

# Introduction

PLAXIS 2D is a finite element package that has been developed specifically for the analysis of deformation, stability and flow in geotechnical engineering projects. The simple graphical input procedures enable a quick generation of complex finite element models, and the enhanced output facilities provide a detailed presentation of computational results. The calculation itself is fully automated and based on robust numerical procedures. This concept enables new users to work with the package after only a few hours of training.

Though the various tutorials deal with a wide range of interesting practical applications, this [Tutorial Manual](#) is intended to help new users become familiar with PLAXIS 2D. The tutorials and the respective material data sets should therefore not be used as a basis for practical projects.

Users are expected to have a basic understanding of soil mechanics and should be able to work in a Windows environment. It is strongly recommended that the tutorials are followed in the order that they appear in the manual. Please note that minor differences in results maybe found, depending on hardware and software configuration.

The [Tutorial Manual](#) does not provide theoretical background information on the finite element method, nor does it explain the details of the various soil models available in the program. The latter can be found in the [Material Models Manual](#), as included in the full manual, and theoretical background is given in the [Scientific Manual](#). For detailed information on the available program features, the user is referred to the [Reference Manual](#). In addition to the full set of manuals, short courses are organised on a regular basis at several places in the world to provide hands-on experience and background information on the use of the program.

## **Tutorials available for different licencing levels:**

Given PLAXIS 2D features and soil models are provided for separated licencing services, the present tutorial manuals are available with previous installation of a specific licence level.

For more information about licencing levels please visit: [General Information Manual](#), [Reference Manual](#) and [Material Models Manual](#)).

As a summary, the tutorials available for each licence level can be identified with the following conventions:

- Tutorials with no identification - generally available for PLAXIS 2D licence.
- [ADV] - tutorials for users with PLAXIS 2D Advanced licence.
- [ULT] - tutorials for users with PLAXIS 2D Ultimate licence.
- [GSE] - tutorials for users with Geotechnical SELECT subscription (previous Basic, Advanced or Ultimate licence level required).

### **Note:**

Each individual PLAXIS 2D tutorial is available for downloading as PDF file in [Bentley Communities](#).