Department of Civil Engineering
School of engineering and Technology

Criteria 1

Sub Criteria 1.3.3

Percentage of students undertaking field projects/research projects/internships

AcademicYear

2022-2023

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

Index

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

Summary of Projects and Trainings

Total Number of Research Projects in UG

	Program	Total Number of students Involved in research projects
Research Projects	B.Tech-CE	19

Total Number of Industrial Trainings in UG

	Program	Total Number of students Involved in Industrial Training
Industrial Trainings	B.Tech-CE	57

Total Number of Field Project/Industry Visits in UG

	Program	Total Number of students involved in Industrial visits
Industry visits	B.Tech	72

Dean
School of Engg. & Tecn
ITM University
Gwalior

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

STUDY AND EVALUATION SCHEME

(SUBJECT-WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS)

Name of Course:BTech(CivilEngineering) **Semester:3rd**

S.No.	Subject Code	Subject Name	Maximum Marks Allotted							Credits Allotted			Total Credits
			Theory			Practical			Total Marks				
			End Sem. Exam	Mid Sem. Exam	Class Participation	End Sem. Exam	Prograssive Evaluation	Internal Viva		L	T	P	
1	CEL0302[T]	Strength of Materials	40	30	30	0	0	0	100	2	1	0	3
2	CEL0303[T]	Concrete Technology	40	30	30	0	0	0	100	2	1	0	3
3	CEL0313[T]	Highway and Traffic Engineering	40	30	30	0	0	0	100	2	1	0	3
4	CEL0331[T]	Elementary design of structures (RCC)	40	30	30	0	0	0	100	2	1	0	3
5	CEL0333[T]	Building Planning and Drawing	40	30	30	0	0	0	100	2	0	0	2
6	MAL0308[T]	Engineering Mathematics	40	30	30	0	0	0	100	3	1	0	4
7	CED0301[P]	Evaluation of Industrial Training -1	0	0	0	40	30	30	100	0	0	2	2
8	CEL0302[P]	Strength of Materials	0	0	0	40	30	30	100	0	0	1	1
9	CEL0303[P]	Concrete Technology	0	0	0	40	30	30	100	0	0	1	1
10	CEL0313[P]	Highway and Traffic Engineering	0	0	0	40	30	30	100	0	0	1	1
11	CEL0331[P]	Elementary design of structures (RCC)	0	0	0	40	30	30	100	0	0	1	1
12	CEL0333[P]	Building Planning and Drawing	0	0	0	40	30	30	100	0	0	1	1
												Total Credits	25

*Newly Added Courses

*

Dean
School of Engg. & Tech
ITM University
Gwalior

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

STUDY AND EVALUATION SCHEME

(SUBJECT-WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS)

Name of Course:BTech(CivilEngineering) **Semester:5th**

S.No.	Subject Code	Subject Name	Maximum Marks Allotted							Credits Allotted			
			Theory			Practical			Total Marks				
			End Sem. Exam	Mid Sem. Exam	Class Participation	End Sem. Exam	Progressive Evaluation	Internal Viva		L	T	P	
1	CEL0510[T]	Hydraulics & fluid machine	40	30	30	0	0	0	100	2	1	0	3
2	CEL0511[T]	Advanced Surveying	40	30	30	0	0	0	100	2	1	0	3
3	CEL0512[T]	Fundamentals of Structural design(RCC)	40	30	30	0	0	0	100	2	1	0	3
4	CEL0514[T]	Advanced Methods of Structural Analysis	40	30	30	0	0	0	100	3	1	0	4
5	CEL0515[T]	Advanced Geotech Engineering	40	30	30	0	0	0	100	2	1	0	3
6	CED0501[P]	Industrial Training	0	0	0	40	30	30	100	0	0	2	2
7	CEL0510[P]	Hydraulics & fluid machine	0	0	0	40	30	30	100	0	0	1	1
8	CEL0511[P]	Advanced Surveying	0	0	0	40	30	30	100	0	0	1	1
9	CEL0512[P]	Fundamentals of Structural design(RCC)	0	0	0	40	30	30	100	0	0	1	1
10	CEL0515[P]	Advanced Geotech Engineering	0	0	0	40	30	30	100	0	0	1	1
												Total Credits	22

*Newly Added Courses

*

Dean
School of Engg. & Tecn
ITM University
Gwalior

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

STUDY AND EVALUATION SCHEME

(SUBJECT-WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS)

Name of Course:BTech(CivilEngineering) **Semester:6th**

S.No.	Subject Code	Subject Name	Maximum Marks Allotted							Credits Allotted			
			Theory			Practical			Total Marks				
			End Sem. Exam	Mid Sem. Exam	Class Participation	End Sem. Exam	Progressive Evaluation	Internal Viva		L	T	P	Total
1	CEL0617[T]	Basic of Structural Design (Steel)	40	30	30	0	0	0	100	2	1	0	3
2	CEL0619[T]	Advanced Structural Design (RCC)	40	30	30	0	0	0	100	2	1	0	3
3	CEL0621[T]	Quantity Surveying & Costing	40	30	30	0	0	0	100	2	1	0	3
4	CEL0634[T]	Environmental Engineering	40	30	30	0	0	0	100	2	1	0	3
5	CED0601[P]	Minor Project	0	0	0	40	30	30	100	0	0	2	2
6	CEL0617[P]	Basic of Structural Design (Steel)	0	0	0	40	30	30	100	0	0	1	1
7	CEL0619[P]	Advanced Structural Design (RCC)	0	0	0	40	30	30	100	0	0	1	1
8	CEL0621[P]	Quantity Surveying & Costing	0	0	0	40	30	30	100	0	0	1	1
9	CEL0634[P]	Environmental Engineering	0	0	0	40	30	30	100	0	0	1	1
10		Elective1.	40	30	30	0	0	0	100	3	1	0	4
												Total Credits	22

*Newly Added Courses

*

Dean
School of Engg. & Tecn
ITM University
Gwalior

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

STUDY AND EVALUATION SCHEME

(SUBJECT-WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS)

Name of Course:BTech(CivilEngineering) **Semester:7th**

S.No.	Subject Code	Subject Name	Maximum Marks Allotted							Credits Allotted			Total Credits
			Theory			Practical			Total Marks				
			End Sem. Exam	Mid Sem. Exam	Class Participation	End Sem. Exam	Prograssive Evaluation	Internal Viva		L	T	P	
1	CEL0723[T]	Advanced Structural Design(Steel)	40	30	30	0	0	0	100	2	1	0	3
2	CEL0725[T]	Introduction to Construction Planning and Management	40	30	30	0	0	0	100	3	1	0	4
3	CEL0731[T]	Railway Engineering	40	30	30	0	0	0	100	3	1	0	4
4	CED0702[P]	Industrial training	0	0	0	40	30	30	100	0	0	2	2
5	CED0703[P]	Major Project (Planning and Literature Survey)	0	0	0	40	30	30	100	0	0	2	2
6	CEL0723[P]	Advanced Structural Design(Steel)	0	0	0	40	30	30	100	0	0	1	1
7		Elective3.	40	30	30	0	0	0	100	3	1	0	4
8		Elective2.	40	30	30	0	0	0	100	3	1	0	4
												Total Credits	24

*Newly Added Courses

*

Dean
School of Engg. & Tech
ITM University
Gwalior

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

STUDY AND EVALUATION SCHEME

(SUBJECT-WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS)

Name of Course:BTech(CivilEngineering) **Semester:8th**

S.No.	Subject Code	Subject Name	Maximum Marks Allotted							Credits Allotted			Total Credits
			Theory			Practical			Total Marks				
			End Sem. Exam	Mid Sem. Exam	Class Participation	End Sem. Exam	Prograssive Evaluation	Internal Viva		L	T	P	
1	CEL0827[T]	Design of Hydraulic Structures	40	30	30	0	0	0	100	2	1	0	3
2	CEL0831[T]	Retrofitting and rehabilitation of structures	40	30	30	0	0	0	100	3	1	0	4
3	CED0804[P]	Major Project	0	0	0	40	30	30	100	0	0	8	8
4	CEL0827[P]	Design of Hydraulic Structures	0	0	0	40	30	30	100	0	0	1	1
5		Elective5.	40	30	30	0	0	0	100	3	1	0	4
6		Elective4.	40	30	30	0	0	0	100	3	1	0	4
												Total Credits	24

*Newly Added Courses

*

Dean
School of Engg. & Tech
ITM University
Gwalior

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

Syllabus-2022-2023

(SOET)(BTech-CivilEngineering)

Title of the Course	Evaluation of Industrial Training -1
Course Code	CED0301[P]

Part A

Year	2nd	**Semester**	3rd	**Credits**	L	T	P	
					0	0	2	2
Course Type	Lab only							
Course Category	Projects and Internship							
Pre-Requisite/s	subject knowledge of first and second semester .			**Co-Requisite/s**				
Course Outcomes & Bloom's Level	**CO1-** Understand the 'real' working environment and get acquainted with the organization structure, business operations and administrative functions**(BL2-Understand)** **CO2-** To have hands-on experience in the students' related field so that they can relate and reinforce what has been taught at the university**(BL2-Understand)** **CO3-** To promote cooperation and to develop synergetic collaboration between industry and the university in promoting a knowledgeable society**(BL3-Apply)** **CO4-** Develop the confidence require for group living and sharing of responsibilities of acquire leader ship qualities and democratic attitudes. **(BL4-Analyze)** **CO5-** Develop the capacity to meet emergencies and natural disasters and practice national integration and social harmony**(BL5-Evaluate)**							
Coures Elements	Skill Development ✓ Entrepreneurship ✓ Employability ✓ Professional Ethics ✕ Gender ✕ Human Values ✓ Environment ✕		**SDG (Goals)**	SDG11(Sustainable cities and economies)				

Part B

Modules	Contents	Pedagogy	Hours
1	Students have to submit a report on training and give a presentation on his/her experience	Presentation	8

Dean
School of Engg. & Tecn
ITM University
Gwalior

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

Part C

Modules	Title	Indicative-ABCA/PBL/ Experiments/Field work/ Internships	Bloom's Level	Hours
Module-I	Industrial training has its own importance in a career of a student who is pursuing a professional degree. It is considered as a part of college curriculum. The objective of an industrial training is to provide us an insight regarding internal working of companies. We understand that theoretical knowledge is not enough for a successful professional career. With an aim to go beyond academics, industrial visit provides students a practical perspective of the work place. Industrial trainings provide an opportunity to learn practically through interaction, working methods and employment practices.	Field work	BL3-Apply	40 hrs
Module-II	It gives students an exposure to current work practices as opposed to possibly theoretical knowledge being taught at college. Industrial visits provide an excellent opportunity to interact with industries and know more about industrial environment. Industrial trainings are arranged by TAP cell with an objective of providing us an opportunity to explore different sectors like IT, Manufacturing services, finance and marketing. Industrial visit helps to combine theoretical knowledge with practical knowledge. Industrial realities are opened to the students through industrial visits/trainings.	Field work	BL4-Analyze	40 hrs

Part D(Marks Distribution)

Theory					
Total Marks	**Minimum Passing Marks**	**External Evaluation**	**Min. External Evaluation**	**Internal Evaluation**	**Min. Internal Evaluation**
	50				
Practical					
Total Marks	**Minimum Passing Marks**	**External Evaluation**	**Min. External Evaluation**	**Internal Evaluation**	**Min. Internal Evaluation**
100	40	40	20	60	

Dean
School of Engg. & Tech
ITM University
Gwalior

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

Part E

Books	
Articles	
References Books	
MOOC Courses	
Videos	

Course Articulation Matrix

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	
CO1	2	0	1	0	2	1	3	2	3	2	0	2	1	1	2
CO2	2	1	0	0	2	1	2	3	3	2	1	2	2	1	1
CO3	2	1	0	0	2	1	3	3	2	2	0	2	2	2	1
CO4	2	0	1	0	2	0	3	2	2	2	0	2	1	2	1
CO5	2	1	0	0	2	1	3	3	3	2	0	2	2	1	1
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Dean
School of Engg. & Tecn
ITM University
Gwalior

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

Syllabus-2022-2023

(SOET)(BTech-CivilEngineering)

Title of the Course	Industrial Training
Course Code	CED0501[P]

Part A

Year	3rd	**Semester**	5th	**Credits**	L	T	P	
					0	0	2	2
Course Type	Lab only							
Course Category	Projects and Internship							
Pre-Requisite/s	Basic Knowledge of Civil Engineering			**Co-Requisite/s**				
Course Outcomes & Bloom's Level	**CO1-** Understand the 'real' working environment and get acquainted with the organization structure, business operations and administrative functions**(BL2-Understand)** **CO2-** To have hands-on experience in the students' related field so that they can relate and reinforce what has been taught at the university**(BL2-Understand)** **CO3-** To promote cooperation and to develop synergetic collaboration between industry and the university in promoting a knowledgeable society**(BL3-Apply)** **CO4-** Develop the confidence require for group living and sharing of responsibilities of acquire leader ship qualities and democratic attitudes. **(BL4-Analyze)** **CO5-** Develop the capacity to meet emergencies and natural disasters and practice national integration and social harmony**(BL5-Evaluate)**							
Coures Elements	Skill Development ✓ Entrepreneurship ✓ Employability ✓ Professional Ethics ✗ Gender ✗ Human Values ✓ Environment ✗		**SDG (Goals)**	SDG11(Sustainable cities and economies)				

Part B

Modules	Contents	Pedagogy	Hours
1	Students have to submit a report on training and give a presentation on his/her experience	Presentation	8

Dean
School of Engg. & Tech
ITM University
Gwalior

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

Part C

Modules	Title	Indicative-ABCA/PBL/ Experiments/Field work/ Internships	Bloom's Level	Hours
Module-I	Industrial training has its own importance in a career of a student who is pursuing a professional degree. It is considered as a part of college curriculum. The objective of an industrial training is to provide us an insight regarding internal working of companies. We understand that theoretical knowledge is not enough for a successful professional career. With an aim to go beyond academics, industrial visit provides students a practical perspective of the work place. Industrial trainings provide an opportunity to learn practically through interaction, working methods and employment practices.	Field work	BL3-Apply	40 hrs
Module-II	It gives students an exposure to current work practices as opposed to possibly theoretical knowledge being taught at college. Industrial visits provide an excellent opportunity to interact with industries and know more about industrial environment. Industrial trainings are arranged by TAP cell with an objective of providing us an opportunity to explore different sectors like IT, Manufacturing services, finance and marketing. Industrial visit helps to combine theoretical knowledge with practical knowledge. Industrial realities are opened to the students through industrial visits/trainings.	Field work	BL4-Analyze	40 hrs

Part D(Marks Distribution)

Theory					
Total Marks	**Minimum Passing Marks**	**External Evaluation**	**Min. External Evaluation**	**Internal Evaluation**	**Min. Internal Evaluation**
	50				
Practical					
Total Marks	**Minimum Passing Marks**	**External Evaluation**	**Min. External Evaluation**	**Internal Evaluation**	**Min. Internal Evaluation**
100	40	40	20	60	

Dean
School of Engg. & Tech
ITM University
Gwalior

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

Part E

Books	
Articles	
References Books	
MOOC Courses	
Videos	

Course Articulation Matrix

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	0	1	0	2	1	3	2	3	2	0	2	1	1	2
CO2	2	1	0	0	2	1	2	3	3	2	1	2	2	1	1
CO3	2	1	0	0	2	1	3	3	2	2	0	2	2	2	1
CO4	2	0	1	0	2	0	3	2	2	2	0	2	1	2	1
CO5	2	1	0	0	2	1	3	3	3	2	0	2	2	1	1
CO6	-	-	-	-	-	-	-		-	-	-	-	-	-	-

Dean
School of Engg. & Tecn
ITM University
Gwalior

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

Syllabus-2022-2023

(SOET)(BTech-CivilEngineering)

Title of the Course	Minor Project
Course Code	CED0601[P]

Part A

Year	3rd	**Semester**	6th	**Credits**	L	T	P	C
					0	0	2	2
Course Type	Project							
Course Category	Discipline Core							
Pre-Requisite/s	Knowledge of Civil engineering and interdisciplinary subjects.			**Co-Requisite/s**				
Course Outcomes & Bloom's Level	**CO1-** To enhance writing skills and knowledge.**(BL2-Understand)** **CO2-** To increase their mental ability.**(BL3-Apply)** **CO3-** To inculcate the ability to express innovative opinion and thoughts**(BL4-Analyze)** **CO4-** To have Dissertation works as skills development in students.**(BL5-Evaluate)**							
Coures Elements	Skill Development ✓ Entrepreneurship ✓ Employability ✓ Professional Ethics ✕ Gender ✕ Human Values ✕ Environment ✕		**SDG (Goals)**	SDG9(Industry Innovation and Infrastructure) SDG11(Sustainable cities and economies)				

Part B

Modules	Contents	Pedagogy	Hours
1	Project/Problem Identification	Project Work	8
2	Project Analysis, Requirement Gathering	Project Work	8
3	Implementation of Project/Solution	Project Work	8
4	Testing and Verification	Project Work	8
5	Presentation and Report Writing	Project Work	8

Part C

Modules	Title	Indicative-ABCA/PBL/ Experiments/Field work/ Internships	Bloom's Level	Hours
Module-I	Identification of a problem and formulation of a topic of project/thesis	PBL	BL3-Apply	15 hrs
Module-III	Dissertation and Viva-voci	PBL	BL5-Evalua e	20 hrs

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

Part D(Marks Distribution)

Theory					
Total Marks	**Minimum Passing Marks**	**External Evaluation**	**Min. External Evaluation**	**Internal Evaluation**	**Min. Internal Evaluation**
	50				
Practical					
Total Marks	**Minimum Passing Marks**	**External Evaluation**	**Min. External Evaluation**	**Internal Evaluation**	**Min. Internal Evaluation**
100	50	40	20	60	

Part E

Books	
Articles	
References Books	
MOOC Courses	
Videos	

Course Articulation Matrix

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

Dean
School of Engg. & Tecn
ITM University
Gwalior

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

Syllabus-2022-2023

(SOET)(BTech-CivilEngineering)

Title of the Course	Industrial training
Course Code	CED0702[P]

Part A

Year	4th	**Semester**	7th	**Credits**	L	T	P	C
					0	0	2	2
Course Type	Lab only							
Course Category	Projects and Internship							
Pre-Requisite/s	Basic Knowledge of Civil Engineering			**Co-Requisite/s**				
Course Outcomes & Bloom's Level	**CO1-** Understand the 'real' working environment and get acquainted with the organization structure, business operations and administrative functions**(BL2-Understand)** **CO2-** To have hands-on experience in the students' related field so that they can relate and reinforce what has been taught at the university**(BL2-Understand)** **CO3-** To promote cooperation and to develop synergetic collaboration between industry and the university in promoting a knowledgeable society**(BL3-Apply)** **CO4-** Develop the confidence require for group living and sharing of responsibilities of acquire leader ship qualities and democratic attitudes. **(BL4-Analyze)** **CO5-** Develop the capacity to meet emergencies and natural disasters and practice national integration and social harmony**(BL5-Evaluate)**							
Coures Elements	Skill Development ✓ Entrepreneurship ✓ Employability ✓ Professional Ethics ✕ Gender ✕ Human Values ✓ Environment ✕		**SDG (Goals)**	SDG11(Sustainable cities and economies)				

Part B

Modules	Contents	Pedagogy	Hours
1	Students have to submit a report on training and give a presentation on his/her experience	Presentation	8

Part C

Modules	Title	Indicative-ABCA/PBL/ Experiments/Field work/ Internships	Bloom's Level	Hours
Module-I	Industrial training has its own importance in a career of a student who is pursuing a professional degree. It is considered as a part of college curriculum. The objective of an industrial training is to provide us an insight regarding internal working of companies. We understand that theoretical knowledge is not enough for a successful professional career. With an aim to go beyond academics, industrial visit provides students a practical perspective of the work place. Industrial trainings provide an opportunity to learn practically through interaction, working methods and employment practices.	Field work	BL3-Apply	40 hrs
Module-II	It gives students an exposure to current work practices as opposed to possibly theoretical knowledge being taught at college. Industrial visits provide an excellent opportunity to interact with industries and know more about industrial environment. Industrial trainings are arranged by TAP cell with an objective of providing us an opportunity to explore different sectors like IT, Manufacturing services, finance and marketing. Industrial visit helps to combine theoretical knowledge with practical knowledge. Industrial realities are opened to the students through industrial visits/trainings.	Field work	BL4-Analyze	40 hrs

Dean
School of Engg. & Tecn
ITM University
Gwalior

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

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	40	40	20	60	

Part E

Books	
Articles	
References Books	
MOOC Courses	
Videos	

Course Articulation Matrix

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	0	1	0	2	1	3	2	3	2	0	2	1	1	2
CO2	2	1	0	0	2	1	2	3	3	2	1	2	2	1	1
CO3	2	1	0	0	2	1	3	3	2	2	0	2	2	2	1
CO4	2	0	1	0	2	0	3	2	2	2	0	2	1	2	1
CO5	2	1	0	0	3	2	3	3	3	2	1	2	2	2	2
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Dean
School of Engg. & Tech
ITM University
Gwalior

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

Syllabus-2022-2023

(SOET)(BTech-CivilEngineering)

Title of the Course	Major Project (Planning and Literature Survey)
Course Code	CED0703[P]

Part A

Year	4th	**Semester**	7th	**Credits**	L	T	P	C
					0	0	2	2
Course Type	Project							
Course Category	Projects and Internship							
Pre-Requisite/s	Knowledge of Civil engineering and interdisciplinary subjects.			**Co-Requisite/s**				
Course Outcomes & Bloom's Level	**CO1-** To enhance writing skills and knowledge.**(BL2-Understand)** **CO2-** To increase their mental ability.**(BL3-Apply)** **CO3-** To inculcate the ability to express innovative opinion and thoughts**(BL4-Analyze)** **CO4-** To have Dissertation works as skills development in students.**(BL5-Evaluate)**							
Coures Elements	Skill Development ✓ Entrepreneurship ✓ Employability ✓ Professional Ethics ✕ Gender ✕ Human Values ✕ Environment ✕		**SDG (Goals)**	SDG11(Sustainable cities and economies)				

Part B

Modules	Contents	Pedagogy	Hours
1	Project/Problem Identification	Project Work	8
2	Project Analysis, Requirement Gathering	Project Work	8
3	Writing of Literature Review	Project Work	8
4	Findings of Research Gap	Project Work	8
5	Presentation and Report Writing	Project Work	8

Part C

Modules	Title	Indicative-ABCA/PBL/ Experiments/Field work/ Internships	Bloom's Level	Hours
Module-I	Identification of a problem and formulation of a topic of project/thesis	PBL	BL3-Apply	15 hrs
Module-III	Dissertation and Viva-voci	PBL	BL5-Evaluate	20 hrs

Part D(Marks Distribution)

Theory					
Total Marks	**Minimum Passing Marks**	**External Evaluation**	**Min. External Evaluation**	**Internal Evaluation**	**Min. Internal Evaluation**
	50				
Practical					
Total Marks	**Minimum Passing Marks**	**External Evaluation**	**Min. External Evaluation**	**Internal Evaluation**	**Min. Internal Evaluation**
100	50	40	20	60	

Dean
School of Engg. & Tecn
ITM University
Gwalior

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

Part E

Books	
Articles	
References Books	
MOOC Courses	
Videos	

Course Articulation Matrix

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	0	0	0	2	1	3	3	3	2	0	2	1	1	2
CO2	2	0	1	0	1	0	2	2	3	2	0	2	2	2	1
CO3	1	1	0	0	2	1	3	3	3	2	0	1	1	1	1
CO4	2	1	1	0	1	1	3	2	2	2	0	2	1	1	2
CO5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Dean
School of Engg. & Tecn
ITM University
Gwalior

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

Syllabus-2022-2023

(SOET)(BTech-CivilEngineering)

Title of the Course	Major Project
Course Code	CED0804[P]

Part A

Year	4th	**Semester**	8th	**Credits**	L	T	P	C
					0	0	8	8
Course Type	Project							
Course Category	Projects and Internship							
Pre-Requisite/s	Knowledge of Civil engineering and interdisciplinary subjects.			**Co-Requisite/s**				
Course Outcomes & Bloom's Level	**CO1-** To enhance writing skills and knowledge.**(BL2-Understand)** **CO2-** To increase their mental ability.**(BL3-Apply)** **CO3-** To inculcate the ability to express innovative opinion and thoughts**(BL4-Analyze)** **CO4-** To have Dissertation works as skills development in students.**(BL5-Evaluate)**							
Coures Elements	Skill Development ✓ Entrepreneurship ✓ Employability ✓ Professional Ethics ✕ Gender ✕ Human Values ✕ Environment ✕		**SDG (Goals)**	SDG11(Sustainable cities and economies)				

Part B

Modules	Contents	Pedagogy	Hours
1	Project/Problem Identification	Project Work	8
2	Project Analysis, Requirement Gathering	Project Work	8
3	Implementation of Project/Solution	Project Work	8
4	Testing and Verification	Project Work	8
5	Presentation and Report Writing	Project Work	8

Part C

Modules	Title	Indicative-ABCA/PBL/ Experiments/Field work/ Internships	Bloom's Level	Hours
Module-I	Identification of a problem and formulation of a topic of project/thesis	PBL	BL3-Apply	15 hrs
Module-III	Dissertation and Viva-voci	PBL	BL5-Evaluate	20 hrs

Part D(Marks Distribution)

Theory					
Total Marks	**Minimum Passing Marks**	**External Evaluation**	**Min. External Evaluation**	**Internal Evaluation**	**Min. Internal Evaluation**
	50				
Practical					
Total Marks	**Minimum Passing Marks**	**External Evaluation**	**Min. External Evaluation**	**Internal Evaluation**	**Min. Internal Evaluation**
100	50	40	20	60	

Dean
School of Engg. & Tecn
ITM University
Gwalior

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

Part E

Books	
Articles	
References Books	
MOOC Courses	
Videos	

Course Articulation Matrix

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	0	0	0	2	1	3	3	3	2	0	2	1	1	2
CO2	2	0	1	0	1	0	2	2	3	2	0	2	2	2	1
CO3	1	0	1	0	1	2	3	3	3	2	0	1	1	1	1
CO4	2	1	1	0	1	1	3	2	2	2	0	2	1	1	2
CO5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Dean
School of Engg. & Tech
ITM University
Gwalior

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

UNIVERSITY
GWALIOR • MP • INDIA
"CELEBRATING DREAMS"

Details of B. Tech Research Projects

Name of the School: SOET
Name of the Course and Branch: B. Tech. Civil Engineering
Batch: 2019-23
Total No. of Students enrolled: 20

S.No	Name of the Student	Roll No.	Title of the project	Guide
1	Tushar Karn	BETN1CE19022	Planning, Scheduling & Structural Analysis of Multi-Storey Residential Green Building	Mr. Aditya Sharma
2	Nadeem Reyaz	BETN1CE19017		
3	Manoj Sharma	BETN1CE19013		
4	Musaib Ahmed Shah	BETN1CE19016		
5	Prithviraj Chaudhary	BETN1CE19026		
6	Apoorva Chaurasiya	BETN1CE19002	Structural Analysis of Circular Multi-Storey (G+10) Building	Mr. Shashank Gupta
7	Kartik Gupta	BETN1CE19010		
8	Mohd Saqlain	BETN1CE19015		
9	Charles Claude Siwale	BETN1CE19005	Comparative Study of NDOLA City on Rainwater harvesting	Mr. Farhan Rahman
10	Parth Singh Chauhan	BETN1CE19020	Analysis and Design of Multi-Storey Residential Building G+5	Mrs. Anshu Tiwari
11	Anku Singh Bhadouriya	BETN1CE19001		
12	Kulprakash Badal	BETN1CE19011		
13	Pakyum Tamo	BETN1CE19019		
14	Bupe Kunda	BETN1CE19004	Design and Analysis of Multi-Storey (G+12) Residential Building using STAAD Pro.	Mr. Nikhil Nandwani
15	Joel Munga	BETN1CE19008		
16	Lenham Kachunga	BETN1CE19012		
17	Maxime Yao	BETN1CE19023		
18	Niza Manzi	BETN1CE19018		
19	Sampa banda	BETN1CE19021		

DEAN
School of Engineering and Technology

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

Sample of Cover pages of Projects

DESIGN AND ANALYSIS OF A MULTI STOREY (G+12) RESIDENTIAL BUILDING USING STAAD-PRO

A

DISSERTATION

Submitted in Partial Fulfillment for the award of the Degree of

BACHELOR IN TECHNOLOGY

IN

CIVIL ENGINEERING

UNIVERSITY
GWALIOR • MP • INDIA

Submitted by

BUPE KUNDA(BETNICE19004)

JOEL MUNGA(BETNICE19008)

LENHAM KACHUNGA(BETNICE19012)

MAXIME YAO(BETNICE19023)

NIZA MANZI(BETNICE19018)

SAMPA BANDA(BETNICE19021)

Under the Guidance of

Mr. Aditya Sharma

(Assistant Professor)

Dean
School of Engg. & Tech
ITM University
Gwalior

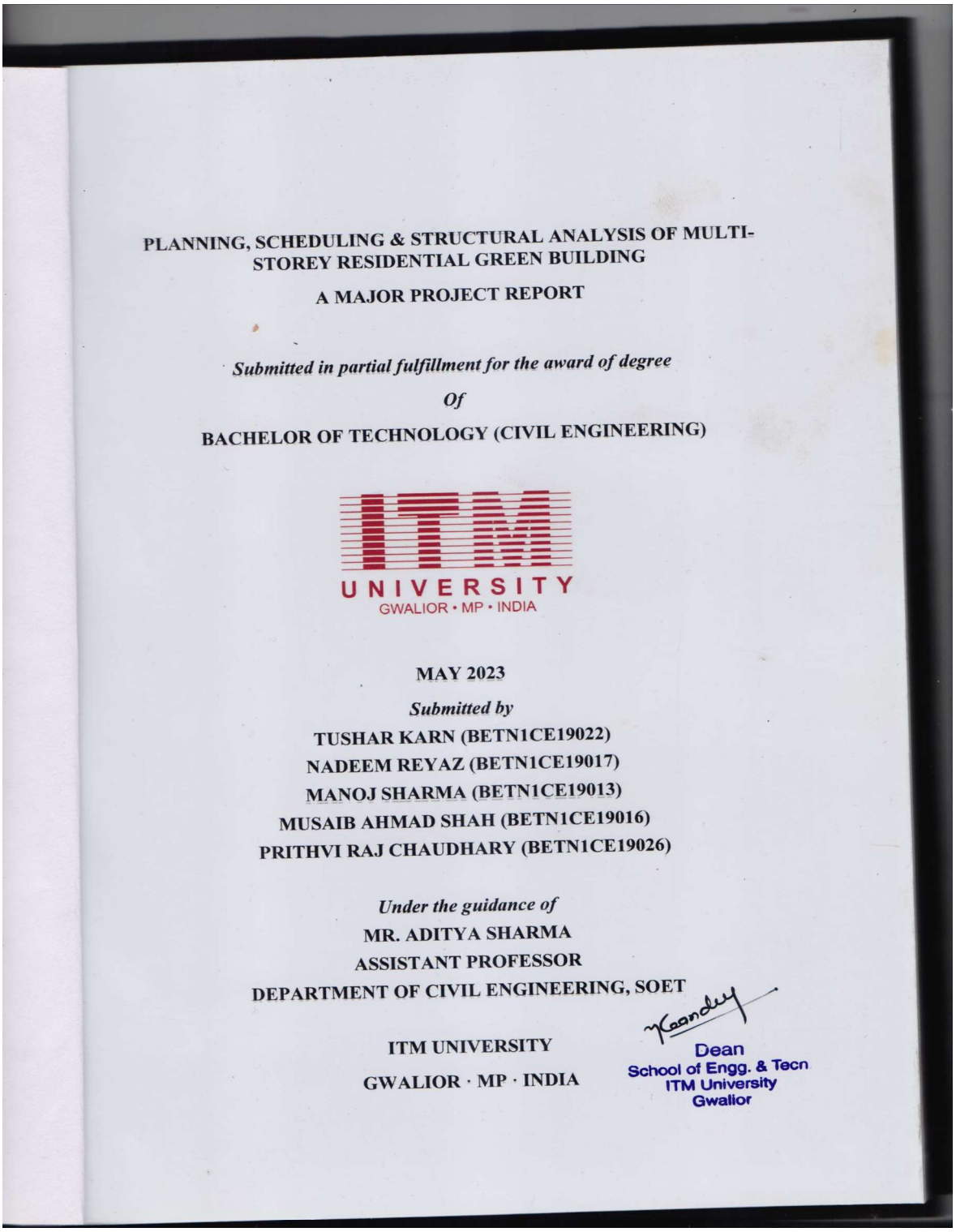
DEPARTMENT OF CIVIL ENGINEERING

SCHOOL OF ENGINEERING & TECHNOLOGY

ITM UNIVERSITY GWALIOR, (M.P) INDIA

2019-2023

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



PLANNING, SCHEDULING & STRUCTURAL ANALYSIS OF MULTI-STOREY RESIDENTIAL GREEN BUILDING

A MAJOR PROJECT REPORT

Submitted in partial fulfillment for the award of degree

Of

BACHELOR OF TECHNOLOGY (CIVIL ENGINEERING)

ITM UNIVERSITY
GWALIOR • MP • INDIA

MAY 2023

Submitted by

TUSHAR KARN (BETN1CE19022)
NADEEM REYAZ (BETN1CE19017)
MANOJ SHARMA (BETN1CE19013)
MUSAIB AHMAD SHAH (BETN1CE19016)
PRITHVI RAJ CHAUDHARY (BETN1CE19026)

Under the guidance of

MR. ADITYA SHARMA
ASSISTANT PROFESSOR
DEPARTMENT OF CIVIL ENGINEERING, SOET

ITM UNIVERSITY
GWALIOR · MP · INDIA

Dean
School of Engg. & Tech
ITM University
Gwalior

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

Major Project Report

On

STRUCTURAL ANALYSIS OF CIRCULAR MULTI-STOREY (G+10) BULILDING

Submitted in partial fulfillment for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

CIVIL ENGINEERING

ITM UNIVERSITY
GWALIOR • MP • INDIA
"CELEBRATING DREAMS"

Submitted by

APOORV CHOURASIA **(BETN1CE19002)**

KARTIK GUPTA **(BETN1CE19010)**

MOHD SAQLAIN **(BETN1CE19015)**

Under the guidance of

Mr. ADITYA SHARMA

ASSISTANT PROFESSOR

Dean
School of Engg. & Tech
ITM University
Gwalior

Department of Civil Engineering

School of Engineering & technology

ITM UNIVERSITY GWALIOR, (M.P), INDIA

2019-2023

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

Total Number of Industrial Trainings in UG

	Program	Total Number of students Involved in Industrial Training
Industrial Trainings	B.Tech-CE	55

GSTIN: 23AGMPY4366M1ZL Reg. No.: PWD200045104

M/S. Mahendra & Sons

Add: Over Bridge Road Subhash Nagar Morena (M.P.) (Anil Yadav)
Mob.: 9098007477, 8319840369

Ref. Date. 3-1-7/23

INTERNSHIP TRAINING CERTIFICATE

This is to certify that Mr.Herdesh Solanki S/O Mr.Mahesh Solanki , a student of civil engineering -2rd year in ITM, University Gwalior successfully completed has 15 days internship about site engineer on ghatigaon water tank(From 12th June to 27th june at the Mahendra and sons .During the period of internship programme with us his conduct was so good, punctual and hard-working.

We wish him every success in life.

M/s. MAHENDRA AND SONS

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

ITM UNIVERSITY
GWALIOR • MP • INDIA
"CELEBRATING DREAMS"

Office of the Executive Engineer,

R&B Sub-Division Maqam/GDA Tangmarg.

No: 4613-14

Dated:- 20-08-2023

The Principal,
ITM University
GWALIOR MP India.

Subject: - Training / Internship of B. Tech Civil Engineering Student.

Ref:- Your office No. ITM(U)/SOET/NOC/2023-24/33 Dt: 15-07-2023.

Sir,

Kindly refer your letter No. cited above regarding the titled subject, Mr. Shariq Jamal War S/O Mohammad Jamal War Roll No, BETNICE20006 of B. Tech Civil Engineering of 7th Semester of your institution attended the various construction sites/works which were ongoing in this Division for a period of 04 weeks. The student have gained sufficient knowledge in the Industrial training.

Yours faithfully,

Executive Engineer,
R&B Sub-Division Maqam.
GDA Tangmarg.

Executive Engineer
R&B Sub Division Maqam

Copy to the:-

1- Asstt. Executive Engineer R&B Sub-Division Magam for information. This is with reference to your No. 491/M

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

KAS sKript Architect Studio

Ar. Kriti Agrawal
M.Plan, B.Arch.
Mobile: +91-7869484497

Ar. Priya Sengar
M.Plan, B.Arch.
Mobile: +91-6264797736

Er. Gaurav Sengar
M.Tech(Stru.), M.Plan, B.E.(Civil)
Mobile: +91-7974149574

• Planner • Architect • Interior • Structure

Date: 6th Feb 2023

To Whomsoever It May Concern

This is to certify that Mr. Rishabh Jain has successfully completed his training program from 2nd Jan 2023 till 2nd Feb 2023 at Skript Architect Studio, Gwalior.

His major responsibilities included working on supervision of building construction. He is hardworking and keen learner. During his tenure with us, he ably handled the work and found to be punctual and productive.

We wish him all success in his future endeavors.

For Skript Architect Studio

Partner
sKript Architect Studio

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

Details of Industrial Visits

Industrial Visits	
Industry	**Date**
Industrial Visit- Rail Spring Karkhana Sithouli	6 April 2023
Industrial Visit- KVK, Gwalior	7 April 2023

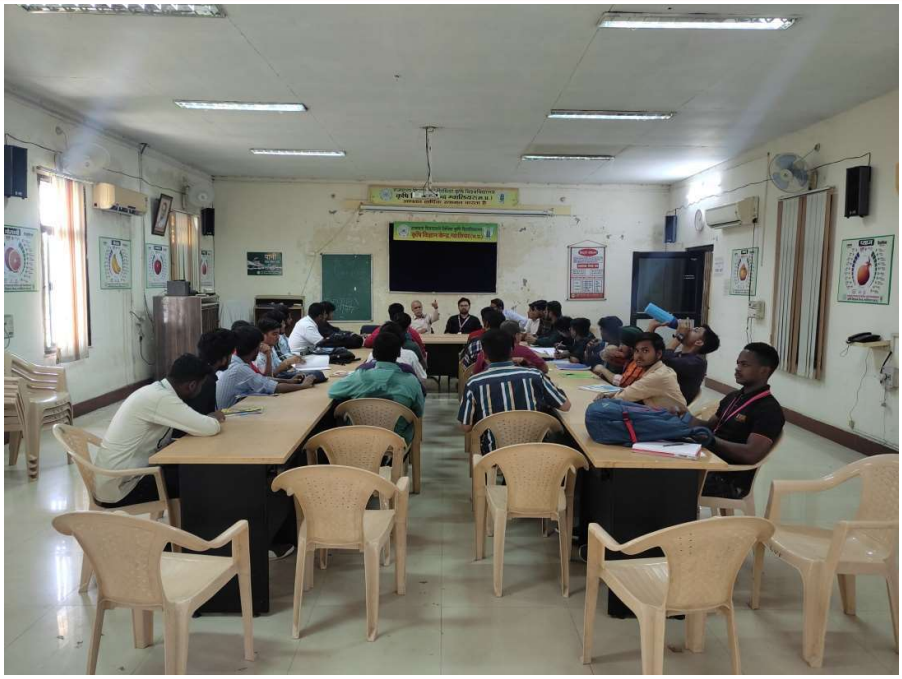
Industrial Visits to Krishi Vigyan Kendra (KVK), Gwalior on 6th April 2023:

1. **General**: Industrial visits for students of 4th semester Mechanical& Agriculture Engineering, 2nd semester Mechanical, Agriculture & Civil Engineering were organized on 06 April 2023. The students were taken to KVK, Thatipur, Gwalior
2. **Participation**: Following faculty members and students visited the plant-
   a) Dr. R. S. Rajput Associate Professor, Dr. Shashikant Pandey & Mr. Arun Singh Kushwah, Assistant Professor.
   b) Students of 4th semester Mechanical Engineering,03 in number
   c) Students of 4th semester Agriculture Engineering, 13 in number
   d) Students of 2nd semester Mechanical Engineering, 05 in number
   e) Students of 2nd semester Agriculture Engineering, 06 in number
   f) Students of 2nd semester Civil Engineering, 09 in number

Dean
School of Engg. & Tecn
ITM University
Gwalior

3. Visit was arranged by Dr. Raj Singh Kushwah, Krishi Vigyan Kendra, Distt. Gwalior, Contact No.: +91-9575336761.
4. **Transport**: Bus for the visit was provided by University.

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



5. **Objective of the visit**:

   a) To make students familiar with the modern trend in agriculture engineering.

   b) To show student, how natural farming is done.

   c) To show students, various aspects, machinery, used in agriculture applications.

   d) To show students, the similarity & difference between theoretical and practical concepts.

6. **Learning Outcomes**:

   a) Students learned about natural farming and their advantages.

   b) Students also learned about Vermi compost making process.

   c) Students visited the modern poultry form, garden, nursery, goat farm etc. in the KVK, Thatipur.

   d) Students learned about how to do organic farming.

   e) Students learned about various machinery used in agriculture, purpose.

   f) Students also learned about the various types of irrigation techniques.

7. **Feedback from students**:

Students gave positive feedback to words practical exposure of modern agriculture practices and natural framing.

List of present students during Industrial visit-

Dean
School of Engg. & Tecn
ITM University
Gwalior

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

Name of student	Roll No.
Aditya Gautam	BETN1CE22013
Aditya Dhakad	BETN1CE22010
Hardesh Solanki	BETN1CE22014
RohitTomar	BETN1CE22004
Uimay Sharma	BETN1CE22022
Harsh Gurjar	BETN1CE22007
AmeroChuma	BETN1CE22012
Pramendra Kumar Singh	BETN1CE22020
RohitChaudhari	BETN1CE22021
AniketKaurav	BETN1ME22004
Sanjay Singh	BETN1ME22006
AlpeshTomer	BETN1ME22002
Sujal Gupta	BETN1ME22001
Nishant Sharma	BETN1ME22008
Md. Hasan Khan	BETN1AG22001
Jay Soni	BETN1AG22002
Harsh Kumar	BETN1AG22007
Vivek M	BETN1AG22008
Om Gupta	BETN1AG22011
Kartik Parsai	BETN1AG22013
Ajayendra Dutt Shukla	BETN1AG21001
Yogendra Singh	BETN1AG21003
Yashpal Singh Solanki	BETN1AG21004
Manne Eshwar	BETN3AG22D01

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

WaghmareDixith	BETN3AG22D02
GundaramAravind	BETN3AG22D03
Manda Deepak	BETN3AG22D04
Suravu Raju	BETN3AG22D05
Nagasai Ponnam	BETN3AG22D06
Pakala HarshaVardhan Reddy	BETN3AG22D07
BodduPavan	BETN3AG22D08
Takoor Nikhil Singh	BETN3AG22D11
B Manohar	BETN3AG22D12
Babu Ali	BETN1ME21001
Bavandeep Singh	BETN1ME21002
Vijay Kumar Sharma	BETN1ME21005

Dean
School of Engg. & Tecn
ITM University
Gwalior

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

Industrial Visits to Rail Spring Karkhana- Sithouli on 7th April 2023:

1. **General**: Industrial visits for students of 8th semester Mechanical and 2nd semester Civil Engineering were organized on 7th April 2023. The students were taken to Rail Spring Karkhana-Sithouli.

2. **Participation**: Following faculty members and students visited the plant
   a. Mr.Arun Singh Kushwah and Dr. Shashikant Pandey, Assistant Professor, Department of Mechanical Engineering.
   b. Students of 8th semester Mechanical and 2nd semester Civil Engineering, 15 in numbers.

3. Visit was arranged by Mr. Sanjeev Chaba, Assistant Workshop Manager, Rail Spring Karkhana-Sithouli (Mob no.09752447004).

4. Transport: Bus for the visit was provided by University.

5. Objective of the visit:
   a. To make students familiar with the industrial environment.
   b. To show students, how actually industry works.

Dean
School of Engg. & Tecn
ITM University
Gwalior

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

c. To show students, manufacturing of rail springs.

d. To show students, the similarity & difference between theoretical and practical concepts of engineering.

6. Learning Outcomes:

a. Students learned about effect of alloying element on the rail steel.

b. Students also learned about Forging process.

c. Students visited the preheating furnace where they learned about the effect of various temperature ranges on the properties of rail steel.

d. Students learned about coiling of steel wires into springs.

e. Students learned about hardness testing, compression testing, shot peening and crack detection method.

f. Students also learned about the safety measures which are must while working in an industry and daily routine also.

7. Feedback from students:

The students gained practical experience of the industry and understood the manufacturing process practically to create a spring. There, students saw, understood and analyzed all the measures like furnace, rolling, shot pinning, industrial crane, industrial robot etc.

Dean
School of Engg. & Tecn
ITM University
Gwalior

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

ITM University, Gwalior		
Student list for Industrial visit(day 2)		
S.No.	**Name**	**Roll No.**
1	Manmeet Singh	BETN1ME19011
2	Rohit Kumar Vaishya	BETN1ME19017
3	Kuldeep Yadav	BETN1ME20002
4	Suraj Kumar	BETN1ME20005
5	Aniket Dwivedi	BETN1ME20008
6	Harsh Vishwakarma	BETN1ME20009
7	Rohit Singh Tomar	BETN1CE22004
8	Shubham Singh Tomar	BETN1CE22005
9	SuryabhanDhakad	BETN1CE22008
10	Aditya Dhakad	BETN1CE22010
11	CHUMA ANESU	BETN1CE22012
12	Aditya Gautam	BETN1CE22013
13	Herdesh Solanki	BETN1CE22014
14	Amit Raj	BETN1CE22019
15	Vinay Sharma	BETN1CE22022
Faculty coordinator		
1	Mr. Arun Singh Kushwah	Assistant Professor
2	Dr. Shashikant Pandey	Assistant Professor

OMVEER SINGH

Digitally signed by OMVEER SINGH
DN: cn=OMVEER SINGH c=IN o=Personal
Reason: I am the author of this document
Location:
Date: 2024-11-21 15:18+05:30

Dean
School of Engg. & Tecn
ITM University
Gwalior

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