**Shri Vile Parle Kelavani Mandal’s**

**NMIMS Global University, Dhule**

**School of Technology, Management & Engineering**

**Survey No. 499, Plot No. 02, Behind Gurudwara,**

**Mumbai Agra National Highway,**

**Dhule- 424 001, Maharashtra, India**

# Curriculum Structure and Syllabus Of

**First Year B. Tech. (Common to all branches)**

**(Regulation 2025)**

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**Effective from Academic Year 2025-26**

Vision

"SVKM NMIMS Global University aspires to be a world-renowned institution of higher learning, dedicated to fostering excellence in education, research and innovation with social responsibility"

Mission

1. To foster a dynamic and inclusive learning environment that nurtures the educational and research aspirations of students from diverse backgrounds.

2. To deliver state-of-the-art pedagogy, emphasizing interdisciplinary collaboration and innovation.

3. To uphold the values of ethics and community engagement to cultivate global citizens and leaders who actively contribute to the advancement of society and the world.

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**CURRICULUM FRAMEWORK**

**LIST OF ABBREVIATIONS**

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **Abbreviation** | **Type of Course** |
| 1 | BSC | Basic Science Course |
| 2 | ESC | Engineering Science Course |
| 3 | PCC | Programme Core Course |
| 4 | PEC | Programme Elective Course |
| 5 | MDM | Multidisciplinary Minor |
| 6 | OEC | Open Elective Course |
| 7 | VSEC | Vocational and Skill Enhancement Course |
| 8 | AEC | Ability Enhancement Course |
| 9 | EEM | Entrepreneurship/Economics/Management Course |
| 10 | IKS | Indian Knowledge System |
| 11 | VEC | Value Education Course |
| 12 | ELC | Experiential Learning Courses |
| 13 | CC | Co-curricular Courses |
| 14 | HSSM | Humanities Social Science and Management |

**SEMESTER-WISE COURSE DISTRIBUTION (GROUP A)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr. No.** | **Type of Course** | **Course Distribution: Semester Wise** | | | **Credit Distribution: Semester Wise** | | |
| **No. of Courses / Semester** | | | **No. of Credits / Semester** | | |
| **I** | **II** | **Total** | **I** | **II** | **Total** |
| 1. | Basic Science Course (BSC) | 3 | 3 | **6** | 7 | 7 | **14** |
| 2. | Engineering Core Course (ECC) | 7 | 5 | **12** | 9 | 6 | **15** |
| 3. | Programme Core Course (PCC) |  |  |  |  |  |  |
| 4. | Programme Elective Course (PEC) |  |  |  |  |  |  |
| 5. | Multidisciplinary Minor (MDM) |  |  |  |  |  |  |
| 6. | Open Elective Course (OEC) |  |  |  |  |  |  |
| 7. | Vocational and Skill Enhancement Course  (VSEC) | 1 | 1 | **2** | 2 | 2 | **4** |
| 8. | Ability Enhancement Course (AEC) |  | 2 | **2** |  | 3 | **3** |
| 9. | Entrepreneurship/ Economics/ Management  Course (HSSM) |  |  |  |  |  |  |
| 10. | Indian Knowledge System (IKS) | 1 |  | **1** | 2 |  | **2** |
| 11. | Value Education Course (VEC) |  |  |  |  |  |  |
| 12. | Experiential Learning Courses (ELC) |  |  |  |  |  |  |
| 13. | Co-curricular courses (CC) | 1 | 1 | **2** | 2 | 2 | **4** |
| **Total** | | **13** | **12** | **25** | **22** | **20** | **42** |

**SEMESTER-WISE CREDIT DISTRIBUTION (GROUP B)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr. No.** | **Type of Course** | **Course Distribution: Semester Wise** | | | **Credit Distribution: Semester Wise** | | |
| **No. of Courses / Semester** | | | **No. of Credits / Semester** | | |
| **I** | **II** | **Total** | **I** | **II** | **Total** |
| 1. | Basic Science Course (BSC) | 3 | 3 | **6** | 7 | 7 | **14** |
| 2. | Engineering Core Course (ECC) | 5 | 7 | **12** | 9 | 6 | **15** |
| 3. | Programme Core Course (PCC) |  |  |  |  |  |  |
| 4. | Programme Elective Course (PEC) |  |  |  |  |  |  |
| 5. | Multidisciplinary Minor (MDM) |  |  |  |  |  |  |
| 6. | Open Elective Course (OEC) |  |  |  |  |  |  |
| 7. | Vocational and Skill Enhancement Course  (VSEC) | 1 | 1 | **2** | 2 | 2 | **4** |
| 8. | Ability Enhancement Course (AEC) | 2 |  | **2** |  | 3 | **3** |
| 9. | Entrepreneurship/ Economics/ Management  Course (HSSM) |  |  |  |  |  |  |
| 10. | Indian Knowledge System (IKS) |  | 1 | **1** | 2 |  | **2** |
| 11. | Value Education Course (VEC) |  |  |  |  |  |  |
| 12. | Experiential Learning Courses (ELC) |  |  |  |  |  |  |
| 13. | Co-curricular courses (CC) | 1 | 1 | **2** | 2 | 2 | **4** |
| **Total** | | **12** | **13** | **25** | **20** | **22** | **42** |

**Curriculum Structure B. Tech.**

**First Year Engineering**

**(Common to all branches)**

**CURRICULUM STRUCTURE**

**First Year B. Tech. (Common to all branches) Semester – I**

**Group A (AIML, IT, ELECTRICAL, CIVIL, MECH)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **First Year Engineering (Regulations 2025)**  **(With effect from Academic Year 2025-26)** | | | | | | | | | | | | | | |
| **Semester I** | | | | | | | | | | | | | | |
| **Course Code** | **Course Name** | **Credit Scheme** | | | | **Teaching Scheme (Hours/Week)** | | | **Evaluation Scheme and Marks** | | | | | |
| **L** | **P** | **T** | **Total** | **L** | **P** | **T** |  | | **ESE** | **TW** | **PR/OR** | **Total** |
| **ISE** | **MSE** |
| T25ABS101 | Engineering Mathematics-I | 3 | - | - | 3 | 3 | - | - | 20 | 20 | 60 | - | - | 100 |
| T25ABS102 | Engineering Physics | 3 | - | - | 3 | 3 | - | - | 20 | 20 | 60 | - | - | 100 |
| T25ABS102P | Engineering Physics- Lab | - | 1 | - | 1 | - | 2 | - | - | - | - | 25 | 25 | 50 |
| T25AES103 | Programming for Problem Solving | 2 | - | - | 2 | 2 | - | - | 10 | 10 | 30 | - | - | 50 |
| T25AES103P | Programming for Problem Solving Lab | - | 1 | - | 1 | - | 2 | - | - | - | - | 25 | 25 | 50 |
| T25AES104 | Engineering Mechanics | 2 | - | - | 2 | 2 | - | - | 10 | 10 | 30 | - | - | 50 |
| T25AES104P | Engineering Mechanics- Lab | - | 1 | - | 1 | - | 2 | - | - | - | - | 25 | 25 | 50 |
| T25AES105 | Basic Electrical and Electronics Engineering | 2 | - | - | 2 | 2 | - | - | 10 | 10 | 30 | - | - | 50 |
| T25AES105P | Basic Electrical and Electronics Engineering- Lab | - | 1 | - | 1 | - | 2 | - | - | - | - | 25 | 25 | 50 |
| T25AIK106 | Indian Knowledge System | 2 | - | - | 2 | 2 | - | - | - | - | - | 50 | - | 50 |
| T25AVS107 | Design Thinking | 2 | - | - | 2 | 2 | - | - | - | - | - | 50 | - | 50 |
| T25ACC108 | A.Yoga Education/B.NSS-I/C.NCC | 1 | 1 | - | 2 | 1 | 2 | - | - | - | - | 50 | - | 50 |
| T25AES109 | Basic Civil and Mechanical Engineering | - | - | - | AU | 2 | - | - | - | - | - | 50\* | - | 50\* |
| **Total** | | **17** | **5** | **0** | **22** | **19** | **10** | **0** | **70** | **70** | **210** | **250** | **100** | **700** |

**First Year B. Tech. (Common to all branches) Semester – II**

**Group A (AIML, IT, ELECTRICAL, CIVIL, MECH)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **First Year Engineering (Regulations 2025)**  **(With effect from Academic Year 2025-26)** | | | | | | | | | | | | | | |
| **Semester II** | | | | | | | | | | | | | | |
| **Course Code** | **Course Name** | **Credit Scheme** | | | | **Teaching Scheme (Hours/Week)** | | | **Evaluation Scheme and Marks** | | | | | |
| **L** | **P** | **T** | **Total** | **L** | **P** | **T** |  | | **ESE** | **TW** | **PR** | **Total** |
| **ISE** | **MSE** |
| T25ABS151 | Engineering Mathematics-II | 3 | - | - | 3 | 3 | - | - | 20 | 20 | 60 | - | - | 100 |
| T25ABS152 | Engineering Chemistry | 3 | - | - | 3 | 3 | - | - | 20 | 20 | 60 | - | - | 100 |
| T25ABS152P | Engineering Chemistry- Lab | - | 1 | - | 1 | - | 2 | - | - | - | - | 25 | 25 | 50 |
| T25AES153 | Object Oriented Paradigm | 2 | - | - | 2 | 2 | - | - | 10 | 10 | 30 | - | - | 50 |
| T25AES153P | Object Oriented Paradigm - Lab | - | 1 | - | 1 | - | 2 | - | - | - | - | 25 | 25 | 50 |
| T25AES154 | Engineering Graphics | 2 | - | - | 2 | 2 | - | - | 10 | 10 | 30 | - | - | 50 |
| T25AES154P | Engineering Graphics- Lab | - | 1 | - | 1 | - | 2 | - | - | - | - | 25 | 25 | 50 |
| T25AAE155 | Communication Skills | 2 | - | - | 2 | 2 | - | - | 10 | 10 | 30 | - | - | 50 |
| T25AAE155P | Communication Skills- Lab | - | 1 | - | 1 | - | 2 | - | - | - | - | 25 | 25 | 50 |
| T25AVS156P | Workshop Practices | - | 2 | - | 2 | - | 4 | - | - | - | - | 50 | 50 | 100 |
| T25ACC157 | A. Integrated Personality Development Course/B. NSS-II/C. Health and wellness | 1 | 1 | - | 2 | 1 | 2 | - | - | - | - | 50 | - | 50 |
| T25AES158 | Energy and Environment Engineering | - | - | - | AU | 2 | - | - | - | - | - | 50\* | - | 50\* |
| **Total** | | **13** | **7** | **0** | **20** | **15** | **14** | **0** | **70** | **70** | **210** | **200** | **150** | **700** |

## **L**-Lecture, **P**-Practical, **T**-Tutorial, **ISE**–In-Sem. Exam, **MSE** – Mid Sem. Exam., **ESE** – End Sem. Exam., **TW**-Term Work, **PR**-Practical

**\*Marks are not considered for calculation of SGPA/CGPA**

**Note: - Exit Policy:** Available as a separate document

**First Year B. Tech. (Common to all branches) Semester – I**

**Group B (COMPUTER, DATA SCIENCE)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **First Year Engineering (Regulations 2025)**  **(With effect from Academic Year 2025-26)** | | | | | | | | | | | | | | |
| **Semester I** | | | | | | | | | | | | | | |
| **Course Code** | **Course Name** | **Credit Scheme** | | | | **Teaching Scheme (Hours/Week)** | | | **Evaluation Scheme and Marks** | | | | | |
| **L** | **P** | **T** | **Total** | **L** | **P** | **T** |  | | **ESE** | **TW** | **PR** | **Total** |
| **ISE** | **MSE** |
| T25ABS101 | Engineering Mathematics-I | 3 | - | - | 3 | 3 | - | - | 20 | 20 | 60 | - | - | 100 |
| T25ABS110 | Engineering Chemistry | 3 | - | - | 3 | 3 | - | - | 20 | 20 | 60 | - | - | 100 |
| T25ABS110P | Engineering Chemistry- Lab | - | 1 | - | 1 | - | 2 | - | - | - | - | 25 | 25 | 50 |
| T25AES103 | Programming for Problem Solving | 2 | - | - | 2 | 2 | - | - | 10 | 10 | 30 | - | - | 50 |
| T25AES103P | Programming for Problem Solving- Lab | - | 1 | - | 1 | - | 2 | - | - | - | - | 25 | 25 | 50 |
| T25AES111 | Engineering Graphics | 2 | - | - | 2 | 2 | - | - | 10 | 10 | 30 | - | - | 50 |
| T25AES111P | Engineering Graphics- Lab | - | 1 | - | 1 | - | 2 | - | - | - | - | 25 | 25 | 50 |
| T25AAE112 | Communication Skills | 2 | - | - | 2 | 2 | - | - | 10 | 10 | 30 | - | - | 50 |
| T25AAE112P | Communication Skills- Lab | - | 1 | - | 1 | - | 2 | - | - | - | - | 25 | 25 | 50 |
| T25AVS113P | Workshop Practices | - | 2 | - | 2 | - | 4 | - | - | - | - | 50 | 50 | 100 |
| T25ACC114 | A. Integrated Personality Development Course/B. NSS-II/C. Health and wellness | 1 | 1 | - | 2 | 1 | 2 | - | - | - | - | 50 | - | 50 |
| T25AES115 | Energy and Environment Engineering | - | - | - | AU | 2 | - | - | - | - | - | 50\* | - | 50\* |
| **Total** | | **13** | **7** | **0** | **20** | **15** | **14** | **0** | **70** | **70** | **210** | **200** | **150** | **700** |

**First Year B. Tech. (Common to all branches) Semester – II**

**Group B (COMPUTER, DATA SCIENCE)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **First Year Engineering (Regulations 2025)**  **(With effect from Academic Year 2025-26)** | | | | | | | | | | | | | | |
| **Semester II** | | | | | | | | | | | | | | |
| **Course Code** | **Course Name** | **Credit Scheme** | | | | **Teaching Scheme (Hours/Week)** | | | **Evaluation Scheme and Marks** | | | | | |
| **L** | **P** | **T** | **Total** | **L** | **P** | **T** |  | | **ESE** | **TW** | **PR** | **Total** |
| **ISE** | **MSE** |
| T25ABS151 | Engineering Mathematics-II | 3 | - | - | 3 | 3 | - | - | 20 | 20 | 60 | - | - | 100 |
| T25ABS159 | Engineering Physics | 3 | - | - | 3 | 3 | - | - | 20 | 20 | 60 | - | - | 100 |
| T25ABS159P | Engineering Physics- Lab | - | 1 | - | 1 | - | 2 | - | - | - | - | 25 | 25 | 50 |
| T25AES153 | Object Oriented Paradigm | 2 | - | - | 2 | 2 | - | - | 10 | 10 | 30 | - | - | 50 |
| T25AES153P | Object Oriented Paradigm - Lab | - | 1 | - | 1 | - | 2 | - | - | - | - | 25 | 25 | 50 |
| T25AES160 | Engineering Mechanics | 2 | - | - | 2 | 2 | - | - | 10 | 10 | 30 | - | - | 50 |
| T25AES160P | Engineering Mechanics-Lab | - | 1 | - | 1 | - | 2 | - | - | - | - | 25 | 25 | 50 |
| T25AES161 | Basic Electrical and Electronics Engineering | 2 | - | - | 2 | 2 | - | - | 10 | 10 | 30 | - | - | 50 |
| T25AES161P | Basic Electrical and Electronics Engineering- Lab | - | 1 | - | 1 | - | 2 | - | - | - | - | 25 | 25 | 50 |
| T25AIK162 | Indian Knowledge System | 2 | - | - | 2 | 2 | - | - | - | - | - | 50 | - | 50 |
| T25AVS163 | Design Thinking | 2 | - | - | 2 | 2 | - | - | - | - | - | 50 | - | 50 |
| T25ACC164 | A.Yoga Education/B.NSS-I/C.NCC | 1 | 1 | - | 2 | 1 | 2 | - | - | - | - | 50 | - | 50 |
| T25AES165 | Basic Civil and Mechanical Engineering | - | - | - | AU | 2 | - | - | - | - | - | 50\* | - | 50\* |
| **Total** | | **17** | **5** | **0** | **22** | **19** | **10** | **0** | **70** | **70** | **210** | **250** | **100** | **700** |

## **L**-Lecture, **P**-Practical, **T**-Tutorial, **ISE**–In-Sem. Exam, **MSE** – Mid Sem. Exam., **ESE** – End Sem. Exam., **TW**-Term Work**, PR**-Practical

## **\*Marks are not considered for calculation of SGPA/CGPA**

## **Note: - Exit Policy:** Available as a separate document