## STUDENT OUTCOMES

The curriculum and syllabus for B.Tech programs conform to outcome based teaching learning process. In general, **ELEVEN STUDENT OUTCOMES** (a-k) have been identified and the curriculum and syllabus have been structured in such a way that each of the courses meets one or more of these outcomes. Student outcomes describe what students are expected to know and be able to do by the time of graduation. These relate to the skills, knowledge, and behaviors that students acquire as they progress through the program. Further each course in the program spells out clear instructional objectives which are mapped to the student outcomes.

## The student outcomes are:

- a) an ability to apply knowledge of mathematics, science, and engineering
- b) an ability to design and conduct experiments, as well as to analyze and interpret data
- c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- d) an ability to function on multidisciplinary teams
- e) an ability to identify, formulate, and solve engineering problems
- f) an understanding of professional and ethical responsibility
- g) an ability to communicate effectively
- h) the broad education necessary to understand the impact of engineering solutions in global, economic, environmental, and societal context
- i) a recognition of the need for, and an ability to engage in life-long learning
- i) a knowledge of contemporary issues
- k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

## SYMBOLS AND ABBREVIATIONS

AR -- Architecture Courses

B -- Courses under Basic Science and Mathematics

BM -- Biomedical Courses
BT -- Biotechnology Courses

C-D-I-O -- Conceive-Design Implement-Operate

CE -- Civil Engineering Courses

CS -- Computer Science and Engineering Courses

CY -- Chemistry Courses

Dept. -- Department of Biomedical Engineering

E with course code -- Elective Courses

E -- Courses under Engineering Sciences

EC -- Electronics and Communication Engineering Courses

EE -- Electrical and Electronics Engineering Courses

G -- Courses under Arts and Humanities

IOs -- Instructional Objectives

L -- Laboratory / Project / Industrial Training Courses

LE -- Language Courses

L-T-P-C -- L- Lecture Hours Per Week

T- Tutorial Hours Per Week P- Practical Hours Per Week

C- Credits for a Course

M -- Courses with Multi Disciplinary Content

MA -- Mathematics Courses

ME -- Mechanical Engineering Courses
NC -- NCC - National Cadet Corps
NS -- NSS - National Service Scheme

P -- Professional Core Courses

PD -- Personality Development Courses

PY -- Physics Course

SO/SOs -- Student Outcomes (a-k)

SP -- NSO – National Sports Organization

YG -- Yoga Course