



SCHEME OF STUDIES & EXAMINATIONS

Department: Automobile Engineering – 5th Semester

S. No.	Course No.	Course Title	Teaching Schedule			Marks of Class work	Examination Marks		Total	Credit	Duration of Exam
			L	T	P		Theory	Practical			
1	AE 301B	ENGINEERING METROLOGY & MEASUREMENT	3	1	-	25	75	-	100	4	3
2	AE 303B	AUTOMOTIVE CHASSIS	4	-	-	25	75	-	100	4	3
3	AE 305B	AUTOMOTIVE ELECTRICAL & ELECTRONICS	4	-	-	25	75	-	100	4	3
4	AE 307B	AUTOMOTIVE ENGINE COMPONENT DESIGN	3	1	-	25	75	-	100	4	3
5	AE 309B	MANUFACTURING PROCESS FOR AUTOMOTIVE COMPONENTS	4	-	-	25	75	-	100	4	3
6	AE 311B	VEHICAL BODY ENGINEEING	3	1	-	25	75	-	100	4	3
7	AE 313B	AUTOMOTIVE CHASSIS COMPONENT LAB	-	-	2	20	-	30	50	1	3
8	AE 315B	AUTOMOTIVE ELECTRICAL & ELECTRONICS LAB	-	-	2	20	-	30	50	1	3
9	AE 317B	COMPUTER AIDED VEHICAL DRAFTING LAB	-	-	2	20	-	30	50	1	3
10	AE 319B	PROFESSIONAL TRAINING-I	-	-	2	50	-	-	50	2	3
Total			21	3	8	260	450	90	800	29	

Note:

- 1 Every student has to participate in the sports activities. Minimum one hour is fixed for sports activities either in the morning or evening. Weight age of Sports is given in General Proficiency & Ethics Syllabus.
- 2 The students will be allowed to use non-programmable scientific calculator. However, sharing/exchange of calculator are prohibited in the examination.
- 3 Electronics gadgets including Cellular phones are not allowed in the examination



SYLLABUS: B Tech (Automobile Engineering)

Department: Automobile – 5th Semester

Subject: Engineering Metrology & Measurement (Theory)

Subject Code: AE 301B

Detailed Content

UNIT NO.1 Concept Of Measurement, Linear And Angular Measurement

- Topic No.1: General concept – Generalized measurement system
- Topic No.2: Units and standards-measuring instruments
- Topic No.3: Sensitivity, readability, range of accuracy, precision-static
- Topic No.4: Dynamic response repeatability, Systematic and random errors-correction
- Topic No.5: Calibration, interchangeability, Definition of metrology-Linear measuring instruments
- Topic No.6: Vernier, micrometer, interval measurement, Slip gauges and classification
- Topic No.7: Interferometry, optical flats, limit gauges, Comparators- Mechanical
- Topic No.8: pneumatic and electrical types
- Topic No.9: Applications Angular measurements--Sine bar, optical bevel protractor
- Topic No.10: Angle Decker – Taper measurements

UNIT NO.2 Form Measurement

- Topic No.11: Measurement of screw threads-Thread gauges
- Topic No.12: Floating carriage micrometer-measurement of gears
- Topic No.13: Tooth thickness, constant chord and base tangent method
- Topic No.14: Gleason gear testing machine, radius measurements
- Topic No.15: Surface finish, straightness, flatness and roundness measurements

UNIT NO.3 Laser And Advances In Metrology

- Topic No.16: Precision instruments based on laser
- Topic No.17: Principles- Laser interferometer-application in linear
- Topic No.18: Angular measurements and machine tool metrology
- Topic No.19: Coordinate measuring machine (CMM)
- Topic No.20: Constructional features – types, applications
- Topic No.21: Digital devices- computer aided inspection

UNIT NO.4 Measurement Of Power, Flow And Temperature Related Properties

- Topic No.22: Force, torque, power-mechanical, Pneumatic, hydraulic and electrical type-Flow measurement
- Topic No.23: Venturi, orifice, rotameter, pitot tube , Temperature- bimetallic strip, pressure thermometers
- Topic No.24: Thermocouples, electrical resistance thermister

Study Scheme				Evaluation Scheme			Total Marks
Lectures per week				Internal Assessment	External Assessment (Examination)		
L	T	P	Credits	Max. Marks	Max. Marks	Exam Duration	
3	1	-	4	25	75	3 hours	100

TEXT BOOKS:

1. Jain R.K., Engineering Metrology, Khanna Publishers
2. Alan S. Morris, The Essence of Measurement, Prentice Hall of India

REFERENCES:

1. Gupta S.C, Engineering Metrology, Dhanpat Rai Publications
2. Jayal A.K, Instrumentation and Mechanical Measurements, Galgotia Publications
3. Beckwith T.G, and N. Lewis Buck, Mechanical Measurements, Addison Wesley

NOTE:

1. In the semester examination, the examiner will set eight questions in all; two question from each unit & students will be required to attempt only five questions, at least one question from each unit.
2. The use of scientific calculator will be allowed in the examination. However, programmable calculator and cellular phone will not be allowed.



SYLLABUS: B Tech (Automobile Engineering)

Department: Automobile – 5th Semester

Subject: Automotive Chassis (Theory)

Subject Code: AE 303B

Detailed Content

UNIT NO.1 Introduction, Front Axle And Steering System

- Topic No.1: Types of chassis layout with reference to power plant locations and drives
Topic No.2: Vehicle frames, various types of frames
Topic No.3: Constructional details, materials, testing of vehicle frames
Topic No.4: Unitized frame body construction, Types of front axles, construction details, materials
Topic No.5: Front wheel geometry: castor, camber, King pin inclination, toe-in
Topic No.6: Conditions for true rolling motion of wheels during steering
Topic No.7: Steering geometry, Ackermann and Davis steering system
Topic No.8: Constructional details of steering linkages
Topic No.9: Different types of steering gear boxes, s, Teering linkages and layouts
Topic No.10: Turning radius, wheel wobble, Power assisted steering, steering of crawler tractors

UNIT NO.2 Drive Line

- Topic No.11: Effect of driving thrust and torque reactions
Topic No.12: Hotchkiss drive, torque tube drive and radius rods
Topic No.13: Propeller shaft, universal joints, Front wheel drive, different types of final drive
Topic No.14: Double reduction and twin speed final drives
Topic No.15: Differential principle, construction details of differential unit
Topic No.16: Non-slip differential, differential locks, differential housings
Topic No.17: Construction of rear axles, types of loads acting on rear axles
Topic No.18: Fully floating, three quarter floating and semi floating rear axles, Rear axle housing
Topic No.19: construction of different types of axle housings, Multi axle vehicles

UNIT NO.3 Suspension System

- Topic No.20: Need of suspension system, types of suspension , Suspension springs
Topic No.21: Constructional details and characteristics of leaf, Coil and torsion bar springs
Topic No.22: Independent suspension, rubber suspension , Pneumatic suspension, shock absorbers

UNIT NO.4 Braking System

- Topic No.23: Classification of brakes, Drum brakes and disc brakes
Topic No.24: Constructional details, theory of braking, Cconcept of dual brake system
Topic No.25: Parking brake,Material, Hydraulic system, vacuum assisted system, air brake system
Topic No.26: Antilock braking, Etarded engine brakes, eddy retarders

Study Scheme				Evaluation Scheme			Total Marks
Lectures per week				Internal Assessment	External Assessment (Examination)		
L	T	P	Credits	Max. Marks	Max. Marks	Exam Duration	
3	1	-	4	25	75	3 hours	100

TEXT BOOKS:

1. Heldt.P.M., "Automotive Chassis"- Chilton Co., New York
2. Steed W., "Mechanics of Road Vehicles"- Illiffe Books Ltd., London

REFERENCES:

1. Newton Steeds and Garrot- "Motor Vehicles"- Butterworths, London
2. Judge A.W- "Mechanism of the Car"- Chapman and Halls Ltd., London
3. Giles.J.G- "Steering, Suspension and tyres"- liiffe Book Co., London
4. Crouse W.H- "Automotive Chassis and Body"- McGraw-Hill, New York
5. K.K.Ramalingam - "Automobile Engineering" – SciTech Publication, Chennai



SYLLABUS: B Tech (Automobile Engineering)

Department: Automobile – 5th Semester

Subject: Automotive Electrical & Electronics (Theory)

Subject Code: AE 305B

Detailed Content

UNIT NO.1 Batteries And Accessories

- Topic No.25: Principle and construction of lead acid battery
- Topic No.26: Characteristics of battery, rating capacity and efficiency of batteries
- Topic No.27: Various tests on batteries, maintenance and charging
- Topic No.28: Lighting system ;insulated and earth return system
- Topic No.29: Details of head light and side light, LED lighting system
- Topic No.30: Head light dazzling and preventive methods , Horn, wiper system and trafficator

UNIT NO.2 Starting System

- Topic No.31: Condition at starting, behavior of starter during starting
- Topic No.32: Series motor and its characteristics, Principle and construction of starter motor
- Topic No.33: Working of different starter drive units, Care and maintenances of starter motor
- Topic No.34: Starter switches

UNIT NO.3 Charging System

- Topic No.35: Generation of direct current, Shunt generator characteristics
- Topic No.36: Armature reaction, third brush regulation, cutout, Voltage
- Topic No.37: Current regulators, compensated voltage regulator
- Topic No.38: Alternators principle and constructional aspects , Bridge rectifiers, new developments.

UNIT NO.4 Fundamentals Of Automotive Electronics, Sensors And Activators

- Topic No.39: Current trends in automotive electronic engine , Management system
- Topic No.40: Electromagnetic interference suppression, Electromagnetic compatibility
- Topic No.41: Electronic dashboard instruments , Onboard diagnostic system
- Topic No.42: Security and warning system, Types of sensors: sensor for speed
- Topic No.43: Throttle position, exhaust oxygen level, Manifold pressure, crankshaft position
- Topic No.44: Coolant temperature, exhaust temperature, Air mass flow for engine application
- Topic No.45: Solenoids, stepper motors, relay

Study Scheme				Evaluation Scheme			Total Marks
Lectures per week				Internal Assessment	External Assessment (Examination)		
L	T	P	Credits	Max. Marks	Max. Marks	Exam Duration	
3	1	-	4	25	75	3 hours	100

TEXT BOOKS:

1. Young A.P. & Griffiths. L. "Automotive Electrical Equipment", ELBS & New Press
2. William B.Riddens "Understanding Automotive Electronics", 5th edition - Butter worth Heinemann Woburn
3. Crouse, W.H "Automobile Electrical Equipment", McGraw-Hill Book Co., Inc., New York,

REFERENCES:

1. Bechhold "Understanding Automotive Electronics", SAE
2. Judge A.W "Modern Electrical Equipment of Automobiles", Chapman & Hall, London
3. Kholi.P.L "Automotive Electrical Equipment", Tata McGraw-Hill Co., Ltd., New Delhi

NOTE:

3. In the semester examination, the examiner will set eight questions in all; two question from each unit & students will be required to attempt only five questions, at least one question from each unit.
4. The use of scientific calculator will be allowed in the examination. However, programmable calculator and cellular phone will not be allowed.



SYLLABUS: B Tech (Automobile Engineering)

Department: Automobile – 5th Semester

Subject: Automotive Engine Component Design (Theory)

Subject Code: AE 307B

Detailed Content

UNIT NO.1 Introduction To Definations, Fits, Tolerances, Surface Finish, Shafts And Springs

- Topic No.1: Engineering materials and their physical properties applied to design
- Topic No.2: Selection of materials, Factor of safety, endurance limit
- Topic No.3: Notch sensitivity, principles of design optimization
- Topic No.4: Future trends, and computer aided drafting
- Topic No.5: Definitions, types of tolerances and fits, Design considerations for interference fits
- Topic No.6: Surface finish, surface roughness, Design of power transmission shafts
- Topic No.7: Design of helical springs

UNIT NO.2 Design Of Cylinder And Piston

- Topic No.8: Choice of material for cylinder and piston
- Topic No.9: Piston friction, piston slap, design of cylinder
- Topic No.10: Piston, piston pin, piston rings, piston failures
- Topic No.11: Lubrication of piston assembl

UNIT NO.3 Design Of Connecting Rod, Crankshaft

- Topic No.12: Material for connecting rod
- Topic No.13: Determining minimum length of connecting rod
- Topic No.14: Small end and big end design, shank design
- Topic No.15: Design of big end cap bolts, Connecting rod failures
- Topic No.16: Balancing of I.C. Engines
- Topic No.17: Significance of firing order, Material for crankshaft
- Topic No.18: Design of crankshaft under bending and twisting
- Topic No.19: Balancing weight calculations

UNIT NO.4 Design Of Valves And Flywheel

- Topic No.20: Design aspects of intake and exhaust manifolds
- Topic No.21: Inlet and Exhaust valves
- Topic No.22: Valve springs, tappets, valve train
- Topic No.23: Materials and design of flywheel

Study Scheme				Evaluation Scheme			Total Marks
Lectures per week				Internal Assessment	External Assessment (Examination)		
L	T	P	Credits	Max. Marks	Max. Marks	Exam Duration	
3	1	-	4	25	75	3 hours	100

TEXT BOOKS:

1. R.K. Jain, "Machine Design", Khanna Publishers, New Delhi
2. "Design Data Book", PSG College of Technology, Coimbatore
3. P.M.Heldt "High Speed Combustion Engines", Oxford-IBH Publishing Co., Calcutta,

REFERENCES:

1. A.Kolchin and V.Demidov, "Design of Automotive Engines", MIR Publishers, Moscow,
2. Sundararaja Murthy T.V "Machine Design", Khanna Publishers, New Delhi
3. Joseph E. Shigley & Larry D. Mitchell, „Mechanical Engineering Design“, Fourth Edition, McGraw-Hill International Book Company
4. Patil S.P., „Mechanical System Design“, 2nd edition, Jaico Publishers
5. M. F. Spotts & T.E. Shoup, "Design of machine Elements", Seventh Edition, Pearson Education.
6. Bhandari V. B., "Design of Machine Elements", Tata McGraw-Hill Publishing Company Ltd., New Delhi.



SYLLABUS: B Tech (Automobile Engineering)

Department: Automobile – 5th Semester

Subject: Manufacturing Process For Automotive Components (Theory)

Subject Code: AE 301B

Detailed Content

UNIT NO.1 Powder Metallurgy

Topic No.46: Process flow chart , Production of metal powders and their raw materials

Topic No.47: Manufacture of friction lining materials for clutches and brakes

Topic No.48: Testing and inspection of PM parts

UNIT NO.2 Forming Process

Topic No.49: Forging – process flow chart, forging of valves, Forging of – connecting rod

Topic No.50: Crank shaft, cam shaft , Forging of –propeller shaft, transmission gear blanks

Topic No.51: Forging of –foot brake linkage, steering knuckles

Topic No.52: Extrusions: Basic process steps, extrusion of transmission shaft

Topic No.53: Steering worm blanks, brake anchor pins

Topic No.54: Rear axle drive shaft, axle housing spindles, Piston pin and valve tappets

Topic No.55: Hydro forming:Forming of manifold & Comparison to conventional methods

Topic No.56: Hydro forming of tail lamp housing, Stretch forming – Stretch forming of auto body panels

Topic No.57: Super plastic alloys for auto body panel

UNIT NO.3 Casting And Machining

Topic No.58: Sand casting of cylinder block and liners

Topic No.59: Centrifugal casting of flywheel, piston ring, Bearing bushes and liners

Topic No.60: Permanent mould casting of piston, Pressure die casting of carburetor and other small auto parts

Topic No.61: Machining of connecting rods; crank shafts; cam shafts

Topic No.62: Pistons; piston pins; piston rings ; valves , Front and rear axle housings

Topic No.63: Flywheel ;Honing of cylinder bores, Opy turning and profile grinding machines

UNIT NO.4 Gear Manufacturing, Recent Trends In Manufacturing Of Auto Components

Topic No.64: Gear milling, Hobbing and shaping , Gear finishing and inspection

Topic No.65: Powder injection molding, Shot peen hardening of gears

Topic No.66: Production of aluminum MMC liners for engine blocks

Topic No.67: Plasma spray coated engine blocks and valves

Topic No.68: Recent developments in auto body panel forming

Topic No.69: Squeeze casting of pistons & Aluminum composite brake rotors

Study Scheme				Evaluation Scheme			Total Marks
Lectures per week				Internal Assessment	External Assessment (Examination)		
L	T	P	Credits	Max. Marks	Max. Marks	Exam Duration	
3	1	-	4	25	75	3 hours	100

TEXT BOOK:

1. Heldt.P.M., High Speed Combustion Engines, Oxford publishing co., New York

REFERENCES:

1. Haslehurst.S.E., Manufacturing Technology, ELBS, London
2. Rusinoff., Forging and forming of metals, D.B, Taraporevla Son & co Pvt Ltd, Mumbai
3. Sabroff.A.M. & Others, Forging Materials & Processes, Reinhold Book Corporation, NewYork
4. Upton, Pressure Die Casting, Pergamon Press

NOTE:

5. In the semester examination, the examiner will set eight questions in all; two question from each unit & students will be required to attempt only five questions, at least one question from each unit.
6. The use of scientific calculator will be allowed in the examination. However, programmable calculator and cellular phone will not be allowed.



SYLLABUS: B Tech (Automobile Engineering)

Department: Automobile – 5th Semester

Subject: Vehicle Body Engineering (Theory)

Subject Code: AE 311B

Detailed Content

UNIT NO.1 Car Body Details

- Topic No.1: Types: saloon, convertibles, limousine, estate car, racing and sports car
- Topic No.2: Visibility: regulations, driver's visibility, tests for visibility
- Topic No.3: Methods of improving visibility and space in cars
- Topic No.4: Safety: safety design, safety equipments for cars
- Topic No.5: Car body construction; design criteria, prototype making
- Topic No.6: Initial tests, crash tests on full scale model
- Topic No.7: Dummies and Instrumentation

UNIT NO.2 Vehicle Aerodynamics

- Topic No.8: Objectives. Vehicle drag and types
- Topic No.9: Various types of forces and moments, Effects of forces and moments
- Topic No.10: Side wind effects on forces and moments
- Topic No.11: Various body optimization techniques for minimum drag
- Topic No.12: Wind tunnel testing: flow visualization techniques, Scale model testing
- Topic No.13: Component balance to measure forces and moments

UNIT NO.3 Bus Body Details

- Topic No.14: Types: mini bus, single decker, double-decker
- Topic No.15: Two level and articulated bus
- Topic No.16: Bus body layout; floor height, engine location
- Topic No.17: Entrance and exit location, Seating dimensions
- Topic No.18: Constructional details: frame construction, double skin construction
- Topic No.19: Types of metal sections used, Regulations
- Topic No.20: Conventional and integral type construction

UNIT NO.4 Commercial Vehicle Details, Body Materials, Trim And Mechanisms

- Topic No.21: Types of body; flat platform, drop side, fixed side
- Topic No.22: Tipper body, tanker body
- Topic No.23: Light commercial: vehicle body types
- Topic No.24: Dimensions of driver's seat relation to controls
- Topic No.25: Drivers cab design., Steel sheet, timber, plastic, GRP
- Topic No.26: Properties of materials
- Topic No.27: Corrosion & anticorrosion methods
- Topic No.28: Selection of paint and painting process
- Topic No.29: Body trim items, Body mechanisms

Study Scheme				Evaluation Scheme			Total Marks
Lectures per week				Internal Assessment	External Assessment (Examination)		
L	T	P	Credits	Max. Marks	Max. Marks	Exam Duration	
3	1	-	4	25	75	3 hours	100

TEXT BOOK:

1. J.Powloski - "Vehicle Body Engineering" - Business Books Ltd, London

REFERENCES:

1. Giles.J.C. - "Body construction and design" - Liiffe Books Butterworth & Co.
2. John Fenton - "Vehicle Body layout and analysis" - Mechanical Engg. Publication Ltd., London
3. Braithwaite.J.B. - "Vehicle Body building and drawing" - Heinemann Educational Books



SYLLABUS: B Tech (AE)

Department: Automobile Engineering – 5th Semester

Subject: Automotive Chassis Component Lab

Subject Code AE – 313B

Detailed Content

LIST OF EXPERIMENTS:

STUDY AND MEASUREMENT OF THE FOLLOWING CHASSIS FRAMES

1. Heavy duty vehicle frame (Leyland, Tata etc)
2. Light duty vehicle frame (Ambassador, Maruti van etc)

STUDY, DISMANTLING AND ASSEMBLING OF

3. Front Axle
4. Rear Axle
5. Differential
6. Steering systems along with any two types of steering gear box
7. Braking systems – hydraulic, servo, vacuum, compressed air power brakes.
8. Leaf spring, coil spring, torsion bar spring, Hydraulic shock absorber
9. Clutch assembly of different types
10. Gear Box
11. Transfer case

Study Scheme				Evaluation Scheme			Total Marks
Lectures per week				Internal Assessment	External Assessment (Examination)		
L	T	P	Credits	Max. Marks	Max. Marks	Exam Duration	
		2	1	20	30	3 hours	50

NOTE:

1. Ten experiments are to be performed in the Semester.
2. At least eight experiments should be performed from the above list. Remaining two experiments may either be performed from the above list or designed & set by the concerned institute as per the scope of the syllabus.



SYLLABUS: B Tech (AE)

Department: Automobile Engineering – 5th Semester

Subject: Automotive Electrical & Electronics Lab

Subject Code AE – 315B

Detailed Content

LIST OF EXPERIMENTS:

A. ELECTRICAL LABORATORY

1. Testing of batteries and battery maintenance
2. Testing of starting motors and generators
3. Testing of regulators and cut – outs relay
4. Diagnosis of ignition system faults
5. Study of automobile electrical wiring

B. ELECTRONICS LABORATORY

6. Study of rectifiers and filters
7. Study of logic gates, adder and flip-flops
8. Study of SCR and IC timer
9. Interfacing A/D converter and simple data acquisition
10. Micro controller programming and interfacing

Study Scheme				Evaluation Scheme			Total Marks
Lectures per week				Internal Assessment	External Assessment (Examination)		
L	T	P	Credits	Max. Marks	Max. Marks	Exam Duration	
		2	1	20	30	3 hours	

NOTE:

1. Ten experiments are to be performed in the Semester.
2. At least eight experiments should be performed from the above list. Remaining two experiments may either be performed from the above list or designed & set by the concerned institute as per the scope of the syllabus.



SYLLABUS: B Tech (AE)

Department: Automobile Engineering – 5th Semester

Subject: Computer Aided Vehical Drafting Lab

Subject Code AE 317B

Detailed Content

The students will be required to carry out the following exercises using any one of the educational CAD software like Latest version of AutoCAD, I-DEAS, CATIA, SOLID EDGE, PRO-ENGINEER etc

LIST OF EXPERIMENTS:

UNIT I

1. Start a New Drawing, Name the Drawing Sheet, Set the Drawing Units, Drawing Precision, Drawing Limits, Grid, Snap and Draw the Margin and Title Block as given in Exercise Problems Sheet
2. Draw Front, Top, Right Side and Orthogonal view of each of the objects in given Exercise Problems Sheet using View Port commands.

UNIT II

3. Draw 3D Surface Models of the Objects as given in Exercise Problems Sheet, using fundamental of 3D Drawing and Surface commands
4. Draw 3D Solid Models of the Objects as given in Exercise Problems Sheet, using fundamental of 3D Drawing and Solid commands

UNIT III

5. Draw 3D Surface Models of Automobile Sheet metal components as given in Exercise Problems Sheet.
6. Draw 3D Solid Models of Automobile Solid Metal components as given in Exercise Problems Sheet.
7. Draw 3D Models of Simple Automobile Assemblies as given in Exercise Problems Sheet.

Study Scheme				Evaluation Scheme			Total Marks
Lectures per week				Internal Assessment	External Assessment (Examination)		
L	T	P	Credits	Max. Marks	Max. Marks	Exam Duration	
		2	1	20	30	3 hours	50

NOTE:

1. For class work, the students should be assigned to prepare at least ten drawing sheets covering all units and each topic/ experiment/exercise of the syllabus.
2. For practical examination, the examiner should set a question paper containing total three questions, one questions from each unit covering all units and each topic/experiment/exercise of the syllabus; students are required to attempt all the three questions.



SYLLABUS: B Tech (Auto)

Department: Automobile Engineering– 5th Semester

Subject: Professional Training I

Subject Code: AE-319B

Detailed Content

At the end of 4th semester each student would undergo four weeks Professional Training in an Industry/ Institute/ Professional Organization/ Research Laboratory etc. with the prior approval of the Training and Placement Officer of the University and submit in the department a typed report along with a certificate from the organization.

The typed report should be in a prescribed format.

The report will be evaluated in the V Semester by a Committee consisting of three teachers from different specialization to be constituted by the Chairperson of the department. The basis of evaluation will primarily be the knowledge and exposure of the student towards different processes and the functioning of the organization.

The student will interact with the committee through presentation to demonstrate his/her learning.

Teachers associated with evaluation work will be assigned 2 periods per week load.

Study Scheme				Evaluation Scheme			Total Marks
Lectures per week		Credits	Internal Assessment	External Assessment (Examination)			
L	T		P	Max. Marks	Max. Marks	Exam Duration	
-	-	2	2	50	-	-	50