Building the Future

Bachelors in Civil Engineering with Computer Applications

This undergraduate program equips students with the essential skills and knowledge to become successful civil engineers in today's technology-driven world. Mastering the core foundations of mathematics, physics, instrumentation, management, and economics and computers, forms the bedrock of our education. The landscape of civil engineering has been transformed by the rapid advancements in computer technology. Today, virtually every aspect of the field, from design and construction to analysis and management, utilizes sophisticated software and computational tools.

This program focuses on building your computer skills relevant to the stream of civil engineering. Through our well-crafted and diverse curriculum, we aspire to equip our students with learning computer fundamentals and use of soft computing skills in fields not limited to infrastructure planning and design, construction, smart and sustainable cities, and environmental issues. After successful completion of the program, the student is open to make his career either in the field of computer engineering, application of computers in civil engineering or core civil engineering.

This program focuses on building your computer skills relevant to civil engineering. You will gain comprehensive knowledge of:

Computer fundamental courses: problem solving with programing language, data science, artificial intelligence and internet of things.
Programming skills: Introduction to programming languages and algorithms.
Computer-aided design (CAD): Developing structural and architectural drawings Building Information modelling, dimensioning, grading plans, and analyzing structural systems.
Civil engineering software packages: Utilizing specialized software for structural analysis, design, Smart Cities, Transportation and traffic Planning, Construction Management, Geotechnical design and Hydrology and Environmental Analysis.
Computational problem-solving: Developing algorithms and codes for solving various civil engineering problems using tools like Mathcad and Excel.

Throughout your studies, you will learn to approach problems with a structured and analytical mindset. By utilizing software tools and developing your programming skills, you will gain the ability to efficiently solve complex civil engineering challenges. This program provides the essential platform to launch your career as a future-ready civil engineer equipped to address the demands of a technology-driven world.