

5

TITLE: MECHANICS & WAVE MOTION (IT)
UNIQUE COURSE CODE: PHY-121
CREDIT HOURS: 3

To teach students calculus based general physics by way of learning about the following topics in depth: Measurement and vectors, Motion in one, two and three dimensions, Newton's laws of motions, Work and energy principles, Laws of conservation of momentum and energy, One- and two-dimensional collisions, Rotational kinematics and dynamics, Conservation of angular momentum, Gravitation, Oscillations and waves.

1. Resnick, Halliday and Krane, *Physics*, vol. 1. ISBN: 978-0-471-32057-9

Recommended Book

1. University Physics, vol. 1, by Sears and Zemansky, ISBN-10: 0201603365