Software Development

Program Brochure · 2026

SOFTWARE ENGINEERING LEADERSHIP

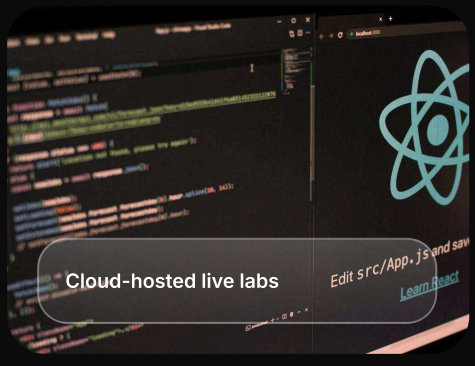
Lead engineers. Deliver outcomes.

Expert ↗ | 48 Hours ↗ | SAM-SELEAD ↗

Software Development

Code that ships.

18 programs in this track



7

modules · hands-on labs · capstone project

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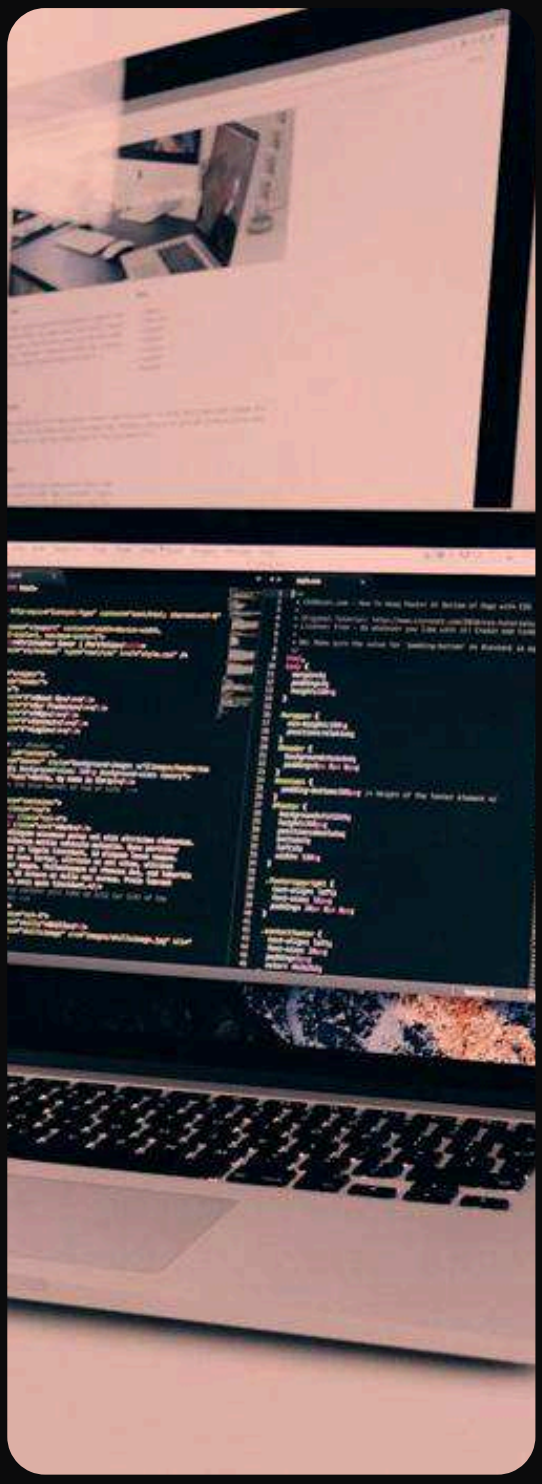
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AT A GLANCE

Level	**Expert**
Duration	**48 Hours**
Modules	**7**
Certificate	**SAM-SELEAD**

Program overview

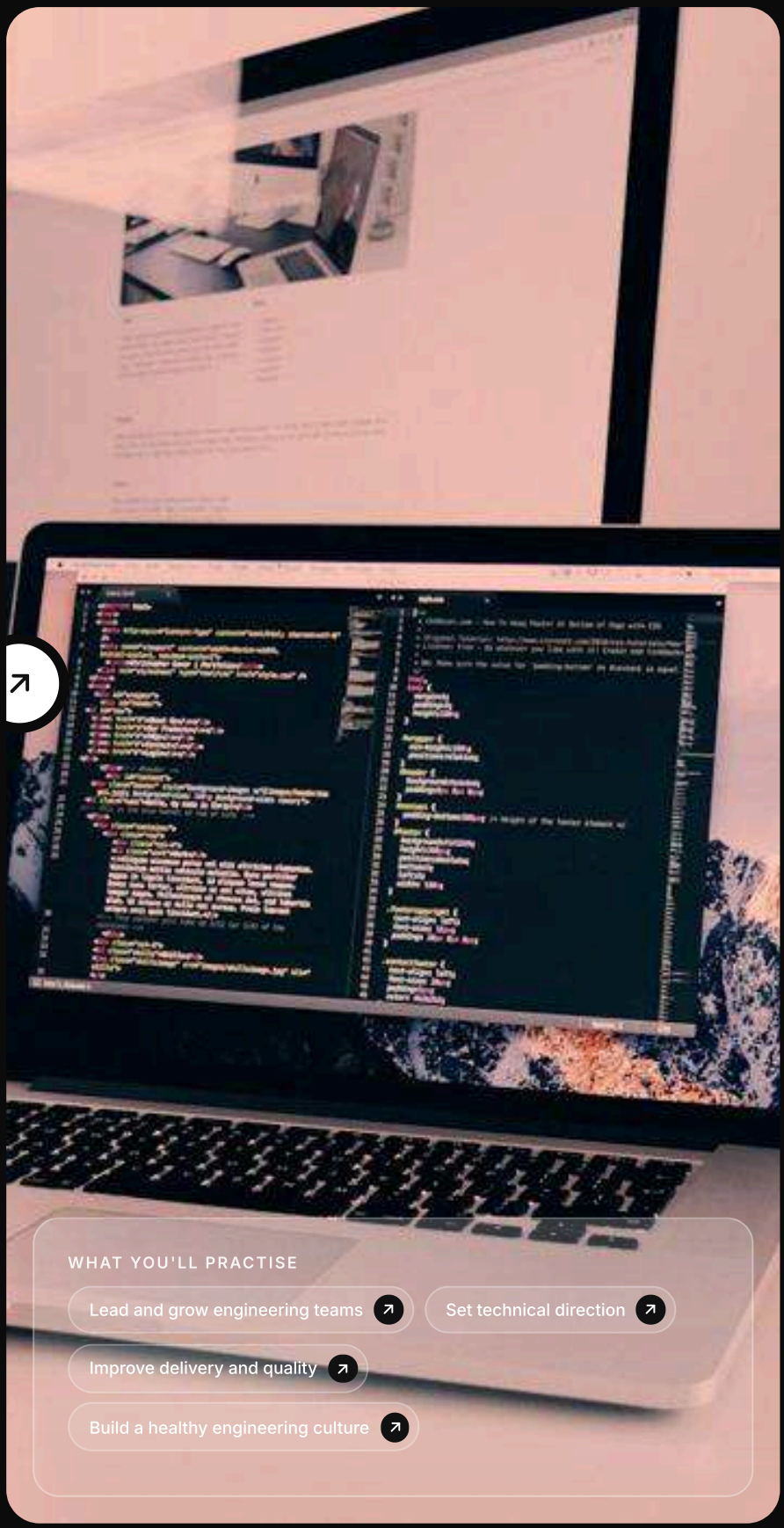
Lead engineers. Deliver outcomes.

For senior engineers and managers — leading teams, technical strategy, delivery and engineering culture.

Moving from strong engineer to effective leader requires a new set of skills: guiding people, setting technical direction and improving how teams deliver. This expert program, for senior engineers, tech leads and managers, covers leadership styles, coaching and feedback, hiring, technical strategy, architecture governance, delivery metrics, stakeholder communication and building a healthy engineering culture.

DELIVERY

Instructor-led · Live virtual · Blended



WHAT YOU'LL PRACTISE

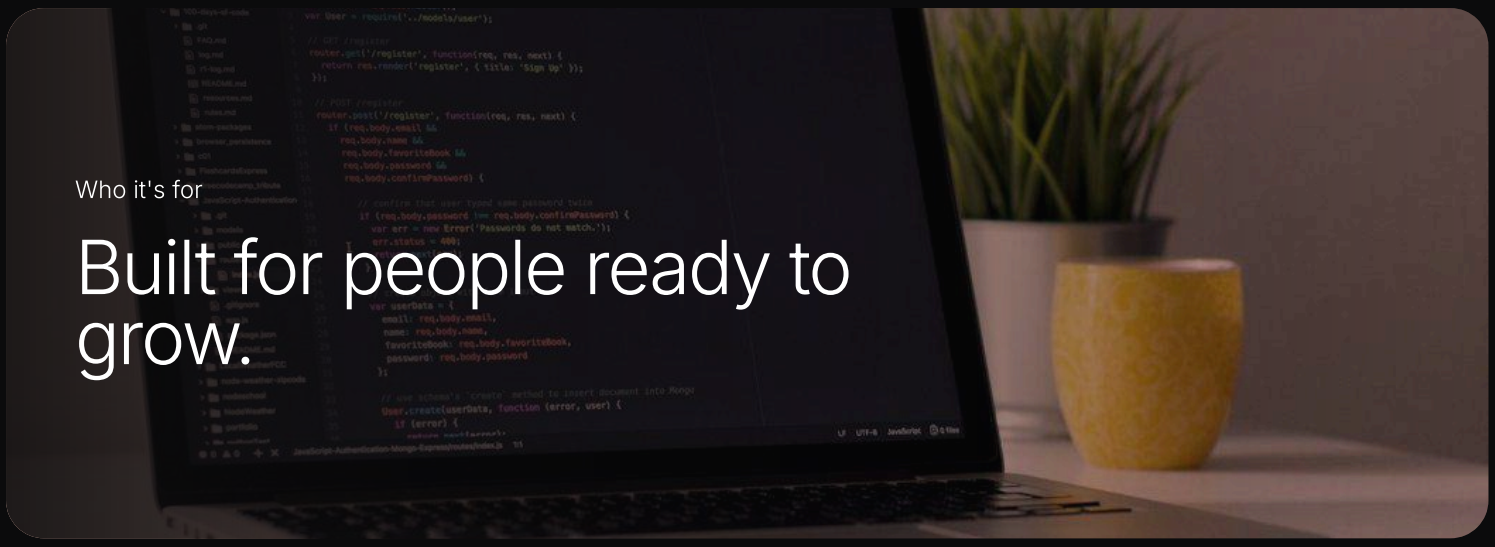
- Lead and grow engineering teams
- Set technical direction
- Improve delivery and quality
- Build a healthy engineering culture

LEVEL
Expert

DURATION
48 Hours

CERTIFICATION
SAM-SELEAD

TRACK
Software Development



Who it's for

Built for people ready to grow.

01

Students & freshers

Python, Java, C/C++ and JavaScript foundations

02

Frontend developers

React, Angular and TypeScript

03

Backend developers

Node, Django, FastAPI and Spring Boot

04

Senior engineers

Microservices, system design, leadership

PREREQUISITES

Several years of professional software engineering experience	01
Current or upcoming lead, senior or manager responsibility	02
Familiarity with agile delivery practices	03

ROLES THIS PREPARES YOU FOR

- Engineering Manager ↗
- Tech Lead ↗
- Staff or Principal Engineer ↗
- Head of Engineering (emerging) ↗
- Engineering Team Lead ↗

Learning outcomes

What you'll be able to do.



01	Adapt leadership style to individuals, teams and situations
02	Run effective one-on-ones, feedback and coaching conversations
03	Hire, onboard and grow engineers using clear career frameworks
04	Set technical direction using architecture decisions and roadmaps
05	Improve delivery using DORA metrics and engineering practices
06	Build inclusive, psychologically safe and accountable engineering cultures

Program runway

Module by module.

7
modules · 48 hours

01	**From Engineer to Leader** Tech lead, manager and staff paths, Leadership styles and situational leadership, Managing your time and energy	6 hrs
02	**Coaching, Feedback and Growth** Effective one-on-one meetings, Giving and receiving feedback, Coaching versus mentoring	8 hrs
03	**Hiring and Team Building** Defining roles and hiring bars, Structured interviews and rubrics, Reducing bias in hiring	6 hrs
04	**Technical Strategy and Architecture** Writing a technical vision, Architecture decision records (ADRs), RFC and design review processes	8 hrs
05	**Delivery and Engineering Excellence** Agile, Scrum and Kanban in practice, Estimation and planning, DORA metrics and SPACE framework	8 hrs
06	**Stakeholders and Communication** Working with product and design, Managing up and across, Communicating trade-offs to non-engineers	6 hrs
07	**Culture, Change and Scaling** Psychological safety and inclusion, Engineering values and rituals, Leading change and reorganisations	6 hrs
★	**Capstone · Engineering Leadership Transformation Plan** Assessment, capstone review and certification	

The syllabus.

Modules 01–03

Module 01

From Engineer to Leader

6 hours

Hands-on lab
Draft your personal leadership charter and first-90-days plan.

TOPICS COVERED

- Tech lead, manager and staff paths
- Leadership styles and situational leadership
- Managing your time and energy
- Delegation and letting go of code
- Building trust with a new team

Module 02

Coaching, Feedback and Growth

8 hours

Hands-on lab
Role-play a difficult feedback conversation with structured peer review.

TOPICS COVERED

- Effective one-on-one meetings
- Giving and receiving feedback
- Coaching versus mentoring
- Career ladders and growth plans
- Handling underperformance fairly

Module 03

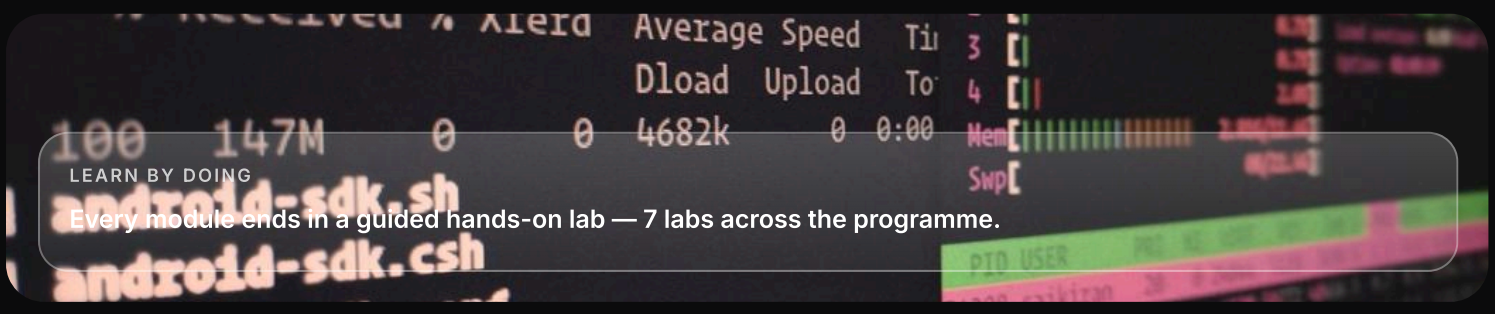
Hiring and Team Building

6 hours

Hands-on lab
Design a structured interview loop and scoring rubric for a role.

TOPICS COVERED

- Defining roles and hiring bars
- Structured interviews and rubrics
- Reducing bias in hiring
- Onboarding that accelerates new hires
- Team topologies and team design



LEARN BY DOING

Every module ends in a guided hands-on lab — 7 labs across the programme.

Syllabus, continued.

Modules 04–05

Module 04

Technical Strategy and Architecture

8 hours

Hands-on lab
Write an ADR and a one-page technical strategy for your team.

TOPICS COVERED

- Writing a technical vision
- Architecture decision records (ADRs)
- RFC and design review processes
- Managing technical debt
- Build versus buy decisions

Module 05

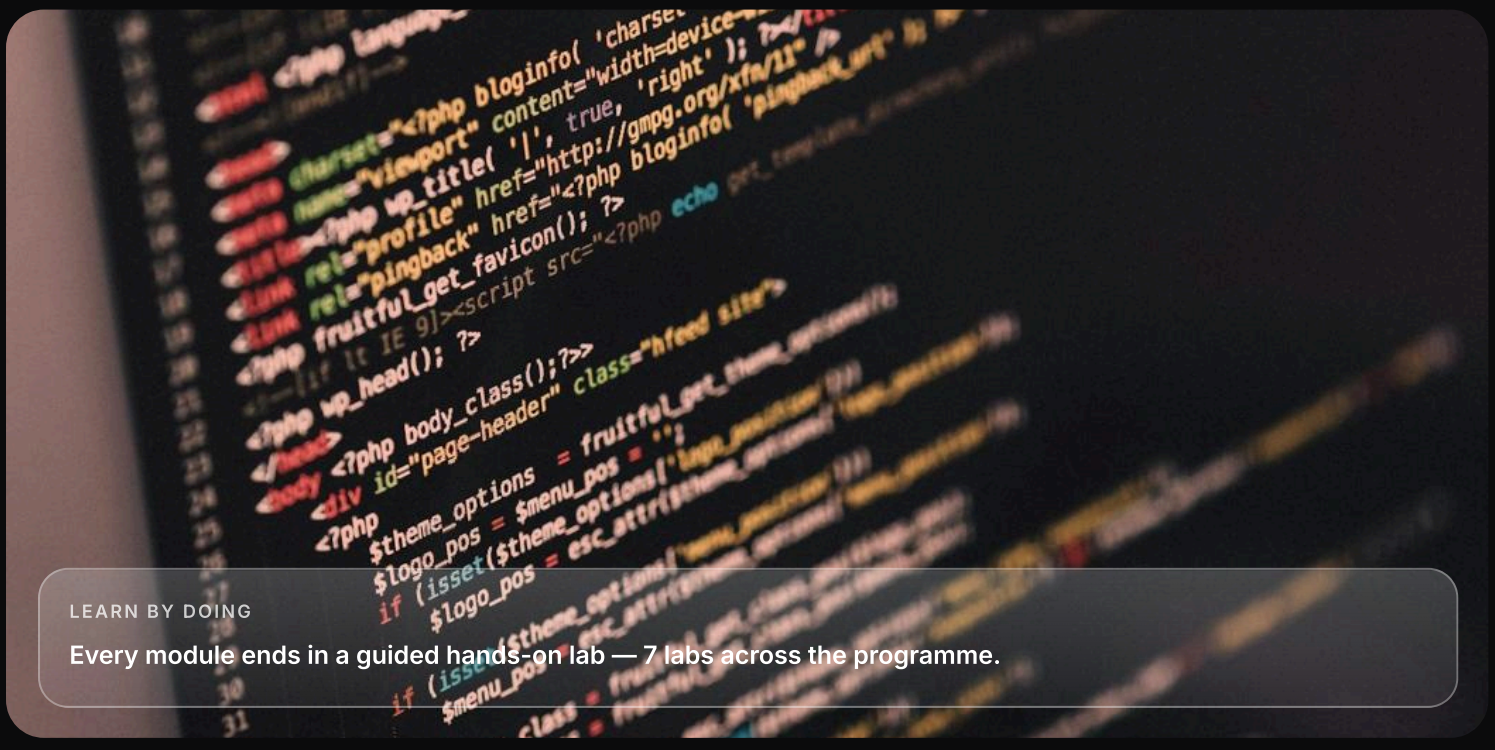
Delivery and Engineering Excellence

8 hours

Hands-on lab
Assess a team's delivery using DORA metrics and propose improvements.

TOPICS COVERED

- Agile, Scrum and Kanban in practice
- Estimation and planning
- DORA metrics and SPACE framework
- Code review and CI/CD practices
- Incident management and blameless postmortems



LEARN BY DOING

Every module ends in a guided hands-on lab — 7 labs across the programme.

Syllabus, continued.

Modules 06–07

Module 06

Stakeholders and Communication

6 hours

Hands-on lab
Present a roadmap trade-off proposal to simulated business stakeholders.

TOPICS COVERED

- Working with product and design
- Managing up and across
- Communicating trade-offs to non-engineers
- Writing clear updates and proposals
- Negotiation and conflict resolution

Module 07

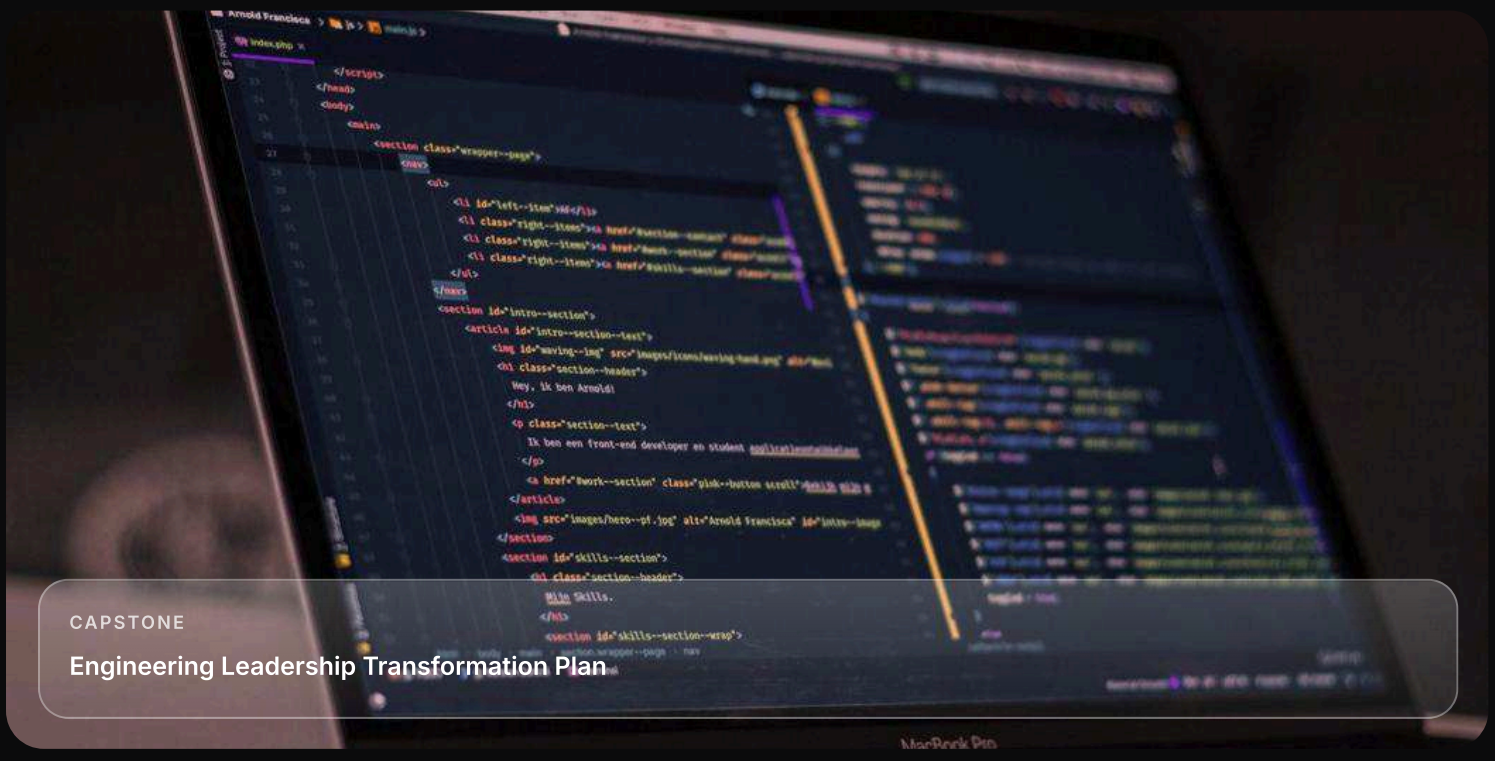
Culture, Change and Scaling

6 hours

Hands-on lab
Design a culture improvement plan with measurable team health signals.

TOPICS COVERED

- Psychological safety and inclusion
- Engineering values and rituals
- Leading change and reorganisations
- Preventing burnout and sustaining pace
- Scaling teams and leadership layers
- Final assessment



CAPSTONE

Engineering Leadership Transformation Plan



Real tools. Real work.

Frameworks & standards

Scrum ↗

FAIR ↗

FOCUS AREAS

Lead and grow engineering teams	01
Set technical direction	02
Improve delivery and quality	03
Build a healthy engineering culture	04



LAB ACCESS

24×7 cloud labs for the length of the program

01

Team Health Assessment

Assess a real or case-study team using delivery metrics and team health surveys, then present a prioritised improvement plan.

02

Technical Strategy Document

Write a technical vision and strategy with ADRs, technical debt priorities and a quarterly roadmap for an engineering team.

03

Hiring Process Redesign

Design an end-to-end hiring process with role scorecards, structured interviews, rubrics and a thirty-day onboarding plan.



Capstone project

Engineering Leadership Transformation Plan

Create and present a comprehensive leadership plan for a team or organisation, covering people development, hiring, technical strategy, delivery metrics,

Certification

SAM-SELEAD

Awarded on successful completion of the program assessments.

- MCQ assessments
- Practical lab evaluation
- Project & capstone review
- Final presentation



The SAM Learning Framework™

Scenario · Apply · Master · Mentor

Phase 01

Scenario

Real-world attack and use-case scenarios open every module.

Phase 02

Apply

Hands-on lab work, CTF challenges and live projects.

Phase 03

Master

Assessment, peer review and certification prep.

Phase 04

Mentor

Post-program career guidance and support.

DELIVERY MODELS

- Instructor-Led (ILT)
- Virtual Instructor-Led
- Self-Paced Online
- E-Learning Licensing
- Blended Learning
- Corporate Onsite
- Bootcamp Intensive

Learning path · Software Development

Where this program fits.

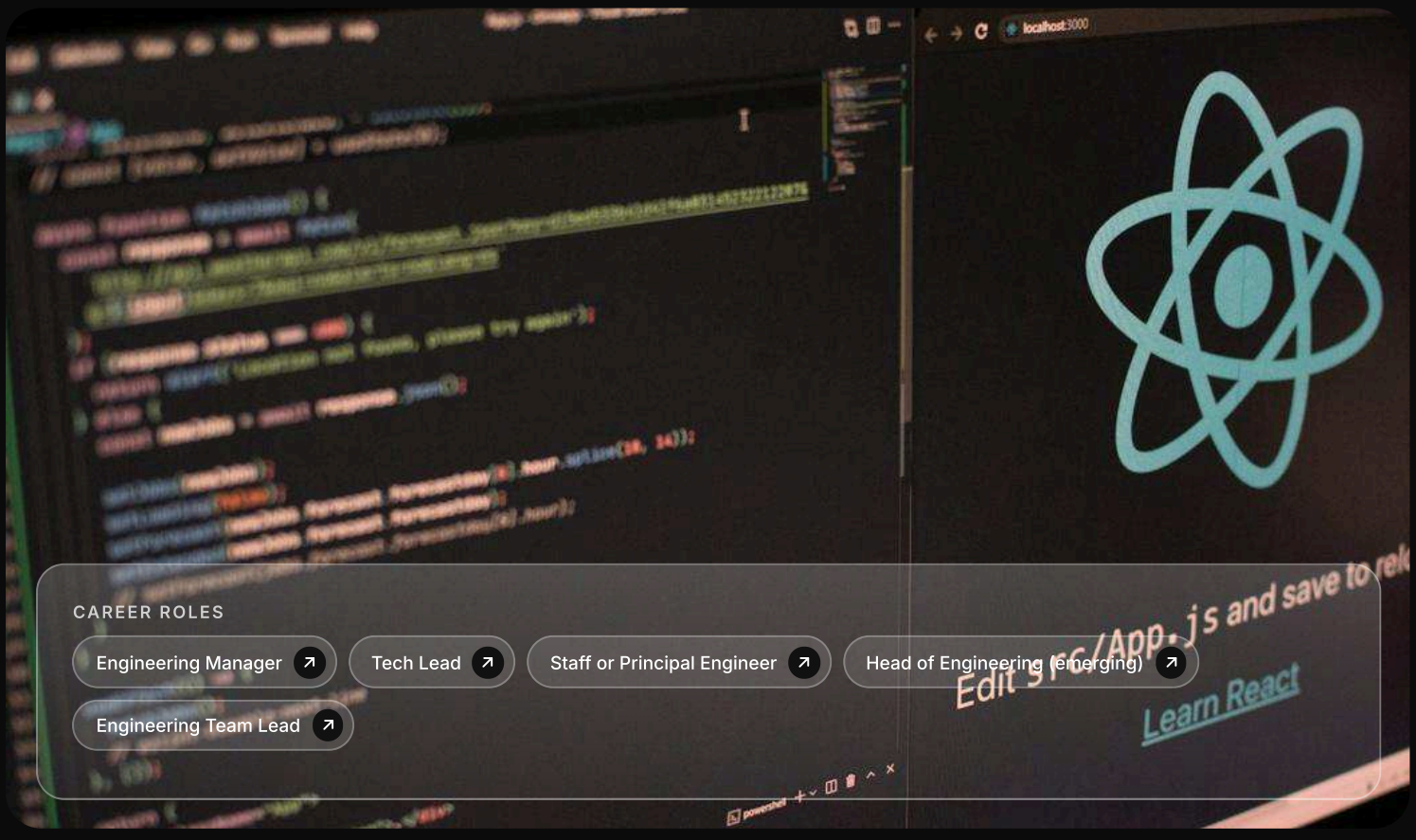
Beginner	Intermediate	Advanced	Expert
4 programs	10 programs	3 programs	You are here

Before this

Full Stack Development (React + Node + MongoDB)	160 Hours
Microservices Architecture	72 Hours
System Design & Architecture	64 Hours

Up next

The top of this pathway — explore related tracks.



Questions, answered.

Q01

Do I need prior experience to join?

Yes. This expert program is designed for experienced engineers who already lead or will soon lead people or technical direction. Several years of software engineering experience is expected, though no formal management title is required.

Q02

How are classes scheduled and delivered?

Sessions are instructor-led and run as live virtual or blended batches, with weekday and weekend options where available. Each session combines concept walkthroughs, live coding and guided lab time, with recordings or notes shared for revision.

Q03

Will I receive a certificate?

Yes. Learners who complete the required labs, projects and final assessments receive the Samcommunity Academy SAM-SELEAD certificate. It is awarded on the basis of assessed work, not attendance alone.

Q04

What tools and lab access will I need?

No specific software is required beyond a laptop, video conferencing and shared documents. Sessions use case studies, templates, role-plays and frameworks that you apply to your own team context.

Q05

Is career support included?

You get guidance on building a portfolio from your projects, resume and GitHub profile reviews, and mock technical interviews. We help you prepare and present your skills, but we do not guarantee jobs, placements or salary outcomes.



Let's talk

START SOFTWARE ENGINEERING LEADERSHIP.

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samcommunity.in

@samcommunity_

Learn practical skills. Grow with mentors.

Xylyn Samcommunity Private Limited · DPIIT-recognized startup · Surat, Gujarat, India