

## B.TECH.2<sup>ND</sup> SEM

### Human Values and Soft Skills HSV-102

Course Outcome (CO)	Details of Course Outcomes
(CO1)	To developing the desired English language skills of students of Engineering and Technology so that they become proficient in communication to excel in their professional lives.
(CO2)	To enhance their linguistic and communicative competence.
(CO3)	Understanding (Clarity) of Human Relationships and Family.
(CO4)	Learn the techniques and art of dialogue writing/speaking and using them in appropriate contexts.
(CO5)	Exposure to Issues in Society and nature (larger manmade systems and Nature).

### Physics (BSP-101)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Pupil will be able to recall and describe the differentiation of materials on basis of band structure. The students will also be able to evoke the diode biasing, free electron theory and low dimensional particles.
(CO2)	Students will be able to explain the concept of electronic materials especially semiconductors and their interaction with light; and the Different measurement techniques for study in material properties.
(CO3)	Pupil will be able to apply their knowledge to illustrate the fabrication/creation and characterization of various electronic Materials like diodes, low dimensional materials.
(CO4)	Students will be able to compare the various measurement techniques And investigate various problem related to free electron and band theory.
(CO5)	Pupil will also be able to evaluate/solve different numerical problems and derivations of important parameters and assess their results with Appropriate justification.

### Physics (P) (LAB) (BSP-101P)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Pupil will be able to recall the basic components of Physics lab, for example: diodes, transistor, ammeter, voltmeter, galvanometer, etc. Student will also be able to remember about the least count, scales on graph and graph plot.
(CO2)	Students will be able to understand the concept of correct circuit connections; for example, connection of ammeter, voltmeter, diodes, and solar cells in the circuit.
(CO3)	Pupil will be able to apply their knowledge in making correct circuit; and in applying correct required formulae in different experiments

(CO4)	Students will be able to analyze the circuit connections and formulae applicable for different experiments related to semiconductor physics .
(CO5)	Pupil will also be able to evaluate the desired results of the experiments either by correct formulae or plotted graphs. Student will also be able to manage their performed practical task in Representable manner.

### Mathematics-II (BSM-102)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Demonstrate their understanding of mathematical ideas from multiple perspectives
(CO2)	To develop logical understanding of the subject.
(CO3)	To develop mathematical skill so that students are able to apply mathematical methods & principals in solving problem from Engineering fields
(CO4)	To make aware students about the importance and symbiosis between Mathematics and Engineering.
(CO5)	Pupil will also be able to evaluate/solve the mathematical problems related to probability and Statistics.

### Engineering Graphics (Web Designing) (CSE-103 P)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Basic understanding of HTML syntax. Learn the fundamental syntax and structure of the web programming language, including variables, data types, loops, conditionals and functions.
(CO2)	Proficiency in writing HTML code. Gain the ability to write HTML programs to solve simple to moderately complex problems
(CO3)	Demonstrate the important HTML tags for designing static pages and separate design from content using Cascading Style sheet.
(CO4)	Utilize the concepts of JavaScript and Java
(CO5)	Discuss the insights of internet programming and implement complete application over the web.

### Object-Oriented and python programming CSE- 104

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Describe the procedural and object oriented paradigm with concepts of streams, classes, functions, data and objects.

(CO2)	Understand dynamic memory management techniques using pointers, constructors, destructors, etc
(CO3)	Describe the concept of function overloading, operator overloading, virtual functions and polymorphism.
(CO4)	Classify inheritance with the understanding of early and late binding, usage of exception handling, generic programming..
(CO5)	Demonstrate the use of various OOPs concepts with the help of programs

### **Basics of Electrical and Electronics Engineering (P) EEE-101P**

<b>Course Outcome (CO)</b>	<b>Details of Course Outcomes</b>
(CO1)	Measure power and power factor in ac circuits
(CO2)	Understand 3 phase balanced and unbalanced, star and delta connected supply and load and to measure power in 3 phase circuits
(CO3)	Design and experiment potential divider circuits.
(CO4)	Measure power and power factor in ac circuits
(CO5)	Illustrate basics of AC circuits

### **Data Structures Using C CSE-102**

<b>Course Outcome (CO)</b>	<b>Details of Course Outcomes</b>
(CO1)	Understand various algorithms for searching and sorting
(CO2)	Design and implement data structures like arrays, stacks & queues
(CO3)	Learning to use singly/doubly linked lists for efficient implementation of data structures
(CO4)	Understanding the tree data structure, with focus on binary trees, binary search trees and height-balanced trees
(CO5)	Understand data structures such as minimum spanning trees and graphs and also their applications in real world scenarios

### **Data Structures Using C (LAB) CSE-102**

<b>Course Outcome (CO)</b>	<b>Details of Course Outcomes</b>
(CO1)	Study and implement various searching and sorting techniques.

(CO2)	Implement search trees and priority queues using heaps.
(CO3)	Implement circular queues for producer-consumer problem simulation.
(CO4)	Implement and understand linked lists for polynomial manipulation.
(CO5)	Study stack data structure and use it for expression parsing