

**VISHNU INSTITUTE OF TECHNOLOGY ( AUTONOMOUS) :: BHIMAVARAM**

**III B.TECH II SEM (R23) - SUBJECTS AND CODES - 2023 Batch**

| <b>Branch</b> | <b>Subject Code</b> | <b>Subject Name</b>                              | <b>Credits</b> |
|---------------|---------------------|--|----------------|
| <b>CIVIL</b>  | 23CE6T01            | Design and Drawing of Steel Structures           | 3              |
|               | 23CE6T02            | Highway Engineering                              | 3              |
|               | 23CE6T03            | Environmental Engineering                        | 3              |
|               | 23CE6T04            | Ground Improvement Techniques                    | 3              |
|               | 23CE6T10            | Interior Design & Space Planning                 | 3              |
|               | 23OE6T04            | Principles of Database Management Systems        | 3              |
|               | 23CE6P01            | Environmental Engineering Lab                    | 1.5            |
|               | 23CE6P02            | Highway Engineering Lab                          | 1.5            |
|               | 23CE6P03            | CAD Lab  | 2              |
|               | 23HS6A01            | Technical Paper Writing & IPR                    | 0              |
| <b>EEE</b>    | 23EE6T01            | Electrical Measurements and Instrumentation      | 3              |
|               | 23EE6T02            | Microprocessors and Microcontrollers             | 3              |
|               | 23EE6T03            | Power System Analysis                            | 3              |
|               | 23EE6T04            | Switchgear and Protection                        | 3              |
|               | 23EE6T07            | Electric Drives                                  | 3              |
|               | 23OE6T04            | Principles of Database Management Systems        | 3              |
|               | 23EE6P01            | Electrical Measurements and Instrumentation Lab  | 1.5            |
|               | 23EE6P02            | Microprocessors and Microcontrollers Lab         | 1.5            |
|               | 23EE6P03            | IoT Applications of Electrical Engineering Lab   | 2              |
|               | 23HS6A02            | Research Methodology                             | 0              |
| <b>ME</b>     | 23ME6T01            | Heat Transfer                                    | 3              |
|               | 23ME6T02            | Artificial Intelligence and Machine Learning     | 3              |
|               | 23ME6T03            | Finite Element Methods                           | 3              |
|               | 23ME6T05            | Advanced Manufacturing Processes                 | 3              |
|               | 23ME6T11            | Refrigeration & Air-Conditioning                 | 3              |
|               | 23OE6T04            | Principles of Database Management Systems        | 3              |
|               | 23ME6P01            | Heat Transfer Lab                                | 1.5            |
|               | 23ME6P02            | Artificial Intelligence and Machine Learning Lab | 1.5            |
|               | 23ME6P03            | Robotics and Drone Technologies Lab              | 2              |

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|--------|--------------|--|---------|
|        | 23HS6A01     | Technical Paper Writing & IPR                                | 0       |
| ECE    | 23EC6T01     | VLSI Design  | 3       |
|        | 23EC6T02     | Microprocessors & Microcontrollers                           | 3       |
|        | 23EC6T03     | Digital Signal Processing                                    | 3       |
|        | 23EC6T08     | 12Weeks MOOC Swayam/ NPTEL course recommended by the BoS     | 3       |
|        | 23EC6T11     | Embedded Systems   | 3       |
|        | 23OE6T04     | Principles of Database Management Systems                    | 3       |
|        | 23EC6P01     | VLSI Design Lab  | 1.5     |
|        | 23EC6P02     | Microprocessors & Microcontrollers Lab                       | 1.5     |
|        | 23EC6P03     | Machine Learning Lab   | 2       |
|        | 23HS6A03     | Research methodology and IPR                                 | 0       |
| CSE    | 23CS6T01     | Compiler Design  | 3       |
|        | 23CS6T02     | Cloud Computing  | 3       |
|        | 23IT6T01     | Cryptography & Network Security                              | 3       |
|        | 23CS6T04     | DevOps   | 3       |
|        | 23CS6T07     | Software Project Management                                  | 3       |
|        | 23CS6T08     | Natural Language Processing                                  |         |
|        | 23OE6T03     | Water Supply Systems   | 3       |
|        | 23CS6P01     | Cloud Computing Lab  | 1.5     |
|        | 23IT6P01     | Cryptography & Network Security Lab                          | 1.5     |
|        | 23CS6P03     | Soft Skills/ SWAYAM Plus – 21st Century Employability Skills | 2       |
|        | 23HS6A01     | Technical Paper Writing & IPR                                | 0       |
| IT     | 23CS6T02     | Cloud Computing  | 3       |
|        | 23IT6T01     | Cryptography & Network Security                              | 3       |
|        | 23AD6T02     | Machine Learning   | 3       |
|        | 23CS6T04     | DevOps   | 3       |
|        | 23IT6T04     | Generative AI  |         |
|        | 23CS6T07     | Software Project Management                                  | 3       |
|        | 23OE6T03     | Water Supply Systems   | 3       |
|        | 23CS6P01     | Cloud Computing Lab  | 1.5     |
|        | 23AD6P02     | Machine Learning Lab   | 1.5     |

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|--------------------|-------------------------------|--|---------|
|                    | 23IT6P03                      | Soft skills // SWAYAM Plus - 21st Century Employability Skills | 2       |
|                    | 23HS6A01                      | Technical Paper Writing & IPR                                  | 0       |
| <b>AI&amp;DS</b>   | 23AD6T01                      | Big Data Analytics   | 3       |
|                    | 23AD6T02                      | Machine Learning   | 3       |
|                    | 23AD6T03                      | Data Visualization   | 3       |
|                    | 23AD6T05                      | NoSQL Databases  | 3       |
|                    | 23AD6T10                      | 12-Week SWAYAM /NPTEL Course recommended by the BoS            | 3       |
|                    | 23OE6T05                      | Fundamentals of Electric Vehicles                              | 3       |
|                    | 23AD6P01                      | Data Visualization and Machine Learning Lab                    | 1.5     |
|                    | 23AD6P04                      | Big Data Analytics Lab   | 1.5     |
|                    | 23AD6P05                      | Soft skills  | 2       |
|                    | 23HS6A01                      | Technical Paper Writing & IPR                                  | 0       |
| <b>AI &amp; ML</b> | 23AM6T01                      | Natural Language Processing                                    | 3       |
|                    | 23AM6T02                      | Deep Learning  | 3       |
|                    | 23AD6T03                      | Data Visualization   | 3       |
|                    | 23AM6T05                      | Any of the 12-Week SWAYAM / NPTEL Course suggested by the BoS  | 3       |
|                    | 23CS6T07                      | Software Project Management                                    | 3       |
|                    | 23OE6T15                      | Microprocessors & Microcontrollers                             | 3       |
|                    | 23AM6P01                      | Deep Learning Lab  | 1.5     |
|                    | 23AD6P03                      | Data Visualization Lab   | 1.5     |
|                    | 23AM6P02                      | Soft Skills  | 2       |
| 23HS6A01           | Technical Paper Writing & IPR | 0  |         |
| <b>CSBS</b>        | 23HS6T01                      | Marketing Research and Marketing Management                    | 3       |
|                    | 23CB6T01                      | Data Analytics   | 3       |
|                    | 23AD6T02                      | Machine Learning   | 3       |
|                    | 23CB6T04                      | 12-week MOOC Swayam/NPTEL course recommended by the BoS        | 3       |
|                    | 23CS6T07                      | Software Project Management                                    | 3       |
|                    | 23OE6T03                      | Water Supply Systems   | 3       |
|                    | 23CB6P01                      | Data Analytics Lab   | 1.5     |
|                    | 23CB6P02                      | Python for Machine Learning Lab                                | 1.5     |

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|---------------|---------------------|-------------------------------|----------------|
|               | 23CB6P03            | Soft Skills or IELTS          | 2              |
|               | 23HS6A01            | Technical Paper Writing & IPR | 0              |