Fluid Mechanics

SWAYAM Prabha Course Code – M09

PROFESSOR'S NAME	Prof. Rajendra Vendula
DEPARTMENT	Mechanical Department
INSTITUTE	Indian Institute of Technology, Bombay
COURSE OUTLINE	Besides course outline, it should also indicate if there are any pre-requisities (i.e, prior knowledge) required .
	This is an introductory course on Fluid Mechanics for second year Mechanical Engineering students. The students are exposed to concepts in Fluid Statics in the first few weeks. The students then learn the use of integral equations for mass momentum and energy. The differential equations for motion will be derived for laminar incompressible flows and closed form solutions for simple cases will be discussed with special reference to pipe flow situations. The boundary layer equations will be derived and analytical solutions for flow over flat plate will be discussed. A brief introduction to turbulent flows and compressible flows will be presented towards the end of the course.

COURSE DETAILS

S. No	Module ID/ Lecture ID	Lecture Title/Topic
1	**L1**	Introduction to Fluid Mechanics
2	**L2**	Introduction to Fluid Mechanics
3	**L3**	Fluid Statics
4	**L4**	Fluid Statics
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References if Any: