



**PROTA**Structure® Suite

**FREE**  
**Commercial License**  
**for 1 MONTH**

## Private Training Set – #2

### Steel Design and Detailing with the ProtaStructure Suite

*Comprehensive Workflow from Analysis to Fabrication*

#### Course Overview

*Course Title:* Steel Design and Detailing with ProtaStructure Suite 2026

*Duration:* 10 Hours

*Format:* Practical, Project-Based Training

*This professional training program is designed to deliver a complete steel workflow using:*

- ProtaStructure
- ProtaDetails
- ProtaSteel

Participants will model, analyze, design, and detail a real-life steel project—from structural concept through fabrication drawings—using an integrated and seamless environment within ProtaStructure Suite 2026.

*The course emphasizes:*

- Advanced steel modeling
- Connection design and automation
- Fabrication-level detailing
- Intelligent drawing production
- Practical, production-ready workflows

#### Training Objectives

*By the end of this 10-hour intensive program, participants will be able to:*

- Develop a complete steel structural model
- Perform load definition and structural analysis
- Design steel members in compliance with code requirements
- Model, customize, and automate steel connections
- Generate shop drawings and fabrication documents
- Extract quantities and reports efficiently
- Establish a seamless design-to-detailing workflow

# Module 1: Structural Modeling & Analysis

In  PROTA Structure®

*This module focuses on building the analytical model and performing structural design.*

## 1. Structural Modeling Fundamentals

- Modelling axes and grids
- Modeling steel elements:
  - Trusses
  - Purlins
  - Girts
  - Braces
  - Frame members
  - Claddings
  - Steel domes

## 2. Loading & Structural Parameters

- Member loading and Load Editor
  - Wall loads
  - User-defined loads
  - Load decomposition
- Inserting, replicating, and removing storeys
- Storey parameters and building configuration
- Load combinations

## 3. Structural Analysis

- Building analysis workflow
- Wind loading definition
- Seismic loading parameters
- Steel member design

## 4. Foundation Design

- Pad footings
- Strip footings
- Mat foundations

## 5. Reporting

- Using the Report Manager
- Generating structural calculation reports



## Module 2: Reinforcement & Detail Generation



*This module focuses on automation and documentation of detailing outputs.*

- Generating details automatically
- Inserting custom sheets
- Using intelligent rebars
- Quantity take-off extraction

Participants will learn how to transition from analysis to detailing without manual redrafting, ensuring consistency and efficiency.

## Module 3: Steel Connection Design & Fabrication



*This module delivers fabrication-level detailing and advanced connection workflows.*

### 1. Modeling & Visualization

- View settings and element filtering
- Creating points, plates, welds, and cuts

### 2. Connection Design

- Creating user-defined connections
- Saving custom connections to library
- Using connection macros
- Adjusting macro parameters
- Fully automated connections using **IntelliConnect**

### 3. Production Workflow

- Numbering elements
- Clash checking
- Model auditing

### 4. Drawing & Fabrication Outputs

- Generating GA plans
- Part drawings
- Assembly drawings

Participants will complete a fully detailed steel project ready for manufacturing and shop production.



## Training Methodology

- Real-life steel project example
- Step-by-step guided workflow
- Best practice modeling techniques
- Practical exercises
- Full project completion from start to finish

## Who Should Attend?

- Structural Engineers
- Steel Design Engineers
- Detailers
- BIM Coordinators
- Engineering Firms transitioning to integrated steel workflows

## Key Benefits

- Reduce modeling and detailing time significantly
- Minimize coordination errors
- Automate repetitive connection tasks
- Improve fabrication accuracy
- Deliver professional documentation faster

## Deliverables

*Participants will leave the course with:*

- A completed steel project model
- Fabrication-ready shop drawings
- Automated connection library examples
- Structural reports and quantity take-offs
- A fully optimized **Prota**Structure Suite 2026 steel workflow

**For registration and training schedules, please contact our sales team or your regional **Prota**Structure representative.**



## Private Training Set – #1



### How to Design RC Structures with the ProtaStructure Suite

*Products: ProtaStructure, ProtaDetails, ProtaBIM*

## Private Training Set – #3



### How to Design RC and Steel Structures with the ProtaStructure Suite

*Products: ProtaStructure, ProtaSteel, ProtaDetails, ProtaBIM*

