



# Computational Engineering Department

<https://co.iith.ac.in/index.html>

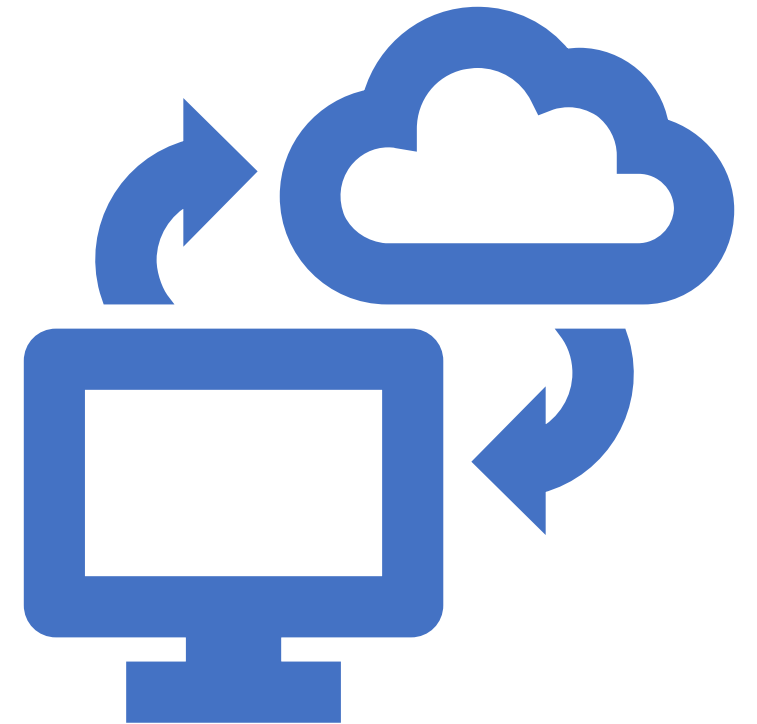
# What is Computational Engineering

Profound advancement in computing tools & techniques

Engineering design & product development uses advanced computational methods

Industry 4.0 needs interaction of physical and computational components

Digital Twins of engineering systems and processes



# Computational Engineering - Philosophy

- ***Interdisciplinary program to develop expertise in***
  - Numerical methods & algorithms
  - Simulation tools for core engineering problems
  - System and process design
  - Optimization & Data Analytics
- ***Strong foundation in Scientific Computing***
  - In-depth coverage of a wide variety of numerical algorithms & techniques
  - Applications of computational methods in real-world engineering problems
  - Students would be ready to address the computational skills gap and provide solutions to various industry problems

