

FACULTY OF **ENGINEERING**

DEGREE COURSE: **INDUSTRIAL ENGINEERING**

MASTER DEGREE: **INDUSTRIAL ENGINEERING / ENERGY**

SUBJECT: FLUID MACHINERY

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OBJECTIVES

- 1 Supply basic expertise to study fluid machines;
 - 2 Describe operating principles and characteristics of some common typology of fluid machines;
 - 3 Supply preliminary sizing of some common typology of fluid machines.
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CONTENTS

One-dimensional thermodynamics and fluidodynamics of fluid machine
Similarity theory
Centrifugal pumps
Reciprocating compressor
Internal combustion engine

LEARNING OUTCOMES

- 1 Learn basic expertise needed to analyze fluid machines;
 - 2 Be familiar of some common typology of fluid machines;
 - 3 Gain knowledge of preliminary sizing criteria of some common typology of fluid machines.
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ASSESSMENT

Written exam: multiple-choice tests and open-ended questions

RECOMMENDED TEXTBOOKS

Educational material supplied by professor
