

**M.TECH IN DIGITAL COMMUNICATION ENGINEERING  
(LDC)  
Choice Based Credit System (CBCS) and Outcome Based Education (OBE)  
(Effective from the academic year 2024-25)**

**SEMESTER – IV (A)**

<b>Research Internship /Industry-Internship leading to project work/ Startup</b>			
Course Code	<b>MINT481</b>	CIE Marks	100
Teaching Hours/Week (L:P:SDA)	Two-semester duration, SEE in the IV semester which leads to project work /start-up.	SEE Marks	100
Total Hours of Pedagogy		Total Marks	200
Credits	06	Exam Hours	3

**Course Learning objectives:** This course will enable students to:

- Internship provide students the opportunity of hands-on experience that include personal training, time and stress management, interactive skills, presentations, budgeting, marketing, liability and risk management, paperwork, equipment ordering, maintenance, responding to emergencies etc. The objectives are further,
- To put theory into practice.
- To expand thinking and broaden the knowledge and skills acquired through course work in the field.
- To relate to, interact with, and learn from current professionals in the field.
- To gain a greater understanding of the duties and responsibilities of a professional.
- To understand and adhere to professional standards in the field.
- To gain insight to professional communication including meetings, memos, reading, writing, public speaking, research, client interaction, input of ideas, and confidentiality.
- To identify personal strengths and weaknesses.
- To develop the initiative and motivation to be a self-starter and work independently

Taking up a two-semester Industry/Research Internship that leads to project work or a start-up can be a highly rewarding experience for students. It allows them to apply theoretical knowledge in practical settings, gain valuable industry or research experience, and potentially develop innovative solutions or business ideas. Here are some key steps and considerations for students pursuing such an internship:

**Industry Internship:** The main objective of the industry internship is to ensure that the intern is exposed to a real-world environment and gain practical experience. Often, it may be a practical exposure to the theory that has been learned during the academic period. The industry internship helps students understand of analytical concepts and tools, hone their skills in real-life situations, and build confidence in applying the skills learned.

**Research Internship:** A research internship is an opportunity for students or early career professionals to gain hands-on experience in conducting research under the guidance of a mentor or within a research team. These internships can take place in academic institutions, research organizations, government agencies, or private companies

**Research /Industry Internship:** In the third-semester Students have to be in touch with a

guide/mentor/coordinator and regularly submit the report referred to the progress internship. Based on the progress report the Guide/Mentor/coordinator has to enter the CIE marks at the end of the 3<sup>rd</sup> semester. At the beginning of the 4<sup>th</sup> semester, students have to define the project topic out of the learning due to the Internship, upon completion of the project work he/she has to attend the SEE at the parent Institute.

**Internship Leading to Start-up:** An internship that leads to a startup is an exciting pathway, blending real-world experience with entrepreneurial ambition. Here's a comprehensive guide to transitioning an internship experience into launching your startup: 1) Maximize your internship experience, 2) Identifying Viable Business Ideas, 3) Research and Validation 4) Building a Business Plan 5) Networking and Mentorship 6) Securing Funding 7) Establishing Startup 8) Launching and Marketing. By following these steps, you can effectively transition from an internship to launching a successful startup. This journey requires dedication, resilience, and a willingness to learn and adapt.

**Course outcomes:** At the end of the course the student will be able to:

- Gain practical experience within industry in which the internship is done.
- Acquire knowledge of the industry in which the internship is done.
- Apply knowledge and skills learned to classroom work.
- Develop a greater understanding about career options while more clearly defining personal career goals.
- Experience the activities and functions of professionals.
- Develop and refine oral and written communication skills.
- Identify areas for future knowledge and skill development.
- Expand intellectual capacity, credibility, judgment, intuition.
- Acquire the knowledge of administration, marketing, finance and economics

**RBT Level: L3, L4, L5, L6**

<b>PROJECT WORK PHASE - II</b>			
Course Code	<b>MPRJ482</b>	CIE Marks	100
Teaching Hours/Week (L:P:SDA)	(0:6:0)	SEE Marks	100
Total Hours of Pedagogy	40 hours Practical	Total Marks	200
Credits	03	Exam Hours	03

**Course Learning objectives:** This course will enable students to:

- To encourage independent learning and the innovative attitude of the students.
- To develop an interactive attitude, communication skills, organization, time management, and presentation skills.
- To impart flexibility and adaptability.
- To inspire team work.
- To expand intellectual capacity, credibility, judgment, and intuition.
- To adhere to punctuality, setting and meeting deadlines.
- To instill responsibilities to oneself and others.
- To train students to present the topic of project work in a seminar without any fear, face the audience confidently, enhance communication skills, involved in group discussions to present and exchange ideas.

**Project Work:** Students in consultation with the guide shall carry out literature survey/ visit industries to finalize the topic of the Project. Subsequently, the students shall collect the material required for the selected project, prepare a synopsis, and narrate the methodology to carry out the project work. Each student, under the guidance of a Faculty, is required to

- Present the seminar on the selected project orally and/or through Power Point slides.
- Answer the queries and be involved in debate/discussion.
- Submit two copies of the typed report with a list of references.
- The participants shall take part in discussions to foster a friendly and stimulating environment in which the students are motivated to reach high standards and become self-confident

**CIE marks** for the project report (20 marks), seminar (20 marks) and question and answer (10 marks) shall be awarded (based on the quality of report and presentation skill, participation in the question and answer session by the student) by the committee constituted for the purpose by the Principal. The committee shall consist of internal guide and a faculty from the department with the senior most acting as the Chairperson.

**Semester End Examination** SEE marks for the project report (30 marks), seminar (10 marks) and question and answer session (10 marks) shall be awarded (based on the quality of the report and presentation skill, participation in the question and answer session) by the examiners appointed by the University.

**RBT Level: L3, L4, L5, L6**