

ISO 14090:2019 Adaptation to climate change

Course outline

Module 1: Introduction to Climate Change and its Impacts

Module 1: Introduction to Climate Change and its Impacts provides an overview of the causes and effects of climate change, as well as the potential impacts of climate change on society and the environment. It also introduces the ISO 14090:2019 Adaptation to Climate Change course, which provides guidance on how to identify and manage climate change risks and opportunities.

Lessons

- Introduction to Climate Change and its Causes
- Understanding the Impacts of Climate Change
- Assessing Climate Change Vulnerability
- Developing Climate Change Adaptation Strategies
- Climate Change Mitigation Strategies
- Climate Change and Human Health
- Climate Change and Biodiversity
- Climate Change and Agriculture
- Climate Change and Water Resources
- Climate Change and Energy Systems

After completing this module, students will be able to:

- Understand the causes and effects of climate change.
- Recognize the potential impacts of climate change on different sectors and regions.
- Develop strategies to reduce the risks associated with climate change.
- Identify and evaluate adaptation options to reduce the impacts of climate change.

Module 2: Understanding the Principles of ISO 14090:2019

Module 2 of the ISO 14090:2019 Adaptation to Climate Change course provides an overview of the principles of ISO 14090:2019, which is an international standard for assessing and managing the risks of climate change. It covers topics such as the purpose of the standard, the scope of the standard, the principles of risk assessment and management, and the roles and responsibilities of stakeholders. It also provides guidance on how to use the standard to develop an adaptation plan.

Lessons

- Introduction to ISO 14090:2019
- Overview of the Principles of ISO 14090:2019
- Risk Assessment and Adaptation Strategies
- Climate Change Impacts and Vulnerability
- Climate Change Adaptation Planning
- Climate Change Adaptation Measures
- Monitoring and Evaluation of Adaptation Measures
- Financing Adaptation Measures
- Communication and Engagement
- Capacity Building for Adaptation

After completing this module, students will be able to:

- Identify the key principles of ISO 14090:2019 and their relevance to climate change adaptation.
- Analyze the potential impacts of climate change on organizations and their operations.
- Develop strategies to reduce the risks associated with climate change adaptation.
- Implement ISO 14090:2019 guidelines to ensure effective climate change adaptation.

Module 3: Assessing Climate Change Risks and Vulnerabilities

Module 3 of the ISO 14090:2019 Adaptation to Climate Change course focuses on assessing climate change risks and vulnerabilities. It provides an overview of the different methods and tools used to identify and assess climate change risks and vulnerabilities, as well as the importance of incorporating climate change into risk management strategies. The module also covers the importance of understanding the social, economic, and environmental impacts of climate change, and how to develop effective adaptation strategies.

Lessons

- Understanding Climate Change Risks and Vulnerabilities
- Assessing Climate Change Impacts on Infrastructure
- Identifying Climate Change Adaptation Strategies
- Developing Climate Change Risk Management Plans
- Evaluating Climate Change Adaptation Options
- Implementing Climate Change Adaptation Measures
- Monitoring and Evaluating Climate Change Adaptation
- Communicating Climate Change Adaptation Strategies
- Integrating Climate Change Adaptation into Decision-Making
- Building Capacity for Climate Change Adaptation

After completing this module, students will be able to:

- Understand the concept of climate change and its impacts on the environment.
- Identify and assess climate change risks and vulnerabilities.
- Develop strategies to reduce climate change risks and vulnerabilities.
- Implement and monitor climate change adaptation plans.

Module 4: Developing Adaptation Strategies and Plans

Module 4 of the ISO 14090:2019 Adaptation to Climate Change course focuses on developing adaptation strategies and plans. It covers topics such as identifying and assessing climate change risks, developing adaptation objectives, and designing and implementing adaptation strategies and plans. The module also provides guidance on monitoring and evaluating adaptation strategies and plans.

Lessons

- Understanding the Principles of Adaptation Planning
- Assessing Climate Change Impacts and Vulnerabilities
- Identifying Adaptation Options
- Developing Adaptation Strategies and Plans
- Implementing Adaptation Strategies and Plans
- Monitoring and Evaluating Adaptation Strategies and Plans
- Integrating Adaptation into Decision-Making
- Engaging Stakeholders in Adaptation Planning
- Financing Adaptation Strategies and Plans
- Communicating Adaptation Strategies and Plans

After completing this module, students will be able to:

- Understand the principles of adaptation to climate change and the importance of developing adaptation strategies and plans.
- Identify the key elements of an adaptation strategy and plan.
- Develop an adaptation strategy and plan that is tailored to the specific needs of the organization.
- Implement the adaptation strategy and plan in order to reduce the risks associated with climate change.

Module 5: Implementing Adaptation Measures

Module 5: Implementing Adaptation Measures is a module in the ISO 14090:2019 Adaptation to Climate Change course. It focuses on the practical implementation of adaptation measures, including the identification of suitable measures, the development of an adaptation plan, and the monitoring and evaluation of the plan. The module also covers the legal and financial aspects of adaptation, as well as the communication and engagement of stakeholders.

Lessons

- Understanding the Principles of Adaptation
- Assessing Climate Change Impacts and Vulnerabilities
- Developing Adaptation Strategies
- Implementing Adaptation Measures
- Evaluating and Monitoring Adaptation Measures
- Integrating Adaptation into Decision-Making
- Financing Adaptation
- Communicating and Engaging Stakeholders
- Building Capacity for Adaptation

- Adaptation in the Context of Sustainable Development

After completing this module, students will be able to:

- Identify and assess the risks and opportunities associated with climate change adaptation.
- Develop strategies and plans to address climate change adaptation.
- Implement adaptation measures to reduce the impacts of climate change.
- Monitor and evaluate the effectiveness of adaptation measures.

Module 6: Monitoring and Evaluating Adaptation Actions

Module 6 of the ISO 14090:2019 Adaptation to Climate Change course focuses on monitoring and evaluating adaptation actions. It provides guidance on how to develop and implement effective monitoring and evaluation systems to track the progress of adaptation actions and measure their effectiveness. It also covers the importance of stakeholder engagement in the monitoring and evaluation process.

Lessons

- Understanding the Principles of Monitoring and Evaluation
- Developing a Monitoring and Evaluation Plan
- Assessing the Effectiveness of Adaptation Actions
- Identifying and Measuring Indicators of Adaptation
- Analyzing and Interpreting Monitoring and Evaluation Data
- Reporting and Communicating Monitoring and Evaluation Results
- Using Monitoring and Evaluation to Improve Adaptation Actions
- Integrating Monitoring and Evaluation into Adaptation Planning
- Assessing the Cost-Effectiveness of Adaptation Actions
- Assessing the Social and Environmental Impacts of Adaptation Actions

After completing this module, students will be able to:

- Understand the importance of monitoring and evaluating adaptation actions to ensure their effectiveness.
- Develop a monitoring and evaluation plan for adaptation actions.
- Identify indicators to measure the success of adaptation actions.
- Analyze the results of monitoring and evaluation to inform decision-making.

Module 7: Integrating Adaptation into Decision-Making

Module 7: Integrating Adaptation into Decision-Making is a module of the ISO 14090:2019 Adaptation to Climate Change course. It provides an overview of the process of integrating adaptation into decision-making, including the identification of adaptation options, the assessment of their effectiveness, and the implementation of the chosen option. It also covers the importance of stakeholder engagement and the need for monitoring and evaluation of adaptation measures.

Lessons

- Understanding the Principles of Adaptation Decision-Making
- Assessing the Risks and Opportunities of Climate Change
- Developing Adaptation Strategies and Plans
- Integrating Adaptation into Existing Decision-Making Processes
- Evaluating the Effectiveness of Adaptation Strategies
- Incorporating Climate Change into Risk Management
- Assessing the Financial Implications of Adaptation
- Understanding the Role of Stakeholders in Adaptation Decision-Making
- Developing Adaptation Policies and Regulations
- Integrating Adaptation into Long-Term Planning

After completing this module, students will be able to:

- Understand the principles of ISO 14090:2019 and how it applies to adaptation to climate change.
- Develop an understanding of the different types of adaptation strategies and how they can be implemented.
- Develop the skills to assess the risks and opportunities associated with climate change adaptation.
- Develop the ability to integrate adaptation into decision-making processes.

Module 8: Communicating and Engaging Stakeholders

Module 8: Communicating and Engaging Stakeholders is designed to help participants understand the importance of engaging stakeholders in the adaptation process. It covers topics such as identifying stakeholders, developing effective communication strategies, and engaging stakeholders in decision-making. It also provides guidance on how to effectively manage stakeholder relationships and ensure that stakeholders are kept informed of progress.

Lessons

- Understanding Stakeholder Needs and Interests
- Developing Effective Communication Strategies
- Engaging Stakeholders in Adaptation Planning
- Building Capacity for Engaging Stakeholders
- Managing Conflict and Negotiating Solutions
- Evaluating Stakeholder Engagement
- Developing Adaptation Strategies with Stakeholders
- Implementing Adaptation Strategies with Stakeholders
- Monitoring and Evaluating Stakeholder Engagement
- Leveraging Stakeholder Resources for Adaptation

After completing this module, students will be able to:

- Understand the importance of engaging stakeholders in the adaptation process.
- Develop effective communication strategies to engage stakeholders.
- Identify and assess the needs and interests of stakeholders.
- Develop strategies to build trust and collaboration with stakeholders.

Module 9: Financing Adaptation

Module 9: Financing Adaptation is a module of the ISO 14090:2019 Adaptation to Climate Change course. It provides an overview of the different sources of financing available for adaptation projects, including public and private sources, and explores the challenges and opportunities associated with financing adaptation. It also covers the importance of developing a financial plan for adaptation projects, and provides guidance on how to access and manage funds.

Lessons

- Understanding the Different Types of Adaptation Financing
- Assessing the Financial Requirements for Adaptation
- Developing a Financing Strategy for Adaptation
- Identifying Sources of Adaptation Financing
- Evaluating the Cost-Effectiveness of Adaptation Financing
- Managing Adaptation Financing Risks
- Implementing Adaptation Financing Mechanisms
- Monitoring and Evaluating Adaptation Financing
- Leveraging Private Sector Investment for Adaptation
- Exploring Innovative Financing Solutions for Adaptation

After completing this module, students will be able to:

- Understand the different sources of financing for adaptation to climate change.
- Analyze the financial implications of different adaptation strategies.
- Develop a financial plan for adaptation to climate change.
- Identify potential sources of funding for adaptation projects.

Module 10: Building Capacity for Adaptation

Module 10: Building Capacity for Adaptation is designed to help participants understand the importance of building capacity for adaptation to climate change. It covers topics such as the need for capacity building, the different types of capacity building, and the various approaches to capacity building. It also provides guidance on how to develop and implement capacity building initiatives. Finally, it provides an overview of the ISO 14090:2019 Adaptation to Climate Change standard and how it can be used to support capacity building efforts.

Lessons

- Understanding the Principles of Adaptation
- Assessing Climate Change Impacts and Vulnerabilities
- Developing Adaptation Strategies and Plans
- Implementing Adaptation Actions
- Monitoring and Evaluating Adaptation
- Engaging Stakeholders in Adaptation
- Financing Adaptation
- Integrating Adaptation into Development Planning
- Building Capacity for Adaptation

- Communicating Adaptation

After completing this module, students will be able to:

- Understand the principles of adaptation to climate change and the importance of building capacity for adaptation.
- Identify the key elements of an adaptation strategy and the roles of stakeholders in the process.
- Develop an action plan to implement an adaptation strategy and identify potential sources of funding.
- Assess the effectiveness of an adaptation strategy and identify potential areas for improvement.