Sample Brief Course Description	
Course title	Introduction to Biomedical Engineering
Course code	BME 200
College	Engineering
Department / Program	Biomedical Engineering
Year/ Level	2/4
Course Type	A. ☐ University ☐ College ■ Department ☐ Others b. ■ Required ☐ Elective
Credited Hours	3
Contact Hours	(LT:3,LB:0,TR:0)
Pre-requisites (if any)	---
Co-requisites (if any)	---
Course description	The course provides the introduction and overview of Biomedical Engineering. The goal is to provide students with an appreciation for the breadth of the field and guide them in making major and career choices. The course topics will include: Biomedical Engineering A Historical Perspective. Biomechanics and Rehabilitation Engineering . Bioinstrumentation. Biomedical Sensors. Bio-signal Processing. Medical Imaging.. Tissue Engineering.

Course Main Objectives	• Define the term biomedical engineering and the roles biomedical engineers play in the health care delivery system. • Understand the biomechanical and Rehabilitation engineering in Biomedical engineering applications. • Describe the components of a basic instrumentation system. • Describe the different classifications of biomedical sensors. • Identify the different origins and types of bio-signals. • Distinguish between the principles of pulse echo ranging and ultrasound imaging. • Understand essential optical principles and fundamentals of light propagation in tissue, as well as other biological and biochemical media. • Describe the issues fundamental to Tissue Engineering.
Learning Outcomes	**Knowledge and Understanding:** 1. Identify an overview of biomedical engineering 2. Understand the biomechanical and rehabilitation engineering concepts 3. Identify the principle of biomedical optics and lasers 4. Understand the fundamental of imaging process
	Skills:---
	Values:---