

MTech(EC): Detailed Program Structure

Specialization: Wireless Communications and Signal Processing

Semester-I

- Communication and Technical Writing (2 credit)
- Programming lab (3 credit)
- Specialization Core I: Introduction to Wireless Communication (4 credit)
- General Elective (Maths) (3/4 credit)
- General Elective (Technical) (3/4 credit)

Semester-II

- Specialization Core II – Advanced Digital Signal Processing (4 credit)
- Minor Project (3 credit)
- Specialization Elective I (3/4 credit)
- Specialization Elective II (4/3 credit)

Summer: Major Project I (4 credit)

Semester-III

- Major Project I (Continued) (6 credit)
- Specialization Elective III (3/4 credit)
- Specialization Elective IV (4/3 credit)

Semester-IV

- Major Project II/Industrial Training Project (12 credit)

Representative List of General Elective (Mathematics)

- Probability & Random Variables
- Linear Algebra
- Optimization
- Graph Theory
- Any other relevant course

Representative List of General Elective (Technical)

- Wireless System Design
- Detection and Estimation Theory
- Any other relevant course

Representative List of Specialization Electives I and II

- Advanced Wireless Communication
- Application of ML to Wireless Communication Systems
- Speech Processing
- Digital Image Processing
- Any other relevant course

Representative List of Specialization Elective III and IV

- Next Generation Communication Systems
- Cyber-Physical Systems and Internet of Things
- Adaptive Signal Processing
- Any other relevant course
