

# Project Design Phase

## Solution Architecture

Date	31 OCTOBER 2025
Team ID	NM2025TMID04230
Project Name	Education Organisation Using ServiceNow
Maximum Marks	2 Marks

### A. Unified Campus Service Management (CSM/ESM)

- **Central Hub:** The primary architectural decision is to use the **Service Portal** as the single point of entry for *all* campus requests—not just IT. This addresses the core pain point identified in the Empathy Map.
- **Request Routing:** All submissions, whether an IT issue (ITSM), a transcript request (CSM), or an HR query (HRSD), are routed via the **Service Catalog** and **Flow Designer** to the correct fulfillment team.
- **Knowledge:** A unified, easily searchable **Knowledge Management** repository is directly integrated into the portal and Virtual Agent to promote self-service and deflect simple inquiries.

### B. Data Integration with Core Systems

The most critical part of the architecture is connecting ServiceNow to existing campus data systems.

### C. Data Structure and CMDB

- The **CMDB** is extended beyond IT assets to include **campus-specific Configuration Items (CIs)**, such as:

- **Classrooms/Labs:** Mapping location, capacity, and embedded technology (projectors, AV systems).
- **Academic Programs/Courses:** Linking service requests directly to the context of a student's degree.
- This structure ensures that an incident logged about a "Projector in Room 305" automatically links the asset, the location, and potentially the assigned maintenance team.

### Deployment and Governance

- **Deployment Model:** The architecture leverages the native **ServiceNow Cloud (SaaS)** model, ensuring automatic updates, high availability, and scalability to handle peak load events like registration.
- **Governance:** A **Center of Excellence (CoE)** architecture is established to govern all changes, ensuring new workflows are standardized and that the platform remains stable across IT, Academic, and Administrative domains.

This architecture ensures high performance, a superior user experience, and the necessary integration to modernize the education organisation's administrative backbone.

### Solution Architecture: Education Organisation Using ServiceNow

The solution architecture for implementing ServiceNow in an education organisation is built upon the **Now Platform**, which serves as the central **Digital Workflow Engine** connecting all stakeholders and processes. The architecture is composed of distinct layers designed to transform service delivery from a fragmented state to a unified model. At the **Presentation/Access** layer, a unified, mobile-friendly interface is crucial: the **Student Portal (CSM)** and **Faculty/Staff Portal (ESM)** provide a single point of entry for all requests, whether they are for IT, academics, or HR. All submissions pass through the **Service Management** layer, where applications like **ITSM, CSM, HRSD, and FSM** define and execute standardized service workflows. Critically, the **Data & Records** layer is anchored by an extended **Configuration Management Database (CMDB)**, which manages not only IT assets but also essential campus CIs like classrooms, labs, and academic programs, ensuring a single source of truth and contextual data for all service requests. Finally, the **Integration** layer, utilizing the **Integration Hub** and custom APIs,

ensures seamless communication with core legacy systems like the **Student Information System (SIS)** and **Learning Management System (LMS)** to synchronize vital data (e.g., student enrollment, grades, and credentials), making the entire service ecosystem responsive and data-rich. This layered approach guarantees scalability, high availability, and a unified, user-centric experience across the entire institution.