

## **The Use of CFD Simulations in Learning Fluid Mechanics at the Undergraduate Level**

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Simple, accurate CFD simulations using COMSOL Multiphysics are used in a senior-level undergraduate course as a means to explore a number of fluid flows with the intent of developing a deep understanding of the underlying fluid mechanical mechanisms involved in the flows. Students also learn about the finite element method, how to properly pose the underlying mathematical model for the fluid flow, and about the limitations of the modeling process itself.