Why IT – Construction Technologies

By taking an IT course, high school students in construction trades can acquire valuable skills and knowledge that will prepare them for successful careers in the construction industry and enable them to adapt to the evolving technological landscape of the field.

1 | Building Information Modeling (BIM)

IT skills are essential for utilizing BIM software, which enables construction professionals to create digital representations of building projects for planning, design, and coordination.

2 | Project Management Software

IT courses teach students how to use project management software to plan, schedule, and track construction projects, improving organization and efficiency.

3 | Construction Scheduling Tools

IT courses cover scheduling tools and techniques used in construction, such as Gantt charts and critical path method (CPM) analysis, to optimize project timelines and resource allocation.

4 | Mobile Applications

IT skills empower students to use mobile apps for on-site documentation, safety inspections, quality control checks, and real-time communication with project stakeholders.

5 | Sustainability and Green Building Tools

IT skills enable students to access resources and tools for designing and constructing sustainable and environmentally friendly buildings, such as energy modeling software and green certification programs.

6 | Geographic Information Systems (GIS)

GIS technology is used in construction for site selection, land use planning, and infrastructure development, making it valuable for students interested in site analysis and civil engineering.

7 | Drones and Aerial Surveying

IT courses cover the use of drones and aerial surveying technology for conducting site surveys, monitoring construction progress, and capturing aerial imagery for project documentation.

8 | Building Automation Systems

Learn about building automation systems (BAS) and smart building technology, including HVAC controls, lighting systems, and security systems, which rely on IT infrastructure for operation and management.

9 | 3D Printing and Additive Manufacturing

IT skills are essential for operating 3D printers and utilizing additive manufacturing techniques to create prototypes, components, and building elements in construction.

10 | Professional Development and Networking

Taking IT courses provides students with opportunities for professional development, networking, and staying updated on technological advancements and industry trends in the construction sector.