

Camunda BMP Technical Lead

Course outline

Module 1: Introduction to Camunda BPM

Module 1 of the Camunda BPM Technical Lead course provides an introduction to Camunda BPM, a business process management platform. It covers the fundamentals of the platform, including its architecture, components, and features. It also provides an overview of the Camunda Modeler, a graphical modeling tool for creating and managing process models. Finally, it introduces the Camunda Cockpit, a web-based dashboard for monitoring and managing process instances.

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 Camunda BPM processes
- Configure and manage Camunda BPM process instances
- Utilize Camunda BPM APIs to integrate with external systems

Module 2: Camunda BPM Architecture

Module 2 of the Camunda BPM Technical Lead course provides an in-depth look at the Camunda BPM architecture. It covers topics such as the Camunda BPM engine, the Camunda BPM platform, and the Camunda BPM workflow. It also provides an overview of the Camunda BPM development process, including the Camunda BPM Modeler, the Camunda BPM Cockpit, and the Camunda BPM Tasklist. Finally, it covers the Camunda BPM REST API and the Camunda BPM web applications.

Lessons

- Overview of Camunda BPM Architecture
- Understanding the Camunda BPM Platform
- Exploring the Camunda BPM Process Engine
- Working with the Camunda BPM Tasklist
- Integrating Camunda BPM with External Systems
- Deploying and Managing Camunda BPM Applications
- Troubleshooting Camunda BPM Applications
- Best Practices for Camunda BPM Architecture
- 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 Camunda BPM process engine and its capabilities.
- Design and implement Camunda BPM processes and workflows.
- Utilize Camunda BPM to create and manage process-driven applications.

Module 3: Camunda BPM Process Modeling

Module 3 of the Camunda BPM Technical Lead course provides an in-depth look at process modeling with Camunda BPM. It covers topics such as process modeling best practices, process modeling tools, and how to create and deploy process models. It also covers how to troubleshoot and debug process models, and how to use Camunda BPM to optimize process models.

Lessons

- Introduction to Camunda BPM Process Modeling
- Understanding the Camunda BPM Process Modeling Language
- Designing and Implementing Process Models
- Working with Events and Gateways
- Working with User Tasks and Forms
- Working with Data and Variables
- Working with Service Tasks and External Systems
- Working with Process Instances and History
- Working with Process Versioning
- Working with Process Optimization and Performance Tuning

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 and deploy process models using the Camunda Modeler and Camunda Engine.
- Utilize the Camunda Modeler to create and manage process models.
- Analyze and optimize process models using the Camunda Modeler.

Module 4: Camunda BPM Process Execution

Module 4 of the Camunda BPM Technical Lead course focuses on the execution of Camunda BPM processes. It covers topics such as process execution, process variables, process events, process tasks, and process monitoring. It also provides an overview of the Camunda BPM process engine and its components. This module provides an in-depth understanding of the Camunda BPM process execution and its related concepts.

Lessons

- Overview of Camunda BPM Process Execution
- Understanding the Camunda BPM Process Execution Model
- Configuring and Deploying Camunda BPM Processes
- Troubleshooting Camunda BPM Process Execution
- Best Practices for Camunda BPM Process Execution
- Automating Camunda BPM Process Execution
- Integrating Camunda BPM Process Execution with Other Systems
- Optimizing Camunda BPM Process Execution Performance
- Securing Camunda BPM Process Execution
- Monitoring Camunda BPM Process Execution

After completing this module, students will be able to:

- Understand the fundamentals of Camunda BPM process execution
- Develop and deploy Camunda BPM process applications
- Utilize Camunda BPM process execution features such as process variables, process instances, and process tasks
- Monitor and troubleshoot Camunda BPM process execution issues

Module 5: Camunda BPM Process Automation

Module 5 of the Camunda BPM Technical Lead course focuses on Camunda BPM Process Automation. This module covers topics such as process modeling, process automation, process optimization, and process governance. It also provides an overview of the Camunda BPM platform and its features, as well as best practices for process automation. Additionally, this module provides hands-on exercises to help students gain practical experience with Camunda BPM.

Lessons

- Introduction to Camunda BPM Process Automation
- Understanding the Camunda BPM Process Model
- Designing and Implementing Camunda BPM Processes
- Working with Camunda BPM Process Variables
- Working with Camunda BPM Process Events
- Working with Camunda BPM Process Gateways
- Working with Camunda BPM Process Services
- Working with Camunda BPM Process Forms
- Working with Camunda BPM Process Reports
- Troubleshooting 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.
- Develop and deploy Camunda BPM process automation applications.
- Utilize Camunda BPM process automation tools to create and manage process models.
- Troubleshoot and debug Camunda BPM process automation applications.

Module 6: Camunda BPM Process Optimization

Module 6 of the Camunda BPM Technical Lead 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 to use it to optimize processes. The module also provides hands-on exercises to help learners apply the concepts they have learned.

Lessons

- Introduction to Camunda BPM Process Optimization
- Analyzing and Optimizing Process Performance
- Automating Process Optimization
- Best Practices for Process Optimization
- Troubleshooting Process Performance Issues
- Advanced Process Optimization Techniques
- Implementing Process Optimization Strategies
- Monitoring and Measuring Process Performance
- Leveraging Process Optimization Tools
- Integrating Process Optimization with Other Systems

After completing this module, students will be able to:

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

Module 7: Camunda BPM Process Monitoring

Module 7 of the Camunda BPM Technical Lead course provides an in-depth look at process monitoring. It covers topics such as setting up monitoring, creating custom metrics, and using the Camunda Cockpit to monitor processes. It also covers advanced topics such as using the Camunda Optimize to analyze process performance and using the Camunda Tasklist to monitor user tasks.

Lessons

- Introduction to Camunda BPM Process Monitoring
- Understanding the Camunda BPM Process Monitoring Architecture
- Configuring and Deploying Camunda BPM Process Monitoring
- Monitoring and Analyzing Camunda BPM Processes
- Troubleshooting Camunda BPM Processes
- Best Practices for Camunda BPM Process Monitoring
- Automating Camunda BPM Process Monitoring
- Integrating Camunda BPM Process Monitoring with Other Systems
- Advanced Topics in Camunda BPM Process Monitoring
- Case Studies in Camunda BPM Process Monitoring

After completing this module, students will be able to:

- Understand the Camunda BPM Process Monitoring module and its components.
- Configure and deploy the Camunda BPM Process Monitoring module.
- Monitor and analyze process performance and identify areas of improvement.
- Troubleshoot and resolve process-related issues.

Module 8: Camunda BPM Process Troubleshooting

Module 8 of the Camunda BPM Technical Lead course provides an in-depth look at 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 Security Issues
- Troubleshooting Process Integration Issues
- Troubleshooting Process Automation Issues
- Troubleshooting Process Orchestration Issues
- Troubleshooting Process Monitoring Issues
- Troubleshooting Process Optimization Issues

After completing this module, students will be able to:

- Identify and troubleshoot common issues with Camunda BPM processes.
- Utilize Camunda BPM tools to analyze and debug process execution.
- Develop strategies to optimize process performance.
- Implement best practices for process monitoring and logging.

Module 9: Camunda BPM Process Security

Module 9 of the Camunda BPM Technical Lead course covers the fundamentals of process security in Camunda BPM. It covers topics such as authentication, authorization, and encryption, as well as how to configure and manage security settings in Camunda BPM. It also provides an overview of the security features available in Camunda BPM and how to use them to protect your processes.

Lessons

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

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 Integration

Module 10 of the Camunda BPM Technical Lead course focuses on Camunda BPM Process Integration. It covers topics such as integrating Camunda BPM with external systems, using the Camunda REST API, and deploying and managing Camunda BPM processes in a distributed environment. The module also covers advanced topics such as using the Camunda BPM Process Engine to create custom process applications and integrating Camunda BPM with other technologies.

Lessons

- Overview of Camunda BPM Process Integration
- Understanding the Camunda BPM Process Integration Architecture
- Configuring Camunda BPM Process Integration
- Integrating Camunda BPM with External Systems
- Troubleshooting Camunda BPM Process Integration Issues
- Best Practices for Camunda BPM Process Integration
- Advanced Topics in Camunda BPM Process Integration
- Automating Camunda BPM Process Integration
- Security Considerations for Camunda BPM Process Integration
- Performance Tuning for Camunda BPM Process Integration

After completing this module, students will be able to:

- Understand the fundamentals of Camunda BPM process integration and how to use it to create automated business processes.
- Develop and deploy Camunda BPM process integration solutions to meet business requirements.
- Utilize Camunda BPM process integration to create and manage complex business processes.
- Troubleshoot and debug Camunda BPM process integration solutions.

Module 11: Camunda BPM Process Governance

Module 11 of the Camunda BPM Technical Lead course focuses on Camunda BPM Process Governance. It covers topics such as process governance principles, process governance roles, process governance tools, and process governance best practices. The module also provides hands-on exercises to help learners gain a better understanding of the concepts.

Lessons

- Introduction to Camunda BPM Process Governance
- Understanding the Camunda BPM Process Governance Framework
- 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
- Advanced Process Governance Strategies in Camunda BPM
- Security and Compliance Considerations for Process Governance
- Monitoring and Auditing Process Governance in Camunda BPM

After completing this module, students will be able to:

- Understand the fundamentals of Camunda BPM process governance and how to apply it to their projects.
- Develop and implement process governance strategies to ensure process compliance and quality.
- Utilize Camunda BPM tools to monitor and analyze process performance.
- Create and maintain process documentation and process maps.

Module 12: Camunda BPM Process Lifecycle Management

Module 12 of the Camunda BPM Technical Lead course provides an in-depth look at the process lifecycle management capabilities of Camunda BPM. It covers topics such as process definition, process instance, process variables, process execution, process monitoring, and process optimization. It also provides an overview of the Camunda BPM process engine and its features, as well as best practices for process lifecycle management.

Lessons

- Overview of Camunda BPM Process Lifecycle Management

- Understanding the Camunda BPM Process Model
- Designing and Implementing Camunda BPM Processes
- Managing and Monitoring Camunda BPM Processes
- Troubleshooting and Optimizing Camunda BPM Processes
- Integrating Camunda BPM Processes with External Systems
- Automating Camunda BPM Processes with Scripting
- Best Practices for Camunda BPM Process Lifecycle Management

After completing this module, students will be able to:

- Understand the fundamentals of Camunda BPM process lifecycle management.
- Develop and deploy Camunda BPM process models.
- Monitor and optimize Camunda BPM process performance.
- Troubleshoot and debug Camunda BPM process issues.

Module 13: Camunda BPM Process Performance Tuning

Module 13 of the Camunda BPM Technical Lead course focuses on process performance tuning. It covers topics such as identifying performance bottlenecks, optimizing process execution, and using Camunda BPM tools to improve process performance. The module also provides guidance on how to monitor and analyze process performance, as well as best practices for process optimization.

Lessons

- Understanding Camunda BPM Performance Metrics
- Analyzing Performance Bottlenecks
- Optimizing Process Execution
- Improving Process Performance with Camunda BPM
- Troubleshooting Performance Issues
- Monitoring and Tuning Camunda BPM
- Best Practices for Performance Tuning
- Leveraging Camunda BPM Performance Tools
- Automating Performance Tuning
- Advanced Performance Tuning Techniques

After completing this module, students will be able to:

- Understand the performance tuning techniques for Camunda BPM processes.
- Identify and resolve performance bottlenecks in Camunda BPM processes.
- Implement best practices for optimizing Camunda BPM process performance.
- Monitor and analyze Camunda BPM process performance metrics.

Module 14: Camunda BPM Process Best Practices

Module 14 of the Camunda BPM Technical Lead course provides an overview of 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 compliant with industry standards and regulations.

Lessons

- Understanding the Camunda BPM Process Model
- Designing a Robust Camunda BPM Process
- Developing a Camunda BPM Process
- Testing and Debugging a Camunda BPM Process
- Deploying a Camunda BPM Process
- Monitoring and Optimizing a Camunda BPM Process
- Troubleshooting a Camunda BPM Process
- Integrating a Camunda BPM Process with External Systems
- Securing a Camunda BPM Process
- Automating a Camunda BPM Process

After completing this module, students will be able to:

- Understand the best practices for designing and implementing Camunda BPM processes.
- Develop an understanding of the Camunda BPM process engine and its capabilities.
- Utilize the Camunda BPM process engine to create and deploy process models.
- Implement process optimization techniques to improve process performance.

Module 15: Camunda BPM Process Documentation

Module 15 of the Camunda BPM Technical Lead course provides an in-depth look at the process documentation module for Camunda BPM. It covers topics such as process modeling, process documentation, process analysis, and process optimization. It also provides guidance on how to create and maintain process documentation, as well as how to use process documentation to improve process performance.

Lessons

- Overview of Camunda BPM Process Documentation
- Best Practices for Documenting Camunda BPM Processes
- Creating Process Documentation with Camunda BPM
- Using Camunda BPM to Automate Process Documentation
- Integrating Process Documentation with Camunda BPM
- Troubleshooting Process Documentation Issues with Camunda BPM
- Managing Process Documentation with Camunda BPM
- Optimizing Process Documentation with Camunda BPM
- Leveraging Camunda BPM for Process Documentation Auditing
- Advanced Process Documentation Strategies with Camunda BPM

After completing this module, students will be able to:

- Understand the fundamentals of Camunda BPM process documentation.

- Develop a comprehensive understanding of the Camunda BPM process documentation process.
- Create and maintain process documentation for Camunda BPM processes.
- Utilize best practices for documenting Camunda BPM processes.

Module 16: Camunda BPM Process Deployment

Module 16 of the Camunda BPM Technical Lead course covers the process of deploying a Camunda BPM process. It covers topics such as setting up the environment, deploying the process, and troubleshooting any issues that may arise. It also provides an overview of the different deployment options available and how to use them.

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

Module 17: Camunda BPM Process Maintenance

Module 17 of the Camunda BPM Technical Lead course provides an overview of the process maintenance module for Camunda BPM. It covers topics such as process versioning, process migration, process optimization, and process monitoring. It also provides an introduction to the Camunda Modeler and Cockpit tools, which are used to manage and monitor processes.

Lessons

- Overview of Camunda BPM Process Maintenance
- Understanding the Camunda BPM Process Model
- Designing and Implementing Process Maintenance Strategies
- Troubleshooting and Debugging Process Maintenance Issues
- Automating Process Maintenance with Camunda BPM
- Best Practices for Process Maintenance

- Performance Tuning for Process Maintenance
- Integrating Process Maintenance with Other Systems
- Security Considerations for Process Maintenance
- Monitoring and Reporting on Process Maintenance

After completing this module, students will be able to:

- Understand the fundamentals of Camunda BPM process maintenance and how to use it to optimize process performance.
- Develop and maintain Camunda BPM process models and diagrams.
- Utilize Camunda BPM process maintenance tools to troubleshoot and debug process issues.
- Implement best practices for process maintenance and optimization.

Module 18: Camunda BPM Process Versioning

Module 18 of the Camunda BPM Technical Lead course covers the process of versioning Camunda BPM processes. It provides an overview of the different types of versioning, how to create and manage versions, and how to use versioning to ensure process stability and reliability. It also covers best practices for versioning and how to use versioning to improve process performance.

Lessons

- Overview of Camunda BPM Process Versioning
- Strategies for Managing Process Versions
- Best Practices for Versioning Processes
- Automating Process Versioning
- Versioning Processes in a Multi-Tenant Environment
- Troubleshooting Process Versioning Issues
- Integrating Process Versioning with Other Systems
- Advanced Topics in Process Versioning
- Security Considerations for Process Versioning
- Performance Optimization for Process Versioning

After completing this module, students will be able to:

- Understand the concept of process versioning and how it can be used to manage process changes.
- Implement process versioning in Camunda BPM using the Camunda Modeler.
- Utilize the Camunda BPM Process Versioning API to manage process versions.
- Develop strategies for managing process versioning in a production environment.

Module 19: Camunda BPM Process Testing

Module 19 of the Camunda BPM Technical Lead course provides an introduction to process testing with Camunda BPM. It covers topics such as setting up a test environment, writing test cases, and running tests. It also covers advanced topics such as mocking, data-driven testing, and performance testing. This module is designed to help technical leads understand the importance of process testing and how to effectively use Camunda BPM to test their processes.

Lessons

- Overview of Camunda BPM Process Testing
- Understanding the Camunda BPM Process Testing Framework
- Writing Automated Tests for Camunda BPM Processes
- Debugging Camunda BPM Processes
- Performance Testing of Camunda BPM Processes
- Best Practices for Camunda BPM Process Testing
- Troubleshooting Camunda BPM Process Testing
- Integrating Camunda BPM Process Testing with Continuous Integration
- Advanced Techniques for Camunda BPM Process Testing
- Security Testing of Camunda BPM Processes

After completing this module, students will be able to:

- Understand the fundamentals of Camunda BPM process testing
- Develop and execute automated tests for Camunda BPM processes
- Analyze and debug Camunda BPM process test results
- Implement best practices for Camunda BPM process testing

Module 20: Camunda BPM Process Debugging

Module 20 of the Camunda BPM Technical Lead course provides an in-depth look at the process of debugging Camunda BPM processes. It covers topics such as how to identify and troubleshoot errors, how to use the Camunda Cockpit to debug processes, and how to use the Camunda Modeler to debug processes. This module also provides an overview of the Camunda BPM Process Debugging API and how to use it to debug processes.

Lessons

- Understanding the Camunda BPM Debugging Process
- Analyzing and Troubleshooting Camunda BPM Processes
- Debugging Camunda BPM Processes with Camunda Cockpit
- Debugging Camunda BPM Processes with Camunda Modeler
- Debugging Camunda BPM Processes with Camunda Tasklist
- Debugging Camunda BPM Processes with Camunda Admin
- Debugging Camunda BPM Processes with Camunda Optimize
- Debugging Camunda BPM Processes with Camunda External Tasks
- Debugging Camunda BPM Processes with Camunda External Services
- Debugging Camunda BPM Processes with Camunda Variables
- Debugging Camunda BPM Processes with Camunda Events
- Debugging Camunda BPM Processes with Camunda History
- Debugging Camunda BPM Processes with Camunda Logging
- Debugging Camunda BPM Processes with Camunda Monitoring
- Debugging Camunda BPM Processes with Camunda Performance
- Debugging Camunda BPM Processes with Camunda Security
- Debugging Camunda BPM Processes with Camunda Connectors

- Debugging Camunda BPM Processes with Camunda APIs
- Debugging Camunda BPM Processes with Camunda Workflows
- Debugging Camunda BPM Processes with Camunda Reports

After completing this module, students will be able to:

- Understand the Camunda BPM process debugging process and be able to identify and troubleshoot errors.
- Utilize the Camunda BPM process debugging tools to identify and resolve issues.
- Develop strategies to optimize the Camunda BPM process debugging process.
- Implement best practices for debugging Camunda BPM processes.