

Module Template - Pre-Analysis & Start-Up

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[Problem Specification](#)

[1. Pre-Analysis & Start-Up](#)

[2. Geometry](#)

[3. Mesh](#)

[4. Physics Setup](#)

[5. Numerical Solution](#)

[6. Numerical Results](#)

[7. Verification & Validation](#)

[Exercises](#)

[Comments](#)

Pre-Analysis & Start-Up

Pre-Analysis

In the *Pre-Analysis* step, we'll review the following:

- **Mathematical model:** (e.g.: We'll look at the governing equations + boundary conditions and the assumptions contained within the mathematical model.)
- **Numerical solution procedure in ANSYS:** (e.g.: We'll briefly overview the solution strategy used by ANSYS and contrast it to the hand calculation approach.)
- **Hand-calculations of expected results:** (e.g.: We'll use an analytical solution of the mathematical model to predict the expected stress field from ANSYS. We'll pay close attention to additional assumptions that have to be made in order to obtain an analytical solution.)

Mathematical Model



Under Construction

Numerical Solution Procedure in ANSYS



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Hand-Calculations of Expected Results



Under Construction

Start-Up



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[Go to Step 2: Geometry](#)

[Go to all \(ANSYS or FLUENT\) Learning Modules](#)