

Engineering Manager

Find the detailed version of this roadmap along with other similar roadmaps

roadmap.sh

- Related Roadmaps
- Backend Development
 - DevOps Engineering
 - System Design
 - Software Architect

EM vs Tech Lead vs IC

What is Engineering Management?

People Product Process

Key Focus Areas

Technical Leadership

- Foundational Knowledge
- Software Engineering Background
 - System Design and Architecture
 - Technical Debt and Management
 - Code Review Best Practices
 - Technical Documentation

- Technical Strategy
- Technical Roadmapping
 - Architectural Decision-Making
 - Build vs Buy Evaluation
 - Technical Risk Assessment
 - Scaling Infrastructure
 - Legacy System Retirement

- Quality and Process
- System Monitoring & Performance
 - CI/CD Implementation
 - Development / Release Workflow
 - Testing Strategies
 - Technical Standards Setting
 - Security Best Practices
 - Incident Management

People Management

- Team Development
- Hiring and Recruitment
 - Team Structure and Design
 - Performance Evaluations
 - Career Development Planning
 - Mentoring and Coaching

- Leadership Skills
- Delegation
 - Conflict Resolution
 - Feedback Delivery
 - Team Motivation
 - Trust / Influence Building
 - Emotional Intelligence

- Communication
- One-on-One Meetings
 - Team Meetings
 - Status Reporting
 - Stakeholder Management
 - Cross-functional Collaboration

Project Management

- Execution
- Agile methodologies
 - Project Tracking
 - Milestone Management
 - Scope Management
 - Timeline Estimation

- Project Planning
- Resource Allocation
 - Sprint Planning
 - Release Management
 - Risk Management
 - Dependency management

- Strategic Thinking
- Product strategy alignment
 - Business Case Development
 - ROI analysis
 - Market awareness
 - Competitive Analysis
 - Competitive Analysis

Business Acumen

- Measurement
- KPI Definition
 - Velocity Tracking
 - Quality Metrics
 - Team Health Metrics
 - Project Postmortems

- Budget Planning
- Resource forecasting
- Cost Optimization
- Vendor Management
- Financial Management

- Company Culture
- Change management
- Organization structure
- Politics navigation
- Cross-department collaboration
- Organizational Awareness

Culture Building

- Team Culture
- Defining and Enforcing Values
 - Inclusive environment creation
 - Team Traditions and Rituals
 - Recognition programs
 - Social connections
 - Bias Recognition / Mitigation

- Engineering Culture
- Innovation fostering
 - Learning culture development
 - Knowledge sharing practices
 - Technical excellence mindset
 - Blameless Post-mortems

Crisis Management

- Team Support
- Contingency planning
 - Disaster recovery
 - Business continuity
 - Security incident handling
 - Production issues management

- Risk Mitigation
- Contingency planning
 - Disaster recovery
 - Business continuity
 - Security incident handling
 - Production issues management

- Incident Response
- Emergency protocols
 - War Room Management
 - Stakeholder Communication
 - Service Recovery
 - Post-incident analysis

Stakeholder Management

- Documentation
- Architecture documentation
 - Process documentation
 - Decision records
 - Best Practices
 - Lessons Learned

- Partner Management
- Vendor relationships
 - Technology partnerships
 - Integration management
 - API strategy
 - External collaboration

- Customer Relations
- Customer feedback integration
 - Technical customer support
 - Customer success alignment
 - Feature prioritization
 - Technical partnerships

Knowledge Management

- Knowledge Transfer
- Mentoring Programs
 - Knowledge bases
 - Tech Talks
 - Brown Bags

- Executive Communication
- Board presentations
 - Executive summaries
 - Strategic proposals
 - Budget requests
 - Vision alignment

Change Management

- Team Change
- Reorganizations
 - Team mergers
 - Role transitions
 - Responsibility shifts
 - Culture evolution

- Technical Change
- Migration planning
 - Legacy system retirement
 - Technology adoption
 - Tool transitions
 - Process changes

- Organizational Change
- Change strategy
 - Impact assessment
 - Stakeholder management
 - Communication planning
 - Resistance management

Visit the following relevant tracks about system design and architecture

[Software Architect](#)

[System Design](#)

[Software Design & Architecture](#)