

# CSMIT

## Integrated Technical Training & Placement Ecosystem

### 1. Project Vision

CSMIT is a high-performance Ed-Tech platform designed to synchronize technical education with professional recruitment. It manages the entire lifecycle of a student—from public inquiry and classroom training to timed assessments and professional placement.

### 2. Core Modules & User Roles

#### A. Public Landing Page

The landing page serves as the primary marketing funnel.

- **Hero & About:** Interactive modals explaining the institute's mission.
- **Video Marquee:** Dual-direction auto-scrolling YouTube demo walls.
- **Tabbed Feature Dashboard:** Upcoming batches, searchable study library, and Wall of Fame.
- **Inquiry API:** Course-specific enrollment forms.

#### B. Administrative Control Panel

A centralized hub for system-wide management.

- **User Management:** Full CRUD operations with role-based filtering (Admin/Trainer/Student).
- **Academic Mapping:** Trainer-to-Batch assignments and course definitions.
- **Global Search:** Debounced header search for instant data filtering.
- **Content CMS:** Forms for Success Stories, Careers, and Blogs.

#### C. Trainer Dashboard

Focused on operational efficiency for educators.

- **Classroom Context:** Real-time batch countdowns and greetings.
- **Operations Hub:** Attendance, task assignment, and performance tracking.

- **HR Self-Service:** Leave management with automated logic.
- **Schedule Intelligence:** Interactive monthly event calendar.

## D. Student Dashboard

A personalized portal for learning and professional growth.

- **Learning Analytics:** Progress cards for assignments, batches, and fees.
- **Timed Assessment:** Distraction-free "Exam Mode" for objective testing.
- **Tech Shorts:** Vertical feed for micro-learning technical tips.
- **ATS Resume Builder:** Automated professional resume generation.

# 3. Technical Architecture

[Angular 17/18](#)   [Signals](#)   [TypeScript](#)   [RxJS](#)   [CSS3 Grid/Flex](#)

The platform uses a service-oriented architecture with a heavy focus on reactive state management for real-time updates.

# 4. Design Requirements

- **Responsive:** Fully adaptive for Mobile, Tablet, and Desktop.
- **Interaction:** 300ms debounced inputs and stateful loading spinners.
- **Visuals:** Confirmation modals and custom message boxes for actions.
- **Theming:** Native support for System-wide Dark Mode.

# 5. Security & Integrity

- Strict **Role-Based Access Control (RBAC)**.
- Immediate session guarding for deactivated accounts.
- Advanced input validation for security and data quality.

made by CSMIT team