Department of Civil Engineering
School of engineering and Technology

Criteria 1

Sub Criteria1.3.3

Percentage of students undertaking field projects/research projects/internships

AcademicYear

2021-2022

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

Index

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

Total Number of Research Projects in UG and PG

	Program	Total Number of students Involved in research projects
Research Projects	B.Tech-CE	12

Total Number of Industrial Trainings in UG

	Program	Total Number of students Involved in Industrial Training
Industrial Trainings	B.Tech-CE	48

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	
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-2021-2022

(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)**	SDG4(Quality education)				

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-2021-2022

(SOET)(BTech-CivilEngineering)

Title of the Course	Industrial Training
Course Code	CED0502[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)**	SDG9(Industry Innovation and Infrastructure) SDG11(Sustainable cities and economies)				

Part B

Modules	Contents	Pedagogy	Hours
1		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. & 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	
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-2021-2022

(SOET)(BTech-CivilEngineering)

Title of the Course	Minor Project
Course Code	CED0603[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. Sanveer 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-2021-2022

(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**
	50				
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. & Tecn
ITM University
Gwalior

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

Syllabus-2021-2022

(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
					0	0	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)**				

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-2021-2022

(SOET)(BTech-CivilEngineering)

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

Part A

Year	4th	**Semester**	8th	**Credits**	L	T	P
					0	0	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)**					

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. & 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	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. & Tecn
ITM University
Gwalior

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

Details of B. Tech Research Projects

Name of School: SOET
Name of the Course and Branch: B. Tech Civil Engineering
Batch: 2018-22
Total Number of Students enrolled: 12

S.No	Name of the Student	Roll No.	Title of the project	Guide
1	Tarkeshwar Kumar	BETN1CE18008	Analysis of Rice Husk Ash and Marine Dust	Mr. Farhan Ul Rahman
2	Ashutosh Rai	BETN1CE19D01		
3	Chirag Gupta	BETN1CE18002		
4	Habu Apang	BETN1CE18003	Sustainable Use of Natural Resources in Green Buildings	Mr. Aditya Sharma
5	Gopal Shahi	BETN1CE18012		
6	Bianglang Khongiong	BETN1CE19D02		
7	Sanju Prajapati	BETN1CE18006	High Performance Concrete	Mr. Nikhil Nandwani
8	Bajrang Sikarwar	BETN1CE18001		
9	Vivek Bhadoria	BETN1CE18010		
10	Tushar Shrivastava	BETN1CE19004	Partial Replacement of Bitumen by Waste Materials	Mr. Shashank Gupta
11	Rohit Dandotiya	BETN1CE19008		
12	Vikash Rajput	BETN1CE19012		

Dean
School of Engg. & Tecn
ITM University
Gwalior

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

Sample of Cover Pages of Projects

MAJOR PROJECT
ON
Analysis Of Rice Husk Ash and Marble Dust

Submitted partially fulfillment of the requirement for the award of degree
Bachelor Of Technology(Civil Engineering)

UNIVERSITY
GWALIOR • MP • INDIA
"CELEBRATING DREAMS"

GUIDED BY
FARHAN-UL-RAHMAN
Assistance professor
(Civil Engineering Department)

SUBMITTED TO
CIVIL DEPARTMENT
ITM UNIVERSITY GWALIOR

SUBMITTED BY
TARKESHWAR KUMAR
(BETN1CE18008)
ASHUTOSH RAI
(BETN3CE19D01)
CHIRAG GUPTA
(BETN1CE18002)

Dean
School of Engg. & Tech
ITM University
Gwalior

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

ITM UNIVERSITY
GWALIOR • MP • INDIA

DEPARTMENT OF CIVIL ENGINEERING

Major project report

On

High performance concrete

Under Guidance of

Mr. Nikhil nandwani sir

2018-2022

Submitted to:-

Mr. Farhan rahman sir

Submitted by:-

Sanju prajapati (BETN1CE18006)

Bajrang sikarwar (BETN1CE18001)

Vivek Bhadoria (BETN1CE18010)

Dean
School of Engg. & Tecn
ITM University
Gwalior

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

UNIVERSITY
GWALIOR • MP • INDIA
"CELEBRATING DREAMS"

Major Project

On

Partial Replacement of Bitumen by Waste Materials

Submitted By

TUSHAR SRIVASTAVA (BETN3CE19D03)
ROHIT DANDOTIYA (BETN1CE18005)
VIKASH RAJPUT (BETN1CE18009)
B-Tech (Civil) -2018-22
8th Semester

Submitted to

Mr. Farhan Rahman sir
(Department of Civil Engineering, SOET)

At

ITM UNIVERSITY
Gwalior, Madhya Pradesh

Dean
School of Engg. & Tech
ITM University
Gwalior

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	48

Programs/ Internships: - The students of civil engineering involve in the curriculum 3 times though out the whole B. Tech Program. The industrial training is included in the odd semester of all years. The students are encouraged to indulge themselves for internships in industry. Some of the examples of training certificates are attached below

Sl. No.	Name of the participant	SEM	Title of the collaborative activity	Name of the collaborating agency with contact details	Duration
1	Piyush Sharma	III	AutoCAD 2D 3D	AutoDesk	20 Days
2	Shivam Dandotiya	III	AutoCAD 2D 3D	AutoDesk	20 Days
3	Tarun Singh	III	AutoCAD 2D 3D	AutoDesk	20 Days
4	JARAVAZA TATENDA	III	AutoCAD 2D 3D	AutoDesk	20 Days
5	Shariq Jamal War	III	AutoCAD 2D 3D	AutoDesk	20 Days
6	Rishabh Jain	III	AutoCAD 2D 3D	AutoDesk	20 Days
7	Rajdev Lodhi	III	AutoCAD 2D 3D	AutoDesk	20 Days
8	Santosh Yadav	III	AutoCAD 2D 3D	AutoDesk	20 Days
9	Sushant Majhi	III	AutoCAD 2D 3D	AutoDesk	20 Days
10	Subhash Chaudhary	III	AutoCAD 2D 3D	AutoDesk	20 Days
11	Subodh chaudhary	III	AutoCAD 2D 3D	AutoDesk	20 Days
12	Dipesh kumar das	III	AutoCAD 2D 3D	AutoDesk	20 Days

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

13	Arpan Kumar Chaudhary	III	AutoCAD 2D 3D	AutoDesk	20 Days
14	Anish Kumar Chaudhary	III	AutoCAD 2D 3D	AutoDesk	20 Days
15	Rabindra Chaudhary	III	AutoCAD 2D 3D	AutoDesk	20 Days
16	Niraj Kumar Sah	III	AutoCAD 2D 3D	AutoDesk	20 Days
17	Nitesh Kumar Shah	III	AutoCAD 2D 3D	AutoDesk	20 Days
18	Krishna Kumar Mandal	III	AutoCAD 2D 3D	AutoDesk	20 Days
19	Jibachh Prasad Sah	III	AutoCAD 2D 3D	AutoDesk	20 Days
20	Aashish Kumar Majhi	III	AutoCAD 2D 3D	AutoDesk	20 Days
21	Shabir Ahmad Ahanger	III	AutoCAD 2D 3D	AutoDesk	20 Days
22	Narmi katon Darang	III	AutoCAD 2D 3D	AutoDesk	20 Days
23	Anku Singh Bhadouriya	V	STAAD Pro Software	Bentley Education	10 Weeks
24	Apoorv chourasia	V	STAAD Pro Software	Bentley Education	10 Weeks
25	Balbir Singh Rajawat	V	STAAD Pro Software	Bentley Education	10 Weeks
26	Bhupe Kunda	V	STAAD Pro Software	Bentley Education	10 Weeks
27	Charles Claude Siwale	V	STAAD Pro Software	Bentley Education	10 Weeks
28	Joel Munga Gideon	V	STAAD Pro Software	Bentley Education	10 Weeks
29	Kartik Gupta	V	STAAD Pro Software	Bentley Education	10 Weeks
30	Kulprakash Badal	V	STAAD Pro Software	Bentley Education	10 Weeks
31	Lehnam Kahunga	V	STAAD Pro Software	Bentley Education	10 Weeks

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

32	Manoj Sharma	V	STAAD Pro Software	Bentley Education	10 Weeks
33	Mohd Saqlain	V	STAAD Pro Software	Bentley Education	10 Weeks
34	Musaib Ahmad Shah	V	STAAD Pro Software	Bentley Education	10 Weeks
35	Nadeem Reyaz	V	STAAD Pro Software	Bentley Education	10 Weeks
36	Parth Singh Chauhan	V	STAAD Pro Software	Bentley Education	10 Weeks
37	Sampa Banda	V	STAAD Pro Software	Bentley Education	10 Weeks
38	Tushar Karn	V	STAAD Pro Software	Bentley Education	10 Weeks
39	Yao Kaachou Maxime	V	STAAD Pro Software	Bentley Education	10 Weeks
40	BAJRANG SINGH SIKARWAR	VII	STAAD Pro Software	Bentley Education	10 Weeks
41	CHIRAG GUPTA	VII	STAAD Pro Software	Bentley Education	10 Weeks
42	HABU APANG	VII	STAAD Pro Software	Bentley Education	10 Weeks
43	ROHIT DANDOTIYA	VII	STAAD Pro Software	Bentley Education	10 Weeks
44	TARKESHWAR KUMAR	VII	STAAD Pro Software	Bentley Education	10 Weeks
45	VIKAS RAJPUT	VII	STAAD Pro Software	Bentley Education	10 Weeks
46	ASHUTOSH RAI	VII	STAAD Pro Software	Bentley Education	10 Weeks

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

47	BIANGLANG KHONGIONG	VII	STAAD Pro Software	Bentley Education	10 Weeks
48	TUSHAR SHRIVASTAVA	VII	STAAD Pro Software	Bentley Education	10 Weeks

Dean
School of Engg. & Tecn
ITM University
Gwalior

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

Sample of Certificates

N·E·A·T
प्रौद्योगिकी के लिए राष्ट्रीय शैक्षणिक सहयोग
National Educational Alliance for Technology

अखिल भारतीय तकनीकी शिक्षा परिषद्
All India Council for Technical Education

EduSkills®
Nation Building Through Skills

AICTE - EduSkills VIRTUAL INTERNSHIP

Certificate of Virtual Internship

This is to certify that

ROHIT DANDOTIYA

has successfully completed 10 weeks

Structural Analysis with STAAD. Pro Virtual Internship

During September - November 2021

Supported By Bentley Education

Mohit Bradoo
Director, Bentley Education
Bentley Systems

Shri Buddha Chandrasekhar
Chief Coordinating Officer (CCO)
NEAT Cell, AICTE

Dr. Satya Ranjan Biswal
Chief Technology Officer (CTO)
EduSkills

www.eduskillsfoundation.org

Dean
School of Engg. & Tecn
ITM University
Gwalior

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

ITM UNIVERSITY
GWALIOR • MP • INDIA
"CELEBRATING DREAMS"

N·E·A·T
प्रौद्योगिकी के लिए राष्ट्रीय शैक्षणिक सहयोग
National Educational Alliance for Technology

अखिल भारतीय तकनीकी शिक्षा परिषद्
All India Council for Technical Education

EduSkills®
Nation Building Through Skills

AICTE - EduSkills VIRTUAL INTERNSHIP

Certificate of Virtual Internship

This is to certify that

VIKAS RAJPUT

has successfully completed 10 weeks

Structural Analysis with STAAD. Pro Virtual Internship

During September - November 2021

Supported By Bentley Education

Mohit Bradoo
Director, Bentley Education
Bentley Systems

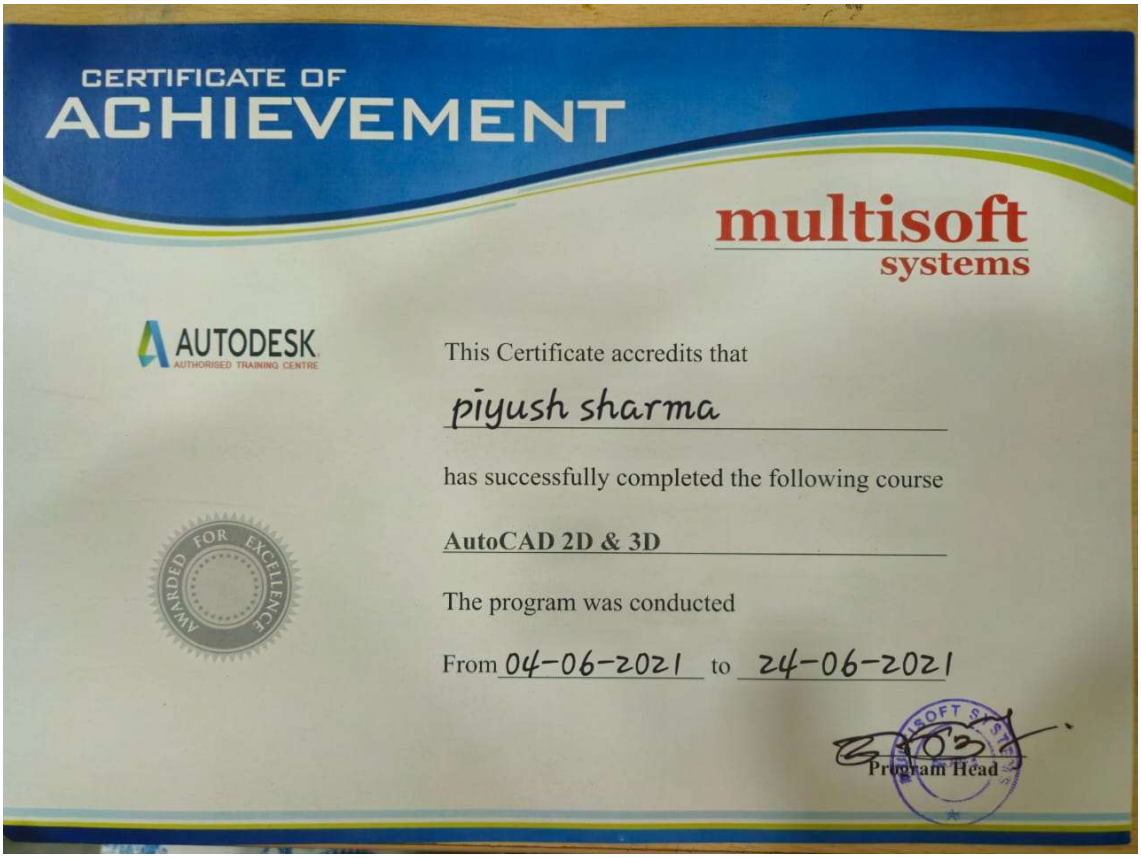
Shri Buddha Chandrasekhar
Chief Coordinating Officer (CCO)
NEAT Cell, AICTE

Dr. Satya Ranjan Biswal
Chief Technology Officer (CTO)
EduSkills

www.eduskillsfoundation.org

Dean
School of Engg. & Tecn
ITM University
Gwalior

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



CERTIFICATE OF
ACHIEVEMENT

multisoft systems

AUTODESK
AUTHORISED TRAINING CENTRE

This Certificate accredits that

piyush sharma

has successfully completed the following course

AutoCAD 2D & 3D

The program was conducted

From 04-06-2021 to 24-06-2021

Program Head

Dean
School of Engg. & Tecn
ITM University
Gwalior

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

Details of Industrial Visits

Industrial visit/Study tours/Site Visits: - Industrial visits are integral to the academic curriculum, particularly for civil engineering students pursuing B. Tech program. These visits are designed to give students practical exposure, complementing theoretical knowledge gained in classrooms. In session 2021-22, Students of civil engineering from the School of Engineering and Technology at ITM University, Gwalior had the privilege of visiting at Engipress Pvt. Ltd on 14 May 2022, and Supreme Industries on 30 May 2022.

Industrial Visit	
Industry	**Date**
Industrial Visit- Engipress Pvt. Ltd.	14 May 2022
Industrial Visit- Supreme Industries	30 May 2022

Dean
School of Engg. & Tecn
ITM University
Gwalior

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

REPORT ON INDUSTRIAL VISIT,

DATE = 14-MAY-2022

Duration :1day

The Department of Civil and Mechanical Engineering has organized a one day industrial visit to "Engipress Industries Pvt Ltd, Sanichara Road, Morena, M.P. " (Sleeper Plant) dated on 14, May 2022. 40 students and 4 faculty members, Dr. Rajendra Singh Rajput, Dr. R.K. Jain, Mr.Nikhil Nandwani & Mr. Arun Singh Kushwah departed from college at 9:30 AM with a moto to learn each and every technical aspects involved in pre or post tensioning of sleepers, various types of it, manufacturing process and material testing etc.

The concrete sleepers are being manufactured by using pre-stressed cement concrete of M60 grade and 16 wires in each sleeper for reinforcement. One bench has eight moulds at a time with oiled inner faces and inserts fixed for the fastening of rails. The wires are inserted into holes and pre-tensioned by hydraulic jacks. Then the concrete is filled into the moulds and the benches are sent for curing. First, they are cured by hot steam at a temperature of 750 Celsius for 12 hours. Thereafter, they are cured in water tanks continuously for 15 days. The testing to destruction is performed batch-wise in a separate digitized flexural testing machine. There are other testing equipment installed in the plant laboratory-like Slump cone, Aggregate impact test apparatus, Sieve shakers, Flexural testing machine, Proctor mould, and Cube vibrating machine, Compression testing machine, Oven and different gauges etc. Most of the tests are computerized and their record is maintained digitally.

The students were happy and very excited during the visit. They got satisfactory answers to their questions from the plant engineers and staff. Snacks was also offered after the visit by the company. The visit was very well managed by the company and its staff. Interactions between students and the industry people may also be beneficial for students.

Dean
School of Engg. & Tech
ITM University
Gwalior

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

Dean
School of Engg. & Tecn
ITM University
Gwalior

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

VISIT TO SUPREME INDUSTRIES

DATE = 30-MAY-2022

Duration :1day

INDUSTRIAL VISIT MENTOR= NIKHIL NANDAWANI,SHANSHAK GUPTA

INDUSTRY GUIDE= SHARAD YADAV

PRODUCTS: Polystyrene & polymer

INDUSTRY: Plastic processing

Headquarters : Mumbai Maharashtra,india

AIM OF INDUSTRIAL VISIT

INDUSTRIAL VISIT is considered as one of the tactical methods of teaching.the man behind we can know things practically through Interaction,working methods.It gives exposure from academic point of view.Industrial visit provide us information about practical working environment

NAME OF THE INDUSTRY: THE SUPREME INDUSTRIES PIPES AND FITTINGS MALANPUR

ABOUT:The factory registered in 30-Jan-2014

INTRODUCTION: The company manufacturer industrial and engineering molded furniture product,storage and material handling crates,multi-layer sheet,multi-layer films packaging films,expanded polyethylene form ,PVC Pipes and fitting ,molded furniture,sataranj mats,disposable EPS container.

OUR EXPERIENCE: At entrance of industry we were told to submit the mobile phones. Than we were first taken to Air conditioned small auditorium where briefing was given using ppt presentation by Sharad Yadav Sir from Supreme. Which was

very helpful. Later we were taken for visit and shown various coloured pipes with different application as per temperature, sanitary appliances, Water tanks, sewage tanks etc and how they are manufactured. Plastic is future of country and world. Students got hands on experience. At the end snaks and cold drink was offered to students. We got to know varities available even in plastics. 9:30am we left University and 2:30pm we reached back University from Malanpur.

Dean
School of Engg. & Tecn
ITM University
Gwalior

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 15:17+05:30

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