Video - Sustainable City Development in Asia: Challenges, Opportunities and The Way Forward  Cities and Climate Change: Science, Policy and investments	1 Feb Thu 2-4 pm	Dr Bindu Lohani, AIT  Dr Hongsoo Lee, Senior Urban Development Specialist, Water and Urban Development Sector Office, Asian Development Bank (ADB), Manila
6	Circular economy: A key approach to addressing Climate Goals	6 Feb Tue 2-4 pm	Dr Prasad Modak, Managing Director, Environmental Management Centre Pvt Ltd Director, Ekonnnect Knowledge Foundation (EMC, India)
7	Climate Technology Needs Assessment in Asia		Prof. Rajendra Shrestha, AIT
8	Adaptation Needs and Planning (including loss and damage)	8 Feb Thu 2-4 pm	Dr. Binaya Raj Shivakoti, Senior Policy Researcher (Water and Adaptation), Institute for Global Environmental Strategies, Japan.
9	Water and Climate Change: Addressing Water Security and Water Resilience in Asia and the Pacific		Prof Mukund Babel, AIT

# Seminar topics

Topic	Lecture topic	Date	Speaker(s)
10	Food Systems Transformation for Climate Change Mitigation and Sustainable Development  Future Thinking on Climate Change and Food security	13 Feb Tue 2-4 pm	Dr Prajal Pradhan, Assistant Professor, University of Groningen, the Netherlands (confirmed)  Prof Anil Anal, AIT
11	The Challenge: financing lower-carbon, climate-resilient development	15 Feb Thu time may need to adjust	Ms. Sarah Colenbrander, Director, Climate and Sustainability programme, ODI, UK.
12	Nature-based Solutions for Addressing Climate Change and Poverty	20 Feb or 22 Feb	Mr Robert J. Dobias, Advisor at Climate Change Center, National Research Council of Thailand. (confirmed)  Prof. Rajendra Shrestha, AIT
14	Special Presentation(s) on Selected Topics	20 Feb or 22 Feb	

# Learning resources

- No textbook
- Several reference books, journals, other resources given in course catalogue
- Lecture presentation file (also containing list of readings) will be made available before the lecture

## Grading :

Midsem exam (30%) - Closed book

Final exam (30%) - Closed book

Assignments (40%)

- (Group)project (30%)
- Participation in class (10%)

## Class Schedule:

Tuesday/Thursday: 2-4 pm  
ET 108

Zoom Meeting

<https://ait-ac-th.zoom.us/j/5787222404?pwd=R0NsWEtxcEJ5OUUzUmtibGRjTmk1QT09>

ID: 578 722 2404

Password: 527538

## Getting lecture materials:

From Moodle

Search course: IN00.41 Climate Change Challenges and Responses

Or go to

School → SERD → ED82 - Climate Change and Sustainable Development

Self-enrollment key: CCCR@24Jan

Contact for course-related inquiry: [shobhakar@ait.ac.th](mailto:shobhakar@ait.ac.th)