

INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI

भारतीय प्रौद्योगिकी संस्थान तिरुपति

1.	Title of the course	Compressible Flow
2.	Course number	ME513L
3.	Structure of credits	3-0-0-3
4.	Offered to	PG
5.	New course/modification to	Modification To ME5025/8
6.	To be offered by	Department of Mechanical Engineering
7.	To take effect from	July 2022
8.	Prerequisite	СоТ
9.	Course Objective(s): To provide clear explanation of the physical phenomena encountered in practical situations in which compressibility effects are important; to understand the basic thermodynamic and conservation principles used in modelling compressible flow; to learn analytical tools to be used for compressible flows and apply them in practice.	
10.	Course Content: To provide clear explanation of the physical phenomena encountered in practical situations in which compressibility effects are important; to understand the basic thermodynamic and conservation principles used in modelling compressible flow; to learn analytical tools to be used for compressible flows and apply them in practice.	
11.	Textbook(s): 1. Anderson J D, Modern Compressible Flow with Historical Perspective, 3rd Edition, McGraw-Hill, Inc., New York (2017).	
12.	Reference(s): 1. Anderson J D, Fundamentals of Aerodynamics, 5th Edition, McGraw-Hill Education (2010). 2. Bertin J J and Cummings R M, Aerodynamics for Engineers, 6th Edition, Pearson (2013).	