# **Certified Hyperledger Fabric Developer**

### **Identity Management**

- Instantiate a wallet
- Import identities to a wallet
- Select and manage identity from a wallet

### **Network Configuration**

- Create and use connection profiles
- Instantiate and connect to a gateway
- Access networks and contracts

#### Smart Contract Development

- Define smart contract class/construct
- Define transaction functions
- Validate and sanitize inputs and arguments
- Implement deterministic logic/code
- Simple state interaction (Get, Put, Delete)
- Execute simple queries
- Create complex queries
- Define assets using key value pairs
- Identify potentially private data
- Incorporate private data collection
- Implement attribute based access control
- Initialization of the ledger state
- Install and instantiate a smart contract

#### **Smart Contract Invocation**

- Invoke smart contracts via CLI
- Submit one or more transactions
- Evaluate transaction functions e.g. for queries
- Query transaction history
- Call a transaction using transaction class (stateful)
- Create and issue an application contract
- Register and handle channel-based events

## Maintenance and Testing

- Handle error and success responses
- Identify and review logs
- Unit test contracts
- Diagnose and endorse policy conflicts
- Identify and correct non-determinism in functions
- Troubleshoot transaction flow