

FLUID MECHANICS-I (ME-222)

Pre-requisite: None

Credit Hours: 03

Contact Hours: 48

RECOMMENDED BOOK(S)

Fundamentals of Fluid Mechanics, Bruce R, Munson.

REFERENCE BOOK(S)

Fluid Mechanics, Frank M. White. McGraw Hill. Latest Edition.

Fluid Mechanics, J. M. Cimbala Y. Cengel. McGraw Hill,

COURSE OBJECTIVES

The course is designed to provide strong foundation for the related subjects to be taught in the latter part of Bachelor program. It attempts to cover

S. No.	CLO/PLOS MAPPING	DOMAIN	PLO
1	Explain clearly the concepts of fluid mechanics based on analytical relations.	C2	01
2	Solve problems correctly related to fluid properties, fluid statics and fluid dynamics.	C3	02
3	Apply the concepts of control volume to interpret the flow field.	C3	04

COURSE CONTENTS

Fluid properties.

Fluid statics

Kinematics of flow

Fluid kinematics

Equation of continuity, flow energy equation

Dimensional analysis and similitude