# COURSE OVERVIEW TM1129 Macroeconomics in Climate Change

#### **Course Title**

Macroeconomics in Climate Change

#### **Course Reference**

TM1129

#### **Course Duration/Credits**

Five days/3.0 CEUs/30 PDHs

#### **Course Date/Venue**

Sessions	Date	Venue
1	July 07-11, 2025	TBA Meeting Room, JW Marriott Hotel Madrid, Madrid, Spain
2	September 08-12, 2025	Hampstead Meeting Room, London Marriott Hotel Regents Park, London, UK
3	October 27-31, 2025	TBA Meeting Room, Grand Hyatt Athens, Athens, Greece
4	January 11-15, 2026	Tamra Meeting Room, Al Bandar Rotana Creek, Dubai, UAE

#### **Course Description**







This practical and highly-interactive course includes real-life case studies and exercises where participants will be engaged in a series of interactive small groups and class workshops.

This course is designed to provide participants with a detailed and up-to-date overview of Macroeconomics in Climate Change. It covers the macroeconomics in environmental context and climate change as a macroeconomic challenge; the global carbon cycle, economic systems, externalities and market failures, climate change and global inequality; the macroeconomic models for climate analysis; the impact on GDP and economic growth and employment; and the labor markets and climate change, public finance, climate change trade, competitiveness and climate policies.

Further, the course will also discuss the financial sector and climate risk, inflation and price stability under climate stress; the carbon pricing and taxes, emissions trading systems (ETS), subsidies and incentives; the public investment for decarbonization, green monetary policy and international climate finance; the macroeconomic costs of inaction and adaptation investment strategies; and the insurance and risk sharing mechanisms.















During this interactive course, participants will learn the disaster risk reduction, economic stability, climate migration and macroeconomics; the sectoral adaptation and structural change; the international climate agreements and macroeconomics; the technology, innovation and green economy; the circular economy, macroeconomic transition, just transition and inclusive green growth; and the macroeconomics scenario planning for climate futures and policies integration.

#### **Course Objectives**

Upon the successful completion of this course, each participant will be able to:-

- Apply and gain an in-depth knowledge on macroeconomics in climate change
- Discuss the macroeconomics in environmental context and climate change as a macroeconomic challenge
- Identify global carbon cycle, economic systems, externalities and market failures, climate change and global inequality
- Illustrate macroeconomic models for climate analysis and discuss the impact on GDP and economic growth
- Determine employment, labor markets and climate change, public finance, climate change trade, competitiveness and climate policies
- Describe financial sector and climate risk as well as inflation and price stability under climate stress
- Identify carbon pricing and taxes, emissions trading systems (ETS), subsidies and incentives
- Apply public investment for decarbonization, green monetary policy and international climate finance
- Analyze macroeconomic costs of inaction and apply adaptation investment strategies and insurance and risk sharing mechanisms
- Carryout disaster risk reduction, economic stability, climate migration and macroeconomics as well as sectoral adaptation and structural change
- Discuss international climate agreements and macroeconomics including technology, innovation and green economy
- Recognize circular economy, macroeconomic transition, just transition and inclusive green growth
- Illustrate macroeconomics scenario planning for climate futures and policies integration

#### Exclusive Smart Training Kit - H-STK®



Participants of this course will receive the exclusive "Haward Smart Training Kit" (**H-STK**<sup>®</sup>). The **H-STK**<sup>®</sup> consists of a comprehensive set of technical content which includes **electronic version** of the course materials conveniently saved in a **Tablet PC**.













#### **Who Should Attend**

This course provides an overview of all significant aspects and considerations of macroeconomics in climate change for executive management team, sub-committee members and employees working in project

#### Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

30% Lectures

20% Practical Workshops & Work Presentations

30% Hands-on Practical Exercises & Case Studies

20% Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

#### **Course Fee**

Madrid/ London/ Athens	<b>US\$ 8,800</b> per Delegate + <b>VAT</b> . This rate includes H-STK <sup>®</sup> (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Dubai	<b>US\$ 5,500</b> per Delegate + <b>VAT</b> . This rate includes H-STK <sup>®</sup> (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

#### **Accommodation**

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.







#### **Course Certificate(s)**

Internationally recognized certificates will be issued to all participants of the course who completed a minimum of 80% of the total tuition hours.

#### **Certificate Accreditations**

Haward's certificates are accredited by the following international accreditation organizations: -



**British Accreditation Council (BAC)** 

Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. Haward's certificates are internationally recognized and accredited by the British Accreditation Council (BAC). BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

The International Accreditors for Continuing Education and Training (IACET - USA)

Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units** (CEUs) in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology Middle East will award **3.0 CEUs** (Continuing Education Units) or **30 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.









#### **Course Instructor(s)**

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:



Mr. Douglas Robinson, MBA, BSc (Honors), Dip, is currently the President of DSR Consulting and the Professor of Business Studies Unit (BSU) at Durban Institute of Technology (DIT), where he is lecturing at MBA level in Quality Management, Quality Control Systems and Standards, Legal Compliance and Corporate Governance Responsibilities, Corporate Valuation & Capital Restructuring, Managing Production Operations, Strategic Planning, Human Resources Management (HRM), Leadership

& Change Management, Presentation Skills, Negotiation Skills, Interpersonal Skills, Communication Skills, Adaptability & Flexibility, Learning & Self Development, Industrial Relationships, Driving Performance, Performance Measurement, Performance Goal Implementation, Time Management Techniques, Organizing Daily Activities, Handling Difficulties & Pressure, Productivity & Feedback Management, Problem Solving & Decision Making, ISO 9001 Lead Auditor, Commercial Negotiation & Legal Aspects, Logistics & Supply Chain Management, Quality Management, Project Financial Planning, Financial Management, Materials Inventory Management, Budgeting & Cost Control, Project Accounting, Project Management, Contract Management, Operations Management, Procurement Management, Entrepreneurship and International Business.

Mr. Robinson has over **30 years** of international experience in **Contract** Management, **Quality** Management, **ISO Standards**, Logistics & Supply Chain Management, Procurement, Purchasing, Outsourcing Strategies, Project Management, Business Systems, Operations Management and Business Re-Organization. Further, he is a **Registered Assessor** of **Quality** Management, Logistics, Supply Chain Management, Procurement Strategies, Purchasing and Outsourcing.

As a leader in the **Quality**, Procurement and Logistics fields, Mr. Robinson facilitated inhouse skills development programmes in a lot of companies worldwide and has **extensive consulting experience** in both the public and private sectors. His experience includes implementing SAP system in Procurement, financial, sales, distribution, materials management and costing.

During his long career life, Mr. Robinson worked for many **International companies** such as Tiger Brands, Nestle's, Mondi Manufacturing, Mondi Forests, Masonite Africa Ltd., Frame etc. He worked as **General Manager**, **Quality Manager**, **Procurement Manager**, **Logistics Manager**, **Logistics Superintendent**, **Project Manager**, **Purchasing Supervisor**, **SAP Facilitator**, etc.

Due to his thorough and long experience and knowledge, Mr. Robinson is **recognized internationally** as an **Expert** in Logistics & Supply Chain Management, Procurement, Purchasing, Outsourcing, Strategic planning, business wellness analysis, **Contract** management, **Project** Management, feasibility studies, financial analysis, cash-flow forecasting, Capital investment analysis, risk analysis, Business process analysis, and **Quality Management Systems**.

Mr. Robinson has a Master degree in Business Administration (MBA) from the University of Durban-Westville, a Bachelor degree with Honors in Business Management and Administration and Diplomas in Medical Technology, Marketing Management, Business Management and Project Management from the University of Rhodesia and from the Damelin Management School respectively. Further, he is a Certified Instructor/Trainer, a Certified Trainer/Assessor by the Institute of Leadership & Management (ILM), an active member of international professional affiliations and delivered innumerable trainings, courses, workshops and seminars globally.











## **Course Program**

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the workshop for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1

Day 1	
0730 - 0800	Registration & Coffee
0800 - 0815	Welcome & Introduction
0815 - 0830	PRE-TEST
0830 - 0930	Introduction to Macroeconomics in Environmental Context Key Macroeconomic Indicators & Variables • Economic Growth versus Sustainable Development • Market Failures & Externalities • Role of Government in Environmental Economics
0930 - 0945	Break
0945 - 1030	Climate Change as a Macroeconomic Challenge Overview of Climate Science & Global Warming • Economic Impacts of Climate Change • Interlinkages Between Climate Systems & Economies • Long-Term Risks to Global GDP
1030 – 1130	Global Carbon Cycle & Economic Systems Carbon Budget Concepts • Emissions Trends by Region & Sector • Role of Energy Systems in Carbon Output • Link to Global Trade & Production
1130 – 1215	Externalities & Market Failures Types of Externalities: Positive & Negative • Public Goods & the Environment • Tragedy of the Commons • Climate Change as a Global Externality
1215 - 1230	Break
1230 – 1330	Climate Change & Global Inequality  Differential Impacts on Developed versus Developing Economies • Climate  Justice & Equity • Vulnerable Populations & Economic Displacement •  Intergenerational Equity
1330 – 1420	Macroeconomic Models for Climate Analysis Traditional Growth Models (Solow, Endogenous Growth) • Integrated Assessment Models (IAMs) • Dynamic Stochastic General Equilibrium Models (DSGE) • Introduction to Climate-Economy Linkages
1420 – 1430	Recap Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1430	Lunch & End of Day One

Day 2

Day Z	
0730 - 0830	Impact on GDP & Economic Growth Climate Shocks & Output Loss • Long-Term versus Short-Term Growth Impacts • Climate Change & Productivity • Case Studies: Climate Disasters & GDP
0830 - 0930	Employment, Labor Markets & Climate Change Job Losses in Vulnerable Sectors • Green Job Creation & Structural Shifts • Labor Mobility & Climate Migration • Policy Instruments for Labor Market Resilience
0930 - 0945	Break
0945 – 1100	Public Finance & Climate ChangeFiscal Risks from Climate Disasters • Climate-Responsive Budgeting • GreenPublic Investment • Debt Sustainability & Climate Finance













	Trade, Competitiveness & Climate Policies
1100 – 1215	Carbon Leakage & Competitiveness • Border Carbon Adjustments • Global
	Supply Chains Under Climate Stress • Trade Agreements & Climate Clauses
1215 - 1230	Break
	Financial Sector & Climate Risk
1220 1220	Physical Risks versus Transition Risks • Role of Central Banks & Regulators •
1230 – 1330	Climate Stress Testing of Financial Institutions • Green Bonds & Sustainable
	Finance
	Inflation & Price Stability Under Climate Stress
1330 - 1420	Climate Events & Price Volatility • Food & Energy Price Shocks • Implications
	Financial Sector & Climate Risk Physical Risks versus Transition Risks • Role of Central Banks & Regulators • Climate Stress Testing of Financial Institutions • Green Bonds & Sustainable Finance  Inflation & Price Stability Under Climate Stress Climate Events & Price Volatility • Food & Energy Price Shocks • Implications for Monetary Policy • Inflation Expectations & Climate Risks  Recap Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
	Recap
1420 – 1430	Using this Course Overview, the Instructor(s) will Brief Participants about the
1420 - 1430	Topics that were Discussed Today and Advise Them of the Topics to be
	Discussed Tomorrow
1430	Lunch & End of Day Two

Day 3	
	Carbon Pricing & Taxes
0730 - 0830	Economic Rationale for Carbon Pricing • Types of Carbon Taxes • Revenue
	Use & Redistribution • Global Carbon Price Coordination
	Emissions Trading Systems (ETS)
0830 - 0930	Design of Cap-and-Trade Schemes • EU ETS & Other Regional Systems •
	Linking ETS Across Borders • Market Stability Mechanisms
0930 - 0945	Break
	Subsidies & Incentives
0945 - 1100	Fossil Fuel Subsidies: Impacts & Reform • Renewable Energy Subsidies •
	Green R&D Funding • Incentives for Carbon Capture & Storage
	Public Investment for Decarbonization
1100 – 1215	Infrastructure for Net Zero • Role of State-Owned Enterprises • National
	Development Banks • Financing Mechanisms
1215 – 1230	Break
	Green Monetary Policy
1230 – 1330	Central Bank Mandates & Climate Goals • Green Quantitative Easing •
	Climate-Related Financial Disclosure • Monetary Tools for Climate Resilience
	International Climate Finance
1330 - 1420	Role of IMF, World Bank & Regional Banks • Climate Funds (e.g., Green
1550 - 1420	Climate Fund) • Climate Finance Gaps in Low-Income Countries • Blended
	Finance Models
	Recap
1420 - 1430	Using this Course Overview, the Instructor(s) will Brief Participants about the
1420 1430	Topics that were Discussed Today and Advise Them of the Topics to be
	Discussed Tomorrow
1430	Lunch & End of Day Three

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Day 7	
0730 - 0830	Macroeconomic Costs of Inaction Cost-Benefit Analysis of Adaptation • Economic Losses from Climate Inaction • Tipping Points & Irreversible Damage • Case Studies of Economic Collapse from Climate
0830 - 0930	Adaptation Investment Strategies Infrastructure for Resilience • Coastal Protection & Water Systems • Climate-Resilient Agriculture • Urban Adaptation Planning















0930 - 0945	Break
0945 - 1100	Insurance & Risk Sharing Mechanisms Climate Risk Insurance Schemes • Role of Private Insurance Markets • Sovereign Insurance Pools • Catastrophe Bonds
1100 – 1215	Disaster Risk Reduction & Economic Stability  Early Warning Systems & Macro Stability • Public-Private Partnerships for Resilience • Economic Recovery Packages • Fiscal Buffers for Climate Shocks
1215 - 1230	Break
1230 - 1330	Climate Migration & Macroeconomics  Economic Drivers of Climate Migration • Impact on Labor Markets & Urbanization • Policy Frameworks for Climate Refugees • Regional Economic Implications
1330 - 1420	Sectoral Adaptation & Structural Change Agriculture & Food Security • Energy System Adaptation • Industry & Manufacturing Transitions • Services Sector Transformations
1420 – 1430	Recap Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1430	Lunch & End of Day Four

Day 5

Day 5	
	International Climate Agreements & Macroeconomics
0730 - 0830	Paris Agreement: Macroeconomic Implications • Global Mitigation Pledges &
	GDP Impact • Role of G20, OECD & UN • Coordination Challenges
	Technology, Innovation & the Green Economy
0830 - 0930	Role of Innovation in Decarbonization • Green Technologies in Macro Models
	• Digitalization & Smart Systems • Technology Transfer & Global Equity
0930 - 0945	Break
	Circular Economy & Macroeconomic Transition
0945 - 1030	Circularity & Resource Efficiency • Macroeconomic Indicators for Circular
0545 - 1050	Economy • Waste, Recycling & Material Flows • Industrial Policy for
	Circularity
	Just Transition & Inclusive Green Growth
1030 - 1130	Principles of Just Transition • Social Protection Measures • Regional
	Development Policies • Dialogue with Labor & Communities
	Macroeconomic Scenario Planning for Climate Futures
1130 – 1230	Climate-Risk Scenario Modeling • Long-Term Planning Tools • Use of IAMs
	in Policy • Stress Testing Economies for Climate Futures
1230 – 1245	Break
	Policy Integration & Future Challenges
1245 – 1345	Aligning Fiscal, Monetary & Climate Policies • Governance for Integrated
1210 1010	Climate Action • Role of Data & Analytics • Emerging Risks: AI,
	Geoengineering & Climate
	Course Conclusion
1345 – 1400	Using this Course Overview, the Instructor(s) will Brief Participants about the
	Course Topics that were Covered During the Course
1400 – 1415	POST-TEST
1415 – 1430	Presentation of Course Certificates
1430	Lunch & End of Course











## **Practical Sessions**

This practical and highly-interactive course includes real-life case studies and exercises:-



# **Course Coordinator**

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