Biomechanics has been defined as the study of the mouvement of living things using the science of mechanics. Surgeons can use biomechanical models to determine whether a patient with cerebral palsy will benefit from tendon lengthening surgery .roboticists are inviting prostheses that are increasingly sophisticated and bipedal robots that can perform complex tasks in dangerous environments. Today, biomechanics is a rapidly growing, multidisciplinary field involving collaborations between individuals from many areas of science and engineering .neuroscientists study how the brain coordinates our muscles during movement and how these neural circuits are disrupted in cases of injury And disease. Computer scientists and biomechanical engineers develop new algorithms and software tools to simulate movements and gain insights these simulations. Biomechanics combined the field of .engineering mechanics with the fields of biology and physiology