# VISVESVARAYA TECHNOLOGICAL UNIVERSITY

# BELAGAVI

# Scheme of Teaching and Examinations (2026)

## M.Tech., in Electronics & Communication

## (Digital Communication & Networking)

Choice-Based Credit System (CBCS) and Outcome-Based Education (OBE)

| | II SEMESTER: DIGITAL COMMUNICATION & NETWORKING | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sl. No | Course Type | Course Code | Course Title | Teaching & Learning Scheme | | | | | Examination | | | | Credits |
| | | | | CI | | LI | TW & SL | Total Hours/Sem | Duration in hours | CIE Marks | SEE Marks | Total Marks | |
| | | | | L | T | P | | | | | | | |
| 1 | PCC | 1MLDN201 | Massive MIMO systems | 42 | 0 | 0 | 48 | 90 | 03 | 50 | 50 | 100 | 4 |
| 2 | PCC | 1MLDN202 | Error Control Coding | 42 | 0 | 0 | 48 | 90 | 03 | 50 | 50 | 100 | 3 |
| 3 | PCC | 1MLDN203 | Multimedia applications | 42 | 0 | 0 | 48 | 90 | 03 | 50 | 50 | 100 | 3 |
| 4 | PCC | 1MLDN204 | Antenna theory | 42 | 0 | 28 | 50 | 120 | 03 | 50 | 50 | 100 | 3 |
| 5 | PEC | 1MLDN205X | Professional Elective Courses-III | 42 | 0 | 0 | 48 | 90 | 03 | 50 | 50 | 100 | 3 |
| 6 | PEC | 1MLDN206X | Professional Elective Course-IV | 42 | 0 | 0 | 48 | 90 | 03 | 50 | 50 | 100 | 3 |
| 7 | PCCL | 1MLDN207X | Professional Core Course- Lab (AEC Lab) | 0 | 0 | 28 | 02 | 30 | 03 | 50 | 50 | 100 | 1 |
| | PCC | 1MLDN208 | Minor Project | 0 | 0 | 28 | 02 | 30 | 03 | 50 | 50 | 100 | 2 |
| **TOTAL** | | | | | | | | | | **350** | **350** | **700** | **22** |

**Professional Elective Courses (PECs):**

Professional Elective Courses – PEC–I and PEC–II – are common to all branches of specialization within a particular Engineering stream. Students may choose the most appropriate elective based on their field of specialization and academic requirements. *Note: The number of courses listed under each PEC group may exceed four, depending on the specializations under one stream.*

**Integrated Professional Core Courses (IPCC):**

The 1Mxx104x Group comprises specialization-specific core courses that are integrated with a practical component, ensuring application-oriented learning aligned with industry and research needs. The number of courses in the group depends on the number of specializations offered under a particular engineering stream.

| Professional Elective Courses (PECs) | | | | |
|---|---|---|---|---|
| **PEC-III** | | | **PEC-IV** | |
| **Code** | **Title of the Course** | | **Code** | **Title of the Course** |
| 1MLDN205A | RF System Design | | 1MLDN206A | Wavelet Transforms and Applications |
| 1MLDN205B | Wireless Sensor Networks | | 1MLDN206B | Cloud Networking |
| 1MLDN205C | Advances in Image Processing | | 1MLDN206C | Array Signal Processing |
| 1MLDN205D | Statistical Signal Processing | | 1MLDN206D | Photonic Networks |

| Professional Core Course- Lab (AEC Lab) | |
|---|---|
| 1MLDN207A | Modelling and simulation using MATLAB |
| 1MLDN207B | Advanced Digital Signal Processing |