ServiceNow Development
24-Hour Course Curriculum

8 Modules | 24 Training Hours | ServiceNow Developer • CAD • Technical Consultant

Module	Hours
1. Development Fundamentals and JavaScript	2
2. Application Development and Data Modeling	3
3. Client-Side Scripting and UI Customization	3
4. Server-Side Scripting and Glide APIs	4
5. Flow Designer and Application Automation	3
6. REST APIs, Integration and Data Exchange	3
7. Application Security, Testing and Deployment	3
8. Enterprise Development Project and Interview Preparation	3
Total	24

Module 1. Development Fundamentals and JavaScript — 2 Hours

- ServiceNow application architecture and environments
- JavaScript variables, functions, objects, arrays and conditions
- Client-side versus server-side execution
- Application scope and cross-scope access
- Script debugging and development best practices
- ServiceNow Studio and IDE concepts

Module 2. Application Development and Data Modeling — 3 Hours

- Create a scoped application and application files
- Create custom tables, fields and reference relationships
- Table extension and application data model
- Forms, views, related lists and application navigation
- Application properties and configuration options
- Map business requirements into data models

Module 3. Client-Side Scripting and UI Customization — 3 Hours

- Client Script types: onLoad, onChange, onSubmit, onCellEdit

- g_form and g_user APIs
- UI Policies and UI Policy Actions
- Mandatory, visible and read-only conditions
- GlideAjax and asynchronous server calls
- UI Actions and client-side validation
- Debugging and performance considerations
- Classic UI, workspaces and UI Builder concepts

Module 4. Server-Side Scripting and Glide APIs — 4 Hours

- Business Rules: before, after, async and display
- GlideRecord query, insert, update and delete
- GlideAggregate and efficient queries
- Script Includes and reusable functions
- GlideSystem (gs) methods
- Scheduled Script Executions
- Events and event-driven scripting
- Debugging, recursion prevention and secure coding

Module 5. Flow Designer and Application Automation — 3 Hours

- Triggers, actions, subflows and execution contexts
- Data pills, variables and conditions
- Approval and task automation
- Scripted actions and reusable automation
- Flow Designer versus Business Rules
- Error handling and execution troubleshooting
- Maintainable automation design

Module 6. REST APIs, Integration and Data Exchange — 3 Hours

- REST, HTTP methods and JSON
- Inbound REST and Scripted REST APIs
- Outbound REST Messages
- Authentication and credential management concepts
- REST API Explorer and Postman testing
- Import Sets and Transform Maps
- Integration error handling, logging and patterns

Module 7. Application Security, Testing and Deployment — 3 Hours

- Scoped application security and ACLs
- Scripted access conditions and cross-scope privileges
- Configuration versus customization
- Automated Test Framework (ATF) fundamentals

- Test cases, assertions and regression testing
- Update Sets, application publishing and deployment
- Source control concepts, code review and upgrade-safe development

Module 8. Enterprise Development Project and Interview Preparation — 3 Hours

- Project: Employee Equipment Request Management Application
- Gather requirements and create request tables
- Configure forms, views and navigation
- Implement client validation, Business Rules and Script Includes
- Automate approvals and fulfillment with Flow Designer
- Create a Scripted REST API endpoint
- Implement ACLs and tests
- Prepare deployment artifacts and technical documentation
- Interview scenarios: GlideRecord, GlideAjax, REST and debugging