**NUTAN MAHARASHTRA VIDYA PRASARAK MANDAL'S**

# NUTAN MAHARASHTRA INSTITUTE OF ENGINEERING

# AND TECHNOLOGY

**AN AUTONOMOUS INSTITUTE | UNDER ADMINISTRATIVE SUPPORT OF PCET**

# Curriculum Structure

# of

# Fourth Year B. Tech.

# Information Technology (2025 Pattern)

# CURRICULUM STRUCTURE

## Fourth Year B. Tech. (Information Technology)
## Semester – VII

| | | | | Level 6.0 | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Fourth Year B. Tech Information Technology | | | | | | | | | | | | |
| | | | | Semester VII | | | | | | | | | | | | |
| Sl. No. | Course Code | Course Type | Course Name | Credit Scheme | | | Teaching Scheme (Hours/Week) | | | Examination Scheme and Marks | | | | | | | |
| | | | | | | | | | | CCE | | ESE | | | | |
| | | | | TH | TUT | PR | L | T | P | UT | FA | SA | PR | OR | TW | TOTAL |
| | | | | | | | | | | 25 | 25 | 50 | | | | |
| 1 | IT25PCC-401 | Programme Core Course | Distributed System | 2 | | | 3 | | | 25 | 25 | 50 | | | | 100 |
| 2 | IT25PCC-402 | Programme Core Course | Distributed System LAB | | | 2 | | | 4 | | | | 25 | | 25 | 50 |
| 3 | IT25PCC-403 | Programme Core Course | Generative Artificial Intelligence | 2 | | | 2 | | | 25 | 25 | 50 | | | | 100 |
| 4 | IT25PCC-404 | Programme Core Course | Generative Artificial Intelligence LAB | | | 2 | | | 4 | | | | 25 | | 25 | 50 |
| 5 | IT25PEC-405 | Programme Elective Course | Programme Elective Course -IV | 3 | | | 3 | | | 25 | 25 | 50 | | | | 100 |
| 6 | IT25PEC-406 | Programme Elective Course | Programme Elective Course Lab-IV | | | 1 | | | 2 | | | | | 25 | 25 | 50 |
| 7 | IT25ELC-407 | Experiential Learning/Internship/OJT | Internship | | | 6 | | | 12 | | | | | 100 | 100 | 200 |
| 8 | IT25ELC-408 | | Project Stage I | | | 2 | | | 4 | | | | | 50 | 50 | 100 |
| TOTAL | | | | 7 | | 13 | 7 | | 26 | 75 | 75 | 150 | 50 | 175 | 225 | 750 |
| | | | | 20 | | | 33 | | | | | | | | | |

**CCE-** Comprehensive Continuous Evaluation**, ESE-** End Semester Evaluation, **TW**-Term Work, **OR**-Oral, **PR**-Practical, **TH**-Theory**, L**-Lecture, **T/TUT**-Tutorial, **UT**- Unit Test, **FA**–Formative Assessment, **SA** – Summative Assessment

## Basket: List of Courses - Programme Elective Course-IV

| Course Code | Course Name | |
|---|---|---|
| IT25PEC-405-A | AIML for Gamming | Choose Any One |
| IT25PEC-405-B | Cloud Security and Forensics | |
| IT25PEC-405-C | Wearable Computing | |

# CURRICULUM STRUCTURE

## Fourth Year B. Tech. (Information Technology)
## Semester – VIII

| | | | | Credit Scheme | | | Teaching Scheme (Hours/Week) | | | Examination Scheme and Marks | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Level 6.0** | | | | | | | | | | | | | | | | |
| **Fourth Year B. Tech Information Technology** | | | | | | | | | | | | | | | | |
| **Semester VIII** | | | | | | | | | | | | | | | | |
| Sl. No. | Course Code | Course Type | Course Name | | | | | | | CCE | | ESE | | | | |
| | | | | TH | TUT | PR | L | T | P | UT | FA | SA | PR | OR | TW | TOTAL |
| | | | | | | | | | | 25 | 25 | 50 | | | | |
| 1 | IT25PCC-451 | Programme Core Course | High Perfomance Computing | 2 | | | 2 | | | 25 | 25 | 50 | | | | 100 |
| 2 | IT25PCC-452 | Programme Core Course | High Perfomance Computing LAB | | | 2 | | | 4 | | | | 25 | | 25 | 50 |
| 3 | IT25PEC-453 | Programme Elective Course | Programme Elective Course -V | 3 | | | 3 | | | 25 | 25 | 50 | | | | 100 |
| 4 | IT25PEC-454 | Programme Elective Course | Programme Elective Course Lab-V | | | 1 | | | 2 | | | | 25 | | 25 | 50 |
| 5 | IT25MDM-455 | Multidisciplinary Course | Wireless Sensor Network | 2 | | | 2 | | | 25 | 25 | 50 | | | | 100 |
| 6 | IT25MDM-456 | Multidisciplinary Course | Wireless Sensor Network LAB | | | 2 | | | 4 | | | | | 25 | 25 | 50 |
| 7 | IT25ELC-457 | Experiential Learning Course /Internship/ OJT | Internship | | | 4 | | | 8 | | | | | 100 | 50 | 150 |
| 8 | IT25ELC-458 | | Research Methodology-II | | | 2 | | | 4 | | | | | | 50 | 50 |
| 9 | IT25ELC-459 | | Project Stage- II | | | 2 | | | 4 | | | | | 50 | 50 | 100 |
| **TOTAL** | | | | 7 | | 13 | 7 | | 26 | 75 | 75 | 150 | 50 | 175 | 225 | 750 |
| | | | | 20 | | | 33 | | | | | | | | | |

**CCE-** Comprehensive Continuous Evaluation, **ESE**- End Semester Evaluation, **TW**-Term Work, **OR**-Oral, **PR**-Practical, **TH**- Theory, **L**-Lecture, **T/TUT**-Tutorial, **UT**- Unit Test, **FA**–Formative Assessment, **SA** – Summative Assessment

## Basket: List of Courses - Programme Elective Course-V

| Course Code | Course Name | |
|---|---|---|
| IT25PEC-453-A | Semantic Search and knowledge | Choose Any One |
| IT25PEC-453-B | Agile Project Management | |
| IT25PEC-453-C | Digital Image Processing | |