MERCURY

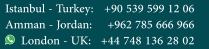Structural Steel Design for Oil & Gas Industry

Structural Steel Design for Oil & Gas Industry

Course Content:

• **Steel Properties and Grades**

•   **Steel Properties**

•   **Structural Shape Selection**

• **Structural Design Philosophy**

•   **Limit State Design and Allowable Stress Design**

•   **Commonly Used Codes and Standards**

• **Loading and Load Assessment**

•   **Dead and Live Load**

•   **Wind and Environmental Load**

•   **Load Conditions and Combinations**

• **Beam and Frame Analysis**

•   **Bending Moment and Shear Calculations**

•   **Truss Analysis**

• **Structural Member Design**

•   **Considerations for Member Selection**

•   **Member Check and Unity Ratio**

•   **Deflection Check**

•   **Member Failure Modes and Solutions**

• **Connection Design**

•   **Welded Connection**

- **Bolted Connections**

- **Design of Bearing Stiffeners**