

PGDFLP25: Project Work

The Project Work is the capstone course of the PG Diploma in Fire Safety, Lifts and Plumbing Services and provides students with an opportunity to integrate the knowledge acquired throughout the programme. Each student shall select one building type, such as a high-rise residential building, commercial complex or shopping mall, institutional building, hospital, hotel, industrial building, airport terminal, metro station, or mixed-use development. The project shall involve the complete planning and design of vertical and horizontal transportation systems, fire protection services, and plumbing systems in accordance with the National Building Code of India (NBC 2016), relevant Indian Standards, CPHEEO Manuals, and international best practices. Students shall prepare architectural service layouts, lift and escalator planning, traffic analysis, fire detection and alarm systems, hydrant and sprinkler layouts, smoke management systems, water supply and distribution networks, sanitary drainage, storm water drainage, rainwater harvesting systems, and sewage treatment concepts. The project shall include design calculations, equipment selection, service coordination, preparation of detailed drawings, riser diagrams, schematics, and code compliance reports. Emphasis shall be placed on the integration of building services with architectural and structural planning using AutoCAD, BIM, or equivalent software. Students shall also prepare cost estimates, technical specifications, operation and maintenance considerations, and sustainability measures related to building services. The project shall culminate in the submission of a comprehensive design report, presentation drawings, and an oral viva voce before an expert evaluation committee, demonstrating technical competence, multidisciplinary coordination, and professional practice in the design of modern building services.