

AWS Cloud Institute: AWS Business Foundations Syllabus

Course Overview

In AWS Business Foundations (AWS BF) you will develop professional skills to help you navigate new work environments, work well with others, and take part in complex, multi-phase projects. You will work to enhance your writing and presentation skills, which will prepare you to contribute to effective meetings with colleagues and clients.

Course Structure

AWS BF is a combination of digital e-learning content ("modules") that you can read, watch, and engage with on your own time (asynchronous content) and instructor-led training sessions (ILTs) that focus on the topics presented in the asynchronous content.

AWS BF modules are covered over the course of 11 weeks and include approximately 60 hours of text, video, audio, hands-on learning activities, and knowledge checks (see Table 1). There are over a dozen ILT sessions offered each week that can be watched live or on-demand. Although ILT attendance is not required for course completion, each session is an opportunity to connect with and learn from your AWS instructor and other AWS BF students.

As with all AWS Cloud Institute courses, the expectation is that you will complete your modules and associated assessments on a weekly basis. You also have the option to attend the ILTs live or watch the recorded version that will be posted online after each session. Taking advantage of this "flipped classroom" method is the best way to ensure that you develop the professional and technical skills required to be successful as a cloud application developer.

Course Sessions

Table 1. AWS BF Module Overview by Content Type

	Content Type	Percentage of total course time (by hours)
1	e-learning (text, video, audio)	30% (18 hours)
2	Ungraded (formative) knowledge checks	8% (5 hours)
3	Hands-on learning activities (labs, activities, and/or AWS Jam challenges)	50% (28 hours)
4	Graded (summative) assessments	12% (7 hours)
5	Total Time	100% (58 hours)

Instructor-Led Training (ILT) Sessions

Mondays: Weekly Stand-Up, 11:30AM, 1:30PM & 3:30PM EST
Tuesdays: Weekly Spotlight, 11:30AM, 1:30PM & 3:30PM EST
Wednesdays: Weekly Focus Session, 11:30AM, 1:30PM & 3:30PM EST
Thursdays: Weekly Labology Session, 11:30AM, 1:30PM & 3:30PM EST
Fridays: Weekly Fun Friday Event, 3:30PM EST
M, T, W, Th: Office Hours, 8:30 AM, 10:00 AM, 05:00 PM, & 06:30 PM EST

All ILT sessions, with the exception of office hours, are recorded and will be available on-demand for you to watch when you have time. Multiple live ILT sessions are offered each day to accommodate a range of schedules. All ILT sessions, with the exception of Fun Friday events, are also offered on a PST schedule (i.e., Weekly Stand-Up 8:30AM, 10:30AM & 12:30PM PST).

Prerequisites

N/A

Assessment and Grading Policy

AWS BF is offered as a “pass/fail” course (no letter grades). You will be required to achieve a passing score of 85% or higher on all weekly summative assessments to successfully complete AWS BF. There is a total of ten (10) summative assessments in this course. Each summative assessment will take the form of a 20-question multiple choice quiz presented at the end of your assigned modules each week. You will have unlimited opportunities to achieve a passing score on each summative assessment.

Attendance at ILT sessions is strongly encouraged, but will not count towards course completion. You should use the ILT sessions to explore concepts that were presented in your e-learning in greater depth, connect with your AWS instructors and fellow ACI learners, and prepare for the weekly summative assessment.

Course Completion Requirements

All learners must complete ten (10) weekly summative assessments with a score of 85% or higher to receive credit for AWS BF. ILT attendance or watching ILT recordings is strongly encouraged but is not required for course completion.

Week 1: Program Overview

Goal:

This is your first module in AWS BF. The purpose of this module is to provide an overview of AWS Cloud Institute and your cloud learning journey. It will outline the learning model used in the program, the resources available to support your learning, and what is required to complete the cloud application developer track at AWS Cloud Institute.

Learning Objectives:

- Provide an overview and an introduction to AWS Cloud Institute.
- Discuss the structure of the program.
- Learn how the content is delivered and what resources are available.

Module Outline:

1. **Welcome to AWS Cloud Institute**
 - a. Welcome and Introduction
 - b. A Day in the Life of a Cloud Application Developer
2. **Program Roadmap**
 - a. Roadmap Overview
 - b. Quarter 1 Roadmap
 - c. Quarter 2 Roadmap
 - d. Quarter 3 Roadmap
 - e. Quarter 4 Roadmap
3. **Your Learning Journey and Support**
 - a. Learning Model for Success
 - b. AWS Certifications
 - c. Your Goals
 - d. Completion Requirements

Videos (Total Time 29:48)

- What is AWS Cloud Institute, with Kevin Kelly (2:14)
- Why Do Employers Need Cloud Developers, with Brad Ingber (5:09)
- A Day in the Life of a Cloud Developer, with Wangechi Doble (5:27)

- Roadmap Overview (3:18)
- What is the Flipped Classroom Model, with Sarah Nagata (6:23)
- What are AWS Certifications, with Rola Dali (2:27)
- How Do I Get an AWS Cloud Institute Certificate, with Sara Abiola (4:31)

Week 2: Writing and Presentation Skills (Part 1)

Goal:

You will learn about effective communication, storytelling, and the value of emotional intelligence.

Learning Objectives:

- Identify tools for crafting better communications.
- Recognize how to create a presentation that is tailored to your audience.
- Explain the dos and don'ts of storytelling.
- Describe how storytelling can be used to communicate business strategy.
- Explain how to establish trust within your team.
- Learn how power and emotional intelligence can be used to influence people.
- Explain the application the Cohen-Bradford influence model.
- Explain how to establish trust within your team.
- Learn how power and emotional intelligence can be used to influence people.
- Explain the application the Cohen-Bradford influence model.

Module Outline:

- 1. Creating Effective Communications**
 - a. Introduction: Creating Effective Communications
 - b. The 80/20 Rule in Effective Communication
 - c. Four Stages of Creating Effective Communication
 - d. Knowledge Check
- 2. Storytelling in a Business Setting**
 - a. Introduction: Storytelling in a Business Setting
 - b. Business Storytelling: Dos and Don'ts
 - c. Storytelling to Communicate Strategy
 - d. Knowledge Check
- 3. Establishing Trust and Leveraging Influence**
 - a. Introduction: Establishing Trust and Leveraging Influence
 - b. Benefits of Establishing Trust
 - c. Power to Influence
 - d. Influence Principles
 - e. Knowledge Check
- 4. Listening and Storytelling as a Call to Action**
 - a. Introduction: Listening and Storytelling as a Call to Action
 - b. Importance of Listening in the Business World
 - c. Storytelling as a Call to Action
 - d. Knowledge Check

Videos (Total Time 59:25):

- Business Storytelling Dos and Don'ts (8:14)
- Benefits of Establishing Trust to Achieve Business Outcomes (7:13)
- Influencing Others and the Types of Power (4:16)
- Using the Power Bar to Identify Your Power Bases (4:45)
- Leveraging the Influence Principles (4:33)

- Applying the Cohen-Bradford Influence Model (4:43)
- The Business Importance of Listening (4:41)
- High-Quality Listening (6:03)
- Storytelling as a Call to Action (5:45)
- Gaining Buy-in for Using Storytelling in Business (9:02)

Ungraded Assessments (Formative):

These ungraded assessments establish the bar of each learner's pre-existing knowledge of the content, and are designed to review basic information about effective communication, storytelling, and emotional intelligence

Graded Assessment:

The graded assessment will cover effective communication, storytelling, and emotional intelligence.

Week 3: Writing and Presentation Skills (Part 2)

Goal:

You will learn about the data visualization, the value of listening in the workplace, and the importance of verbal assertiveness.

Learning Objectives:

- Provide an overview of data visualization and various methods involved.
- Understand the impact of data visualization.
- Understand the importance of assertiveness in business.
- Understand behavioral and verbal assertiveness.
- Learn how to encourage an audience listen.

Module Outline:

- 1. Visualizing Data**
 - a. Introduction: Visualizing Data
 - b. Spotlight on Data Visualization
 - c. Common Visualizations for Quantitative and Qualitative Data
 - d. Data Visualization Technologies
 - e. Knowledge Check
- 2. Presenting to a Large Group**
 - a. Introduction: Presenting to a Large Group
 - b. Behavioral Assertiveness
 - c. Verbal Assertiveness
 - d. Speak So the Audience Listens
 - e. Business Importance of Assertiveness
 - f. Knowledge Check

Videos (Total Time 32:45):

- Behavioral Assertiveness (7:06)
- Verbal Assertiveness (11:07)
- Outline Effective Speaking Skills (9:10)
- The Business Importance of Assertiveness (5:22)

Ungraded Assessments (Formative):

These ungraded assessments establish the bar of each learner's pre-existing knowledge of the content, and are designed to review basic information about data visualization, the value of listening in the workplace, and the importance of verbal assertiveness.

Graded Assessment:

The graded assessment will cover data visualization, the value of listening in the workplace, and the importance of verbal assertiveness.

Week 4: Professional Skills (Part 1)

Goal:

You will learn about the role of emotional intelligence in business and understand the importance of cultural awareness, empathy, and teamwork.

Learning Objectives:

- Describe the role of emotional intelligence in business and how to develop it.
- Explain how to maintain and gather support for mental well-being.
- Explain the importance of ethical leadership.
- Explain the role of empathy in the workplace.
- Discuss the importance of cultural awareness in the workplace.
- Understand change management and the social styles model.
- Explain the importance of team synergy and a growth mindset to build effective teams.
- Explain the factors involved in virtual team building.

Module Outline:

- 1. Discussing the Role of Emotional Intelligence in Business**
 - a. Introduction: Discuss the Role of Emotional Intelligence in Business
 - b. Understanding Emotional Intelligence
 - c. Developing Emotional Intelligence to Influence
 - d. Importance of Mental Well-Being
 - e. Ethical Leadership and its Importance
 - f. Business Dilemmas and Barriers to Ethical Leadership
 - g. Knowledge Check
- 2. Understanding the Importance of Cultural Awareness and Empathy**
 - a. Data Structures Overview
 - b. Introduction: Understanding the Importance of Cultural Awareness and Empathy
 - c. Types of Empathy
 - d. Expressing Empathy in the Workplace
 - e. Importance of Cultural Awareness
 - f. Elements of Resilience
 - g. Knowledge Check
- 3. Understanding Key Aspects of Teamwork in Business**
 - a. Introduction: Understand Key Aspects of Teamwork in Business
 - b. Change Management
 - c. The Social Style Model
 - d. Team Synergy for Effective Team
 - e. Fixed Mindset and Growth Mindset
 - f. Impact of Growth Mindset on Cross-Functional Teams
 - g. Managing High-Performance Virtual Teams
 - h. Working Effectively from a Remote Site
 - i. Using Conflict Management Strategies
 - j. Business Importance of Conflict Management
 - k. Tips for Using Each Conflict Management Strategy
 - l. Knowledge Check

Videos (Total Time 1:33):

- Spotlight on Leadership: Emotional Intelligence (4:05)
- Self-Awareness and Emotional Intelligence (5:40)
- Team Members and Emotional Intelligence (5:22)
- Organizational Culture and Emotional Intelligence (4:32)
- Accountability and Emotional Intelligence (5:56)
- Developing Emotional Intelligence (5:53)
- Getting Support for Mental Well-Being (5:34)
- Helping Others Maintain Mental Well-Being (5:48)
- Ethical Leadership and its Importance (7:44)
- Business Dilemmas and Barriers to Ethical Leadership (5:06)
- Types of Empathy (7:47)
- Expressing Empathy in the Workplace (9:07)
- The Benefits of Empathy in the Workplace (7:27)
- Challenges Associated with Workplace Empathy (8:24)
- The Importance of Cultural Awareness (4:54)

Ungraded Assessments (Formative):

These ungraded assessments establish the bar of each learner's pre-existing knowledge of the content, and are designed to review basic information about the role of emotional intelligence in business and the importance of cultural awareness, empathy, and teamwork.

Graded Assessment:

The graded assessment will cover the role of emotional intelligence in business and understand the importance of cultural awareness, empathy, and teamwork.

Week 5: Professional Skills (Part 2)

Goal:

You will learn about the value of networking and understand how critical thinking impacts decision-making.

Learning Objectives:

- Understand the components for building effective business relationships.
- Describe the value of effective networking.
- Describe professional networking and its components.
- Determine the value of a personal brand in creating a networking plan.
- Determine the importance of negotiation.
- Understand the advantages of engaging in recognition practices.
- Describe the quality and parameters of a decision.

Module Outline:

- 1. The Value of Networking and Creating a Personal Brand**
 - a. Introduction: Value of Networking and Creating a Personal Brand
 - b. The Value of Effective Networking
 - c. Building Effective Business Relationships and Professional Networking
 - d. The Value of a Personal Brand
 - e. Knowledge Check
- 2. Your Brain at Work: Various Tools**
 - a. Introduction: Your Brain at Work: Various Tools
 - b. Negotiation and Decision-Making

- c. Optimizing Work Environment
- d. Human-Centric Business Experiments
- e. Intrinsic Recognition
- f. Brain Hacks
- g. Knowledge Check

Videos (Total Time 1:00):

- The Value of Effective Networking (4:09)
- The Components of an Effective Networking Plan (4:10)
- The Components for Building Effective Business Relationships (4:23)
- Components of Professional Networking (4:36)
- Value of a Personal Brand (5:51)
- Importance of a Personal Brand for Creating a Networking Plan (5:31)
- Why Negotiate? (7:24)
- Optimizing Work Environments for Introverts and Extroverts (8:16)
- Fundamentals of Human-Centric Business Experiments (7:20)
- Team Involvement in Intrinsic Recognition (4:26)
- Brain Hacks: Use Questions to Learn (1:06)
- Brain Hacks: Make Learning a Habit (1:55)
- Brain Hacks: Distraction Detox (1:34)

Ungraded Assessments (Formative):

These ungraded assessments establish the bar of each learner's pre-existing knowledge of the content, and are designed to review basic information about the value of networking and how critical thinking impacts decision-making.

Graded Assessment:

The graded assessment will cover the value of networking and how critical thinking impacts decision-making.

Week 6: Customer Conversations

Goal:

You will learn about several different aspects of customer communication, the art of eliciting customer requirements, and effective communication strategies.

Learning Objectives:

- Describe the customer and their needs.
- Understand how to define and analyze the Voice of the Customer (VoC).
- Explain the customer service framework and its impact.
- Explain requirement elicitation.
- Understand requirements documentation.
- Identify ways to monitor and track requirements.
- Describe key communication skills to solve customer problems.
- Describe the four communication styles.
- Identify techniques for managing challenging conversations.
- Describe how to determine customer satisfaction and loyalty.
- Discuss methods for and the importance of maintaining a positive work attitude.
- Explain how to create a value-centric culture and boost team motivation.
- Utilize your knowledge to identify the concern and follow-up action.
- Apply your knowledge to successfully navigate conversations.

Module Outline:

- 1. Identifying the Customers and Their Needs**
 - a. Introduction: Identifying the Customer and their Needs
 - b. Understanding the Customer and their Needs
 - c. VoC - Enhancing the Customer Experience
 - d. Customer Service Framework
 - e. Knowledge Check
- 2. Art of Eliciting Customer Requirements**
 - a. Introduction: Eliciting Customer Requirements
 - b. Gathering and Monitoring Requirements
 - c. Knowledge Check
 - d. Summary
- 3. Effective Communication Strategies for Customer Problem-Solving**
 - a. Introduction: Communicating with Customer to Solve Problems
 - b. Key Communication Skills to Solve Customer Problems
 - c. Fundamentals of Customer Communication
 - d. Measuring Customer Satisfaction and Loyalty
 - e. Knowledge Check
- 4. Defining success and communicating work value to customers**
 - a. Introduction: Communicating Work Value to Customers
 - b. Leveraging Customer Insights
 - c. Utilizing a Communication Plan
 - d. Knowledge Check

Videos (Total Time 2:53):

- Voice of the Customer (VoC) (8:11)
- Gather Voice of the Customer (3:34)
- Translate Voice of the Customer (6:03)
- Examine a SIPOC Chart (4:47)
- Validate the Problem and Goal Statement (6:25)
- Identify the Levels of Customer Service (12:41)
- Identify the Effect of Customer Service on a Company's Brand (7:42)
- Identify the Effective Customer Service Strategy Components (4:32)
- Recognize the Role of Customer Focus (10:37)
- Overview of a Requirements Traceability Matrix (RTM) (6:54)
- Using an RTM in the Requirements Gathering Process (4:05)
- Emotional Intelligence Skills for Effective Customer Service (8:21)
- Nonverbal Cues, Inquiring, and Empathizing while Listening (8:56)
- Silence and Its Uses During Listening (4:28)
- Describe Communication Styles (4:05)
- Identify Techniques for Challenging Conversations (14:30)
- Scenario 1: Delivering a Difficult Message (3:54)
- Scenario 2: Asking for a New Assignment (5:00)
- Scenario 3: Negotiating a Compromise (5:38)
- Customer Satisfaction and Loyalty Analytics (5:54)
- Leveraging Customer Insight Practices to Drive Innovation in the Customer and Employee Experience (6:01)
- How Creating Customer Journey Maps Can Motivate and Engage Employees to Design Positive Customer Experiences (7:33)
- Integrating Multiple Channels into a Seamless, Omnichannel Customer Experience (7:30)
- Drivers Needed for a Communication Plan (7:16)
- Communication Plan Execution Evaluation Criteria (8:43)

Ungraded Assessments (Formative):

These ungraded assessments establish the bar of each learner's pre-existing knowledge of the content, and are designed to review basic information about several different aspects of customer communication, the art of eliciting customer requirements, and effective communication strategies.

Graded Assessment:

The graded assessment will cover several different aspects of customer communication, the art of eliciting customer requirements, and effective communication strategies.

Week 7: Problem Solving

Goal:

You will learn how to understand the root cause of business problems, as well as strategies for generating solutions, using design thinking, and making responsible decisions.

Learning Objectives:

- Understand ambiguous problem statements.
- Perform a problem analysis.
- Define problems, interpret facts, and plan productive actions.
- Describe root cause analysis and identify the steps involved to solve a problem.
- Design and implement a solution to avoid recurring problems.
- Describe the 'Five Whys' process to navigate through a problem.
- Create a productive environment for decision-making.
- Generate appropriate solutions and manage conflict within a team using various strategies.
- Identify appropriate decision making tools.
- Define and describe strategies for decision making.
- Analyze behavioral biases that influence decisions and discuss the common decision making mistakes.
- Describe how to implement and communicate the decision.
- Describe design thinking and the five phases involved in the process.
- Explain how power of "and" can eliminate trade-offs in business.

Module Outline:

- 1. Solving Business Problems**
 - a. Introduction: Solving Business Problems
 - b. Understanding the Problem
 - c. Problem Analysis
 - d. Knowledge Check
- 2. Understand the Root Cause of a Problem**
 - a. Introduction: Finding the Root Cause
 - b. Root Cause Analysis (RCA)
 - c. The Five Whys
 - d. Knowledge Check
- 3. Generating Solutions and Decision-Making**
 - a. Introduction: Generating Solutions and Decision-Making
 - b. Decision-Making Process
 - c. Generate Solutions
 - d. Assess Alternative Solutions
 - e. Make a Decision
 - f. Knowledge Check
- 4. Decision-Making Best Practices**
 - a. Introduction: Decision-Making Best Practices
 - b. Collaborative Decision-Making

- c. Factors Impacting Decision-Making
- d. Analyzing Behavioral Biases that Influence Decisions
- e. Common Decision-Making Mistakes
- f. Implementing a Decision
- g. Knowledge Check

5. Design Thinking and the Power of And

- a. Introduction: Design Thinking and the Power of And
- b. Design Thinking
- c. Exploring the Power of And
- d. Knowledge Check

Videos (Total Time 4:04):

- Ambiguity in the Workplace (5:24)
- Analyzing a Problem (8:49)
- Focus on What's Actually Happening by Asking "What's Going On?" (9:50)
- Interpret Facts by Asking "What Does It Mean?" (9:44)
- Plan Productive Action by Asking, "What Should We do?" (5:16)
- Root Cause Analysis: The Basics (6:03)
- Root Cause Analysis: The Problem (6:44)
- Root Cause Analysis: Contributing Factors (7:11)
- Root Cause Analysis: The Most Probable Root Cause (6:44)
- Root Cause Analysis: Designing and Implementing a Solution (6:03)
- Spotlight on the 5 Whys (4:55)
- Create a Productive Environment (10:27)
- Generate Options, Ideas and Alternatives (8:15)
- What is Mind Mapping? (5:42)
- Create a Mind Map (9:36)
- Strategies for Managing Conflict (6:17)
- Investigate Alternative Choices (6:20)
- Integrating Decision Tree Analysis with the Predictive Business Model (6:50)
- Use Decision Tools to Make a Choice (8:41)
- When to Use Collaborative Decision-Making (5:37)
- Collaborative Decision-Making Methods (7:20)
- Collaborative Decision-Making Process (6:23)
- Pros and Cons of Collaborative Decision-Making (5:00)
- Groupthink and How to Avoid It (7:00)
- Cognitive and Other Factors that Impact Decision-Making (9:39)
- Analyze the Representativeness Bias (7:32)
- Analyze the Overconfidence Bias (3:27)
- Analyze the Anchoring and Adjustment Bias (5:46)
- Analyze the Prospect Theory and Loss Aversion (6:06)
- How to Avoid Common Decision-Making Mistakes (6:26)
- Implement a Decision (7:13)
- Spotlight on Design Thinking (4:47)
- Review Conventional Wisdom Around Trade-Offs (4:58)
- Identify Key Principles and Processes (5:04)
- Review Success Stories (8:05)
- Utilize the Power of And (5:43)

Ungraded Assessments (Formative):

These ungraded assessments establish the bar of each learner's pre-existing knowledge of the content, and are designed to review basic information about understanding the root cause of business problems, as well as strategies for generating solutions, using design thinking, and making responsible decisions.

Graded Assessment:

The graded assessment will cover understanding the root cause of business problems, strategies for generating solutions, using design thinking, and making responsible decisions.

Week 8: Sustainability (Part 1)

Goal:

You will learn about many aspects of sustainability, including the effect on climate change on the environment, and how the circular economy impacts an organization.

Learning Objectives:

- Understand climate change, its effects on the environment, and the ways to address it.
- Integrate sustainable initiatives into businesses to maximize benefits.
- Define the triple-bottom-line method.
- Provide an overview on the circular economy and how it impacts the organization.
- Discuss why the circular economy should matter to the planet and the people.
- Describe the circular economy's key frameworks and enablers, and how they can improve the value chain.

Module Outline:

1. Climate and Carbon

- a. Introduction: Climate and Carbon
- b. Significance of Climate Change for Clients and Stakeholders
- c. Strategies for Businesses to Tackle Climate Change
- d. Adapting Business Practices for a Sustainable Future
- e. Climate and Carbon: Technology and Transformation Agenda
- f. Triple Bottom Line
- g. Introduction to Sustainable Performance
- h. Knowledge Check

2. Circular Economy

- a. Introduction: Circular Economy
- b. Introduction to Circular Economy
- c. Circular Economy and its Benefits
- d. Circular Economy: Key Frameworks and Enablers
- e. Circular Economy: Accelerating the Circular Agenda with Technology
- f. Knowledge Check

Videos (Total Time 48:49):

- Changing Expectations from Businesses (00:44)
- Creating Sustainable Value Chains (1:02)
- Sustainable Development Goals (SDGs) (00:16)
- Businesses responding to Climate Change (1:07)
- Switching to Renewable Energy Sources (1:22)
- Leading by Example (1:26)
- The Climate Challenge (00:57)
- Spotlight on the Triple Bottom Line (3:48)
- Describe Sustainable Performance Measurement (6:43)

- Measure Aspect of Your Business' Sustainability (8:56)
- Propose Sustainable Initiatives (8:10)
- Maintain Sustainable Performance Initiatives (5:48)
- Spotlight on the Circular Economy (5:06)
- Circular Economy: Why it Matters to Our Clients (00:37)
- Industrial Disruption Through Technological Innovation (00:51)
- 4IR Technologies (1:19)
- Determining the Right Mix of Technologies (00:37)

Ungraded Assessments (Formative):

These ungraded assessments establish the bar of each learner's pre-existing knowledge of the content, and are designed to review many aspects of sustainability, including the effect on climate change on the environment, and how the circular economy impact an organization.

Graded Assessment:

The graded assessment will cover many aspects of sustainability, including the effect on climate change on the environment, and how the circular economy impacts an organization.

Week 9: Sustainability (Part 2)

Goal:

You will learn about many aspects of sustainability, including the dynamics of sustainable customer brand and growth, the impact of analytics on clean technology, and sustainable business technologies.

Learning Objectives:

- Describe sustainable customer brand, growth, and experience.
- Explain how sustainable performance is measured.
- Describe sustainability metrics and reporting.
- Understand the impact of digital and analytics on business processes in clean technology companies.
- Explore the technologies and capabilities needed to adopt digital and analytic processes.
- Describe how digital and analytics can improve clean technologies.
- Explain the concept of sustainable cloud, sustainable IT, and sustainable software.
- Explain the technology and transformation agenda adopted by businesses for the implementation of sustainable cloud, IT, and software.
- Describe why sustainable technologies should matter to society and the positive effects they can provide for our planet and businesses.
- Understand the relationship between the corporate sustainability agenda and sustainable cloud, IT, and software.
- Explain the basics of an organization's technology and transformation agenda.
- Describe the concept of Product Life Cycle Management (PLM).
- Gain insight into how green software supports sustainability and environmental well-being for clients and the ecosystem.
- Learn about the role of green software in reducing the environmental impact of digital technology.
- Learn about the four phases of implementing green software principles to achieve sustainable technology goals for your company.

Module Outline:

1. **Sustainable Customer Brand, Growth, and Experience**
 - a. Introduction: Sustainable Customer Brand, Growth, and Experience
 - b. Introduction to Sustainable Customer Brand, Growth, and Experience
 - c. Dynamics of Sustainable Customer Brand, Growth, and Experience
 - d. Societal Importance of Sustainability
 - e. Significance of Sustainable Customer Brand and Growth for Clients and Ecosystems

- f. Technology and Transformation Agenda for Sustainable Brand, Growth, and Experience
 - g. Achieving Sustainable Customer Brand, Growth, and Experience Goals in Business
 - h. Sustainability Metrics and Reporting
 - i. Knowledge Check
- 2. Impact of Digital and Analytics on Clean Technologies**
- a. Introduction: Impact of Digital and Analytics on Clean Technologies
 - b. Impact of Digital and Analytics on Clean Technology Business Processes
 - c. Technologies and Capabilities for Adopting Digital and Analytics Processes
 - d. Enhancing Clean Technologies with Digital and Analytics
 - e. Knowledge Check
- 3. Sustainable technologies**
- a. Introduction: Sustainable Technologies
 - b. Understanding the Functionality of Sustainable Technologies
 - c. Achieving Sustainable Technology Milestones in Business
 - d. Sustainability Technology and Transformation Agenda
 - e. Product Lifecycle Management (PLM)
 - f. Green Software and Business Sustainability
 - g. Green Software and Business Strategies
 - h. Green Software and Business Performance
 - i. Knowledge Check

Videos (Total Time 1:04):

- What is Sustainable Customer brand, Growth, and Experience? (5:51)
- Sustainable Customer brand, Growth, and Experience (1:14)
- Sustainability and Our Consumption Habits (1:00)
- Achieving Sustainability (00:28)
- Stakeholder Pressure on Businesses (00:27)
- Delivering Sustainability Objectives (00:34)
- Sustainable Customer Experiences (00:42)
- Combining Technology and Transformation (00:16)
- Leveraging ESG Materiality Assessment (1:16)
- Society and Environment (00:52)
- Identify Effective Sustainability Reporting (9:01)
- Choose Metrics and KPIs (6:22)
- Impact of Digital and Analytics on Clean Technology Business Processes (7:47)
- Technologies and Capabilities for Adopting Digital and Analytics Processes (7:41)
- How Digital and Analytics Can Improve Clean Technologies (6:17)
- Deploying Sustainable Technologies (00:36)
- How Organizations Have Implemented Sustainable Cloud, IT, and Software in Practice? (2:27)
- Product Life Cycle Management (5:26)
- What is Green Software? (3:31)
- Driving Sustainability Outcomes (00:17)
- Green Software Principles (1:44)
- Green Software Adoption (00:39)

Ungraded Assessments (Formative):

These ungraded assessments establish the bar of each learner's pre-existing knowledge of the content, and are designed to review basic information about the dynamics of sustainable customer brand and growth, the impact of analytics on clean technology, and sustainable business technologies.

Graded Assessment:

The graded assessment will cover the dynamics of sustainable customer brand and growth, the impact of analytics on clean technology, and sustainable business technologies.

Week 10: Project Management (Part 1)

Goal:

You will learn about the lifecycle of a project and the principles of project management, including Agile methodologies.

Learning Objectives:

- Explain project management and describe the role of the project manager.
- Describe the life cycle of a project and explain the significance of each phase.
- Determine project scope and schedule.
- Describe project working style and risk mitigation process.
- Explain the Agile project management approach and philosophy, including values and principles.
- Identify and compare the essential roles in a Scrum team and what makes them effective.

Module Outline:

- 1. Project Management**
 - a. Introduction: Project Management
 - b. Project Management
 - c. Project Management Lifecycle
 - d. Project Scope and Schedule
 - e. Project Working Styles
 - f. Requirements Management Process
 - g. Project Risk Mitigation
 - h. Knowledge Check
- 2. Agile Project Management**
 - a. Introduction: Agile Project Management
 - b. Benefits of Agile Project Management
 - c. Agile Methodologies
 - d. Agile Roles and Processes
 - e. Agile Scrum Approach
 - f. Dos and Don'ts of Agile Project Management
 - g. Knowledge Check

Videos (Total Time 1:48):

- Spotlight on Agile Project Management (4:18)
- Agile Project Methodologies Overview (11:34)
- Applications of Agile Project Management Methodologies (5:35)
- Agile Artifacts and Metrics (9:07)
- Agile Roles and Processes (10:09)
- Agile Project Management and Business Product Owners (6:46)
- Impact of Product Owner Performance in Agile Environments (8:29)
- Key Product Owner Relationships in Agile Environments (8:04)
- Agile Scrum (5:30)
- User Stories (8:09)
- Sprint Planning and Execution (4:40)
- Sprint Completion and Review (6:57)
- Minimum Viable Product (MVP) (4:40)
- The Sprint Retrospective (8:31)

- Agile Teams: Missteps and Solutions (5:44)

Ungraded Assessments (Formative):

These ungraded assessments establish the bar of each learner's pre-existing knowledge of the content, and are designed to review basic information about the lifecycle of a project and the principles of project management, including Agile methodologies.

Graded Assessment:

The graded assessment will cover the project lifecycle and the principles of project management, including Agile methodologies.

Week 11: Project Management (Part 2)

Goal:

You will learn about the change management process and the importance of implementing effective communication strategies.

Learning Objectives:

- Define the change management process.
- Describe the role of a project manager in the change management process.
- Explain the importance of implementing effective communication strategies.
- Explain the dynamics and challenges of virtual teams.

Module Outline:

- 1. Change Management**
 - a. Introduction: Change Management
 - b. Change Management Process
 - c. Implement a Change Management Process
 - d. Make a Change Initiative Successful
 - e. Knowledge Check
- 2. General Tips for Successful Team Project Management**
 - a. Introduction: General Tips for Successful Project Management
 - b. Effective Communication Strategies
 - c. Team Environment and Collaboration Techniques
 - d. Stakeholder Engagement
 - e. Knowledge Check

Videos (Total Time 1:36):

- Reasons for Using a Communication Plan (6:44)
- The Essentials of a Communication Plan (5:39)
- How to Effectively Monitor a Communication Plan (4:51)
- Communication Plan Review and Revision (6:24)
- Communication Plan Monitoring and Feedback (4:17)
- Dynamics of Virtual Teams (6:32)
- Business Environment Differences in the Management of Virtual Teams (7:18)
- The Four Models of Collaboration (6:42)
- Human Attributes Necessary for Collaboration (5:25)
- Technology for Collaboration (7:13)
- Collaboration Technology Challenges (4:28)
- Competitive Advantages of a Cross-Functional Team (6:27)
- Identify the Obstacles to Success (7:12)
- Strategies for a Successful Cross-Functional Team (8:31)

- Rewards and Recognition (00:48)
- Effectiveness of Cross-Functional Team Leadership (7:10)
- Co-Leadership (00:24)
- Facilitation Assistance (00:24)
- Training of Existing Team Leaders (00:23)

Ungraded Assessments (Formative):

These ungraded assessments establish the bar of each learner's pre-existing knowledge of the content, and are designed to review basic information about the change management process and the importance of implementing effective communication strategies.

Graded Assessment:

The graded assessment will cover the change management process and the importance of implementing effective communication strategies.

Definitions

Text, Videos, Interactives:

- e-learning content
- Includes text, interactive e-learning experiences/e-learning interactions, animated videos, videos with trainers, repurposed existing e-learning content

Ungraded (Formative) Knowledge Checks

- Includes pre- and post-module assessment
- Multiple choice
- 2-5 questions

Graded (Summative) Assessments

- Multiple choice
- 10-20 questions

Ungraded Activity (coding challenges, labs)

- Requires learner to perform, practice, or apply knowledge in a scenario or assess a scenario
- Requires learner to perform, practice, or apply knowledge
- Formative