

## HASMUKH GOSWAMI COLLEGE OF ENGINEERING, VAHELAL

### SYLLABUS FOR MID SEM EXAM-MARCH-2018

#### MECH

Semester	Sub Code	Subject	Unit No(GTU Syllabus)	Unit Name(GTU Syllabus)
8th	2181910	REE	1,2,3,4	Scenario of Renewable Energy (RE) Sources,Solar Energy,Wind Energy,Bio Energy
	2181916	ECM	1,2,3,4	energy scenario,basics of energy its various forms and conversation, energy management and audit, financial management
	2181923	ENT	1,2	Introduction of entrepreneurship, Starting the venture
Semester	Sub Code	Subject	Unit No(GTU Syllabus)	Unit Name(GTU Syllabus)
6th	2161901	DOM	1,2,,3,4	Balancing of Rotating Masses, Dynamics of Reciprocating Engines, Introduction to Mechanical Vibrations, Single Degrees of Freedom System (Linear and Torsional), Vibration Measurement, Cam Dynamics.
	2161902	ICE	1,2,3,4,5,6	Introduction, Fuel Air Cycles and Actual Cycles, Combustion, Fuels and its supply system for SI and CI engine, Ignition and Governing System, Supercharging
	2161903	CAD	1,2,3	INTRODUCTION , CURVES AND SURFACES , MATHEMATICAL REPRESENTATION OF SOLIDS
	2161907	IE	1,2,3,4,5	Location selection and Plant layout, Production planning and control, Productivity and work study, Job evaluation and wage plan, Industrial Legislation
	2161908	R & AC	1,2,3,4	introduction, refrigerant, air refrigeration, vapor compression system
	2161909	PT	1,2	Metal Cutting, Thermal Aspects in machining
Semester	Sub Code	Subject	Unit No(GTU Syllabus)	Unit Name(GTU Syllabus)
4th	2140003	EEM	1,2,3,4,5	INTRODUCTION TO ECONOMICS,THEORY OF PRODUCTION,MARKETS,BASIC ECONOMIC PROBLEM,MONEY
	2141901	MMM	1,2,3,6,7	Mechanical Measurement, Linear and Angular Measurement, Measurement of Force, Torque and Strain, Metrology, Metrology of Gears and screw threads
	2141905	CVNM	6 to 11	Interpolation, Numerical integration, soution of ODE, Roots of Algebraic and Transcendental Equations, Eigen values by Power and Jacobi methods , Numerical solution of Ordinary Differential Equations:
	2141906	FM	1,2,3,4,7	Fluids and Their Properties,Pressures and Head,Static Forces on Surface and Buoyancy,Motion of Fluid Particles and Streams.Dimensiona Analysis And Similarities
	2141907	MDID	1,2,3	Introduction, Columns and Beam, Shafts key and Coupling
	2141908	MP II	1,2,3	Manufacturing Processes, metal casting processes,metal joining processes
Semester	Sub Code	Subject	Unit No(GTU Syllabus)	Unit Name(GTU Syllabus)
2ND PG	2720801	FEM	1,2,3,4	Mathematical models for structural problems,Bars, Trusses and Beams,2D and 3D Elements,Plate and Shell Elements
	2720802	CAM	1,2,3	Cnc machine tools,System drives and control system,Manual part programming for CNC
	2720815	CIM	1,2,3,4,5	Manufacturing Automobile, Automated Flow Lines, Manual Assembly Lines, Automated Assembly Systems, Automatic Material Handling & Storage Systems
	2720816	DFMA	1,2,3	Introduction to talarances,Form design of casting weldmets forging and sheet metal components, Design for assembly- Machining Consideration
	2721316	BTE	1,2,3,4	INTRODUCTION, URBAN TRANSPORTATION, TRAVEL DEMAND MODELLING, TRAFFIC ENGINEERING