

(6) Mechanics.

Technical college	30 Weeks	No . of week hours		
Department: Medical Instrumentation Engineering		Th.	Pr.	Unit
First Year		2	--	4
		Subject : Mechanics .		

أهداف المادة : إعطاء الطالب المعلومات النظرية التي لها الدور الأساسي في حل المشاكل التكنيكية إضافة إلى الدور الأساسي و البارز في بناء الآلات و الأجهزة .

Week	Syllabus
1 st	Introduction , resultant of force system .
2 nd	Component of force .
3 rd	Moment of force .
4 th , 5 th	Couples , resultant of coplanar force systems .
6 th , 7 th	Equilibrium of force system.
8 th , 9 th	Non – coplanar force systems, equilibrium of non – coplanar concurrent force .
10 th , 11 th	Analysis of structures .
12 th , 13 th	Methods of joint problems.
14 th , 15 th	Friction .
16 th , 17 th	Centroide .
18 th , 19 th	Second moment of area .
20 th	Material properties .
21 st , 22 nd	Stresses .
23 rd	Simple strain .
24 th	Variable stresses .
25 th , 26 th	Bending & beams .
27 th , 28 th	Riveted and welded connections .
29 th , 30 th	Special topics .