

## **National University of Sciences and Technology**

# **Course Description**

Course Title	Course Code	Credit Hours
Design of Mechatronics Systems	ME 832	3 - 0

### **Textbook:**

• "Mechatronics System Design" by Devdas Shetty and Richard A. Kolk

## **Course Objective:**

• This course will enable the students to understand fundamental of Mechatronics and design of different Mechatronics systems.

#### **Course Outline:**

• The program's curriculum is particularly strong in areas that form the basis of mechatronics, including analytical and adaptive, dynamics, math modeling and optimization, mechanical design of mechatronic systems and their adaptive and intelligent control, and robotics design and control. The course also covers modeling and simulation of mechatronics systems, adaptive control systems, hydraulics and pneumatics, machine intelligence.

#### **ASSESSMENTS**

Description	Percentage Weightage (%)	
Assignments	05-10%	
Quizzes	10-15%	
Mid Semester Exams	30-40%	
End Semester Exam	40-50%	