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المعهد الهندسي لخدمات التكنولوجيا والبرمجيات



Engineering office for Technology and Software Services

## Bentley RAM Connection



### ■ Bentley RAM Connection Training Program

### ■ Course Code: 1044-P

### Master Steel Connection Design According to International Standards

#### 🎯 Course Introduction

This course aims to equip civil and structural engineers with the skills to efficiently use **Bentley RAM Connection** in designing and verifying structural steel connections in compliance with international standards such as AISC and Eurocode.

#### 📦 Core Modules

#### 🔹 Module 1: Introduction to RAM Connection

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- Overview of RAM Connection and its importance in structural design
- Navigating the user interface and main tools
- Comparison with other structural design software
- ◆ **Module 2: Design Standards and Structural Concepts**
  - Overview of applied codes (AISC, Eurocode, others)
  - Types of steel connections and practical applications
  - Understanding design requirements and constraints
- ◆ **Module 3: Connection Setup and Analysis**
  - Preparing project input data
  - Defining loads and force distribution on connections
  - Performing structural analysis using RAM Connection
- ◆ **Module 4: Shear Connection Design**
  - End Plate Connection design techniques
  - Angle Connection detailing and verification
  - Structural integrity checks and code compliance
- ◆ **Module 5: Moment Connection Design**
  - Welded and bolted moment connections
  - Design considerations for moment-transferring joints
  - Simulating behavior and performance in software
- ◆ **Module 6: Column and Base Plate Connections**
  - Designing beam-to-column and column-to-base plate connections
  - Foundation connection detailing
  - Handling various loading conditions in practice
- ◆ **Module 7: Reporting and Exporting Results**
  - Generating detailed engineering reports
  - Exporting data to software such as STAAD.Pro and Tekla
  - Preparing fabrication and shop drawings for execution

#### ◆ **Target Audience**

- Civil and structural engineers
- Engineering students specializing in structural design
- Consulting firms and construction companies

#### ◆ **Course Requirements**

- Basic knowledge of structural analysis and steel design
- Familiarity with engineering standards (AISC, Eurocode)

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- PC capable of running engineering software

### ✓ Learning Outcomes

By the end of this course, participants will be able to:

- Efficiently use Bentley RAM Connection for real projects
- Design various steel connection types according to codes
- Generate detailed reports and shop drawings
- Integrate RAM Connection with other platforms like STAAD.Pro

### 🔧 Ready to master steel connection design like a pro?

Join us now and transform your engineering workflow!

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