

Curriculum of B.Tech Electronics and Communication Engineering (Design & Manufacturing)

(According to 1st Academic Council meeting held on 12th March 2016)

| Semester 1 | | | | |
|--|-----------|-----------|-----------|-----------------|
| Course Name | I | P | C | Category |
| Calculus | 3 | 0 | 3 | BSC |
| Engineering Mechanics | 3 | 0 | 3 | BSC |
| Computational Engineering | 3 | 0 | 3 | BEC |
| Basic Electrical & Electronics Engineering | 3 | 0 | 3 | BEC |
| English for Communication | 2 | 0 | 2 | HMC |
| Earth, Environment & Design | 2 | | P/F | HMC |
| Engineering Skills Practice | 0 | 3 | 2 | BEC |
| Materials & Mechanics Practice | 0 | 3 | 2 | BSC |
| Computational Engineering Practice | 0 | 3 | 2 | BEC |
| Engineering Graphics | 1 | 3 | 3 | BEC |
| Total | 17 | 12 | 23 | |
| Semester 2 | | | | |
| Differential Equations | 3 | 0 | 3 | BSC |
| Engineering Electromagnetics | 3 | 0 | 3 | BSC |
| Science and Engineering of Materials | 3 | 0 | 3 | BSC |
| Concepts in Engineering Design | 3 | 0 | 3 | BEC |
| Design History | 2 | 0 | 2 | BEC |
| Professional Ethics for Engineers | 2 | 0 | P/F | HMC |
| Measurement & Data Analysis Practice | 0 | 3 | 2 | BSC |
| Engineering Electromagnetics Practice | 0 | 3 | 2 | BSC |
| Industrial Design Sketching | 0 | 3 | 2 | BEC |
| Design Realization | 0 | 3 | 2 | BEC |
| Total | 16 | 12 | 22 | |
| Semester 3 | | | | |
| Course Name | I | P | C | Category |
| Linear Algebra | 3 | 0 | 3 | BSC |
| Engineering Economics | 3 | 0 | 3 | HMC |
| Mechanical Design of Electronic Systems | 3 | 0 | 3 | PEC |
| Digital Logic Design | 3 | 0 | 3 | PEC |
| Signals and Systems | 3 | 0 | 3 | PEC |
| Analog Circuits | 3 | 0 | 3 | PEC |
| Analog Circuits Practice | 0 | 3 | 2 | PEC |
| DLD Practice | 0 | 3 | 2 | PEC |
| Total | 18 | 6 | 22 | |
| Semester 4 | | | | |
| Course Name | I | P | C | Category |
| Probability Theory | 3 | 0 | 3 | BSC |
| Sociology of Design | 3 | 0 | 3 | HMC |
| Control Systems | 3 | 0 | 3 | PEC |
| Digital Signal Processing | 3 | 0 | 3 | PEC |
| Data Structures and Algorithms Practice | 1 | 3 | 3 | PEC |
| Electrical Drives Practice | 1 | 3 | 3 | PEC |
| Digital Signal Processing Practice | 0 | 3 | 2 | PEC |
| Total | 14 | 9 | 20 | |

| Semester 5 | | | | |
|---|-----------|-----------|-----------|-----------------|
| Course Name | I | P | C | Category |
| Entrepreneurship and Management Functions | 3 | 0 | 3 | HMC |
| Electronic Manufacturing and Prototyping | 1 | 3 | 3 | PEC |
| Micro Processors and Computer Architecture | 3 | 0 | 3 | PEC |
| Analog and Digital Communication | 3 | 0 | 3 | PEC |
| Sensing and Instrumentation Practice | 1 | 3 | 3 | PEC |
| MicroProcessors and MicroControllers Practice | 0 | 3 | 2 | PEC |
| Communication Systems Practice | 0 | 3 | 2 | PEC |
| Information Theory and Coding | 3 | 0 | 3 | PEC |
| Total | 14 | 12 | 22 | |
| Semester 6 | | | | |
| Design for Quality and reliability | 3 | 0 | 3 | HMC |
| VLSI Design | 3 | 0 | 3 | PEC |
| Embedded System | 1 | 3 | 2 | PEC |
| VLSI Design Practice | 0 | 3 | 2 | PEC |
| Data Networks | 3 | 0 | 3 | PEC |
| Product Design Practice | 0 | 3 | 2 | PCD |
| Elective I | 3 | 0 | 3 | ELE |
| Elective II | 3 | 0 | 3 | ELE |
| Total | 16 | 9 | 21 | |
| Semester 7 | | | | |
| Course Name | I | P | C | Category |
| Internship | 0 | - | 5 | PCD |
| Free Elective - I | 3 | 0 | 3 | ELE |
| Design Project | 0 | 6 | 5 | PCD |
| Total | 3 | 6 | 13 | |
| Semester 8 | | | | |
| Course Name | I | P | C | Category |
| Elective – III | 3 | 0 | 3 | ELE |
| Free Elective-II | 3 | 0 | 3 | ELE |
| Management Elective | 3 | 0 | 3 | HMC |
| Project | 0 | - | 10 | PCD |
| Total | 9 | | 19 | |

Note:

- Elective courses such as
 - Intelligent Product Design
 - Sustainable Design
 - New Product Management
- will be offered as a group to choose in Elective III