

B.Tech. (New Scheme) for Academic Year 2024-25 onwards
Semester-Wise Structure of Curriculum

1st Year: Semester-I

| Sr. No. | Course Category | Course Title | Course Code | Lecture (L) / Tutorial (T) / Practical (P) per week | | | Credits | |
|-------------------------|-----------------|--|---|---|----|---|---------|----|
| | | | | L | T@ | P | | |
| 1. | IC | Communication Skills in English (for CSE, IT, ECE, AI&ML, IIoT, AI&DS, and M&C) OR Financial Education (for CSE, IT, ECE, AI&ML, IIoT, AI&DS, and M&C) | HSIC101 | 2 | 0 | 2 | 3# | |
| | | Economics for Engineers (for EE, CE, ME, PIE, SET, R&A, and M&V) OR Business Studies (for EE, CE, ME, PIE, SET, R&A, and M&V) | HSIC103 | 3 | 0 | 0 | | |
| | | | HSIC102 | 3 | 0 | 0 | | |
| | | | HSIC104 | 3 | 0 | 0 | | |
| 2. | | | Differential Calculus and Differential Equations (for all) | MAIC101 | 3 | 0 | 0 | 3 |
| 3. | | | Engineering Physics (for all) | PHIC101 | 3 | 0 | 2 | 4 |
| 4. | | | Engineering Graphics (for EE, CE, and SET) | CEIC101 | 1 | 0 | 3 | 2 |
| | | | Engineering Graphics (for ME, PIE, and R&A) | MEIC101 | 1 | 0 | 3 | |
| | | | Engineering Practice (for CSE, IT, ECE, AI&ML, IIoT, AI&DS, M&C, and M&V) | MEIC102 | 1 | 0 | 3 | |
| 5. | | | Problems Solving and Programming Using C (for CSE, IT, AI&ML, IIoT, AI&DS, and M&C) | CSIC101 | 3 | 0 | 2 | 4 |
| | | | Problems Solving and Programming Using C (for EE, CE, ECE, ME, PIE, R&A, SET, and M&V) | CSIC103 | | | | |
| 6. | | | Energy and Environmental Science (for all) | CHIC101 | 2 | 0 | 2 | 3 |
| 7. | NC | Any one subject from Group-I (for CSE, IT, ECE, AI&ML, IIoT, AI&DS, and M&C) | **NC### | 2 | 0 | 0 | 2# | |
| | | Any one subject from Group-II (for EE, CE, ME, PIE, SET, R&A, and M&V) | **NC### | 2 | 0 | 0 | | |
| 8. | | | NCC/ Sports/ Yoga | SWNC101 | 0 | 0 | 4 | 2* |
| 9. | | | NSS/ Clubs/ Technical Societies | SWNC102 | 0 | 0 | 4 | |
| Total Credits (for all) | | | | | | | 21 | |

* Continuous Evaluation Model as per guidelines and the credit to be awarded at the end of 6th Semester based on Cumulative performance up to 6th Semester.

Minimum number of students required to register for the subject to be offered is 50, and maximum number is 80 in one lecture group, limited to only 2 lecture groups for any subject.

@ In lieu of tutorial, wherever necessary, assignments and interactions with the students may be conducted at their own convenience by the faculty concerned.

** Two letters signifying the Department offering the course.

Three digits indicating course number.

B.Tech. (New Scheme) for Academic Year 2024-25 onwards
Semester-Wise Structure of Curriculum

1st Year: semester-II

| Sr. No. | Course Category | Course Title | Course Code | Lecture (L) / Tutorial (T) / Practical (P) per week | | | Credits |
|---|-----------------|---|-------------|---|----|---|---------|
| | | | | L | T@ | P | |
| 1. | IC | Communication Skills in English (for EE, CE, ME, PIE, SET, R&A, and M&V) OR Financial Education (for EE, CE, ME, PIE, SET, R&A, and M&V) | HSIC101 | 2 | 0 | 2 | 3# |
| | | Economics for Engineers (for CSE, IT, ECE, AI&ML, IIoT, AI&DS, and M&C) OR Business Studies (for CSE, IT, ECE, AI&ML, IIoT, AI&DS, and M&C) | HSIC103 | 3 | 0 | 0 | |
| | | | HSIC102 | 3 | 0 | 0 | |
| | | | HSIC104 | 3 | 0 | 0 | |
| 2. | | Integral Calculus and Difference Equations (for all) | MAIC102 | 3 | 0 | 0 | 3 |
| 3. | | Advanced Engineering Physics (for CE, ME, and PIE) | PHIC102 | 3 | 0 | 2 | 4 |
| | | Advanced Engineering Physics (for ECE, and M&V) | PHIC103 | 3 | 0 | 2 | |
| | | Advanced Engineering Physics (for EE) | PHIC104 | 3 | 0 | 2 | |
| | | Advanced Engineering Physics (for IIoT) | PHIC105 | 3 | 0 | 2 | |
| | | Semiconductors for Energy Systems (for SET) | PHIC106 | 3 | 0 | 2 | |
| | | Digital System Design (for CSE, IT, AI&ML, AI&DS, R&A, and M&C) | CSIC100 | 3 | 0 | 0 | 3 |
| 4. | | Engineering Practice (for CE, EE, ME, PIE, SET, and R&A) | MEIC102 | 1 | 0 | 3 | 2 |
| | | Engineering Graphics (Web Design) (For CSE, IT, ECE, AI&ML, IIoT, AI&DS, M&V, and M&C) | CSIC102 | 1 | 0 | 3 | |
| 5. | | Chemistry (for CE, ME, and PIE) | CHIC102 | 3 | 0 | 2 | 4 |
| | | Chemistry (for EE, ECE and M&V) | CHIC103 | 3 | 0 | 2 | |
| | | Electrochemistry & Fuel Cell Technology (SET) | CHIC104 | 3 | 0 | 2 | |
| | | Programming using Python (for CSE, IT, AI&ML, IIoT, AI&DS, R&A, and M&C) | CSIC104 | 2 | 0 | 2 | 3 |
| 6. | NC | Any one subject from Group-I (for EE, CE, ME, PIE, SET, R&A, and M&V) | **NC### | 2 | 0 | 0 | 2# |
| | | Any one subject from Group-II (for CSE, IT, ECE, AI&ML, IIoT, AI&DS, and M&C) | **NC### | 2 | 0 | 0 | |
| 7. | | NCC/ Sports/ Yoga | SWNC101 | 0 | 0 | 4 | 2* |
| 8. | | NSS/ Clubs/ Technical Societies | SWNC102 | 0 | 0 | 4 | |
| 9. | PC | Programme Core Course (Theory) EE, SET, ME, PIE, and R&A | **PC### | 4 | 0 | 0 | 4 |
| | | Programme Core Course (Theory & Lab.) CE, ECE, M&V, SET CSE, IT, AI&ML, AI&DS, M&C, and IIoT | | 3 | 0 | 2 | |
| Total Credits (for CSE, IT, AI&ML, AI&DS, R&A, and M&C) | | | | | | | 20 |
| Total Credits (for IIoT) | | | | | | | 21 |
| Total Credits (for CE, EE, ECE, ME, PIE, M&V and SET) | | | | | | | 22 |

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