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Welcome to SimCafe.org

The SimCafe wiki at simcafe.org is being developed at Cornell University as an e-learning resource to integrate industry-standard simulation tools into courses and to provide a resource for supplementary learning outside the classroom. Professors and students around the world use simcafe.org for free to teach and to learn simulations. SimCafe learning modules cover simulation applications in a broad spectrum of subjects: solid mechanics, fluid dynamics, heat transfer and dynamics. In the newer modules, short embedded YouTube videos demonstrate software steps. Users can add comments to modules via an interface to piazza.com. Read more in this article on the ANSYS Blog.

Currently, we have learning modules and tutorials for:

- Finite-element analysis (FEA) using ANSYS Mechanical
 - o ANSYS tutorials from Prantil et al textbook
- Computational fluid dynamics (CFD) using ANSYS FLUENT
 Multiphysics analysis (Fluid, Structural, Thermal, Modal and Electrical) using ANSYS AIM
- Program development using MATLAB
- Wind turbine analysis using BLADED

Various tips and tricks that are useful across many tutorials can be found on this page.

When installing simulation programs covered in these tutorials, follow these testing protocols to assure the program is working correctly.

Contributors to SimCafe.org can find helpful resources here: Contributors Resources

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