

# DAFFODIL INTERNATIONAL UNIVERSITY

School of Engineering

Program: CE

Semester: Summer 2020

Course Code: CE 213

Course Title: Mechanics of Solids II

Course Instructor: [Rayhan Md. Faysal](#)

## Course Objectives:

1. Teach the basics of the combination of stresses
2. Teach the transformation of stresses
3. Teach the basics of deflection and buckling
4. Give an introduction of cable, bolts and weldings

## Course outcome:

1. Learn to analyze the situation involving combined stress and transformation of stress.
2. Learn to calculate deflection.
3. Learn the basic analyze of cable, bolts and weldings

## Lecture Plan:

Session	Topic	Covered course objective no.	Covered course outcome no.
1	Introduction	n/a	n/a
2	Unsymmetric Bending	1	1
3	Stress Transformation	2	1
4	Principal Stresses	2	1
5	Mohr Circle of Stress	2	1
6	Direct Integration Method	3	2
7	Singularity Functions	3	2
8	Column Analysis Part I	3	2

9	Column Analysis Part II	3	2
10	Elastic Strain Energy	4	3
11	Cable Analysis	4	3
12	Bolt and Rivet Joints	4	3
13	Weld Joint	4	3