

Camunda BMP Architect

Course outline

Module 1: Introduction to Camunda BPM

Module 1 of the Camunda BPM Architect course provides an introduction to the Camunda BPM platform. It covers the fundamentals of the platform, including its architecture, components, and features. It also provides an overview of the Camunda BPM process engine and its capabilities. Finally, it provides an introduction to the Camunda Modeler, a graphical tool for creating and managing process models.

Lessons

- Overview of Camunda BPM
- Camunda BPM Architecture
- Camunda BPM Process Modeling
- Camunda BPM Process Execution
- Camunda BPM Process Monitoring
- Camunda BPM Process Optimization
- Camunda BPM Process Automation
- Camunda BPM Process Integration
- Camunda BPM Process Security
- Camunda BPM Process Governance

After completing this module, students will be able to:

- Understand the fundamentals of Camunda BPM and its architecture
- Develop and deploy process models using Camunda Modeler
- Configure and manage process instances using Camunda Cockpit
- Utilize Camunda BPM to create custom tasks and activities

Module 2: Camunda BPM Architecture

Module 2 of the Camunda BPM Architecture course provides an overview of the Camunda BPM architecture and its components. It covers topics such as the Camunda BPM engine, the Camunda BPM platform, the Camunda BPM Modeler, and the Camunda BPM Cockpit. It also provides an introduction to the Camunda BPM API and how to use it to create custom applications. Finally, it provides an overview of the Camunda BPM deployment process and how to configure and deploy a Camunda BPM application.

Lessons

- Introduction to Camunda BPM Architecture
- Overview of Camunda BPM Components
- Understanding the Camunda BPM Process Engine
- Working with Camunda BPM Process Models
- Deploying and Managing Camunda BPM Applications
- Integrating Camunda BPM with External Systems
- Best Practices for Camunda BPM Architecture
- Troubleshooting Camunda BPM Architecture Issues
- Advanced Topics in Camunda BPM Architecture

After completing this module, students will be able to:

- Understand the fundamentals of Camunda BPM architecture and its components.
- Develop an understanding of the different types of Camunda BPM processes and how they are used.
- Learn how to design and implement Camunda BPM processes.
- Gain the ability to troubleshoot and optimize Camunda BPM processes.

Module 3: Camunda BPM Process Modeling

Module 3 of the Camunda BPM Architect course focuses on process modeling. It covers the fundamentals of process modeling, including the different types of models, the elements of a process model, and how to create a process model. It also covers the different tools available for process modeling, such as BPMN, DMN, and CMMN. Finally, it provides an overview of the Camunda Modeler, a graphical tool for creating process models.

Lessons

- Introduction to Camunda BPM Process Modeling
- Understanding the Camunda BPM Process Modeling Language
- Creating a Process Model in Camunda BPM
- Working with Gateways and Events in Camunda BPM
- Working with Tasks and Activities in Camunda BPM
- Working with Data and Variables in Camunda BPM
- Working with Forms and User Interfaces in Camunda BPM
- Working with Rules and Decision Tables in Camunda BPM
- Working with Connectors and External Services in Camunda BPM
- Working with Sub-Processes and Call Activities in Camunda BPM
- Working with Multi-Instance and Parallel Processing in Camunda BPM
- Working with Timers and Escalations in Camunda BPM
- Working with Versioning and Deployment in Camunda BPM
- Working with Security and Authorization in Camunda BPM
- Working with Monitoring and Reporting in Camunda BPM
- Working with Optimization and Performance in Camunda BPM
- Troubleshooting and Debugging in Camunda BPM
- Best Practices for Camunda BPM Process Modeling

After completing this module, students will be able to:

- Understand the fundamentals of Camunda BPM process modeling and how to create process models using the Camunda Modeler.
- Develop an understanding of the Camunda BPMN 2.0 standard and how to apply it to process models.
- Learn how to use the Camunda Modeler to create and modify process models.
- Develop the ability to analyze and optimize process models for improved performance.

Module 4: Camunda BPM Process Execution

Module 4 of the Camunda BPM Architect course covers the process of executing a Camunda BPM process. It covers topics such as creating and deploying a process, starting and managing process instances, and monitoring process execution. It also covers how to use the Camunda Cockpit to monitor and manage process execution.

Lessons

- Introduction to Camunda BPM Process Execution
- Understanding the Camunda BPM Process Execution Model
- Configuring Camunda BPM Process Execution
- Working with Camunda BPM Process Execution Variables
- Troubleshooting Camunda BPM Process Execution
- Advanced Camunda BPM Process Execution Techniques
- Integrating Camunda BPM Process Execution with External Systems
- Best Practices for Camunda BPM Process Execution
- Security Considerations for Camunda BPM Process Execution
- Automating Camunda BPM Process Execution

After completing this module, students will be able to:

- Understand the fundamentals of Camunda BPM process execution
- Design and implement Camunda BPM process execution models
- Utilize Camunda BPM process execution tools to automate business processes
- Monitor and analyze Camunda BPM process execution performance metrics

Module 5: Camunda BPM Process Monitoring

Module 5 of the Camunda BPM Architect course focuses on process monitoring. It covers topics such as setting up monitoring dashboards, creating custom metrics, and using the Camunda Cockpit to monitor and analyze process performance. Additionally, the module covers how to use the Camunda Optimize tool to gain insights into process performance and identify areas for improvement.

Lessons

- Introduction to Camunda BPM Process Monitoring
- Understanding the Camunda BPM Process Monitoring Architecture

- Configuring Camunda BPM Process Monitoring
- Monitoring Camunda BPM Processes
- Analyzing Camunda BPM Process Performance
- Troubleshooting Camunda BPM Processes
- Best Practices for Camunda BPM Process Monitoring
- Integrating Camunda BPM Process Monitoring with Other Tools
- Automating Camunda BPM Process Monitoring
- Advanced Topics in Camunda BPM Process Monitoring

After completing this module, students will be able to:

- Understand the fundamentals of Camunda BPM process monitoring
- Develop an understanding of the Camunda BPM process monitoring architecture
- Utilize the Camunda BPM process monitoring tools to monitor and analyze process performance
- Implement best practices for process monitoring and optimization in Camunda BPM

Module 6: Camunda BPM Process Optimization

Module 6 of the Camunda BPM Architect course focuses on process optimization. It covers topics such as process analysis, process improvement, process automation, and process monitoring. It also provides an overview of the Camunda BPM platform and how it can be used to optimize processes. The module also provides practical exercises to help students gain hands-on experience in process optimization.

Lessons

- Introduction to Camunda BPM Process Optimization
- Analyzing and Optimizing Process Performance
- Automating Process Optimization
- Designing Processes for Maximum Efficiency
- Best Practices for Process Optimization
- Troubleshooting Process Performance Issues
- Leveraging Process Analytics to Improve Performance
- Implementing Process Automation to Streamline Performance
- Utilizing Process Simulation to Identify Bottlenecks
- Integrating Process Optimization with Business Intelligence

After completing this module, students will be able to:

- Understand the fundamentals of Camunda BPM process optimization and how to apply them to improve process performance.
- Identify and analyze process bottlenecks and inefficiencies.
- Develop strategies to optimize process performance and reduce costs.
- Implement process optimization techniques such as process automation, process redesign, and process monitoring.

Module 7: Camunda BPM Process Automation

Module 7 of the Camunda BPM Architect course focuses on process automation. It covers topics such as process automation best practices, process automation tools, and how to use Camunda BPM to automate processes. It also provides hands-on exercises to help students gain practical experience in process automation.

Lessons

- Introduction to Camunda BPM Process Automation
- Understanding the Camunda BPM Architecture
- Designing and Implementing Processes with Camunda BPM
- Working with Camunda BPM Process Variables
- Developing Custom Process Applications with Camunda BPM
- Integrating Camunda BPM with External Systems
- Troubleshooting and Debugging Camunda BPM Processes
- Deploying and Managing Camunda BPM Processes
- Best Practices for Camunda BPM Process Automation
- Advanced Topics in Camunda BPM Process Automation

After completing this module, students will be able to:

- Understand the fundamentals of Camunda BPM process automation and its components.
- Design and implement process automation solutions using Camunda BPM.
- Utilize Camunda BPM to create and deploy process models.
- Monitor and analyze process performance using Camunda BPM.

Module 8: Camunda BPM Process Integration

Module 8 of the Camunda BPM Architect course covers the integration of Camunda BPM processes into existing systems. It covers topics such as integrating with external systems, using REST APIs, and using the Camunda BPM process engine to orchestrate complex business processes. Additionally, the module covers how to use the Camunda BPM process engine to monitor and analyze process performance.

Lessons

- Introduction to Camunda BPM Process Integration
- Understanding the Camunda BPM Process Integration Architecture
- Configuring Camunda BPM Process Integration
- Integrating Camunda BPM with External Systems
- Developing Custom Process Integration Components
- Troubleshooting Camunda BPM Process Integration
- Best Practices for Camunda BPM Process Integration
- Advanced Topics in Camunda BPM Process Integration

After completing this module, students will be able to:

- Understand the fundamentals of Camunda BPM process integration

- Design and implement Camunda BPM process integration solutions
- Utilize Camunda BPM process integration tools and techniques
- Troubleshoot and debug Camunda BPM process integration issues

Module 9: Camunda BPM Process Security

Module 9 of the Camunda BPM Architect course covers the fundamentals of process security. It covers topics such as authentication, authorization, and encryption, as well as how to secure Camunda BPM processes. It also provides an overview of the security features available in Camunda BPM and how to configure them.

Lessons

- Introduction to Camunda BPM Process Security
- Understanding Authentication and Authorization
- Configuring Security for Camunda BPM Processes
- Implementing Role-Based Access Control
- Securing Camunda BPM Process Data
- Auditing and Logging Security Events
- Best Practices for Camunda BPM Process Security
- Troubleshooting Camunda BPM Process Security Issues
- Integrating Third-Party Security Solutions with Camunda BPM Processes

After completing this module, students will be able to:

- Understand the security concepts and features of Camunda BPM
- Implement authentication and authorization for Camunda BPM processes
- Configure and manage user roles and permissions
- Utilize Camunda BPM security features to protect process data and resources

Module 10: Camunda BPM Process Governance

Module 10 of the Camunda BPM Architect course focuses on Camunda BPM Process Governance. This module covers topics such as process governance principles, process governance roles, process governance tools, and process governance best practices. It also provides an overview of the Camunda BPM Process Governance Framework and how it can be used to ensure that processes are properly managed and monitored.

Lessons

- Introduction to Camunda BPM Process Governance
- Understanding the Camunda BPM Process Governance Model
- Implementing Process Governance in Camunda BPM
- Best Practices for Process Governance in Camunda BPM
- Troubleshooting Process Governance Issues in Camunda BPM
- Automating Process Governance in Camunda BPM
- Integrating Process Governance with Other Systems

- Analyzing Process Governance Performance in Camunda BPM
- Optimizing Process Governance in Camunda BPM
- Securing Process Governance in Camunda BPM

After completing this module, students will be able to:

- Understand the fundamentals of Camunda BPM process governance
- Develop an understanding of the different types of process governance models
- Implement process governance models in Camunda BPM
- Monitor and optimize process governance models in Camunda BPM

Module 11: Camunda BPM Process Analytics

Module 11 of the Camunda BPM Architect course covers Camunda BPM Process Analytics, a powerful tool for analyzing and optimizing business processes. It provides insights into process performance, process bottlenecks, and process optimization opportunities. It also provides a comprehensive view of process performance across multiple process instances. This module will teach you how to use Camunda BPM Process Analytics to identify and address process inefficiencies.

Lessons

- Introduction to Camunda BPM Process Analytics
- Understanding the Benefits of Camunda BPM Process Analytics
- Analyzing Process Performance with Camunda BPM Process Analytics
- Visualizing Process Performance with Camunda BPM Process Analytics
- Creating Reports with Camunda BPM Process Analytics
- Troubleshooting Process Performance with Camunda BPM Process Analytics
- Integrating Camunda BPM Process Analytics with Other Systems
- Automating Process Performance Analysis with Camunda BPM Process Analytics
- Best Practices for Using Camunda BPM Process Analytics
- Advanced Topics in Camunda BPM Process Analytics

After completing this module, students will be able to:

- Understand the fundamentals of Camunda BPM Process Analytics and its components.
- Develop an understanding of how to use Camunda BPM Process Analytics to monitor and analyze process performance.
- Learn how to use Camunda BPM Process Analytics to identify process bottlenecks and inefficiencies.
- Gain the ability to use Camunda BPM Process Analytics to optimize process performance.

Module 12: Camunda BPM Process Design Patterns

Module 12 of the Camunda BPM Architect course covers the use of process design patterns to create efficient and effective business processes. It covers topics such as process decomposition, process flow, process orchestration, and process optimization. It also provides an overview of the different types of process design patterns and how they can be used to create effective business processes.

Lessons

- Introduction to Camunda BPM Process Design Patterns
- Designing a Process Model with Camunda BPM
- Understanding the Camunda BPM Process Engine
- Working with Camunda BPM Process Variables
- Implementing Human Tasks in Camunda BPM
- Using Camunda BPM Gateways
- Working with Camunda BPM Events
- Designing a Robust Process Model with Camunda BPM
- Implementing Business Rules in Camunda BPM
- Optimizing Process Performance with Camunda BPM
- Troubleshooting Camunda BPM Process Models
- Best Practices for Camunda BPM Process Design

After completing this module, students will be able to:

- Understand the fundamentals of Camunda BPM process design patterns and how to apply them to create efficient and effective process models.
- Develop an understanding of the different types of process design patterns and how to apply them to create process models that are optimized for performance.
- Learn how to use Camunda BPM to create process models that are optimized for scalability and maintainability.
- Develop the skills to create process models that are optimized for cost and time efficiency.

Module 13: Camunda BPM Process Best Practices

Module 13 of the Camunda BPM Architect course covers best practices for designing and implementing Camunda BPM processes. It covers topics such as process modeling, process optimization, process automation, and process governance. It also provides guidance on how to ensure that processes are designed to meet the needs of the organization and its stakeholders.

Lessons

- Introduction to Camunda BPM Process Best Practices
- Designing Robust Processes
- Optimizing Process Performance
- Automating Processes with Camunda BPM
- Leveraging Camunda BPM for Process Monitoring
- Integrating Camunda BPM with External Systems
- Troubleshooting Processes with Camunda BPM
- Securing Processes with Camunda BPM
- Developing Custom Process Components with Camunda BPM
- Deploying and Managing Processes with Camunda BPM

After completing this module, students will be able to:

- Understand the fundamentals of Camunda BPM process best practices
- Develop an understanding of how to design and implement Camunda BPM processes
- Utilize Camunda BPM process best practices to optimize process performance
- Implement Camunda BPM process best practices to ensure process compliance with industry standards and regulations.

Module 14: Camunda BPM Process Troubleshooting

Module 14 of the Camunda BPM Architect course focuses on troubleshooting processes in Camunda BPM. It covers topics such as identifying and resolving common issues, debugging process instances, and using the Camunda Cockpit to monitor and analyze process performance. The module also provides guidance on how to use the Camunda Optimize tool to optimize process performance.

Lessons

- Identifying and Resolving Common Process Issues
- Debugging and Analyzing Process Flows
- Troubleshooting Process Performance Issues
- Troubleshooting Process Data Issues
- Troubleshooting Process Modeling Issues
- Troubleshooting Process Deployment Issues
- Troubleshooting Process Execution Issues
- Troubleshooting Process Security Issues
- Troubleshooting Process Integration Issues
- Troubleshooting Process Automation Issues

After completing this module, students will be able to:

- Understand the fundamentals of troubleshooting Camunda BPM processes.
- Identify and resolve common issues with Camunda BPM processes.
- Utilize the Camunda BPM process engine logs to diagnose and fix process issues.
- Develop strategies for monitoring and maintaining Camunda BPM processes.

Module 15: Camunda BPM Process Deployment

Module 15 of the Camunda BPM Architect course covers the process of deploying a Camunda BPM process. It covers topics such as creating a deployment descriptor, deploying a process to a Camunda BPM engine, and troubleshooting deployment issues. It also covers how to use the Camunda Modeler to create and deploy a process.

Lessons

- Overview of Camunda BPM Process Deployment
- Understanding the Camunda BPM Process Deployment Architecture
- Configuring Camunda BPM Process Deployment
- Deploying Camunda BPM Processes
- Troubleshooting Camunda BPM Process Deployment

- Best Practices for Camunda BPM Process Deployment
- Automating Camunda BPM Process Deployment
- Security Considerations for Camunda BPM Process Deployment
- Monitoring Camunda BPM Process Deployment
- Optimizing Camunda BPM Process Deployment Performance

After completing this module, students will be able to:

- Understand the fundamentals of Camunda BPM process deployment
- Develop and deploy Camunda BPM processes using the Camunda Modeler
- Utilize the Camunda Cockpit to monitor and manage deployed processes
- Troubleshoot and debug deployed processes using the Camunda Tasklist and Camunda Admin Console