

**SCHOOL OF ENGINEERING & TECHNOLOGY**

**CRITERIA 1**

**Subcriteria- 1.3.3**

**Percentage of students undertaking field  
projects/research projects/internships**

**Academic Year 2023-2024**

  
Dr. Omveer Singh  
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**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
(ECE), SCHOOL OF ENGINEERING AND TECHNOLOGY**

**Total Number of Research Projects in UG and PG**

Research Projects	Program	Total Number of students Involved in research projects
	B.TECH(ECE)	<b>07</b>

The students undertake major projects for increasing their practical knowledge and experience. Students are encouraged to do their research in the university and community to encourage the research insight in them

**Total Number of Internships in UG**

Internships	Program	Total Number of students Involved in internship
	B.TECH(ECE)	<b>16</b>

In the Electronics & Communication Engineering disciplines, there is mandatory Internship. In the curriculum design it has been incorporated into the program and completes it as a mandatory part of final year training.

**Total Number of Field Project/Industry visits in UG and PG**

Field Project/Industry visits	Program	Total Number of students Involved in industrial visit
	B.TECH(ECE)	<b>49</b>

Field visits / Industry Visits Field/ Industrial visits during the course of any program gives students an insight on the internal working environment of the company. Electronics & Communication engineering, students undertake field visits to industry to enhance knowledge and enrich skills.



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## STUDY AND EVALUATION SCHEME (2023-2024)

### SUBJECT-WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS

Program:BTech(Electronics\_and\_Communication)

Semester:1st

S.No.	Subject Code	Subject Name	Maximum Marks Allotted						Credits Allotted			Total Credits	
			Theory			Practical			Total Marks	L	T		P
			End Sem. Exam	Mid Sem. Exam	Class Participation	End Sem. Exam	Prograssive Evaluation	Internal Viva					
1	ECL0101[T]	Basic Electronics	60	20	20	0	0	0	100	2	1	0	3
2	ECL0102[T]	Principles of Sensors & IoT	60	20	20	0	0	0	100	2	1	0	3
3	HUL0101[T]	Communication Skills & Colloquium	60	20	20	0	0	0	100	3	0	0	3
4	MAL0101[T]	Calculus For Engineers	60	20	20	0	0	0	100	2	1	0	3
5	MEL0101[T]	Engineering Mechanics	60	20	20	0	0	0	100	2	1	0	3
6	ECL0101[P]	Basic Electronics	0	0	0	60	20	20	100	0	0	1	1
7	ECL0102[P]	Principles of Sensors & IoT	0	0	0	60	20	20	100	0	0	1	1
8	ECP0101[P]	Electronics Workshop Practice	0	0	0	60	20	20	100	0	0	2	2
9	HUL0101[P]	Communication Skills & Colloquium	0	0	0	60	20	20	100	0	0	1	1
10	MAL0101[P]	Calculus For Engineers	0	0	0	60	20	20	100	0	0	1	1
11	MEL0101[P]	Engineering Mechanics	0	0	0	60	20	20	100	0	0	1	1
<b>Total Credits</b>												<b>22</b>	

\*Newly Added Courses

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## STUDY AND EVALUATION SCHEME

( SUBJECT-WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS)


Name of Course: BTech(Electronics\_and\_Communication)

Semester: 2nd

S.No.	Subject Code	Subject Name	Maximum Marks Allotted							Credits Allotted			Total Credits
			Theory			Practical			Total Marks	L	T	P	
			End Sem. Exam	Mid Sem. Exam	Class Participation	End Sem. Exam	Prograssive Evaluation	Internal Viva					
1	CSL0201[T]	Essentials of Information Technology	60	20	20	0	0	0	100	2	0	0	2
2	ECL0261[T]	Fundamentals of Arduino Programming	60	20	20	0	0	0	100	2	1	0	3
3	EEL0201[T]	Principles of Electrical Engineering	60	20	20	0	0	0	100	2	1	0	3
4	MAL0203[T]	Statistics for Engineers	60	20	20	0	0	0	100	2	1	0	3
5	MCL0201[T]	Environmental Pollution & Global Issues	60	20	20	0	0	0	100	3	1	0	4
6	MCL0202[T]	Making of Modern India	60	20	20	0	0	0	100	2	0	0	2
7	MEL0202[T]	Engineering Graphics	60	20	20	0	0	0	100	2	0	0	2
8	CSL0201[P]	Essentials of Information Technology	0	0	0	60	20	20	100	0	0	1	1
9	CSP0201[P]	Programming Logics	0	0	0	60	20	20	100	0	0	2	2
10	ECL0261[P]	Fundamentals of Arduino Programming	0	0	0	60	20	20	100	0	0	1	1
11	EEL0201[P]	Principles of Electrical Engineering	0	0	0	60	20	20	100	0	0	1	1
12	MAL0203[P]	Statistics for Engineers	0	0	0	60	20	20	100	0	0	1	1
13	MEL0202[P]	Engineering Graphics	0	0	0	60	20	20	100	0	0	1	1
<b>Total Credits</b>												<b>26</b>	

\*Newly Added Courses

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## STUDY AND EVALUATION SCHEME

( SUBJECT-WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS)

Name of Course: BTech(Electronics\_and\_Communication)

Semester: 3rd

S.No.	Subject Code	Subject Name	Maximum Marks Allotted							Credits Allotted			Total Credits
			Theory			Practical			Total Marks	L	T	P	
			End Sem. Exam	Mid Sem. Exam	Class Participation	End Sem. Exam	Prograssive Evaluation	Internal Viva					
1	ECL0303[T]	Semiconductor Devices	60	20	20	0	0	0	100	2	1	0	3
2	ECL0304[T]	Architecturing of Smart IoT Devices	60	20	20	0	0	0	100	3	0	0	3
3	ECL0306[T]	Digital Electronics	60	20	20	0	0	0	100	2	1	0	3
4	ECL0307[T]	Network Analysis & Synthesis	60	20	20	0	0	0	100	2	1	0	3
5	MAL0306[T]	Engineering Mathematics	60	20	20	0	0	0	100	3	1	0	4
6	CSP0303[P]	Object Oriented Programming with Java	0	0	0	60	20	20	100	0	0	2	2
7	ECD0301[P]	Evaluation of Industrial Training-I	0	0	0	60	20	20	100	0	0	2	2
8	ECL0303[P]	Semiconductor Devices	0	0	0	60	20	20	100	0	0	1	1
9	ECL0304[P]	Architecturing of Smart IoT Devices	0	0	0	60	20	20	100	0	0	1	1
10	ECL0306[P]	Digital Electronics	0	0	0	60	20	20	100	0	0	1	1
11	ECL0307[P]	Network Analysis & Synthesis	0	0	0	60	20	20	100	0	0	1	1
<b>Total Credits</b>												<b>24</b>	

\*Newly Added Courses

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## STUDY AND EVALUATION SCHEME

( SUBJECT-WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS)

Name of Course: BTech(Electronics\_and\_Communication)

Semester: 4th

S.No.	Subject Code	Subject Name	Maximum Marks Allotted							Credits Allotted			Total Credits
			Theory			Practical			Total Marks	L	T	P	
			End Sem. Exam	Mid Sem. Exam	Class Participation	End Sem. Exam	Prograssive Evaluation	Internal Viva					
1	CSL0457[T]	Data Structure and Application	60	20	20	0	0	0	100	2	1	0	3
2	ECL0408[T]	Electronics Circuits & Linear ICs Applications	60	20	20	0	0	0	100	3	1	0	4
3	ECL0409[T]	Digital System Design	60	20	20	0	0	0	100	3	1	0	4
4	ECL0411[T]	Analog Communication	60	20	20	0	0	0	100	3	1	0	4
5	ECL0460[T]	Wireless Sensor Networks & IoT	60	20	20	0	0	0	100	2	1	0	3
6	CSL0457[P]	Data Structure and Application	0	0	0	60	20	20	100	0	0	1	1
7	CSP0405[P]	Computer Programming Lab (PYTHON)	0	0	0	60	20	20	100	0	0	2	2
8	ECL0408[P]	Electronics Circuits & Linear ICs Applications	0	0	0	60	20	20	100	0	0	1	1
9	ECL0409[P]	Digital System Design	0	0	0	60	20	20	100	0	0	1	1
10	ECL0411[P]	Analog Communication	0	0	0	60	20	20	100	0	0	1	1
11	ECL0460[P]	Wireless Sensor Networks & IoT	0	0	0	60	20	20	100	0	0	1	1
<b>Total Credits</b>												<b>25</b>	

\*Newly Added Courses

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## STUDY AND EVALUATION SCHEME

( SUBJECT-WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS)

Name of Course:BTech(Electronics\_and\_Communication)

Semester:5th

S.No.	Subject Code	Subject Name	Maximum Marks Allotted							Credits Allotted			Total Credits
			Theory			Practical			Total Marks	L	T	P	
			End Sem. Exam	Mid Sem. Exam	Class Participation	End Sem. Exam	Prograssive Evaluation	Internal Viva					
1	ECL0512[T]	Electromagnetic Theory	60	20	20	0	0	0	100	3	1	0	4
2	ECL0513[T]	Digital Communication	60	20	20	0	0	0	100	3	1	0	4
3	ECL0514[T]	Control System	60	20	20	0	0	0	100	2	1	0	3
4	ECL0515[T]	Advanced Microprocessors and Interfacing	60	20	20	0	0	0	100	3	1	0	4
5	ECL0519[T]	Digital Signal Processing	60	20	20	0	0	0	100	2	1	0	3
6	ECD0502[P]	Evaluation of Industrial Training-II	0	0	0	60	20	20	100	0	0	2	2
7	ECL0513[P]	Digital Communication	0	0	0	60	20	20	100	0	0	1	1
8	ECL0515[P]	Advanced Microprocessors and Interfacing	0	0	0	60	20	20	100	0	0	1	1
9	ECL0519 [P]	Digital Signal Processing	0	0	0	60	20	20	100	0	0	1	1
10	ECP0502[P]	Software Lab-I	0	0	0	60	20	20	100	0	0	2	2
<b>Total Credits</b>												<b>25</b>	

\*Newly Added Courses

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## STUDY AND EVALUATION SCHEME

( SUBJECT-WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS)

Name of Course: BTech(Electronics\_and\_Communication)

Semester: 6th

S.No.	Subject Code	Subject Name	Maximum Marks Allotted							Credits Allotted			Total Credits
			Theory			Practical			Total Marks	L	T	P	
			End Sem. Exam	Mid Sem. Exam	Class Participation	End Sem. Exam	Prograssive Evaluation	Internal Viva					
1	ECL0617[T]	Antenna & Wave Propagation	60	20	20	0	0	0	100	3	1	0	4
2	ECL0618[T]	Micro controller & Embedded System	60	20	20	0	0	0	100	3	1	0	4
3	ECL0621[T]	Cellur & Mobile communication	60	20	20	0	0	0	100	3	1	0	4
4	ECL0662[T]	Machine Learning	60	20	20	0	0	0	100	2	1	0	3
5	ECD0603[P]	Mini Project	0	0	0	60	20	20	100	0	0	2	2
6	ECL0617[P]	Antenna & Wave Propagation	0	0	0	60	20	20	100	0	0	1	1
7	ECL0618[P]	Micro controller & Embedded System	0	0	0	60	20	20	100	0	0	1	1
8	ECL0662[P]	Machine Learning	0	0	0	60	20	20	100	0	0	1	1
9	ECP0603[P]	Software Lab-II	0	0	0	60	20	20	100	0	0	2	2
10		Elective1.	60	20	20	0	0	0	100	3	1	0	4
<b>Total Credits</b>												<b>26</b>	

\*Newly Added Courses

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## STUDY AND EVALUATION SCHEME

( SUBJECT-WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS)

Name of Course: BTech(Electronics\_and\_Communication)

Semester: 7th

S.No.	Subject Code	Subject Name	Maximum Marks Allotted							Credits Allotted			Total Credits
			Theory			Practical			Total Marks	L	T	P	
			End Sem. Exam	Mid Sem. Exam	Class Participation	End Sem. Exam	Prograssive Evaluation	Internal Viva					
1	ECL0723[T]	Microwave Engineering	60	20	20	0	0	0	100	3	1	0	4
2	ECL0733[T]	VLSI Technology	60	20	20	0	0	0	100	3	1	0	4
3	ECD0704[P]	Major Project-I	0	0	0	60	20	20	100	0	0	2	2
4	ECL0723[P]	Microwave Engineering	0	0	0	60	20	20	100	0	0	1	1
5	ECP0704[P]	Evaluation of Industrial Training-III	0	0	0	60	20	20	100	0	0	2	2
6		Elective4.	60	20	20	0	0	0	100	3	1	0	4
7		Elective3.	60	20	20	0	0	0	100	3	1	0	4
8		Elective2.	60	20	20	0	0	0	100	3	0	0	3
<b>Total Credits</b>													<b>24</b>

\*Newly Added Courses

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## STUDY AND EVALUATION SCHEME

( SUBJECT-WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS)

Name of Course:BTech(Electronics\_and\_Communication)

Semester:8th

S.No.	Subject Code	Subject Name	Maximum Marks Allotted							Credits Allotted			Total Credits
			Theory			Practical			Total Marks	L	T	P	
			End Sem. Exam	Mid Sem. Exam	Class Participation	End Sem. Exam	Prograssive Evaluation	Internal Viva					
1	ECL0825[T]	Optical Fiber Communication	60	20	20	0	0	0	100	2	1	0	3
2	ECL0826[T]	VLSI Design	60	20	20	0	0	0	100	2	1	0	3
3	ECD0805[P]	Major Project-II	0	0	0	60	20	20	100	0	0	8	8
4	ECL0825[P]	Optical Fiber Communication	0	0	0	60	20	20	100	0	0	1	1
5	ECL0826[P]	VLSI Design	0	0	0	60	20	20	100	0	0	1	1
6		Elective6.	60	20	20	0	0	0	100	3	1	0	4
7		Elective5.	60	20	20	0	0	0	100	3	1	0	4
<b>Total Credits</b>												<b>24</b>	

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## List of Elective Subjects

Subject Code	Subject Name	Subject Type	Semeste
0665[T]	Micro Electro Mechanical System (MEMS)	Elective1	6th
0620[T]	Data Communication	Elective1.	6th
0701B [T]	Web Technologies	Elective2	7th
0701C[T]	Intellectual Property Rights	Elective2	7th
0701A[T]	Electric Vehicle Technology	Elective2.	7th
0763 [T]	IoT Data Analytics	Elective3	7th
0752[T]	Wireless Ad hoc Networks	Elective3.	7th
0736 [T]	Nanoelectronics	Elective4	7th
0764[T]	Cloud Computing	Elective4.	7th
0829[T]	Industrial Electronics	Elective5	8th
0843[T]	Wireless Networks	Elective5.	8th
0840 [T]	Soft Computing	Elective6	8th
0839[T]	Digital Image & Video Processing	Elective6.	8th

  
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## Syllabus-2023-2024

(SOET)(BTech-Electronics\_and\_Communication)

<b>Title of the Course</b>	Major Project-II
<b>Course Code</b>	ECD0805[P]

### Part A

Year	4th	Semester	8th	Credits	L	T	P	C
					0	0	8	8
<b>Course Type</b>	Lab only							
<b>Course Category</b>	Projects and Internship							
<b>Pre-Requisite/s</b>				<b>Co-Requisite/s</b>				
<b>Course Outcomes &amp; Bloom's Level</b>	<b>CO1-</b> To increase writing skills and knowledge( <b>BL2-Understand</b> ) <b>CO2-</b> To enhance their mental ability( <b>BL3-Apply</b> ) <b>CO3-</b> To inculcate the ability to express innovative opinion and thought( <b>BL4-Analyze</b> ) <b>CO4-</b> To have Dissertation works as skills development in student ( <b>BL5-Evaluate</b> )							
<b>Course Elements</b>	Skill Development ✓ Entrepreneurship ✓ Employability ✓ Professional Ethics ✗ Gender ✗ Human Values ✗ Environment ✗		<b>SDG (Goals)</b>					

### Part B

Modules	Contents	Pedagogy	Hours
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### Part C

Modules	Title	Indicative-ABCA/PBL/ Experiments/Field work/ Internships	Bloom's Level	Hours
Module-1	Identification of a problem and formulation of a topic of project/Thesis	PBL	BL6-Create	15
Module-2	To have field work and data collection through a chosen methodology	PBL	BL6-Create	15
Module-3	Dissertation and VIVA-VOCI	PBL	BL6-Create	15

  
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## Part D(Marks Distribution)

Theory					
Total Marks	Minimum Passing Marks	External Evaluation	Min. External Evaluation	Internal Evaluation	Min. Internal Evaluation
Practical					
Total Marks	Minimum Passing Marks	External Evaluation	Min. External Evaluation	Internal Evaluation	Min. Internal Evaluation
100	50	60	30	40	

## Part E

<b>Books</b>	1)Electronics for you <a href="https://www.electronicsforu.com/category/electronics-projects/hardware-diy">https://www.electronicsforu.com/category/electronics-projects/hardware-diy</a>
<b>Articles</b>	<a href="https://www.ietlucknow.ac.in/sites/default/files/mag/Projects%20of%20Electronics%20and%20communication%20deptt._1.pdf">https://www.ietlucknow.ac.in/sites/default/files/mag/Projects%20of%20Electronics%20and%20communication%20deptt._1.pdf</a>
<b>References Books</b>	1)Electronics for you <a href="https://www.electronicsforu.com/category/electronics-projects/hardware-diy">https://www.electronicsforu.com/category/electronics-projects/hardware-diy</a>
<b>MOOC Courses</b>	<a href="https://www.coursera.org/learn/major-engineering-project-performance">https://www.coursera.org/learn/major-engineering-project-performance</a>
<b>Videos</b>	<a href="https://nptel.ac.in/courses/110104073">https://nptel.ac.in/courses/110104073</a>

## Course Articulation Matrix

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	-	1	-	-	1	2	3	-	-	-	3	1	-
CO2	-	3	2	3	-	3	1	-	3	3	-	2	-	2	2
CO3	-	-	3	3	3	-	-	3	3	3	1	2	-	3	2
CO4	-	-	-	-	-	-	3	3	3	3	2	3	-	3	3
CO5	-	-	-	-	-	-	-	-	3	3	-	3	-	-	3
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

  
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## Syllabus-2023-2024

(SOET)(BTech-Electronics\_and\_Communication)

<b>Title of the Course</b>	Evaluation of Industrial Training-II
<b>Course Code</b>	ECD0502[P]

### Part A

Year	3rd	Semester	5th	Credits	L	T	P	C
					0	0	2	2
<b>Course Type</b>	Lab only							
<b>Course Category</b>	Internships							
<b>Pre-Requisite/s</b>	Basic theoretical knowledge of electronics and communication.			<b>Co-Requisite/s</b>				
<b>Course Outcomes &amp; Bloom's Level</b>	<p><b>CO1-</b> Apply theoretical knowledge from coursework to solve real-world industry problems. (e.g., utilize marketing principles to develop a campaign for a local business) <b>(BL1-Remember)</b></p> <p><b>CO2-</b> Demonstrate proficiency in industry-standard tools and technologies relevant to the internship field. (e.g., use design software to create graphics for a company website) <b>(BL2-Understand)</b></p> <p><b>CO3-</b> Analyze and interpret data collected during the internship experience. (e.g., analyze customer feedback to improve product design)<b>(BL3-Apply)</b></p> <p><b>CO4-</b> Enhance critical thinking skills by analyzing and evaluating the outcomes of assigned projects or tasks.<b>(BL4-Analyze)</b></p> <p><b>CO5-</b> Compile a comprehensive report documenting the learning experiences, challenges, and achievements during the internship period.<b>(BL5-Evaluate)</b></p>							
<b>Course Elements</b>	Skill Development ✓ Entrepreneurship ✗ Employability ✓ Professional Ethics ✗ Gender ✗ Human Values ✗ Environment ✗		<b>SDG (Goals)</b>					

### Part B

Modules	Contents	Pedagogy	Hours
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## Part C

Modules	Title	Indicative-ABCA/PBL/ Experiments/Field work/ Internships	Bloom's Level	Hours
1	Learning of how to do team work, collaboration with others and learning of insight regarding the internal working atmosphere of companies.	Internships	BL2-Understand	15
2	Learning of how to use the theoretical knowledge for solving the industry problem.	Internships	BL3-Apply	15
3	Development of communication skill, managerial skill and exposure to current work practices as opposed to possibly theoretical knowledge being taught at college.	Internships	BL4-Analyze	15
4	Adapting to evolving business cultures, new methods and technologies, services, technical interface.	Internships	BL4-Analyze	15
5	Learning of how to make industrial training reports and presentation of the reports and training.	Internships	BL5-Evaluate	20

## Part D(Marks Distribution)

Theory					
Total Marks	Minimum Passing Marks	External Evaluation	Min. External Evaluation	Internal Evaluation	Min. Internal Evaluation
Practical					
Total Marks	Minimum Passing Marks	External Evaluation	Min. External Evaluation	Internal Evaluation	Min. Internal Evaluation
100	50	60	30	40	

## Part E

<b>Books</b>	
<b>Articles</b>	
<b>References Books</b>	
<b>MOOC Courses</b>	
<b>Videos</b>	

  
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## Course Articulation Matrix

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	1	-	-	-	-	-	-	-	-	2	-	-	-	-	2
CO2	1	2	1	2	-	-	-	-	-	2	-	-	-	-	3
CO3	1	2	2	2	-	-	-	-	-	-	-	-	-	-	3
CO4	1	2	2	3	-	-	-	-	-	-	-	-	-	-	2
CO5	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

  
**Dr. Omveer Singh**  
 REGISTRAR  
 ITM University  
 Gwalior (M.P.)

## Notice

### One Day Industrial Visit Of Water Treatment Plant Jalalpur Gwalior M.P. India

Date: 20.02. 2024

Dear Students,

We are pleased to announce that Dept. of Electronics & Communication, School of Engineering & Technology, ITM University, Gwalior is organizing a one day Industrial Visit to **Water Treatment Plant Jalalpur Gwalior** on **26<sup>th</sup> Feb, 2024** for B. Tech 1<sup>st</sup> and 2<sup>nd</sup> Year students.

Following are the instructions for visit duration and each one will follow them strictly:

1. Do not use or switched off your mobile phone
  2. Carry one water bottle and lunch box with you
  3. Carry one note book and pen
  4. Maintain discipline and decorum of university
- **Reporting Time:** 9.30 AM sharp at ITMU, Turari campus
  - **Date:** 26<sup>th</sup> Feb, 2024
  - **Program Coordinators:**
  - Mr. Bhupendra Dhakad Assistant Professor, Dept. of ECE, SOET
  - Dr. Sadhana Mishra, Assistant Professor, Dept. of ECE, SOET

**Topics to be covered:** The purpose of this visit is to help the students enhance their skills, employability, and entrepreneurship as well as their understanding of new adapted technologies in industries.

#### **Outcome of the Program**

- Skill development
- Understanding of new adapted technologies by industries
- Understand the production cycle and supply
- Employability and entrepreneurship development



Prof. Ranjeet Singh Tomar  
HOD  
Department of Electronics & Communication



Dr. Omveer Singh  
REGISTRAR  
ITM University  
Gwalior (M.P.)

**A BRIEF REPORT  
OF  
ONE DAY INDUSTRIAL VISIT OF WATER TREATMENT  
PLANT JALALPUR GWALIOR M.P INDIA**

The Departments of Electronics and Communication and Electrical Engineering, School of Engineering and Technology, ITM University Gwalior has organized one day industrial visit on 26<sup>th</sup> Feb, 2024 of Water Treatment Plant Jalapur Gwalior for B.Tech 1<sup>st</sup> and 2<sup>nd</sup> Year students. In this one day industrial visit students learn about steps involve in water treatment like Coagulation, Flocculation, Sedimentation, Filtration, and Disinfection with this students get the information about used electrical and electronics instruments in water purification like Generator, Rapid and lime Mixers, Level Control System for Sludge Tank, Submersible Waste Pump, Alum Circulation Pump, Electrical Panels & Control Desk for High Lift Pump, Level Sensing and Pressure Sensing Instruments, Chlorine gas leak detector and many of the control room equipments. These equipments are used in the process of water purification.

Approx 45 students of above mention branches are benefited by this one day industrial visit. This industrial visit was very beneficial to students and provides the practical learning to connect theories and knowledge learned in the classroom to real-world situations.

. Following faculty members were also with them on this visit:

1. Mr. Bhupendra Dhakad
2. Mr. Satish rathore

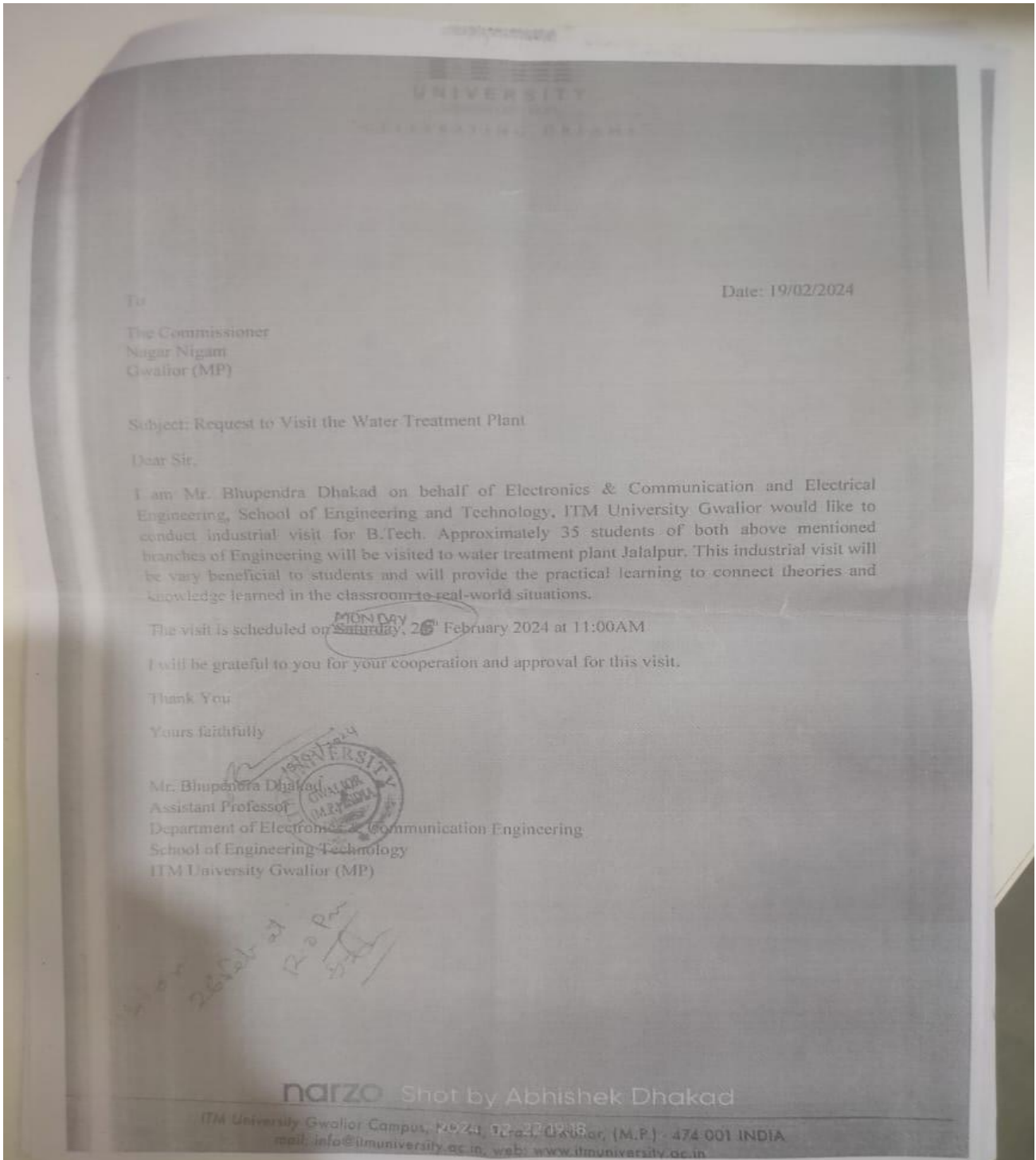


Prof. Ranjeet Singh Tomar  
HOD  
Department of Electronics & Communication



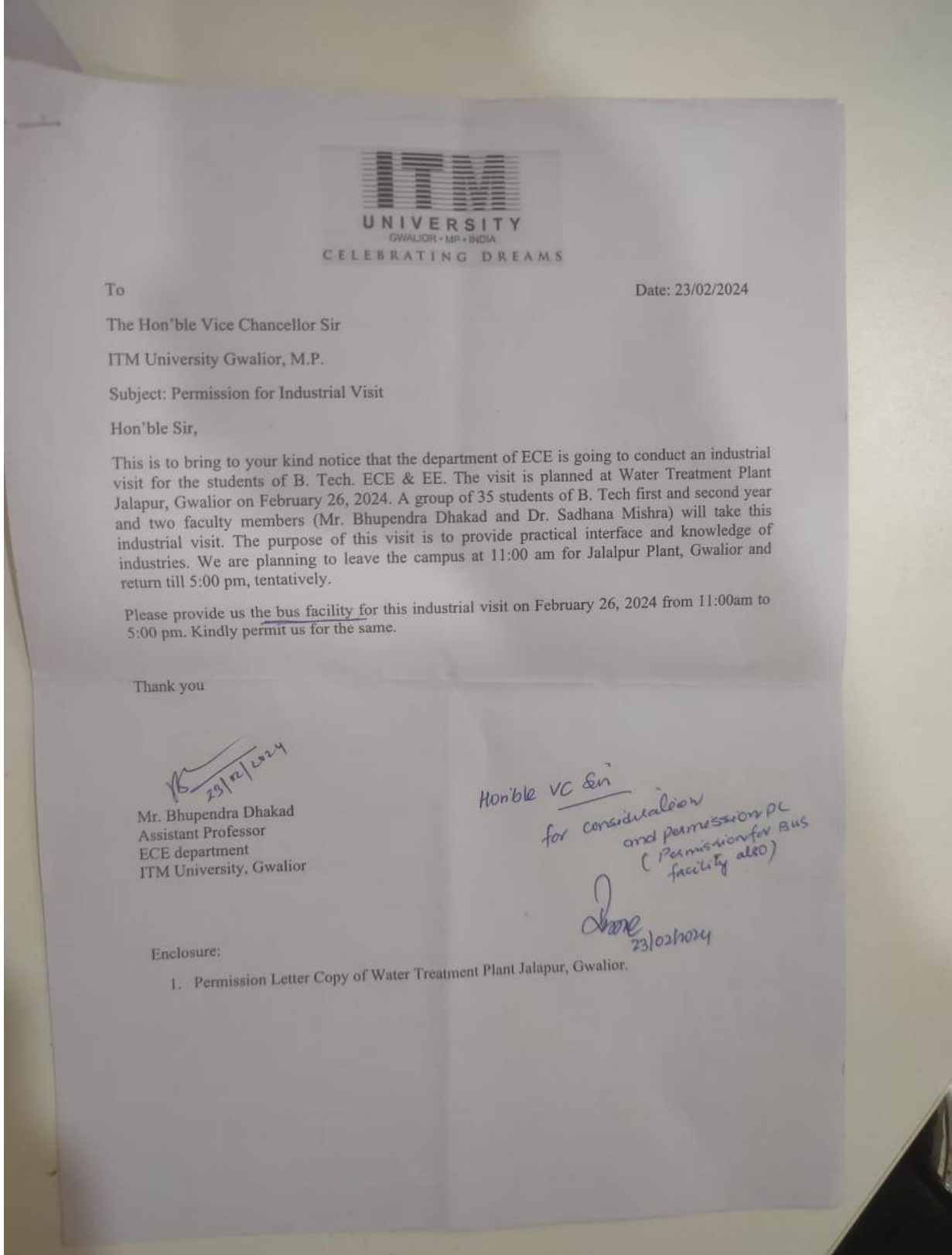
Dr. Omveer Singh  
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ITM University  
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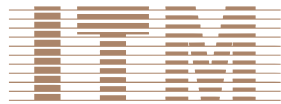
## Permission Approval from Industry



  
**Dr. Omveer Singh**  
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Gwalior (M.P.)

## Approval to visit from ITM University





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"CELEBRATING DREAMS"

DRO/377/24-2-24



BUS REQUIREMENT FORM

Date: 24/02/2024

Purpose of activity: (Industrial visit) provide practical interface and knowledge of industries

No. of student's in branch: 45 Expected Students on tour: 35

Heads	Information
a. The programme to which the proposed activity is relevant.	B.Tech (Electronics & Communication and electrical engineering)
b. The Program Outcome (PO) achieved by the proposed activity.	PO1, PO2, PO5 (ECE 261, ECE 460, ECE 411)
c. The course to which the proposed activity is relevant.	Electronics / Electrical machine / Power system
d. The Course Outcome (CO) achieved by the proposed activity.	CO4, CO5
e. The NAAC Criteria/Sub Criteria under which such activity falls.	Criteria 1 <sup>3.4</sup> & 5.1 <sup>3</sup>

No. of buses needed: 01

i) Bus required from: 26/02/2024 to 26/02/2024 Time from 11:00 am/pm to 5:00 am/pm

ii) Bus required from: / to Time from am/pm to am/pm

iii) Bus required from: / to Time from am/pm to am/pm

Name & signature of applicant's

Bhupendra Dhalwad Acct. professor Dept. of ECE / SOET

Signature's of Dean

Dy. Registrar's comments for availability of bus/s:

Honble. V. C. Sir

Bus arrangement will be made, submitted for your kind approval please

Dy. Registrar

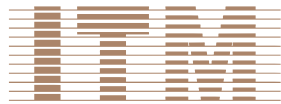
Registrar

Vice Chancellor

Note: i) Copy of the approval should be mailed to IQAC cell for record. ii) After the conclusion of event, two Geo tagged photos should be submitted to IQAC cell.

Report and Report






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"CELEBRATING DREAMS"

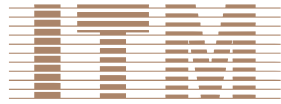
## Attendance of Students during Industry Visit

  
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CELEBRATING DREAMS

**Industrial Visit of Water Treatment Plant Jalalpur, Gwalior, M.P**

**Student Attendance** 26/02/2024

S.No	Name	Roll No.	Signature
1.	Abhay Singh Bhadouriya	BETN1EC23001	Abhay
2.	Abhishek Rathor	BETN1EC23002	Abhishek
3.	Aman Singh Parmar	BETN1EC23003	Aman Singh
4.	Dharmveer Singh	BETN1EC23004	Dharmveer
5.	Vaishnavi Kumari	BETN1EC23006	Vaishnavi
6.	Gagandeep Kushwah	BETN1EC23008	Gagan
7.	Payal Chauhan	BETN1EC23009	Payal
8.	Pothuganti Sumanth	BETN1EC23010	P. Sumanth
9.	aman singh routela	BETN1EC23011	Aman
10.	Bhaskar	BETN1EC23012	Bhaskar
11.	Devesh Gupta	BETN1EC23013	Devesh
12.	devesh raj	BETN1EC23015	Devesh
13.	Harshit Bhanu	BETN1EC23016	Harshit
14.	Milan	BETN1EC23017	Milan
15.	adarsh kumar tiwari	BETN1EC23018	Adarsh
16.	Padala Bhanu Siva Sanjith Reddy	BETN1EC23019	Sanjith
17.	Abhishek kumar	BETN1EE23001	Abhishek
18.	indrajeet rathore	BETN1EE23002	Indrajeet
19.	madhav sharma	BETN1EE23003	Madhav
20.	SARWAGYA PAL	BETN1EE23004	Sarwagya
21.	SHIVAM BHAGEL	BETN1EE23005	Shivam
22.	Tanya Mangal	BETN1EE23006	Tanya
	Anurag Sagar	BETN1EE23007	Anurag



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23.	Sujal Kushwah	BETN1EE23008	<i>Sujal</i>
24.	Mayank yadav	BETN1EE23009	<i>Mayank</i>
25.	Aman Rajak	BETN1EE23010	<i>Aman</i>
26.	Akansha Shakya	BETN1EE23012	<i>Akansha</i>
27.	Aman Sharma	BETN1EE23015	<i>Aman</i>
28.	Harshraj Singh Kushwah	BETN1EE23014	
29.	Yashraj Singh Tomar	BETN1EE23015	<i>Yashraj Tomar</i>
30.	Deepesh Dhakar	BETN1EE23016	<i>Deepesh</i>
31.	Anash Mirza	BETN1EE23018	
32.	Nyasha Ndlovu	BETN1EE23020	
33.	Gurshan Singh Randhawa	BETN1EE23021	<i>Gurshan</i>
34.	Gaurav Yadav	BETN1EE23022	
35.	Sachin Singh	BETN1EC22001	<i>S. Singh</i>
36.	Rahul Yadav	BETN1EC22002	<i>Rahul</i>
37.	Vaishnavi Tripathi	BETN1EC22003	
38.	Vastvik Sharma	BETN1EC22009	<i>Vastvik</i>
39.	Akhilesh Dinkar	BETN3EC23D01	<i>Akhilesh</i>
40.	Samala Venu Yadav	BETN3EC23D02	
41.	Sumit Rajpoot	BETN1EE22001	<i>Sumit</i>
42.	Somesh Tiwari	BETN1EE22002	<i>Somesh Tiwari</i>
43.	Abhishek Dhakad	BETN1EE22003	
44.	Dev Chauhan	BETN1EE22004	<i>Dev Dhakad</i>
45.	Sahil Pal	BETN1EE22005	<i>Sahil</i>
46.	Priyanshu Ahirwar	BETN1EE22006	<i>Priyanshu</i>
47.	Sneha Gupta	BETN3EE23D01	<i>Sneha Gupta</i>

48. Anuj Singh Rajawat

BETN1EC22004

49. Javed

BETN1EE22007

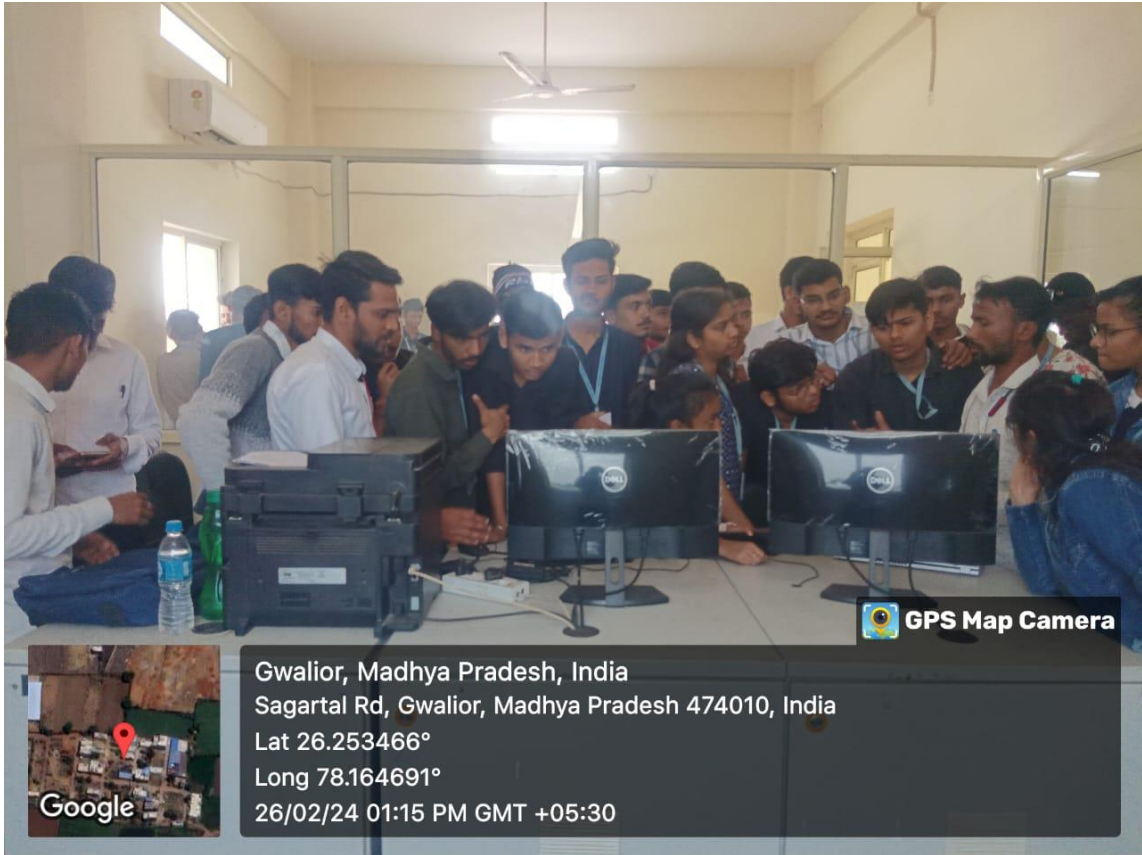
*Dr. Omveer Singh*  
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## Geo-tagged Photographs









  
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