

SWAMI VIVEKANAND UNIVERSITY, SIRONJA, SAGAR (M.P.)



SYLLABUS

For

**MASTER OF TECHNOLOGY (M.Tech)
HIGHWAY ENGINEERING**

Course Code : MTCEH

Department of Civil Engineering

Faculty of Engineering

Duration of Course	: 2 Years
Examination Mode	: Semester
Examination System	: Grading

Swami Vivekanand University, Sironja Sagar (M.P.)
2016-2017



Swami Vivekanand University, Sagar (M.P.)

Scheme of Examination



Faculty of Engineering

Department : Civil Engineering

Scheme of Course : M.Tech in Highway Engineering

Course Code : MTCEH

Semester/Year :- 1 Sem

Paper / Subject Code	Title of the Paper / Subject	Credit Allotted			Total Credit	Distribution of Marks										Duration of Theory Exam
		L	T	P		Theory					Practical			Grand Total (H=D+G)		
						End Sem.		Internal		Total (D=A+B+C)	End Sem.		Internal (F)		Total (G=E+F)	
						Max (A)	Min	MST (B)	TW (C)		Max (E)	Min				
MTCEH - 0101	Highway Material and Testing	3	1	-	4	70	28	20	10	100	-	-	-	-	100	3 Hrs
MTCEH - 0102	Transportation Planning	3	1	-	4	70	28	20	10	100	-	-	-	-	100	3 Hrs
MTCEH - 0103	Highway Geometric Design	3	1	-	4	70	28	20	10	100	-	-	-	-	100	3 Hrs
MTCEH - 0104	Highway Equipments & Machinery	3	1	-	4	70	28	20	10	100	-	-	-	-	100	3 Hrs
MTCEH - 0105	Elective- I	3	1	-	4	70	28	20	10	100	-	-	-	-	100	3 Hrs
MTCEH - 0106	Lab-I (Highway Lab)	-	-	6	6	-	-	-	-	-	90	36	60	150	150	-
MTCEH - 0107	Lab-II (CAD)	-	-	6	6	-	-	-	-	-	90	36	60	150	150	-
Total		15	05	12	32	350	-	100	50	500	180	-	120	300	800	

Elective I

- MTCEH – 0105(A) Low Cost Road
- MTCEH – 0105(B) Bituminous Concrete Road Construction
- MTCEH – 0105(C) Cement Concrete Road Construction
- MTCEH – 0105(D) Advanced Mathematics



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Scheme of Examination



Faculty of Engineering
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Semester/Year :- 2 Sem

Paper / Subject Code	Title of the Paper / Subject	Credit Allotted			Total Credit	Distribution of Marks										Duration of Theory Exam
		L	T	P		Theory					Practical			Grand Total (H=D+G)		
						End Sem.		Internal		Total (D=A+B+C)	End Sem.		Internal		Total (G=E+F)	
						Max (A)	Min	MST (B)	TW (C)		Max (E)	Min				
MTCEH -0201	Pavement Analysis & Design	3	1	-	4	70	28	20	10	100	-	-	-	-	100	3 Hrs
MTCEH -0202	Traffic Engg. & Field Studies	3	1	-	4	70	28	20	10	100	-	-	-	-	100	3 Hrs
MTCEH -0203	Highway Construction	3	1	-	4	70	28	20	10	100	-	-	-	-	100	3 Hrs
MTCEH-0204	Elective- II	3	1	-	4	70	28	20	10	100	-	-	-	-	100	3 Hrs
MTCEH-0205	Elective- III	3	1	-	4	70	28	20	10	100	-	-	-	-	100	3 Hrs
MTCEH-0206	Advanced Highway Lab. – III	-	-	6	6	-	-	-	-	-	90	36	60	150	150	-
MTCEH-0207	Advanced Highway Lab. – IV	-	-	6	6	-	-	-	-	-	90	36	60	150	150	-
Total		15	05	12	32	350	-	100	50	500	180	-	120	300	800	

Elective II

- MTCEH – 0204(A) Airport Planning and Design
- MTCEH – 0204(B) Highway Bridges
- MTCEH – 0204(C) Harbour and Dock Engg
- MTCEH – 0204(D) Tunnel Engg

Elective III

- MTCEH – 0205(A) Highway Subgrade and Foundation Analysis
- MTCEH – 0205(B) Advances of Concrete Technology
- MTCEH – 0205(C) Fiber Reinforced Concrete
- MTCEH – 0205(D) Advanced Highway Equipments



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Scheme of Examination



Faculty of Engineering

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Scheme of Course : M.Tech in Highway Engineering

Course Code : MTCEH

Semester/Year :- 3 Sem

Paper / Subject Code	Title of the Paper / Subject	Credit Allotted			Total Credit	Distribution of Marks										Duration of Theory Exam
		L	T	P		Theory					Practical			Grand Total (H= D+G)		
						End Sem.		Internal		Total (D= A+B+C)	End Sem.		Internal LW (F)		Total (G= E+F)	
						Max (A)	Min	MST (B)	TW (C)		Max (E)	Min				
MTCEH - 0301	Elective-IV	3	1	-	4	70	28	20	10	100	-	-	-	-	100	3 Hrs
MTCEH - 0302	Elective-V	3	1	-	4	70	28	20	10	100	-	-	-	-	100	3 Hrs
MTCEH - 0303	Project-I	-	-	4	4	-	-	-	-	-	100	30	-	100	100	-
MTCEH - 0304	Dissertation Part-I (Literature Review/Problem Formulation/ Synopsis)	-	-	8	8	-	-	-	-	-	120	48	80	200	200	
	Total	6	2	12	20	140	-	40	20	200	220	-	80	300	500	

Elective I

MTCEH – 0301(A)

MTCEH MTHE – 0301(B)

Elective II

MTCEH – 0302(A)

MTCEH – 0302(B)



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Scheme of Examination



Faculty of Engineering

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Semester/Year :- 4 Sem

Paper / Subject Code	Title of the Paper / Subject	Credit Allotted			Total Credit	Distribution of Marks										Duration of Theory Exam
		L	T	P		Theory					Practical			Grand Total (H= D+G)		
						End Sem.		Internal		Total (D= A+B+C)	End Sem.		Internal		Total (G= E+F)	
						Max (A)	Min	MST (B)	TW (C)		Max (E)	Min				
MTCEH - 0401	Dissertation Part- II	-	-	20	20	-	-	-	-	-	300	120	200	500	500	-
	Total	-	-	20	20	-	-	-	-	-	300	120	200	500	500	