

# Project Design Phase

## Solution Architecture

Date	1 November 2025
Team ID	NM2025TMID00502
Project Name	Educational Organisation Using ServiceNow
Maximum Marks	4 Marks

### Solution Architecture:

#### Goals of the Architecture

- Provide a unified, automated platform for academic record management, notifications, and approvals.
- Ensure data integrity and security through role-based access management and workflow automation.
- Reduce manual effort and errors in record keeping, communication, and academic event processing.

#### Key Components

- User Table (sys\_user): Stores student, faculty, and admin profiles with all related information.
- Course and Academic Tables: Linked to users for managing enrollments, grades, attendance, and assignments.
- Business Rules: Automate critical validations (e.g., prevent user deletion if assigned, trigger notifications for grade entry).
- Notification Engine: Delivers real-time alerts for deadlines, approvals, and academic activities.
- Role-Based Access Controls: Restricts sensitive data and operations by user roles.

#### Development Phases

- Create test academic users and roles.
- Assign courses and academic activities.
- Implement business rules for validation and automation.
- Test automated notifications, approvals, and data management workflows.

#### Solution Architecture Description

The architecture delivers a modern ServiceNow solution that centralises all educational workflows—student and faculty data management, course assignments, grade submissions, attendance tracking, and approvals—inside a secure and highly automated environment.

Robust business rules enforce academic policies and prevent actions that would compromise data integrity, such as deleting users actively involved in ongoing courses or activities. Real-time notifications and role-based controls ensure that users are always informed, that actions are tracked, and that security requirements are upheld. The development process involves configuring data tables, testing business logic, and validating system behavior to guarantee reliability, scalability, and operational transparency for education institutions.

**Solution Architecture Diagram:**

