

The RAMP Curriculum

The RAMP University Network develops course material and conducts teacher trainings for faculty at member universities to empower them to deliver high-quality Master's level teaching at their universities and practitioner training courses for ministries of finance and other government departments in their home countries. Course material is made available to faculty from member universities who enrol in a teacher training.

The following courses have been fully developed and peer-reviewed:

Academic courses

- Adaptation Finance: This course provides an overview of climate-related macrofinancial risks, and how these can be conceptualised and modelled. It also introduces different approaches to analyse and quantify these risks, discussing different micro- and macroprudential approaches to mitigate risks. The course draws on the latest academic research, as well as evolving practice at central banks and financial supervisory authorities.
- Climate Budgeting and Public Financial Management (PMF): This course provides an overview of the innovative approaches, methodologies and tools that have been applied across countries to integrate climate change into PFM systems. It is structured around the four stages of the budget cycle, with a focus on national government expenditure. Drawing on real world examples, it provides an overview of the enabling environment for the successful introduction of reforms, including the role of leadership and coordination, capacity building and political support for related reforms. In addition, it provides an assessment of the progress that has been made across countries and the key areas identified for future reforms.
- Disaster Risk Finance: This course equips students with an understanding of the challenges created by the current reactive status-quo for crisis risk management and response, and how this undermines public finances and economic development. It provides the theory for how DRF supports more proactive financial preparedness and planning ahead of crises, and the benefits for climate vulnerable countries. The fundamental components of a DRF system are unpacked from risk analysis, through to response planning and the pre-arranged financing instruments that ensure funds are available to put plans into action when crisis hits. A range of real-life examples are explored, highlighting best practices and challenges experienced by governments and organisations already deploying such approaches.
- Understanding Climate-related Macro-financial Risks: This course provides an overview of
 climate-related macrofinancial risks, and how these can be conceptualised and modelled. It
 also introduces different approaches to analyse and quantify these risks and discusses
 different micro- and macroprudential approaches to mitigate risks. The course draws on the
 latest academic research, as well as evolving practices at central banks and financial
 supervisory authorities.



Practitioner courses

- Adaptation Finance: This course provides a thorough overview of adaptation finance with an
 emphasis on finance for adaptation in developing countries. Through case studies, academic
 research and other materials, the course takes students through vital elements of the
 adaptation finance landscape, including the role of government, development finance
 institutions, and the private sector.
- Climate Budgeting and Public Financial Management: This course provides an overview of the innovative approaches, methodologies and tools that have been applied across countries to integrate climate change into national planning and budgeting processes. It is structured around the four stages of the budget cycle, with a focus on national government expenditure. It provides practical exercises for the design and implementation of climate responsive budgeting reforms, supported by key lessons from country experiences. Drawing on real world examples, it provides an overview of the enabling environment for the successful introduction of reforms, including the role of leadership and coordination, capacity building and political support for related reforms. In addition, it provides an assessment of the progress that has been made across countries and the key areas identified for future reforms.
- Economics and Finance of Climate Adaptation: This course has been developed for policy
 makers and government officials with no prior knowledge of the topic. The course builds an
 understanding of the economic impacts of climate change and discusses measures to mitigate
 risks and develop better climate risk management frameworks, enabling climate-resilient
 development. It discusses how to assess the costs and benefits of climate adaptation, how to
 overcome economic barriers to climate adaptation, and how to mobilise adaptation finance.
- Sovereign Debt and Environmental Risk: This course investigates sovereign risk arising from climate change and nature loss. It begins with the fundamentals of government debt and proceeds to discuss how environmental risks and natural capital affect a country's cost of capital and its debt sustainability. The course then scrutinises how sovereign ESG and nature-related factors are reflected in a country's creditworthiness and the tragedy of the horizon in the context of credit ratings. The course explores sovereign ESG investing from both the issuer and investor side, what challenges and opportunities exist, including discussing the critical role of the ingrained income bias. The course examines how recent financial innovations expand the government's toolbox to manage risks and reach sustainability targets. This includes a comparison of various instruments, such as debt-for-nature swaps, green (or labelled) bonds, sustainability-linked bonds, and a discussion of the strengths, weaknesses and complementarities of available instruments. Lastly, the course considers how to set targets for such instruments, evaluate performance and avoid greenwashing concerns.
- Understanding Climate-related Macro-financial Risks: This course provides an overview of climate-related macro-financial risks and how these can be conceptualised and assessed. The course explores the dimensions in which climate change can affect macro-financial dynamics, both as risks emerge going forward, and as economies adapt to decarbonise. The course discusses the transmission channels through which climate change can impact sovereign risk, discussing the potential threats, mitigation strategies, and opportunities. It then considers the role of the financial sector, and the role micro- and macro-prudential approaches can play in minimising risks and supporting the transition, including the importance of climate-related metrics to ascertain exposures and opportunities. Lastly, the course turns to assessments of climate risks. First, considering how the IMF assesses climate risks, its role, programs, and influence. Second, the role of climate scenario analysis more broadly and the role of climate stress testing for financial institutions.



The following courses are currently under development and will be made available to member universities in due course:

- Program Design: Economic and Financial Appraisal (Academic Course)
- Fiscal Policy and Environmental Change (Academic Course)
- Sovereign Debt and Environmental Risk (Academic Course)
- Ecological Macro Modelling (Academic Course)
- Program Design: Economic and Financial Appraisal (Practitioner Course)
- Fiscal Policy and Environmental Change (Practitioner Course)
- Ecological Macro Modelling (Practitioner Course)

Faculty from member universities who would like to access course material and take part in teacher trainings should contact the RAMP University Network Secretariat at universitynetwork@soas.ac.uk

Capacity Building for Partner Governments

RAMP has delivered several intensive capacity building courses for partner governments in-person and online. To strengthen local capacities, faculty from member universities have received dedicated training and have co-taught on the Economics and Finance of Climate Change Foundation Course. The following in-person workshops were co-delivered in 2024:

- <u>Uganda Ministry of Finance, Planning and Economic Development, Uganda Bureau of Statistics, and Uganda National Planning Authority, co-delivered with faculty from Makerere University, July 2024</u>
- National Treasury of Kenya, State Department of Economic Planning, and Kenya National Bureau of Statistics, co-delivered with faculty from University Nairobi, September 2024
- Rwanda Ministry of Finance and Economic Planning, Ministry of Environment, and Rwanda Green Fund, co-delivered with faculty from University of Rwanda, October 2024
- Ethiopia Ministry of Finance and Ministry of Planning and Development, co-delivered with faculty from Addis Ababa University, December 2024

In collaboration with leading experts in the field, RAMP has delivered the following online courses:

- Introduction to Macro-climate Modelling, December 2024
- Macro-Climate Modelling with DIGNAD, July 2024
- Introduction to Sovereign Debt and Environmental Risks, November 2023
- Program Design: Economic and Financial Appraisal, October 2023
- Introduction to Finance in Climate Negotiations, September 2023
- Introduction to Adaptation Finance, September 2023



Research Grants for Member Universities

The RAMP University Network has thus far administered the following research grants:

- Small case study research grants
- Larger research grants