Certified MACH Architect

Exam Guide

The Certified MACH Architect exam has been designed to validate core skills for architects who design, manage, and deploy complex composable solutions using established MACH principles.

Target Exam Role/Minimally Qualified Candidate

Successful candidates should have the following experience:

- 1 to 2 years of full-time experience leading MACH projects and driving multiple transformation projects
- A similar amount of time performing the job tasks as reflected in the Exam Objectives in the table below

Exam Details

Number of questions: 60
Time allotted to take the exam: 120 minutes
Passing Score: 70%
Language Offered: English
Exam Format: Multiple choice and multiple response
Resources Available: None permitted during exam

Exam Topics and Content

The exam contains question items that cover the areas for the stated role as shown in the chart immediately below:

Category	Domain	Sub Topic	Exam Objectives
MCA 1			
Plan	MACH Fundamentals	Core Concepts	• Explain major MACH benefits: growth enablement, cost optimization, and risk

			reduction ● Explain major drivers for MACH adoption: speed, flexibility, and integration ● Differentiate MACH front end design from traditional design patterns ● Define Monolith, PBC (Packaged Business Capabilities), and Microservices ● Define hosting & deployment models for MACH ● Evaluate key MACH application benefits for a given case: Agility, Scalability, Flexibility, and Control ● Select correct design statements for a Composable Business Architecture
Plan	MACH Fundamentals	Composable Design	● Select correct design statements for a Composable Business Architecture
Plan	MACH Fundamentals	PBC Anatomy	● Define the 4 core elements of a PBC (Modularity, Autonomy, Discoverability, Orchestration)
MCA 2			
Plan	Strategy	Project Management	● Develop a business case to define project KPIs/OKRs ● Determine TCO with MACH technologies using available resources ● Define roles and responsibilities for all workstreams (PM, design, tech architecture, development, etc.) ● Create a roadmap of summary milestones, defining project scope evolution ● Document specific deliverables and connect them to KPIs/OKRs
Plan	Strategy	Executive Summary	● Develop a summary presentation illustrating project scope for stakeholders
Plan	Strategy	Organizational Engagement	● Lead workshops exploring composable solutions for business challenges ● Use MACH tools to measure, track, and improve diversity, equity, inclusion, and belonging (DEIB)
Plan	Strategy	Strategy Alignment	● Define frameworks for aligning business and technology when designing Microservices ● Place selected applications in the pace-layered application model ● Assess a given organization's MACH readiness with available tools
Plan	Strategy	Planning	● Plan architecture to support future

			business needs with composable thinking
MCA 3			
Plan	Governance	Best Practices	• Develop guidelines and best practices for implementing composable architectures.
Plan	Governance	IT Governance	• Define a governance framework for managing composable IT practices
Plan	Governance	Gap Analysis	• Conduct gap analysis between AS-IS and TO-BE architectures • Analyze AS-IS architecture to identify weaknesses and strengths • Produce an assessment document outlining AS-IS architecture
Plan	Requirements Gathering	Product	• Evaluate functional requirements for technical enablement
Build	Solutioning	Product	• Evaluate functional requirements for technical enablement • Review and incorporate customer journey maps and service blueprints (front-stage & back-stage processes)
MCA 4			
Build	Solutioning	UX	• Review and incorporate information architecture, content models, and interaction design • Evaluate or review visual designs and/or design style tiles
Build	Solutioning	Tech Architecture	• Develop data models and integration plans (including API brokering) • Select technology stack and MACH vendors, and map to the project roadmap • Design and document TO-BE architecture (objectives, constraints, standards) • Design and develop APIs following best practices including security
Build	Solutioning	Security	• Establish security protocols (zero trust, authentication, encryption, etc)
Build	Solutioning	Testing Strategy	• Lead testing strategy (unit, integration, end-to-end testing) in collaboration with QA team
MCA 5			
Build	Technology Enablement	Design	• Identify stages of atomic design for frontend application development

Build	Technology Enablement	Tech Architecture	• Ensure compliance with regulations in composable system designs
Build	Technology Enablement	AI	• Identify AI statements as composable or isolated AI components • Apply MACH principles to Generative AI solutioning • Identify practical considerations when embedding Generative AI solutions in MACH environments
MCA 6			
Build	Implementation	Tech Enablement	• Set up development, staging, and production environments (MACH compliant) • Implement CI/CD pipeline and code repository setup
Build	Implementation	UX	• Develop a design system (managed by Storybook or similar tools)
Build	Implementation	Scrum Management	• Develop backlog, conduct story pointing, and manage sprint planning
Build	Implementation	Development	• Implement sprint tasks, migrate content/data, build integrations, and conduct unit testing
MCA 7			
Build	Deployment	Deployment Planning	• Develop launch plans, optimize for launch, and document training materials
Build	Deployment	Testing	• Validate final integrated testing
Build	Deployment	Launch	• Launch the application, define a deployment process (CI/CD, rollback strategies)
MCA 8			
Run	Deployment	Knowledge Transfer	• Transition to the maintenance team, conduct post-deployment reviews
Run	Post-Deployment and Operations	Optimization	• Define and utilize optimization metrics to identify benefits achieved
Run	Post-Deployment and Operations	Operating Model	• Ensure transition of the operating model for ongoing operations
MCA 9			
Manage	Strategy	Strategy Alignment	• Align strategies based on composable principles and business goals

Manage	Strategy	Operating Model	• Define Operating Model development explicitly
Manage	Governance	Impact Assessment	• Assess ecosystem changes to determine impact on composable architecture
Manage	Governance	Migration Planning	• Define a comprehensive data migration plan
Manage	Solutioning	Tech Architecture	• Evaluate System Integrators for composable competencies
Manage	Solutioning	Modernization	• Modernize the application landscape by decomposing System of Records into PBC and microservice solutions
Manage	Deployment	Release Strategy	• Outline a release and git flow strategy
Manage	Implementation	Scrum Management	• Conduct initial tasks that need to be completed before starting an agile delivery
Manage	Post-Deployment and Operations	Benefits Assessment	• Conduct post-implementation reviews to assess benefits of new composable systems explicitly