

Teaching Thermodynamics

Course Title	Teaching Thermodynamics
Course Category	Pedagogy
Relevant Discipline(s)	Any Engineering discipline that requires Thermodynamics
Duration of course in equivalent integer no. of days (min 3 days, 1 day = 6 hrs of lectures/hands on sessions)	3 Days
Proposed dates	February 19 – 21, 2021

Brief Course Description and Course Contents
<p>Thermodynamics is a fundamental subject in several disciplines of Engineering such as Mechanical, Aerospace, Chemical and Materials. The purpose of the workshop is to discuss an approach to teach Thermodynamics at the undergraduate level for such disciplines. The workshop will be conducted on the basis of lecture videos already existing under the IITBombayX platform. The primary focus of the workshop will be on teaching the fundamental laws of Thermodynamics that form the foundation of the subject: the Zeroth law, the First law, and the Second law. The objective of the workshop will be to introduce these three laws and their implications in a clear and unambiguous manner, building on only a prior knowledge of basic Physics typically studied till the first year of engineering. In addition, the workshop will address an important aspect of problem solving skills that require analysing model systems of engineering interest, thereby clearly demonstrating the application of the fundamental laws of Thermodynamics.</p>

Instructor Details			
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