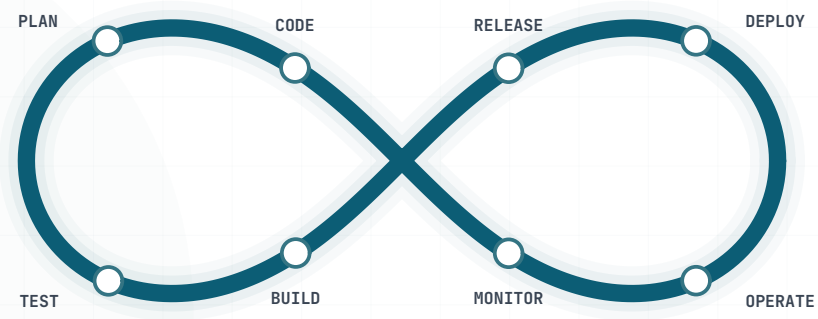
12-WEEK ADVANCED TRACK

DEVOPS & PLATFORM ENGINEERING

From Git fundamentals to GitOps, Kubernetes at scale, DevSecOps, observability and AI-assisted operations — built with industry mentors, six real-time projects and one production-grade capstone.

KUBERNETES · TERRAFORM · ARGO CD · GITHUB ACTIONS · DOCKER · ANSIBLE · PROMETHEUS · OPENTELEMETRY · VAULT · ISTIO · AWS · AZURE



6 real-time projects • 1 capstone • Live mentorship • Placement support

WHO WE ARE

Learning engineered for the industry you will join.

Edufyi Tech Solutions transforms the educational journey for college students through cutting-edge virtual internships and structured, mentor-led training. Every learner ships real infrastructure, reviews real pull requests and defends a real capstone.

12	06	25+	01
WEEKS OF MENTORSHIP	REAL-TIME PROJECTS	TOOLS IN THE STACK	CAPSTONE DEFENCE

MISSION

To equip students with virtual internships and production-grade projects that convert into placements, guided end-to-end by working industry mentors.

VISION

To transform education by linking academic learning to real operational practice, so graduates arrive job-ready on day one.

WHO IS IT FOR

Built for four kinds of learners

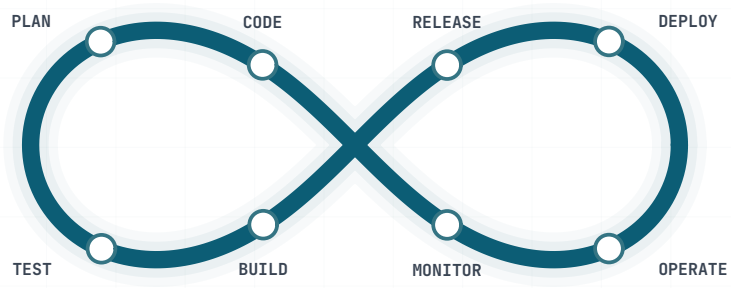
- **Final-year & pre-final students**
  CS / IT / ECE students who want an infrastructure-first career path.
- **Fresh graduates**
  Bridge the gap between coursework and what hiring teams actually test.
- **Manual QA & support engineers**
  Move laterally into CI/CD, automation and reliability roles.
- **Junior developers**
  Own your pipelines, containers, cloud footprint and on-call quality.

EDUFYI TECH
SOLUTIONS

HOW THE WORK FLOWS

The lifecycle you will operate

Every module maps to a stage of the loop. You do not learn tools in isolation — you learn the hand-offs between them.



REFERENCE DELIVERY PIPELINE

COMMIT	BUILD	SCAN	ARTIFACT	DEPLOY	VERIFY
git push	Actions	Trivy/SAST	OCI registry	Argo CD	SLO gates
01	02	03	04	05	06

THREE ENGINEERING PILLARS

AUTOMATE

Everything reproducible: IaC, pipelines, policy as code.

OBSERVE

Metrics, logs, traces and SLOs before incidents, not after.

SECURE

Shift-left scanning, secrets management and supply-chain trust.

HOW WE MEASURE YOU: DORA METRICS

01 **DEPLOY FREQUENCY**

Ship on demand, many times a day.

02 **LEAD TIME FOR CHANGE**

Commit to production in under an hour.

03 **CHANGE FAILURE RATE**

Keep failed changes under 15%.

04 **TIME TO RESTORE**

Recover service in minutes, not days.

LESSON PLAN

Weeks 01 – 03

WEEK 01

DevOps Foundations & SDLC

Culture, lifecycle and the operating model

- Why DevOps: flow, feedback, continuous learning
- SDLC models vs. DevOps operating model
- DORA four key metrics & elite performance
- Value-stream mapping a delivery pipeline
- Linux essentials, shell, systemd, networking basics

LINUX BASH DORA AGILE

WEEK 02

Git, Trunk-Based Delivery & Code Review

Version control the way product teams use it

- Git internals: objects, refs, rebase vs. merge
- Trunk-based development & feature flags
- Git Flow, release branches, semantic versioning
- PR reviews, CODEOWNERS, conventional commits
- Pre-commit hooks, linting and signed commits

GIT GITHUB PRE-COMMIT SEMVER

WEEK 03

Continuous Integration at Scale

Fast, trustworthy build feedback

- GitHub Actions: matrices, caching, reusable workflows
- Jenkins pipelines as code & shared libraries
- Unit, integration and contract test stages
- Build artifacts, caching and pipeline performance
- Quality gates with SonarQube coverage thresholds

GITHUB ACTIONS JENKINS GITLAB CI SONARQUBE

LESSON PLAN

Weeks 04 – 06

WEEK 04

Containers & Image Supply Chain

From Dockerfile to hardened, signed images

- Container internals: namespaces, cgroups, OverlayFS
- Docker Compose for local multi-service stacks
- Vulnerability scanning, SBOM and Cosign signing
- Multi-stage builds, distroless & slim images
- Registries, tagging strategy, image promotion

DOCKER · BUILDKIT · TRIVY · SBOM · COSIGN

WEEK 05

Infrastructure as Code with Terraform

Cloud infrastructure that is reviewable

- Terraform core: providers, state, plan/apply
- Reusable landing zones for AWS / Azure
- Policy as code with Sentinel / OPA & Terratest
- Modules, workspaces, remote state & locking
- Drift detection, imports and safe destroys

TERRAFORM · AWS · AZURE · OPA

WEEK 06

Configuration Management & Cloud Ops

Repeatable servers, repeatable environments

- Ansible playbooks, roles, inventories, Vault
- Packer golden images & autoscaling groups
- Cost awareness and FinOps tagging discipline
- Idempotency and immutable infrastructure
- Core cloud services: IAM, VPC, S3, RDS, load balancers

ANSIBLE · PACKER · IAM · FINOPS

LESSON PLAN

Weeks 07 – 09

WEEK 07

Kubernetes Fundamentals

Orchestration you can reason about

- Architecture: control plane, kubelet, scheduler, etcd
- Storage classes, PVs, StatefulSets and jobs
- kubectl debugging and cluster troubleshooting
- Pods, Deployments, Services, Ingress, ConfigMaps
- Probes, resource requests/limits, HPA autoscaling

KUBERNETES · KUBECTL · EKS · AKS

WEEK 08

Advanced Kubernetes & Service Mesh

Operating clusters like a platform team

- Helm charts, Kustomize overlays, environment promotion
- Operators and Custom Resource Definitions
- Progressive delivery: canary and blue-green
- RBAC, network policies, admission control
- Istio / Linkerd: mTLS, traffic shifting, retries

HELM · KUSTOMIZE · ISTIO · ARGO ROLLOUTS

WEEK 09

GitOps & Continuous Delivery

Git as the single source of truth

- GitOps principles and reconciliation loops
- Environment promotion & release strategies
- Rollback, disaster recovery and change safety
- Argo CD / Flux: app-of-apps, sync waves, drift repair
- Secrets in GitOps: Sealed Secrets, External Secrets

ARGO CD · FLUX · GITOPS · SEALED SECRETS

LESSON PLAN

Weeks 10 – 12

WEEK 10 — DevSecOps & Supply-Chain Security

Security as a pipeline stage, not a gate

- Threat modelling and shift-left security
- HashiCorp Vault: dynamic secrets and rotation
- SLSA levels, provenance and compliance evidence
- SAST, DAST, SCA and secret scanning in CI
- OPA / Kyverno policy enforcement in clusters

VAULT · TRIVY · KYVERNO · SLSA · ZAP

WEEK 11 — Observability & Site Reliability

Know before your users tell you

- Metrics, logs, traces: the three signals
- OpenTelemetry instrumentation end-to-end
- Incident response, postmortems, chaos engineering
- Prometheus, Grafana, Alertmanager, Loki, Tempo
- SLI / SLO / error budgets and on-call practice

PROMETHEUS · GRAFANA · OPENTELEMETRY · LOKI · SRE

WEEK 12 — Platform Engineering, AIOps & Capstone

Where DevOps is heading next

- Internal developer platforms & Backstage portals
- AIOps: anomaly detection, AI-assisted incident triage
- Capstone build, review and presentation
- Golden paths, self-service and paved roads
- LLMOps & MLOps pipelines in a nutshell

BACKSTAGE · AIOPS · MLOPS · CROSSPLANE

HANDS-ON

Six real-time projects

Each project is graded, reviewed by a mentor and lands in your portfolio with a public repository and an architecture write-up.

P1 Zero-touch CI/CD pipeline

Build, test, scan and deploy a microservice with GitHub Actions and environment gates.

P2 Containerised microservices stack

Multi-stage Docker builds, Compose local stack, hardened and signed images.

P3 Terraform cloud landing zone

VPC, IAM, compute and managed database provisioned from reusable modules.

P4 Kubernetes production deployment

Helm-packaged app with autoscaling, ingress, secrets and canary rollout.

P5 GitOps with Argo CD

Declarative multi-environment delivery, drift repair and one-click rollback.

P6 Observability & SRE workspace

Prometheus + Grafana + Loki dashboards, SLOs, alerts and an incident postmortem.

CAPSTONE

Ship a production-grade platform, end to end.

Provision cloud infrastructure with Terraform, deliver a containerised application through a secured GitOps pipeline onto Kubernetes, and prove it with SLO dashboards, alerting and a documented incident drill.

TERRAFORM · K8S · ARGO CD · VAULT · GRAFANA

EDUFYI TECH SOLUTIONS

OUTCOMES

What you walk away with

ROLE-READY

DevOps Engineer, SRE, Platform or Cloud Engineer interviews.

PORTFOLIO

7 documented repositories with architecture diagrams.

CERTIFIED

Internship, training and course certificates + LOR.

MENTORED

Live reviews, mock interviews and resume engineering.

OUR PROCESS

01 **Demo call**
See the curriculum and mentors.

02 **Choose a plan**
Pick the track that fits your goals.

03 **Enroll**
Join the cohort and community.

04 **Engage 2–3 months**
Weekly labs, reviews and stand-ups.

05 **Get placed**
Portfolio, mock interviews, referrals.

CERTIFICATIONS

- ✓ **Internship Certificate**
- ✓ **Training Certificate**
- ✓ **Course Certificate**
- ✓ **Letter of Recommendation**

WHAT EVERY COHORT INCLUDES

LIVE MENTOR SESSIONS

Weekly working sessions with practising DevOps engineers.

LAB ENVIRONMENTS

Guided cloud and cluster labs with reference repositories.

CODE & DESIGN REVIEWS

Pull-request feedback on every project you submit.

INTERVIEW PREP

Scenario rounds, troubleshooting drills and resume review.

LIFETIME RESOURCES

Recordings, runbooks, cheat sheets and community access.

PLACEMENT SUPPORT

Referrals through our hiring tie-up companies.

ACCREDITED CERTIFICATIONS.

Every learner receives industry-recognised, accredited certificates on completion of the internship, industrial training and capstone project modules.



INTERNSHIP CERTIFICATE
Accredited Certification



INDUSTRIAL TRAINING
Accredited Certification



PROJECT COMPLETION
Accredited Certification

INTERNSHIP

Verified internship completion credential

TRAINING

Industrial training hours certified

PROJECT

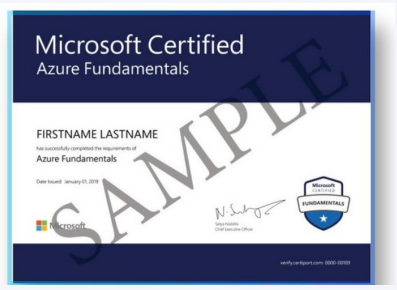
Capstone project completion proof

GLOBAL MNC CERTIFICATIONS.

Learners are prepared for and certified through globally recognised professional certification programs from leading technology companies.



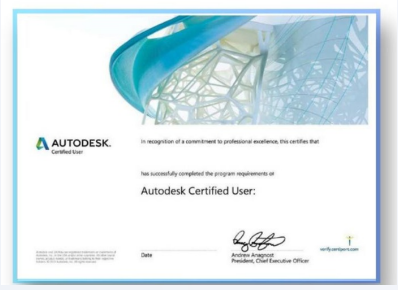
CISCO
Cybersecurity CCST



MICROSOFT
Azure Fundamentals



IBM
Internet of Things



AUTODESK
Certified User



ESB
Entrepreneurship

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