



# Lecture (00) Introduction To Engineering Course



## Overview/Road map

By:

**Dr. Ahmed ElShafee**

Dr. Ahmed ElShafee, ACUFOE : Spring 2020, HUM101  
Introduction to Engineering

## About the course

Course name, Code	HUM101 – Introduction to Engineering
Pre-requisite	-
Credit hours	3
Number Sessions	6
Date, time, place	Lecture: Wednesday 13:00 – 15:00 1-5 Thursday 11:00 – 13:00
Reference	<i>lecture notes</i>

Email	Ahmed.elshafee@acu.edu.eg
Presentations and materials	www.Aelshafee.net

# Objectives

---

- This course introduces students to the range of engineering disciplines and the engineering method of problem-solving, as well as sustainability and other issues associated with the practice of engineering.
- This introduction is made through a mix of lectures, laboratories.
- Course focuses on improving core engineering problem solving using computer aided tools like Python programming language.

## Part 1 : Introduction To Engineering and Technology profession

---

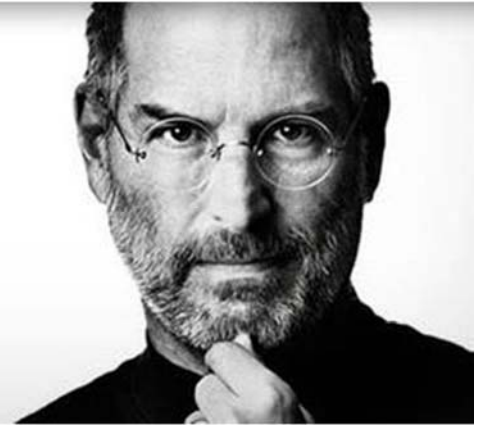
- Introduction to engineering profession
- Discuss different disciplines/specializations in engineering fields
- Briefly discuss skills and capabilities required by each engineer.
- Briefly discuss engineering supporting personals in Engineering field.

# Part 2 : Introduction To Engineering and Technology Tools and Methodologies

---

**Everybody in this country should learn to program a computer... because it teaches you how to think**

Steve Jobs, co-founder and CEO of Apple Inc. (1955 - 2011)



python™

5

Dr. Ahmed ElShafee, AI

ction to Engineering

- 
- Python is a high-level general-purpose programming language that can be applied to many different classes of problems

Clean, simple syntax

- Focus on programming skills instead of learning syntax

Huge standard library

- Work on realistic applications while learning the fundamentals

Uses dynamic typing

- Using a statically typed language seems unnatural (later stage)

Interactive Interpreter

- Test language features while programming

6

Dr. Ahmed ElShafee, ACCUPOE : Spring 2020, HCU101 Introduction to Engineering



# Grading Scheme

---

item	Grade
final	40
midterm	20
Attendance and participation	10
Laboratories	10
Project/discussion (joint project with BSE104)	20

7

Dr. Ahmed ElShafee, ACUFOE : Spring 2020, HUM101 Introduction to Engineering



Thanks,..  
Lets do this,..

Dr. Ahmed ElShafee, ACUFOE : Spring 2020, HUM101  
Introduction to Engineering