

**Veermata Jijabai Technological Institute**

**Veermata Jijabai Technological Institute**

**Scheme of Teaching and Evaluation**

**M Tech Programmes  
(R2009)  
(Proposed)**

**Effective from Academic Year 2009-10**

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester I) (Civil Engineering with specialization of Environmental Engineering)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
CE0311	Environmental Chemistry	3	-	-	3	40	-	60	100	3
CE0312	Environmental Microbiology	3	-	-	3	40	-	60	100	3
CE0313	Advanced Hydraulics	3	-	-	3	40	-	60	100	3
CE0314	Air, Noise Pollution & Control	3	-	-	3	40	-	60	100	3
-	Elective	3	-	-	3	40	-	60	100	3
HM0311	Communication Skills I	2	-	-	N/NP					
	Total	17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
CE1311	Water Laboratory	-	-	3	1.5	50	50		100	
CE1312	Air pollution & Microbiology Laboratory	-	-	3	1.5	50	50		100	
CE1313	Sampling & analysis Laboratory	-	-	3	1.5	50	50		100	
CE2311	Seminar	-	-	3	1.5	50	50		100	
	Total	-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4311	Industry Interaction	-	-	2	P/NP					
CC4312	E-library	-	-	2	-					
CC4313	Internet	-	-	2						
	Total	-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

Effective from Academic Year 2009-10

# Veermata Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester II) (Civil Engineering with specialization of Environmental Engineering)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
CE0321	Advanced water treatment	3	-	-	3	40	-	60	100	3
CE0322	Advanced waste water treatment	3	-	-	3	40	-	60	100	3
CE0323	Industrial waster water treatment	3	-	-	3	40	-	60	100	3
CE0324	Solid & hazardous waste management	3	-	-	3	40	-	60	100	3
-	Elective	3	-	-	3	40	-	60	100	3
HM0321	Communication Skills II	2	-	-	N/NP					
	Total	17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
CE1321	Waste water & Solid waste laboratory	-	-	3	1.5	50	50		100	
CE1322	Computer Applications	-	-	3	1.5	50	50		100	
CE1323	Design laboratory	-	-	3	1.5	50	50		100	
CE2321	Seminar	-	-	3	1.5	50	50		100	
	Total	-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4321	Industry Interaction	-	-	2	P/NP					
CC4322	E-library	-	-	2	-					
CC4323	Internet	-	-	2						
	Total	-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

## Veermata Jijabai Technological Institute

### Scheme of Teaching and Evaluation M Tech (Semester III & IV) (Civil Engineering with specialization of Environmental Engineering)

<b>Project</b>										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
CE3331	Stage –I Presentation	-	-	-	6					
CE3341	Stage –II Presentation	-	-	-	6					
CE3342	Presentation and Viva	-	-	-	12					
	Total				24					

<b>Elective Courses</b>	
Course Code	Course Name
CE0351	Environmental Legislation
CE0352	Environmental Management
CE0353	EIA and Audit
CE0354	Operation & Maintenance of Treatment Facilities
CE0355	Rural water supply & sanitation
CE0356	Water resources management

**Abbreviations:**

L: Lectures, T: Tutorial, P: Practical, TA: Teacher Assessment, ESE (P): End Semester Practical Examination, ESE (O): End Semester Oral Examination, IST: In Semester Test/s, ESE (W): End Semester Written Examination, ESE (W) (hrs): End Semester Written Examination duration, ESE (O) (hrs): End Semester Examination Practical (duration), P/NP: Pass/Not Pass

**Notes:**

TA for Theory and Laboratory courses shall carry 25 marks  
 IST: One mid semester test (20 marks, one hour duration) and two surprise tests/quizzes (5 marks each).  
 ESE(W) shall be of 100 marks and of 3 hours, ESE(P) and ESE(O) shall be decided as per course requirement. ESE(O) and ESE (P) shall together carry 25 marks.

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester I) (Civil Engineering with specialization of Construction Management)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
CE0411	Principles & practice of management	3	-	-	3	40	-	60	100	3
CE0412	Legal aspects of construction	3	-	-	3	40	-	60	100	3
CE0413	Advanced construction techniques	3	-	-	3	40	-	60	100	3
-	Elective –I	3	-	-	3	40	-	60	100	3
-	Elective-II	3	-	-	3	40	-	60	100	3
HM0311	Communication Skills	2	-	-	N/NP					
	Total	17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
CE1411	Project Management Laboratory I	-	-	3	1.5	50	50		100	
CE1412	Computer laboratory	-	-	3	1.5	50	50		100	
CE1413	Quantity surveying & estimating Laboratory	-	-	3	1.5	50	50		100	
CE2411	Seminar	-	-	3	1.5	50	50		100	
	Total	-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4311	Industry Interaction	-	-	2	P/NP					
CC4312	E-library	-	-	2	-					
CC4313	Internet	-	-	2						
	Total	-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester II) (Civil Engineering with specialization of Construction Management)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
CE0421	Construction Resource Management	3	-	-	3	40	-	60	100	3
CE0422	Project Financing	3	-	-	3	40	-	60	100	3
CE0423	Advanced project management	3	-	-	3	40	-	60	100	3
-	Elective –I	3	-	-	3	40	-	60	100	3
-	Elective-II	3	-	-	3	40	-	60	100	3
HM0321	Communication Skills	2	-	-	N/NP					
	Total	17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
CE1421	Project Management Laboratory II	-	-	3	1.5	50	50		100	
CE1422	Material testing laboraory	-	-	3	1.5	50	50		100	
CE1423	Maintenance management Laboratory	-	-	3	1.5	50	50		100	
CE2421	Seminar	-	-	3	1.5	50	50		100	
	Total	-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4321	Industry Interaction	-	-	2	P/NP					
CC4322	E-library	-	-	2	-					
CC4323	Internet	-	-	2						
	Total	-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester III & IV) (Civil Engineering with specialization of Construction Management)

Project										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
CE3431	Stage –I Presentation	-	-	-	6					
CE3441	Stage –II Presentation	-	-	-	6					
CE3442	Presentation and Viva	-	-	-	12					
	Total				24					

Elective Courses	
Course Code	Course Name
CE0451	Value Management
CE0452	Construction Marketing
CE0453	International Construction Business
CE0454	Pavement Management System
CE0455	Rehabilitation of Structures
CE0456	Advanced Construction Materials
CE0457	Risk and Disaster Management
CE0458	Operational Health & safety Management
CE0459	Project Management Information Systems
CE0460	Facilitates Management
CE0461	Managerial Decision making

**Abbreviations:**

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**Notes:**

TA for Theory and Laboratory courses shall carry 25 marks  
 IST: One mid semester test (20 marks, one hour duration) and two surprise tests/quizzes (5 marks each).  
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# Veermata Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester I) (Civil Engineering with specialization of Structural Engineering)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
CE0511	Theory of Elasticity and Plasticity	3	-	-	3	40	-	60	100	3
CE0512	Non – Linear Analysis	3	-	-	3	40	-	60	100	3
CE0513	Experimental Stress Analysis	3	-	-	3	40	-	60	100	3
-	Elective -I	3	-	-	3	40	-	60	100	3
-	Elective-II	3	-	-	3	40	-	60	100	3
HM0311	Communication Skills	2	-	-	N/NP					
	Total	17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
CE1511	Deign of High Rise Structures in R.C.C	-	-	3	1.5	50	50		100	
CE1512	Deign of Large Span Structures in R.C.C	-	-	3	1.5	50	50		100	
CE1513	Design of Industrial Structures –I (Steel)	-	-	3	1.5	50	50		100	
CE2511	Seminar	-	-	3	1.5	50	50		100	
	Total	-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4311	Industry Interaction	-	-	2	P/NP					
CC4312	E-library	-	-	2	-					
CC4313	Internet	-	-	2						
	Total	-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester II) (Civil Engineering with specialization of Structural Engineering)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
CE0521	Theory of Plates and Shells	3	-	-	3	40	-	60	100	3
CE0522	Finite Element Analysis	3	-	-	3	40	-	60	100	3
CE0523	Advanced Design of Concrete Structures	3	-	-	3	40	-	60	100	3
-	Elective -I	3	-	-	3	40	-	60	100	3
-	Elective-II	3	-	-	3	40	-	60	100	3
HM0321	Communication Skill	2	-	-	N/NP					
Total		17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
CE1521	Design of Industrial Structures –II (R.C .C)	-	-	3	1.5	50	50		100	
CE1522	Design of Bridges (RCC and Pre-Stressed)	-	-	3	1.5	50	50		100	
CE1523	Design of Bridges (Steel)	-	-	3	1.5	50	50		100	
CE2521	Seminar	-	-	3	1.5	50	50		100	
Total		-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4321	Industry Interaction	-	-	2	P/NP					
CC4322	E-library	-	-	2	-					
CC4323	Internet	-	-	2						
Total		-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

**Effective from Academic Year 2009-10**

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester III & IV) (Civil Engineering with specialization of Structural Engineering)

Project										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
CE3531	Stage –I Presentation	-	-	-	6					
CE3541	Stage –II Presentation	-	-	-	6					
CE3542	Presentation and Viva	-	-	-	12					
	Total				24					

Elective Courses	
Course Code	Course Name
CE0551	Advanced Structural Mechanics
CE0552	Engineering Optimization
CE0553	Advanced Foundation Engineering
CE0554	Structural Dynamics
CE0555	Earthquake Engineering
CE0556	Analysis of Composite Structures
CE0557	Pre-stressed Concrete
CE0558	Advanced Design of Steel Structures
CE0559	Advanced Design of Bridges
CE0560	Mathematical and Numerical Methods
CE0561	Structural safety and reliability
CE0562	Earth Pressure and Retaining Structures
CE0563	Design of Offshore Structures

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**Notes:**

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# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester I) (Electrical Engineering with specialization of Power Systems)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
EE0311	Advanced power systems	3	-	-	3	40	-	60	100	3
EE0312	FACTS	3	-	-	3	40	-	60	100	3
EE0313	Power system protection	3	-	-	3	40	-	60	100	3
EE0314	Feedback control design	3	-	-	3	40	-	60	100	3
-	Elective I	3	-	-	3	40	-	60	100	3
HM0311	Communication Skills	2	-	-	N/NP					
	Total	17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
EE1311	MATLAB	-	-	3	1.5	50	50		100	
EE1312	Dynamical systems lab	-	-	3	1.5	50	50		100	
EE1313	High voltage-lab I	-	-	3	1.5	50	50		100	
EE2311	Seminar	-	-	3	1.5	50	50		100	
	Total	-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4311	Industry Interaction	-	-	2	P/NP					
CC4312	E-library	-	-	2	-					
CC4313	Internet	-	-	2						
	Total	-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester II) (Electrical Engineering with specialization of Power Systems)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
EE0321	Insulation system design	3	-	-	3	40	-	60	100	3
EE0322	Power system stability	3	-	-	3	40	-	60	100	3
EE0323	Power system planning	3	-	-	3	40	-	60	100	3
EE0324	High performance industrial drives	3	-	-	3	40	-	60	100	3
-	Elective II	3	-	-	3	40	-	60	100	3
HM0321	Communication Skill	2	-	-	N/NP					
	Total	17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
EE1321	Finite element methods lab	-	-	3	1.5	50	50		100	
EE1322	Simulation lab	-	-	3	1.5	50	50		100	
EE1323	High voltage lab II	-	-	3	1.5	50	50		100	
EE2321	Seminar	-	-	3	1.5	50	50		100	
	Total	-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4321	Industry Interaction	-	-	2	P/NP					
CC4322	E-library	-	-	2	-					
CC4323	Internet	-	-	2						
	Total	-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

**Effective from Academic Year 2009-10**

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester III & IV) (Electrical Engineering with specialization of Power Systems)

Project										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
EE3331	Stage – I Presentation	-	-	-	6					
EE3341	Stage – II Presentation	-	-	-	6					
EE3442	Presentation and Viva	-	-	-	12					
	Total				24					

Elective Courses	
Course Code	Course Name
EE0451	Elective I - High voltage testing and measuring system
EE0452	Elective I - High voltage breakdown
EE0453	Elective II - Power plant component design
EE0454	Elective II - Grounding and shielding systems
EE0455	Elective II - Partial discharge

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 IST: One mid semester test (20 marks, one hour duration) and two surprise tests/quizzes (5 marks each).  
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# Veermata Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester I) (Electrical Engineering with specialization of Control Systems)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
EE0411	Dynamical systems	3	-	-	3	40	-	60	100	3
EE0412	Feedback Control Design	3	-	-	3	40	-	60	100	3
EE0413	Optimal control	3	-	-	3	40	-	60	100	3
EE0414	Finite dimensional linear systems	3	-	-	3	40	-	60	100	3
-	Elective I	3	-	-	3	40	-	60	100	3
HM0311	Communication Skills	2	-	-	N/NP					
	Total	17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
EE1411	MATLAB	-	-	3	1.5	50	50		100	
EE1412	Dynamical systems-lab1	-	-	3	1.5	50	50		100	
EE1413	Advanced computational Methods	-	-	3	1.5	50	50		100	
EE2411	Seminar	-	-	3	1.5	50	50		100	
	Total	-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4311	Industry Interaction	-	-	2	P/NP					
CC4312	E-library	-	-	2	-					
CC4313	Internet	-	-	2						
	Total	-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

# Veermata Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester II) (Electrical Engineering with specialization of Control Systems)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
EE0421	Non linear system analysis	3	-	-	3	40	-	60	100	3
EE0422	Multi variable control	3	-	-	3	40	-	60	100	3
EE0423	Non linear control design	3	-	-	3	40	-	60	100	3
EE0424	High performance industrial drives	3	-	-	3	40	-	60	100	3
-		3	-	-	3	40	-	60	100	3
HM0321	Communication Skill	2	-	-	N/NP					
	Total	17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
EE1421	Finite element methods lab	-	-	3	1.5	50	50		100	
EE1422	Dynamical systems-lab2	-	-	3	1.5	50	50		100	
EE1423	Controller design -lab	-	-	3	1.5	50	50		100	
EE2421	Seminar	-	-	3	1.5	50	50		100	
	Total	-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4321	Industry Interaction	-	-	2	P/NP					
CC4322	E-library	-	-	2	-					
CC4323	Internet	-	-	2						
	Total	-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

**Effective from Academic Year 2009-10**

## Veermata Jijabai Technological Institute

### Scheme of Teaching and Evaluation M Tech (Semester III & IV) (Electrical Engineering with specialization of Control Systems)

<b>Project</b>										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
EE3431	Stage –I Presentation	-	-	-	6					
EE3441	Stage –II Presentation	-	-	-	6					
EE3442	Presentation and Viva	-	-	-	12					
	Total				24					

<b>Elective Courses</b>	
Course Code	Course Name
EE0451	Elective I: Modeling and Analysis of System
EE0452	Elective I: Digital Controls
EE0453	Elective II: Advanced control theory
EE0454	Elective II: Robust and Optimal Control

**Abbreviations:**

L:Lectures, T:Tutorial, P:Practical, TA:Teacher Assessment, ESE (P):End Semester Practical Examination, ESE (O): End Semester Oral Examination, IST: In Semester Test/s, ESE (W):End Semester Written Examination, ESE (W) (hrs):End Semester Written Examination duration, ESE (O) (hrs):End Semester Examination Practical (duration), P/NP:Pass/Not Pass

**Notes:**

TA for Theory and Laboratory courses shall carry 25 marks  
 IST: One mid semester test (20 marks, one hour duration) and two surprise tests/quizzes (5 marks each).  
 ESE(W) shall be of 100 marks and of 3 hours, ESE(P) and ESE(O) shall be decided as per course requirement. ESE(O) and ESE (P) shall together carry 25 marks.

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester I) (Electronics Engineering)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
EC0311	VLSI Systems design	3	-	-	3	40	-	60	100	3
EC0312	Digital system design	3	-	-	3	40	-	60	100	3
EC0313	Discrete time signal processing	3	-	-	3	40	-	60	100	3
EC0314	Electronics in medicine	3	-	-	3	40	-	60	100	3
-	Elective I	3	-	-	3	40	-	60	100	3
HM0311	Communication Skills	2	-	-	N/NP					
	Total	17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
EC1311	Discrete time signal processing – Lab	-	-	3	1.5	50	50		100	
EC1312	Digital system design-lab	-	-	3	1.5	50	50		100	
EC1313	Advanced Communication-lab	-	-	3	1.5	50	50		100	
EC2311	Seminar	-	-	3	1.5	50	50		100	
	Total	-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4311	Industry Interaction	-	-	2	P/NP					
CC4312	E-library	-	-	2	-					
CC4313	Internet	-	-	2						
	Total	-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester II) (Electronics Engineering)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
EC0321	Nano Electronics	3	-	-	3	40	-	60	100	3
EC0322	Advanced DSP	3	-	-	3	40	-	60	100	3
EC0323	Embedded systems	3	-	-	3	40	-	60	100	3
EC0324	Mobile & cellular communication	3	-	-	3	40	-	60	100	3
-		3	-	-	3	40	-	60	100	3
HM0321	Communication Skill	2	-	-	N/NP					
	Total	17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
EC1321	VLSI- Lab	-	-	3	1.5	50	50		100	
EC1322	Embedded systems-lab	-	-	3	1.5	50	50		100	
EC1323	Virtual instrumentation - Lab	-	-	3	1.5	50	50		100	
EC2321	Seminar	-	-	3	1.5	50	50		100	
	Total	-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4321	Industry Interaction	-	-	2	P/NP					
CC4322	E-library	-	-	2	-					
CC4323	Internet	-	-	2						
	Total	-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

**Effective from Academic Year 2009-10**

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester III & IV) (Electronics Engineering)

Project										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
EC3331	Stage –I Presentation	-	-	-	6					
EC3341	Stage –II Presentation	-	-	-	6					
EC3342	Presentation and Viva	-	-	-	12					
	Total				24					

Elective Courses	
Course Code	Course Name
EC0351	Elective I: Advanced communication
EC0352	Elective I: Power electronics applications
EC0353	Elective II: Data communication
EC0354	Elective II: Virtual instrumentation

**Abbreviations:**

L:Lectures, T:Tutorial, P:Practical, TA:Teacher Assessment, ESE (P):End Semester Practical Examination, ESE (O): End Semester Oral Examination, IST: In Semester Test/s, ESE (W):End Semester Written Examination, ESE (W) (hrs):End Semester Written Examination duration, ESE (O) (hrs):End Semester Examination Practical (duration), P/NP:Pass/Not Pass

**Notes:**

TA for Theory and Laboratory courses shall carry 25 marks  
 IST: One mid semester test (20 marks, one hour duration) and two surprise tests/quizzes (5 marks each).  
 ESE(W) shall be of 100 marks and of 3 hours, ESE(P) and ESE(O) shall be decided as per course requirement. ESE(O) and ESE (P) shall together carry 25 marks.

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester I) (Electronics and Telecommunication Engineering)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
ET0311	Discrete time signal processing	3	-	-	3	40	-	60	100	3
ET0312	Advanced communication	3	-	-	3	40	-	60	100	3
ET0313	Microwave –I	3	-	-	3	40	-	60	100	3
ET0314	Statistical theory of communication	3	-	-	3	40	-	60	100	3
-	Elective I	3	-	-	3	40	-	60	100	3
HM0311	Communication Skills	2	-	-	N/NP					
Total		17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
ET1311	Discrete time signal processing Lab	-	-	3	1.5	50	50		100	
ET1312	Advanced communication – Lab I	-	-	3	1.5	50	50		100	
ET1313	Microwave –Lab I	-	-	3	1.5	50	50		100	
ET2311	Seminar	-	-	3	1.5	50	50		100	
Total		-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4311	Industry Interaction	-	-	2	P/NP					
CC4312	E-library	-	-	2	-					
CC4313	Internet	-	-	2						
Total		-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester II) (Electronics and Telecommunication Engineering)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
ET0321	Mobile & Cellular Communication	3	-	-	3	40	-	60	100	3
ET0322	Advanced DSP	3	-	-	3	40	-	60	100	3
ET0323	Error Correcting Codes	3	-	-	3	40	-	60	100	3
ET0324	Micro wave – I	3	-	-	3	40	-	60	100	3
-		3	-	-	3	40	-	60	100	3
HM0321	Communication Skill	2	-	-	N/NP					
Total		17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
ET1321	Error Correcting Codes	-	-	3	1.5	50	50		100	
ET1322	Micro wave Lab II	-	-	3	1.5	50	50		100	
ET1323	Advanced communication Lab II	-	-	3	1.5	50	50		100	
ET2321	Seminar	-	-	3	1.5	50	50		100	
Total		-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4321	Industry Interaction	-	-	2	P/NP					
CC4322	E-library	-	-	2	-					
CC4323	Internet	-	-	2						
Total		-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester III & IV) (Electronics and Telecommunication Engineering)

Project										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
ET3331	Stage –I Presentation	-	-	-	6					
ET3341	Stage –II Presentation	-	-	-	6					
ET3442	Presentation and Viva	-	-	-	12					
	Total				24					

Elective Courses	
Course Code	Course Name
ET0351	Elective I: Non-Linear optical communication
ET0352	Elective I: Communication Networks
ET0353	Elective II: Mobile computing
ET0354	Elective II: Radar Engineering
ET0355	Elective II: Data Compression

**Abbreviations:**

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**Notes:**

TA for Theory and Laboratory courses shall carry 25 marks  
 IST: One mid semester test (20 marks, one hour duration) and two surprise tests/quizzes (5 marks each).  
 ESE(W) shall be of 100 marks and of 3 hours, ESE(P) and ESE(O) shall be decided as per course requirement. ESE(O) and ESE (P) shall together carry 25 marks.

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester I) (Computer Engineering)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
CO401	Algorithm & complexity	3	-	-	3	40	-	60	100	3
CO402	High performance computer architecture	3	-	-	3	40	-	60	100	3
CO403	Object oriented software engineering	3	-	-	3	40	-	60	100	3
CO404	Elective I	3	-	-	3	40	-	60	100	3
CO405	Elective II	3	-	-	3	40	-	60	100	3
HM0301	Communication Skills	2	-	-	N/NP					
Total		17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
CO401	Algorithm & complexity Lab	-	-	3	1.5	50	50		100	
CO402	Software Lab – I	-	-	3	1.5	50	50		100	
CO403	Systems Lab – I	-	-	3	1.5	50	50		100	
CO401	Seminar	-	-	3	1.5	50	50		100	
Total		-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4311	Industry Interaction	-	-	2	P/NP					
CC4312	E-library	-	-	2	-					
CC4313	Internet	-	-	2						
Total		-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester II) (Computer Engineering)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
CO406	Distributed Systems	3	-	-	3	40	-	60	100	3
CO407	Advanced database systems	3	-	-	3	40	-	60	100	3
CO408	Software project management	3	-	-	3	40	-	60	100	3
CO409	Elective III	3	-	-	3	40	-	60	100	3
CO410	Elective IV	3	-	-	3	40	-	60	100	3
HM0301	Communication Skill	2	-	-	N/NP					
Total		17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
CO401	Distributed systems Lab	-	-	3	1.5	50	50		100	
CO402	Software Lab – II	-	-	3	1.5	50	50		100	
CO403	Systems Lab – II	-	-	3	1.5	50	50		100	
CO401	Seminar	-	-	3	1.5	50	50		100	
Total		-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4321	Industry Interaction	-	-	2	P/NP					
CC4322	E-library	-	-	2	-					
CC4323	Internet	-	-	2						
Total		-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

# Veermata Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester III & IV) (Computer Engineering)

Project										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
CO401	Stage –I Presentation	-	-	-	6					
CO402	Stage –II Presentation	-	-	-	6					
CO403	Presentation and Viva	-	-	-	12					
	Total				24					

Elective Courses	
Course Code	Course Name
CO451	Artificial Intelligence
CO452	Introduction to Computing with Neural Nets
CO453	Advanced Network Technologies
CO454	Pervasive computing
CO455	Advanced digital Image Processing
CO456	Pattern Recognition & Applications
CO457	Data Mining
CO458	Decision Support Systems
CO459	Advanced Compilers
CO460	Software architecture
CO461	Operations Research
CO462	Machine Learning
CO463	Speech & Natural Language processing
CO464	Wireless Communications and Networks
CO465	Cryptography & Network Security
CO466	Sensor Network
CO467	Computer Vision
CO468	Multimedia Systems
CO469	Management Information Systems
CO470	Embedded Systems
CO471	Parallel and Distributed Algorithms
CO472	Software Testing

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**Notes:**

TA for Theory and Laboratory courses shall carry 25 marks  
 IST: One mid semester test (20 marks, one hour duration) and two surprise tests/quizzes (5 marks each).  
 ESE(W) shall be of 100 marks and of 3 hours, ESE(P) and ESE(O) shall be decided as per course requirement. ESE(O) and ESE (P) shall together carry 25 marks.

# Veermata Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester I) (Production Engineering)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
CE0401	Metal Forming Technology	3	-	-	3	40	-	60	100	3
CE0402	Computer Aided Design	3	-	-	3	40	-	60	100	3
CE0403	Automation and Mechatronics	3	-	-	3	40	-	60	100	3
CE0404	Computer Integrated Manufacturing	3	-	-	3	40	-	60	100	3
-	Elective-I	3	-	-	3	40	-	60	100	3
HM0301	Communication Skills	2	-	-	N/NP					
Total		17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
CE1401	Laboratory-1	-	-	3	1.5	50	50		100	
CE1402	Laboratory-2	-	-	3	1.5	50	50		100	
CE1403	Laboratory-3	-	-	3	1.5	50	50		100	
CE2401	Seminar	-	-	3	1.5	50	50		100	
Total		-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4311	Industry Interaction	-	-	2	P/NP					
CC4312	E-library	-	-	2	-					
CC4313	Internet	-	-	2						
Total		-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

**Effective from Academic Year 2009-10**

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester II) (Production Engineering)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
CE0401	Advanced Operations Research	3	-	-	3	40	-	60	100	3
CE0402	Metal Casting & Welding Technology	3	-	-	3	40	-	60	100	3
CE0403	Unconventional & Micro-Machining Technology	3	-	-	3	40	-	60	100	3
CE0404	Process Engineering & Tooling.	3	-	-	3	40	-	60	100	3
-	Elective-II	3	-	-	3	40	-	60	100	3
HM0301	Communication Skill	2	-	-	N/NP					
	Total	17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
CE1401	Laboratory-1	-	-	3	1.5	50	50		100	
CE1402	Laboratory-2	-	-	3	1.5	50	50		100	
CE1403	Laboratory-3	-	-	3	1.5	50	50		100	
CE2401	Seminar	-	-	3	1.5	50	50		100	
	Total	-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4321	Industry Interaction	-	-	2	P/NP					
CC4322	E-library	-	-	2	-					
CC4323	Internet	-	-	2						
	Total	-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

# Veermata Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester III & IV) (Production Engineering)

Project										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
CE3401	Stage –I Presentation	-	-	-	6					
CE3402	Stage –II Presentation	-	-	-	6					
CE3403	Presentation and Viva	-	-	-	12					
	Total				24					

Elective Courses	
Course Code	Course Name
CE0451	Elective 1: Value Engineering
CE0452	Elective 1: Statistical Quality Control
CE0453	Elective 1: Project Management
CE0454	Elective 1: Ergonomics for Manufacturing
CE0455	Elective 1: Advanced Operations Research
CE0456	Elective 1: Product Design and Development
CE0457	Elective 1: World Class Manufacturing
CE0458	Elective 1: Micro Electro Mechanical Systems
CE0459	Elective 1: Processing of Plastics & Composites
CE0460	Elective 1: Manufacturing Robotics
CE0461	Elective 1: Process Engineering & Tooling Technology
	Elective 2: Design for Excellence
	Elective 2:Supply Chain Management
	Elective 2:Design of Experiments
	Elective 2:Manufacturing Systems
	Elective 2:Machining Technology
	Elective 2:Design of Work Holding Devices
	Elective 2:Advanced Total Quality Management
	Elective 2:Research Methodology
	Elective 2:Computer Programming Language
	Elective 2:Rapid Prototyping
	Elective 2: achine Tool Design

**Abbreviations:**

L:Lectures, T:Tutorial, P:Practical, TA:Teacher Assessment, ESE (P):End Semester Practical Examination, ESE (O): End Semester Oral Examination, IST: In Semester Test/s, ESE (W):End Semester Written Examination, ESE (W) (hrs):End Semester Written Examination duration, ESE (O) (hrs):End Semester Examination Practical (duration), P/NP:Pass/Not Pass

**Notes:**

TA for Theory and Laboratory courses shall carry 25 marks

**Effective from Academic Year 2009-10**

## **Veerмата Jijabai Technological Institute**

IST: One mid semester test (20 marks, one hour duration) and two surprise tests/quizzes (5 marks each).  
ESE(W) shall be of 100 marks and of 3 hours, ESE(P) and ESE(O) shall be decided as per course requirement. ESE(O) and ESE (P) shall together carry 25 marks.

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester I) (Mechanical Engineering with specialization of Automobile Engineering)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
ME0411	Machine Dynamics & Vibrations	3	-	-	3	40	-	60	100	3
ME0412	Theory of elasticity plasticity & Material behavior	3	-	-	3	40	-	60	100	3
ME0413	Engineering experimentation and reliability engineering	3	-	-	3	40	-	60	100	3
ME0414	Engine theory & Design	3	-	-	3	40	-	60	100	3
-	Elective I	3	-	-	3	40	-	60	100	3
HM0311	Communication Skills	2	-	-	N/NP					
Total		17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
ME1411	Theory of elasticity plasticity & Material behavior	-	-	3	1.5	50	50		100	
ME1412	Machine Dynamics Vibrations Reliability & DOE	-	-	3	1.5	50	50		100	
ME1413	CFD	-	-	3	1.5	50	50		100	
ME2411	Seminar	-	-	3	1.5	50	50		100	
Total		-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4311	Industry Interaction	-	-	2	P/NP					
CC4312	E-library	-	-	2	-					
CC4313	Internet	-	-	2						
Total		-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

Effective from Academic Year 2009-10

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester II) (Mechanical Engineering with specialization of Automobile Engineering)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
ME0421	Chasis Body Engg.	3	-	-	3	40	-	60	100	3
ME0422	Design Of Power Transmission Systems	3	-	-	3	40	-	60	100	3
ME0423	CAD CAM	3	-	-	3	40	-	60	100	3
ME0424	FEM	3	-	-	3	40	-	60	100	3
-		3	-	-	3	40	-	60	100	3
HM0321	Communication Skill	2	-	-	N/NP					
Total		17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
ME1421	FEM	-	-	3	1.5	50	50		100	
ME1422	CAD CAM	-	-	3	1.5	50	50		100	
ME1423	Automobile Lab	-	-	3	1.5	50	50		100	
ME2421	Seminar	-	-	3	1.5	50	50		100	
Total		-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4321	Industry Interaction	-	-	2	P/NP					
CC4322	E-library	-	-	2	-					
CC4323	Internet	-	-	2						
Total		-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

# Veermata Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester III & IV) (Mechanical Engineering with specialization of Automobile Engineering)

Project										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
ME3431	Stage –I Presentation	-	-	-	6					
ME3441	Stage –II Presentation	-	-	-	6					
ME3442	Presentation and Viva	-	-	-	12					
	Total				24					

Elective Courses	
Course Code	Course Name
ME0451	System Modelling & Analysis
ME0452	Vehicle Performance
ME0453	CFD
ME0454	Value Engg.
ME0455	Automotive Materials
ME0456	Automotive Air Conditioning
ME0457	Automotive Power Trains
ME0458	Hybrid Technology
ME0459	Design of Suspension Systems

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**Notes:**

TA for Theory and Laboratory courses shall carry 25 marks  
 IST: One mid semester test (20 marks, one hour duration) and two surprise tests/quizzes (5 marks each).  
 ESE(W) shall be of 100 marks and of 3 hours, ESE(P) and ESE(O) shall be decided as per course requirement. ESE(O) and ESE (P) shall together carry 25 marks.

# Veermata Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester I) (Mechanical Engineering with specialization of Machine Design)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
ME0311	Machine Dynamics & Vibrations	3	-	-	3	40	-	60	100	3
ME0312	Theory of elasticity plasticity & Material behavior	3	-	-	3	40	-	60	100	3
ME0313	Engineering experimentation and reliability engineering	3	-	-	3	40	-	60	100	3
ME0314	Tribology	3	-	-	3	40	-	60	100	3
-	Elective I	3	-	-	3	40	-	60	100	3
HM0311	Communication Skills	2	-	-	N/NP					
Total		17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
ME1311	Theory of elasticity plasticity & Material behavior	-	-	3	1.5	50	50		100	
ME1312	Machine Dynamics Vibrations Reliability & DOE	-	-	3	1.5	50	50		100	
ME1313	CAD I	-	-	3	1.5	50	50		100	
ME2311	Seminar	-	-	3	1.5	50	50		100	
Total		-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4311	Industry Interaction	-	-	2	P/NP					
CC4312	E-library	-	-	2	-					
CC4313	Internet	-	-	2						
Total		-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester II) (Mechanical Engineering with specialization of Machine Design)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
ME0321	FEM	3	-	-	3	40	-	60	100	3
ME0322	Cad-Cam	3	-	-	3	40	-	60	100	3
ME0323	Design of power transmission Systems	3	-	-	3	40	-	60	100	3
ME0324	Optimization Of Design	3	-	-	3	40	-	60	100	3
-	Elective II	3	-	-	3	40	-	60	100	3
HM0321	Communication Skill	2	-	-	N/NP					
Total		17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
ME1321	FEM	-	-	3	1.5	50	50		100	
ME1322	CFD	-	-	3	1.5	50	50		100	
ME1323	CAD CAM	-	-	3	1.5	50	50		100	
ME2321	Seminar	-	-	3	1.5	50	50		100	
Total		-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4321	Industry Interaction	-	-	2	P/NP					
CC4322	E-library	-	-	2	-					
CC4323	Internet	-	-	2						
Total		-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester III & IV) (Mechanical Engineering with specialization of Machine Design)

Project										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
ME3401	Stage –I Presentation	-	-	-	6					
ME3402	Stage –II Presentation	-	-	-	6					
ME3403	Presentation and Viva	-	-	-	12					
	Total				24					

Elective Courses	
Course Code	Course Name
ME0351	Advanced M/C Design
ME0352	Value Engg.
ME0353	Product Design & Development
ME0354	Industrial Noise & Advanced Vibration
ME0355	Process Equipment Design
ME0356	System modeling & Analysis
ME0357	Design of Material Handling Equipment
ME0358	CFD

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**Notes:**

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# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester I) (Mechanical Engineering with specialization of CAD / CAM)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
ME0511	CAD	3	-	-	3	40	-	60	100	3
ME0512	Automation & Mechatronics	3	-	-	3	40	-	60	100	3
	CIM	3	-	-	3	40	-	60	100	3
ME0514	Object Oriented Methodology & Operating Systems	3	-	-	3	40	-	60	100	3
-	Elective I	3	-	-	3	40	-	60	100	3
HM0311	Communication Skills	2	-	-	N/NP					
	Total	17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
ME1511	CAD	-	-	3	1.5	50	50		100	
ME1512	Automation & Mechatronics	-	-	3	1.5	50	50		100	
	CIM	-	-	3	1.5	50	50		100	
ME2511	Seminar	-	-	3	1.5	50	50		100	
	Total	-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4311	Industry Interaction	-	-	2	P/NP					
CC4312	E-library	-	-	2	-					
CC4313	Internet	-	-	2						
	Total	-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester II) (Mechanical Engineering with specialization of CAD / CAM)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
ME0521	Robotics	3	-	-	3	40	-	60	100	3
ME0522	Optimization Of Design	3	-	-	3	40	-	60	100	3
ME0523	FEM	3	-	-	3	40	-	60	100	3
ME0524	Advanced Manufacturing Processes	3	-	-	3	40	-	60	100	3
-	Elective II	3	-	-	3	40	-	60	100	3
HM0321	Communication Skill	2	-	-	N/NP					
	Total	17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
ME1521	FEM	-	-	3	1.5	50	50		100	
ME1522	Robotics	-	-	3	1.5	50	50		100	
ME1523	CFD	-	-	3	1.5	50	50		100	
ME2521	Seminar	-	-	3	1.5	50	50		100	
	Total	-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4321	Industry Interaction	-	-	2	P/NP					
CC4322	E-library	-	-	2	-					
CC4323	Internet	-	-	2						
	Total	-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester III & IV) (Mechanical Engineering with specialization of CAD / CAM)

Project										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
ME3531	Stage –I Presentation	-	-	-	6					
ME3541	Stage –II Presentation	-	-	-	6					
ME3542	Presentation and Viva	-	-	-	12					
	Total				24					

Elective Courses	
Course Code	Course Name
ME0551	Control Systems
ME0552	Value Engineering.
ME0553	Product Design & Development
ME0554	Reliability Engineering
ME0555	Software Engineering
ME0556	Artificial Intelligence & Expert Systems
ME0557	Customization of CAD-CAM Software
ME0558	Product Engineering & Life Cycle Management
ME0559	E-Commerce & Industrial Finance
ME0560	Dynamic System Analysis
ME0561	CFD

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# Veermata Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester I) (Textile Engineering)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
CE0401	Advanced Yarn Manufacturing	3	-	-	3	40	-	60	100	3
CE0402	Management System I	3	-	-	3	40	-	60	100	3
CE0403	High Tech Fibres	3	-	-	3	40	-	60	100	3
CE0404	Structure and Properties of Textile Materials	3	-	-	3	40	-	60	100	3
-	Garment Entrepreneurship	3	-	-	3	40	-	60	100	3
HM0301	Communication Skills	2	-	-	N/NP					
Total		17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
CE1401	Advanced Yarn Manufacturing	-	-	3	1.5	50	50		100	
CE1402	Structure and Properties of Textile Materials	-	-	3	1.5	50	50		100	
CE1403	High Tech Fibres	-	-	3	1.5	50	50		100	
CE2401	Seminar	-	-	3	1.5	50	50		100	
Total		-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4311	Industry Interaction	-	-	2	P/NP					
CC4312	E-library	-	-	2	-					
CC4313	Internet	-	-	2						
Total		-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

# Veerмата Jijabai Technological Institute

## Scheme of Teaching and Evaluation M Tech (Semester II) (Textile Engineering)

Theory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	IST	ESE	Total	ESE (W) (hrs)
CE0401		3	-	-	3	40	-	60	100	3
CE0402		3	-	-	3	40	-	60	100	3
CE0403		3	-	-	3	40	-	60	100	3
CE0404		3	-	-	3	40	-	60	100	3
-		3	-	-	3	40	-	60	100	3
HM0301	Communication Skill	2	-	-	N/NP					
	Total	17	-	-	15					

Laboratory Courses										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
CE1401		-	-	3	1.5	50	50		100	
CE1402		-	-	3	1.5	50	50		100	
CE1403		-	-	3	1.5	50	50		100	
CE2401	Seminar	-	-	3	1.5	50	50		100	
	Total	-	-	12	6					

Co-curricular Activities										
Course Code	Course Name	Hr/Week			Credits					
		L	T	P						
CC4321	Industry Interaction	-	-	2	P/NP					
CC4322	E-library	-	-	2	-					
CC4323	Internet	-	-	2						
	Total	-	-	6	-					

Total for Semester	L	T	P	Total Hours	Credits
	17	-	18	35	21

## Veerмата Jijabai Technological Institute

### Scheme of Teaching and Evaluation M Tech (Semester III & IV) (Textile Engineering)

Project										
Course Code	Course Name	Hr/Week			Credits	Examination Scheme (Evaluation in % Weightage)				
		L	T	P		TA	ESE (O)	ESE (P)	Total	ESE (P) (hrs)
CE3401	Stage –I Presentation	-	-	-	6					
CE3402	Stage –II Presentation	-	-	-	6					
CE3403	Presentation and Viva	-	-	-	12					
	Total				24					

Elective Courses	
Course Code	Course Name
CE0451	
CE0452	
CE0453	
CE0454	
CE0455	
CE0456	
CE0457	
CE0458	
CE0459	
CE0460	
CE0461	

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**Veermata Jijabai Technological Institute**

**Effective from Academic Year 2009-10**