M.E. (2008, 2012 & 2013 - Pattern)
Examination, December 2013

UNIVERSITY OF PUNE

EXAMINATION CIRCULAR No. 191 of 2013

Programme of the M.E. 2008 & 2012 Pattern (Sem. I & II) & M.E. 2013 (Credit Pattern) (All Branches) Examination, December - 2013.

Instructions to the Candidates:

1. Candidates are required to be present at respective college fifteen minutes before the time fixed for the first paper and ten minutes before the time of each subsequent papers.
   (As per Circular No.128/2013 dated 10.10.2013)
2. Candidates are forbidden from taking any material into the examination hall that can be used for malpractice at the time of examination.
3. No request for any special concession such as a change in time or any day fixed for the University Examination on religious or any other ground shall be granted.
4. Candidates are requested to see the Notice -Board at their place of examination regularly for changes if any, that may be notified later in the programme.
5. Candidates are requested to note the Day, Date and Time of every Paper on every Day
6. Candidates are permitted to use stencils at the time of examination.
7. Candidates appearing for the examinations are expected to provide themselves with Side- rules.
8. The exchange or loan of side-rules, drawing instruments of other materials used in the examination hall is Not Permitted while the examinations are in process. Candidates must bring their own instruments and will not be allowed to borrow from each other under any circumstances.
9. Use of non-programmable battery operated electronic Calculator of Pocket-size is allowed. The exchange of Calculators is not allowed.
10. **The paper setting, Conduct of Examination and paper assessment for End-semester examination for the subject Elective – I (M.E. 2013 Credit Pattern) shall be done by the respective colleges as per the schedule of University**
11. The Written Examination will be conducted in the following order : (Attached)

ME Civil (2008 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	Construction Manget.	Geotechnical	Hydraulics	Structure
Monday, 02/12/2013	*Mathematics (501101)	Numerical Methods (501201)	Computational Methods in Hydraulics (501301)	*Structural Mathematics (501401)
Wednesday 04/12/2013	*Management & Project Planning in Construction (501102)	System Approach to Management & Development of Human Resources (501202)	Water Resource Planning & Management (501302)	*Advanced Soild Mechanics (501402)
Saturday, 07/12/2013	*Construction Technology (501103)	Engineering Behavior of soils (501203)	Fluid Mechanics (501303)	*Structural Dynamics (501403)
Tuesday, 10/12/2013	***Elective-I (501104)** *a) New Construction Materials *b)Disaster Management *c) Repairs Rehabilitation, Retro.of Structures *d) Construction Safety	**Elective-I (501204)** a) Applied Soil Mechanics b) Site Investigations & Ground Improvement c) Rock Mechanics & Tunnelling d) Shallow and Deep Foundation	**Elective-I (501304)** a) Remote Sensing & GIS in Water Resource Engineering b) Dam Engineering c) Systems Techniques in Water Resource Engineering	***Elective-I (501404)** *a) Advanced Design of concrete Structures *b) Structural Design of Concrete Bridges *c) Design of Composite Construction *d) Design of Foundations
Thursday 12/12/2013	***Elective-II (501105)** *a) Resources Management *b) TQM in Construction *c) Value Engineering *d) Project Risk Analysis & Mitigation Techniques	**Elective-II (501205)** a) Soil Stabilization b) Soil Structure Interaction c) Geo-environmental Engineering d) Earth Pressure & Retaining Structures	**Elective-II (501305)** a) Closed Conduit Flow b) Hydro Informatics & Simulation c) Hydropower	**Elective-II (501405)** *a) Advanced Design of Metal Structures *b)Structural Design of Steel Bridges *c)Plastic Analysis & Design of Steel Structures *d) Design of Industrial Steel Structures

* Note - **Papers marked are of four hours duration (between 2-30 p.m. to 6-30 p.m.)**

ME Civil (2008 Pattern) Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	Construction Management	Geotechnical	Hydraulic Engineering	Structure
Tuesday, 03/12/2013	*Construction Contracts Administration & Management(501108)	Finite Element Methods in Geotechnical Engineering (501208)	Open Channel Hydraulics (501308)	*Theory of Plates and Shells (501408)
Thursday, 05/12/2013	*Project Economics & Financial Mgt. (501109)	Reinforce Earth and Geo-synthetics (501209)	Hydrology (501309)	*Finite Element Method (501409)
Monday, 09/12/2013	*Operation Research (501110)	Foundation Design and Detailing (501210)	Sediment Transport & River Mechanics (501310)	*Management in Structural Engineering (501410)
Wednesday 11/12/2013	***Elective – III (501111)** *a) Advanced Construction Technology *b) Infrastructure Development *c) International Contracting	**Elective III (501211)** a) Slope Stability & Earth Dams b) Geotechnical Earthquake Engineering c) Foundation of Offshore Structures	**Elective III (501311)** a) Irrigation & Drainage b) Coastal Engineering c) Water Management & Conveyance System	***Elective – III (501411)** *a) Earthquake Resistant Design of Structures *b) Structural Stability *c) Structural Reliability *d) Non-linear Analysis of Structures
Friday 13/12/2013	***Elective IV (Open) (501112)** a) Trust areas in Project Management	**Elective IV (Open) (501212)**	**Elective IV (Open) (501312)**	***Elective IV (Open) (501412)** a) *Biomaterials & Bio-Mechanics b) Mechanics of Modern Materials c) Theory of Plasticity d) Optimization Techniques

*Note - Papers marked are of four hours duration (between 2-30 p.m. to 6-30 p.m.)

ME Civil (Environmental Engg.) (2008 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Civil (Envirommental Engg.) Sem- I
Monday, 02/12/2013	Numerical Methods and Applied Statistics (501501)
Wednesday 04/12/2013	Air Pollution and Control (501502)
Saturday, 07/12/2013	Physico- Chemical Process for Water and Waste Water Treatment (501503)
Tuesday, 10/12/2013	**Elective –I(501504)** a)Air and Water Quality Modeling b)Environmental Legislation and Management System c)Environmental Impact Assessment and Management
Thursday 12/12/2013	**Elective – II(501505)** a)Occupation Safety and Health b)Principles and Design of Biological Treatment System c)Environmental Risk Assessment and Management

ME Civil (Environmental Engg.) (2008 Pattern) Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Civil (Envirommental Engg.) Sem- II
Tuesday, 03/12/2013	Industrial Waste Water Management (501508)
Thursday, 05/12/2013	Environmental Chemistry and Microbiology (501509)
Monday, 09/12/2013	Solid Waste and Hazardous Waste Management (501510)
Wednesday 11/12/2013	**Elective – III (501511)** a)Ground Water Contamination and Pollution Transport b)Agricultural Pollution Control and Environmental Biotechnology c)Environmental Sanitation

Friday 13/12/2013	**Elective-IV(501512)**
	    Open Elective
	    a) Ground Water Contamination and Pollution Transport
	    b) Environmental Sanitation

ME Civil (Environmental Engineering) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day & Date	M.E. Civil (Envirommental Engg.) Sem- I
Monday, **02/12/2013**	Environmental Legislation & Management Systems
Wednesday **04/12/2013**	Environmental Chemistry & Micro-Biology
Saturday, **07/12/2013**	Physico-Chemical Process for Water and Waste Water Treatment
Tuesday, **10/12/2013**	Research Methodology
Thursday **12/12/2013**	Elective - I

ME Civil (Water Resources & Environmental Engineering) (2012 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Civil (Water Resources & Environmental Engg.) Sem- I
Monday, 02/12/2013	Environmental Chemistry & Microbiology (501601)
Wednesday 04/12/2013	Environmental Management (501602)
Saturday, 07/12/2013	Advance Fluid Mechanics (501603)
Tuesday, 10/12/2013	**Elective – I (501604)** a) Ground Water Contamination & Transport b) Hydrology & Groundwater c) Air Pollution Engineering d) Solid & Hazardous Waste Management
Thursday 12/12/2013	**Elective-II (501605)** a) Unit Operation in Environmental Engineering b) Advance Water Treatment & Water Supply Engineering c) Remote Sensing & GIS System for Water Resources Management d) Planning and Management of Water Resources

ME Civil (Water Resources & Environmental Engineering) (2012 Pattern) Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Civil (Water Resources & Environmental Engg.) Sem- II
Tuesday, 03/12/2013	Optimization Technique (501608)
Thursday, 05/12/2013	Open Channel Hydraulics (501609)
Monday, 09/12/2013	Advance Waste Water Treatment (501610)
Wednesday 11/12/2013	**Elective – III (501611)** 1. Computational Method in Water Resources 2. Noise Pollution and Control Technique 3. Ground Water Modeling 4. Industrial Waste Management
Friday 13/12/2013	**Elective – IV (501612)** 1. Dam Engineering 2. Energy and Environment 3. Closed Conduit Flow 4. Research Methodology and Intellectual Property Right

ME Civil (Water Resources & Environmental Engineering) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day & Date	ME Civil (Water Resources & Environmental Engineering)
Monday, 02/12/2013	Planning and Management of Water Resources
Wednesday 04/12/2013	Environmental Chemistry and Microbiology
Saturday, 07/12/2013	Fluid Mechanics
Tuesday, 10/12/2013	Research Methodology Treatment
Thursday 12/12/2013	Elective - I

ME Civil (Hydraulics) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day & Date	ME Civil (Hydraulics)
Monday, 02/12/2013	Fluid Mechanics
Wednesday 04/12/2013	Irrigation and Drainage
Saturday, 07/12/2013	Planning and Management of Water Resources
Tuesday, 10/12/2013	Research Methodology
Thursday 12/12/2013	Elective - I

ME Civil (Structures) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day & Date	ME Civil (Structures)
Monday, **02/12/2013**	Advanced Mechanics of Solids (501401)
Wednesday **04/12/2013**	Structural Dynamics (501402)
Saturday, **07/12/2013**	Advanced Design of Steel Structures (501403)
Tuesday, **10/12/2013**	Research Methodology Treatment (501404)
Thursday **12/12/2013**	Elective – I (501405)

ME Civil (Construction Management) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day & Date	ME Civil (Construction Management)
Monday, 02/12/2013	Applications of Statistical Methods in Construction (501101)
Wednesday 04/12/2013	Management and Project Planning in Construction (501102)
Saturday, 07/12/2013	Construction Technology (501103)
Tuesday, 10/12/2013	Research Methodology Treatment (501104)
Thursday 12/12/2013	Elective – I (501105)

ME Civil (Geotechnical Engineering) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day & Date	ME Civil (Geotechnical Engineering)
Monday, 02/12/2013	Advance Soil Mechanics (501121)
Wednesday 04/12/2013	Ground Improvement Techniques (501122)
Saturday, 07/12/2013	Rock Mechanics (501123)
Tuesday, 10/12/2013	Research Methodology (5011004)
Thursday 12/12/2013	Elective – I (501124)

ME Mechanical (2008 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day & Date	Heat Power Engineering	Design Engineering
Monday, 02/12/2013	Numerical Methods in Thermal & Fluid Engineering (502101)	Mathematical Modeling & Analysis (502201)
Wednesday 04/12/2013	Advanced Thermodynamics (502102)	Advanced Stress Analysis (502202)
Saturday, 07/12/2013	Technology & Financial Management (502103) (Common to Design & Mechatronics)	Technology & Financial Management (502203)
Tuesday, 10/12/2013	**Elective-I (502104)** a) Performance Assessment of Mechanical Equipments b) Refrigeration Technology c) Energy Conservation & Management d) Convective Heat Transfer Analysis	**Elective-I (502204)** a) Instrumentation & Automatic Control b) Advanced Material Science c) Optimization Techniques
Thursday 12/12/2013	**Elective-II (502105)** a) Internal Combustion Engines b) Advanced Air Conditioning & Heating & Ventilation c) Conventional Power Plants d) Advanced Gas Dynamics	**Elective-II (502205)** a) Material Handling Equipment Design b) Process Equipment Design c) Robotics

ME Mechanical (2008 Pattern) Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day & Date	Heat Power Engineering	Design Engineering
Tuesday, 03/12/2013	Advanced Heat Transfer (502108)	Vibration & Noise Control (502208)
Thursday, 05/12/2013	Measurement Techniques and Data Analysis (502109)	Advanced Machine Design (502209)
Monday, 09/12/2013	Advanced Fluid Mechanics (502110)	Analysis & Synthesis of Mechanisms (502210)
Wednesday 11/12/2013	**Elective – III (502111)** a) Internal Combustion Engines – fuels b) Cryogenic Engineering c) Non Conventional Power Plants	**Elective – III (502211)** a) Reliability Engineering b) Engineering Fracture Mechanics c) Computer Aided Engineering
Friday 13/12/2013	**Elective – IV (502112)** a)Heat Exchanger System Design and Performance b)Computational Fluid Dynamics OPEN (SELF STUDY)** i)Computer Aided Engineering (Design)	**Elective – IV (502212)** a) Vehicle dynamics b) Industrial Tribology c) OPEN (SELF STUDY)**

ME Mechanical (Mechatronics) (2008 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Mechanical(Mechatronics) Sem- I
Monday, 02/12/2013	Applied Numerical Methods and Computational Techniques (502801)
Wednesday 04/12/2013	Mechanical of Electronic Measurements (502802)
Saturday, 07/12/2013	Technology and Financial Management (502103) (Common to Mechanical)
Tuesday, 10/12/2013	**Elective - I((502804)** a) Design of Machine Elements b) Digital Signal Processing c) Advanced Material Science
Thursday 12/12/2013	**Elective – II(502805)** a) Control Systems b) Theory of Machines and Mechanisms c) Instrumentation & Automatic Control

ME Mechanical (Mechatronics) (2008 Pattern) Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Mechanical(Mechatronics) Sem- II
Tuesday, 03/12/2013	Microcontrollers (502808)
Thursday, 05/12/2013	Industrial Automation (502809)
Monday, 09/12/2013	Drives & Actuators (502810)
Wednesday 11/12/2013	**Elective – III (502811)** a) Computer Aided Design b) Robotics c) Automotive Electronics
Friday 13/12/2013	**Elective IV (502812)** a)Embedded Systems b)Fuzzy Logic and Neural Networks c) Open (Self Study)

ME Mechanical (Mechatronics) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Mechanical(Mechatronics) Sem- I
Monday, 02/12/2013	System Modeling, Identification and Simulation (502801)
Wednesday 04/12/2013	Control System – I (502802)
Saturday, 07/12/2013	Sensors, Transducers and Interfacing Techniques (502803)
Tuesday, 10/12/2013	Research Methodology (502804) (Common to All Mechanical Branches – 2013 Credit Pattern)
Thursday 12/12/2013	Elective – I (502805)

ME Mechanical (Automotive Engineering) (2008 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Mechanical (Automotive Engg.) Sem- I
Monday, 02/12/2013	Mathematical Modeling & Analysis (502201)
Wednesday 04/12/2013	Automotive Engine Design (502301)
Saturday, 07/12/2013	Technology and Financial Management (502103)
Tuesday, 10/12/2013	**Elective – I (502302)** a) Advanced Heat Transfer b)Finite Element Method c)Advanced Hydraulics and Pneumatic Systems
Thursday 12/12/2013	**Elective – II (502303)** a)Tribology and Preventive Maintenance b)Automotive Safety and Regulations c)Automobile Air Conditioning

ME Mechanical(Automotive Engineering) (2008 Pattern) Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Mechanical (Automotive Engg.) Sem- II
Tuesday, 03/12/2013	Automotive Fuels and Emissions (502306)
Thursday, 05/12/2013	Autoerotic (502307)
Monday, 09/12/2013	Fundamentals of Vehicle Dynamics (502308)
Wednesday 11/12/2013	**Elective – III (502309)** a)Noise Vibrations and Harshness b)Automotive Materials c)Vehicle Aerodynamics
Friday 13/12/2013	**Elective – IV (502310)** a)Computational Fluid Dynamics b)Automotive Chassis Design c)** Open Elective (Self Study)

ME Mechanical (Automotive Engineering) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Mechanical(Automotive Engineering) Sem- I
Monday, 02/12/2013	Advanced Mathematics (507201)
Wednesday 04/12/2013	Automotive Engine Design (502302)
Saturday, 07/12/2013	Automotive Safety and Regulations (502303)
Tuesday, 10/12/2013	Research Methodology (502304) (Common to All Mechanical Branches – 2013 Credit Pattern)
Thursday 12/12/2013	Elective – I (502305)

ME Mechanical (Energy Engineering) (2012 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Mechanical(Energy Engg.) Sem- I
Monday, 02/12/2013	Advanced Engineering Mathematics (502501)
Wednesday 04/12/2013	Advanced Thermodynamics (502502)
Saturday, 07/12/2013	Energy Conversion Systems (502503)
Tuesday, 10/12/2013	**Elective – I (502504)** a) Nuclear Materials and Reactor Fundamentals b) Process Optimization c) Plant Operation, Dynamics and Control
Thursday 12/12/2013	**Elective – II (502505)** a) Electromechanical and Reactor Systems b) Process Integration c) Non Conventional Energy Sources

ME Mechanical (Energy Engineering) (2012 Pattern) Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Mechanical(Energy Engg.) Sem- II
Tuesday, 03/12/2013	Convective Heat Transfer (502508)
Thursday, 05/12/2013	Energy Systems Modeling and Analysis (502509)
Monday, 09/12/2013	Energy Management (502510)
Wednesday 11/12/2013	**Elective – III (502511)** a) Radiation Safety and Shielding b) Energy and Climate c) Energy Regulatory Frameworks
Friday 13/12/2013	**Elective – IV (502512)** a) Nuclear Measurement and Detection b) Energy Resources and Economics c) Processing Storage and Disposal of Nuclear Waste d) Open Elective

ME Mechanical (Energy Engineering) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Mechanical (Energy Engg.) Sem- I
Monday, 02/12/2013	Advanced Mathematics and Numerical Methods (507101)
Wednesday 04/12/2013	Advanced Thermodynamics (502502)
Saturday, 07/12/2013	Advanced Fluid Mechanics (502103) (Common to Heat Power Engineering – 2013 Credit Pattern)
Tuesday, 10/12/2013	Research Methodology (502504) (Common to All Mechanical Branches – 2013 Credit Pattern)
Thursday 12/12/2013	Elective – I (502505)

ME Mechanical (Computer Aided Design Manufacture & Engineering) (2012 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Mechanical (CADM & E) Sem- I
Monday, 02/12/2013	Advanced Machine Design (520401)
Wednesday 04/12/2013	Mathematical Modeling (502402)
Saturday, 07/12/2013	Computer Aided Design (520403)
Tuesday, 10/12/2013	**Elective – I (502404)** a) Material for Engineering Applications b) Advanced Manufacturing Processes c) Customization of CAD/CAM Software's d) CAD/CAM Practices in Metal Forming
Thursday 12/12/2013	**Elective – II (502405)** a) Finite Element Analysis b) Integrated Product Design & Development c) Computational Fluid Dynamics d) Robotics

ME Mechanical (Computer Aided Design Manufacture & Engineering) (2012 Pattern) Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Mechanical (CADM & E) Sem- II
Tuesday, 03/12/2013	Management of Technology (502408)
Thursday, 05/12/2013	Computer Aided Manufacturing (502409)
Monday, 09/12/2013	Computer Integrated Manufacturing (502410)
Wednesday 11/12/2013	**Elective – III (502411)** a) Design for X b) Automated Manufacturing System Modeling c) Simulation and Modelling d) Optimization Techniques
Friday 13/12/2013	**Elective – IV (502412)** a) Product Lifecycle Management b) Rapid Prototyping c) data Base Management System d) Robust Design of Product / Process e) Open Elective

ME Mechanical (Computer Aided Design Manufacture & Engineering) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Mechanical (CADM & E) Sem- I
Monday, 02/12/2013	Advanced Mathematics (507201)
Wednesday 04/12/2013	Advanced Machine Design (502402)
Saturday, 07/12/2013	Computer Aided Design (502403)
Tuesday, 10/12/2013	Research Methodology (502404) (Common to All Mechanical Branches – 2013 Credit Pattern)
Thursday 12/12/2013	Elective – I (502405)

ME Mechanical (Heat Power Engineering) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Mechanical (Heat Power Engineering) Sem- I
Monday, 02/12/2013	Advanced Mathematics and Numerical Methods (507101)
Wednesday 04/12/2013	Advanced Thermodynamics and Combustion Technology (502102)
Saturday, 07/12/2013	Advanced Fluid Mechanics (502103) (Common to Energy Engineering – 2013 Credit Pattern)
Tuesday, 10/12/2013	Research Methodology (502104) (Common to All Mechanical Branches – 2013 Credit Pattern)
Thursday 12/12/2013	Elective – I (502105)

ME Mechanical (Design Engineering) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Mechanical (Design Engineering) Sem- I
Monday, 02/12/2013	Advanced Mathematics (507201)
Wednesday 04/12/2013	Material Science and Mechanical Behavior of Materials (502202)
Saturday, 07/12/2013	Advanced Stress Analysis (502203)
Tuesday, 10/12/2013	Research Methodology (502204) (Common to All Mechanical Branches – 2013 Credit Pattern)
Thursday 12/12/2013	Elective – I (502205)

ME Electrical (2008 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	Control System 2008 Course	Power System 2008 Course
Monday, 02/12/2013	Advanced Mathematical Technique for Control System (503101)	Computer Applications in power Systems (503201)
Wednesday 04/12/2013	Process Control Management (503102)	Power Sector Economics, Management & Restructuring (503202)
Saturday, 07/12/2013	Nonlinear Control System (503103)	Power System Modeling (503203)
Tuesday, 10/12/2013	**Elective-I (503104)** a) Automation & Robotics b) Modeling & Dynamic System	**Elective-I (503204)** a) Digital Signal Processing & its Applications b) Advanced Power Electronics
Thursday 12/12/2013	**Elective-II (503105)** a) Advanced Topics in Control Systems b) Computer Aided Control Systems Design c) SCADA System & Applications	**Elective-II (503205)** a) Artificial Intelligence & its Application in Power System b) Renewable Energy Sources

ME Electrical (2008 Pattern) Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	Control System 2008 Course	Power System 2008 Course
Tuesday, 03/12/2013	Multivariable & Optimal Control System (503108)	Power System Dynamics (503208)
Thursday, 05/12/2013	System Identification & Adaptive Control (503109)	Power System Planning & Reliability (503209)
Monday, 09/12/2013	Advanced Digital Control Technique (503110)	High Voltage Power Transmission (503210)
Wednesday 11/12/2013	**Elective – III (503111)** a)Robust Control Systems b)Stochhastics Dynamical Systems c)Large Scale System	**Elective – III (503211)** a)Digital Power System Protection b)Power Electronics Applications in Power Systems
Friday 13/12/2013	**Elective – IV (503112)** a)Intelligent Control b)Advanced Drives & Control c)Open	**Elective – IV (503212)** a)Power Quality Assessment and Mitigation b)Partial Discharges in Electrical Power Apparatus c)Open

ME Electrical(Power Electronics & Drives) (2008 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Electrical (Power Electronics & Drives) Sem- I
Monday, 02/12/2013	Modeling and Analysis of Electrical Machines (503301)
Wednesday 04/12/2013	Energy Management and Power Quality in Electrical Drives (503302)
Saturday, 07/12/2013	Power Electronic Devices and Circuits (503303)
Tuesday, 10/12/2013	**Elective – I (503304)** a) DSP and its Applications in Electrical Drives b) Data Acquisition and Signal Conditioning c) Digital Simulation of Power Electronic Systems
Thursday 12/12/2013	**Elective – II (503305)** a) FACTS and HVDC b) Harmonics and their Mitigation

ME Electrical(Power Electronics & Drives) (2008 Pattern) Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Electrical (Power Electronics & Drives) Sem- II
Tuesday, 03/12/2013	Controlled Electrical Drives (503308)
Thursday, 05/12/2013	Power Electronic Applications (503309)
Monday, 09/12/2013	Design of Power Electronic Systems (503310)
Wednesday 11/12/2013	**Elective – III (503311)** a) Automation in Industrial Drives b) Computer Aided Design of Electrical Machines c) Microcontroller Applications
Friday 13/12/2013	**Elective – IV (503312)** a) Artificial Intelligence in Electrical Drives b) Special Topics in Power Electronics and Drives c) Open Elective

ME Electrical (Power Electronics & Drives) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Electrical (Power Electronics & Drives) Sem- I
Monday, 02/12/2013	Modeling and Analysis of Electrical Machines (503301)
Wednesday 04/12/2013	Energy Management and Power Quality in Electrical Drives (503302)
Saturday, 07/12/2013	Power Converters (503303)
Tuesday, 10/12/2013	Research Methodology (503304)
Thursday 12/12/2013	Elective – I (503305)

ME Electrical (Power Systems) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Electrical (Power Systems) Sem- I
Monday, 02/12/2013	Computer Applications in Power Systems (503201)
Wednesday 04/12/2013	Power Sector Economics and Management (503202)
Saturday, 07/12/2013	Power System Modeling (503203)
Tuesday, 10/12/2013	Research Methodology (503204)
Thursday 12/12/2013	Elective – I (503205)

ME Electrical (Control Systems) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Electrical (Control Systems) Sem- I
Monday, 02/12/2013	Computational Technique for Control System (503101)
Wednesday 04/12/2013	Process Control Management (503102)
Saturday, 07/12/2013	Non Linear Control System (503103)
Tuesday, 10/12/2013	Research Methodology (503104)
Thursday 12/12/2013	Elective – I (503105)

ME E & TC (2008 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	Microwave	VLSI Embedded System
Monday, 02/12/2013	Electromagnetics & Antenna Theory (504222)	Analog & Digital CMOS IC Design (504181)
Wednesday 04/12/2013	Principles & Practices for IT Management (504182) (Common to VSLI, Electronics)	Principles & Practices for IT Management (504182)
Saturday, 07/12/2013	RF Wave & Microwave Circuit Design (504223)	Embedded System Design (504183)
Tuesday, 10/12/2013	**Elective-I (504224)** a) Applications of Microwaves to Radar & Satellite b) Digital Image processing & Analysis c) Communication Networks	**Elective-I (504184)** a) ASIC Design & Modeling b) Nanotechnology c) Machine Intelligence
Thursday 12/12/2013	**Elective-II (504225)** a) Smart Antennas b) Speech Processing & Application c) Semiconductor Device Modeling & Technology	**Elective-II (504185)** a) Reconfigurable Computing b) Memory Technologies c) VLSI EDA Tools

ME E & TC(2008 Pattern) Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	Microwave	VLSI Embedded System
Tuesday, 03/12/2013	Microwave Integrated Circuits (504228)	Real Time Operating Systems (504188)
Thursday, 05/12/2013	Signal Processing for Wireless Communication (504229)	Embedded Signal Processing (504189)
Monday, 09/12/2013	Mobile Communication – GSM and CDMA (504230)	RF IC Design (504190)
Wednesday 11/12/2013	**Elective – III (504231)** a)Fiber Optic Communication b)System Design c)EMI and EMC Techniques	**Elective – III (504191)** a)Fault Tolerant System Design b)Biomedical Signals and Systems c)Advanced Digital System Design
Friday 13/12/2013	**Elective – IV (Open) (504232)** Any one subject of Elective IV from the following Branches a)Electronics Engineering b)Computer Engineering c)Information Technology Open Elective i))Software Project Management ii) Digital Signal Compression	**Elective IV – (Open) (504192)** a) Embedded Automotive Systems b) System on Chip (SOC) c) Software Defined Radio d) High Performance Computer Network (Comm. to I.T.)

ME Electronics & Telecommunication (Signal Processing) (2008 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	Electronics & Telecommunication (Signal Processing) Sem. I
Monday, 02/12/2013	Liner Algebra & Random Processes (504501)
Wednesday 04/12/2013	Principles & Practices for I.T. Management (504182) (Common to E.& TC, V.L.S.I. & Electronic)
Saturday, 07/12/2013	Signal Processing Techniques (504502)
Tuesday, 10/12/2013	**Elective-I (504503)** a) Digital Image Processing b) Automotive Electronics c) Artificial Intelligence
Thursday 12/12/2013	**Elective-II (504504)** a) Bio-Medical Signal Processing b) Wireless & Mobile Communication c) Smart Antennas

ME Electronics & Telecommunication (Signal Processing) (2008 Pattern) Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	Electronics & Telecommunication (Signal Processing) Sem. II
Tuesday, 03/12/2013	Statistical Signal Processing (504507)
Thursday, 05/12/2013	Advanced Digital Signal Processing (504508)
Monday, 09/12/2013	VLSI in Signal Processing (504509)
Wednesday 11/12/2013	**Elective – III: (504510)** a)Acoustic & Speech Processing b)Digital Signal Compression c)Multimedia Techniques
Friday 13/12/2013	**Elective – IV (504511)** a)Radar & Satellite Signal Processing b)Operating Systems & Open Source Systems c)Computer Vision

ME Electronics & Telecommunication (Signal Processing) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	Electronics & Telecommunication (Signal Processing) Sem. I
Monday, 02/12/2013	Image Processing and Analysis (504401)
Wednesday 04/12/2013	Signal Processing Techniques (504402)
Saturday, 07/12/2013	Mixed Signal Processing Systems and Design (504403)
Tuesday, 10/12/2013	Research Methodology (504104)
Thursday 12/12/2013	Elective – I (504405)

ME E & TC (Communication Networks) (2008 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. E & TC (Communication Networks) Sem- I
Monday, 02/12/2013	Coding & Modulation Techniques (504601)
Wednesday 04/12/2013	Principles & Practices of IT Management (504182)
Saturday, 07/12/2013	Modeling & Simulation of Communication Network (504602)
Tuesday, 10/12/2013	**Elective – I (504603)** a)Microwave and Antenna Theory b)Signal Detection and Estimation c) Ad-hoc Networks
Thursday 12/12/2013	**Elective – II (504604)** a) RF MRMs b)Network Architecture & Design c)Computational Electromagnetics

ME E & TC (Communication Networks) (2008 Pattern) Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. E & TC (Communication Networks) Sem- II
Tuesday, 03/12/2013	Wired and Wireless Networks (504607)
Thursday, 05/12/2013	Network Traffic Analysis and Qos (504608)
Monday, 09/12/2013	Wireless System Design (504609)
Wednesday 11/12/2013	**Elective – III ((504610)** a)Wireless Sensor Networks b)Mobile Computing c)Network Security
Friday 13/12/2013	**Elective – IV (504611)** a)Software Radio b)Neural Networks in Communication c)Hardware Platforms for Networking Applications

ME E & TC (Communication Networks) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. E & TC (Communication Networks) Sem- I
Monday, 02/12/2013	Modeling and Simulation of Communication Networks (504501)
Wednesday 04/12/2013	Spread spectrum and CDMA Systems (504502)
Saturday, 07/12/2013	Detection and Estimation Theory (504104)
Tuesday, 10/12/2013	Research Methodology (504104)
Thursday 12/12/2013	Elective – I (504505)

Day and Date	M.E. E & TC (Microwave) Sem- I
Monday, 02/12/2013	Electromagnetics and Antenna Theory (504301)
Wednesday 04/12/2013	RF and Microwave Circuits (504302)
Saturday, 07/12/2013	Microwave Measurements (504303)
Tuesday, 10/12/2013	Research Methodology (504104)
Thursday 12/12/2013	Elective – I (504305)

ME E & TC (VLSI & Embedded Systems) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. E & TC (VLSI & Embedded Systems) Sem- I
Monday, 02/12/2013	Digital CMOS Design (504201)
Wednesday 04/12/2013	Embedded System Design (504103)
Saturday, 07/12/2013	Reconfigurable Computing (504203)
Tuesday, 10/12/2013	Research Methodology (504104)
Thursday 12/12/2013	Elective – I (504205)

ME Electronics (2008 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Electronics (Digital System) Sem. I
Monday, 02/12/2013	Microelectronics (504195)
Wednesday 04/12/2013	Principles & Practices for IT Management (504182)
Saturday, 07/12/2013	Signal Processing Architectures (504196)
Tuesday, 10/12/2013	**Elective-I (504197)** a) Fault Tolerant System Design b) Advanced Digital System Design c) Wireless & Mobile Technologies
Thursday 12/12/2013	**Elective-II (504198)** a) Machine Intelligence b) Advanced Computing Architectures c) Memory Technologies

ME Electronics (2008 Pattern) Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Electronics (Digital System) Sem. II
Tuesday, 03/12/2013	Embedded Systems (504201)
Thursday, 05/12/2013	Communication Network and Security (504202)
Monday, 09/12/2013	Image Processing and Pattern Recognition (504203)
Wednesday 11/12/2013	**Elective – III (504204)** a) Digital Systems using PLDs b) Biomedical Signals and Systems c) Embedded Video processing
Friday 13/12/2013	**Elective – IV (OPEN) (504205)** a) Reconfigurable Computing b) Embedded Automotive Systems c) Digital Signal Compression

ME Electronics (Digital System) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Electronics (Digital System) Sem. I
Monday, 02/12/2013	Microelectronics (504101)
Wednesday 04/12/2013	Digital Signal Processing Architectures (504102)
Saturday, 07/12/2013	Embedded System Design (504103)
Tuesday, 10/12/2013	Research Methodology (504104)
Thursday 12/12/2013	Elective – I (504105)

ME Production Engineering (2008 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Production Engineering – Sem. I
Monday, 02/12/2013	Mathematics and Statistics (511101)
Wednesday 04/12/2013	CAD/CAM/CIM (511102)
Saturday, 07/12/2013	Advanced Manufacturing Processes (511103)
Tuesday, 10/12/2013	**Elective-I (511104)** a) Advanced Mechatronics b) Reliability & Failure Analysis c) Supply Chain Management d) Advanced Machine Tool Design
Thursday 12/12/2013	**Elective-II (511105)** a) Advance Robotics b) Sheet Metal Processing c) Tool and Die Design d) Engineering Economics & Accounting

ME Production Engineering (2008 Pattern)Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Production Engineering – Sem. II
Tuesday, 03/12/2013	Material Technology (511108)
Thursday, 05/12/2013	Manufacturing Management (511109)
Monday, 09/12/2013	Industrial Automation (511110)
Wednesday 11/12/2013	**Elective – III (511111)** a) Plastics Processing b) Product Life Cycle Management c) Welding & Joining d) Surface Treatment processes
Friday 13/12/2013	**Elective – IV (Open) (511112)** a) Optimization Techniques b) Research Methodologies c) Intellectual Property Rights & Product Design d) Energy management

ME Production (CAD/CAM) (2008 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Production (CAD/CAM) Sem- I
Monday, 02/12/2013	Computer Aided Design (511201)
Wednesday 04/12/2013	Computer Aided Manufacturing (511202)
Saturday, 07/12/2013	Optimization Techniques (511203)
Tuesday, 10/12/2013	**Elective I (511204)** a)Advanced Stress Analysis b)Tribology & Surface Engineering c)Industrial Robotics & Artificial Intelligence d)Concurrent Product Design
Thursday 12/12/2013	**Elective – II (511205)** a) Mechatronics b) Rapid Prototyping c) Energy Management d) CAD/CAM/CAE Software Development

ME Production (CAD/CAM) (2008 Pattern) Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Production (CAD/CAM) Sem- II
Tuesday, 03/12/2013	Computer Integrated Manufacturing (511208)
Thursday, 05/12/2013	Finite Element Analysis (511209)
Monday, 09/12/2013	Advanced Mathematics (511210)
Wednesday 11/12/2013	**Elective –III: (511211)** a)Product Life Cycle Management b)Advanced Materials and Processing c)Manufacturing System Design d)Quality & Reliability Engineering
Friday 13/12/2013	**Elective – IV :(511212)** a)Computer Aided Process Planning b)Technology Management c)Design of Experiments & Research Methodology d)Computational Fluid Dynamics

ME Production (CAD/CAM) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Production (CAD/CAM) Sem- I
Monday, 02/12/2013	Computer Aided Design (511301)
Wednesday 04/12/2013	Computer Aided Manufacturing (511302)
Saturday, 07/12/2013	Advanced Mathematics and Statistics (511303)
Tuesday, 10/12/2013	Design of Experiments & Research Methodology (511304)
Thursday 12/12/2013	Elective – I (511305)

ME Production (Manufacturing & Automation) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Production (Manufacturig & Automation) Sem- I
Monday, 02/12/2013	Mathematics & Statistics (511101)
Wednesday 04/12/2013	Industrial Automation (511102)
Saturday, 07/12/2013	Advanced Manufacturing Processes (511103)
Tuesday, 10/12/2013	Research Methodology (511104)
Thursday 12/12/2013	Elective – I (511105)

ME Computer Engineering / Computer Networks (2008 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	Computer Engineering	Computer Networks
Monday, 02/12/2013	Applied Algorithms (510101) (Common to Network Engineering)	Applied Algorithms (510301)
Wednesday 04/12/2013	Emerging Trends in Computer Architecture (510102)(Common to Network Engineering)	Emerging Trends in Computer Architecture (510302)
Saturday, 07/12/2013	Principles & Practices for IT Management (510103)(Common to Network Engineering)	Principles & Practices for IT Management (510303)
Tuesday, 10/12/2013	**Elective-I (510104)** a)Advance Software Engineering b) Intelligent Systems c) Internet Routing Design d) Mobile computing	**Elective – I (510304)** a)Internet Routing Design b)Advanced TCP / IP
Thursday 12/12/2013	**Elective-II (510105)** a) Information & Network Security b) Advanced compilers c) Web Services and SOA d) Embedded System Design	**Elective - II(510305)** a)Wireless Technology b)Information Security Audit & Management

ME Computer Engineering / Computer Networks (2008 Pattern) Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	Computer Engineering	Computer Networks
Tuesday, 03/12/2013	Distributed System (510108)	Operating System Design (510308)
Thursday, 05/12/2013	High Performance Database System (510109) (Common to Network Engineering)	High Performance Database Systems (510309)
Monday, 09/12/2013	Network Design, Modeling and Analysis (510110)	Advanced Software Engineering (510310)
Wednesday 11/12/2013	**Elective – III (510111)** a)Software Design and Architecture b)Pattern Recognition and Machine Vision c)Network Programming d)Advanced Internet Programming	**Elective – III (510311)** a)Network Programming b)Network Design, Modeling and Analysis
Friday 13/12/2013	**Elective – IV (510112)** a)Software Project Management b)Infrastructure Management c)Data Warehousing and Data Mining d)Open Elective (Self Study)	**Elective – IV (510312)** a) Infrastructure Management b) Convergence Technology c) Open Elective (Self Study)**

ME Computer Engineering / Computer Networks (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	Computer Engineering	Computer Networks
Monday, 02/12/2013	Applied Algorithms (510101)	Advanced Network Algorithms (510201)
Wednesday 04/12/2013	High Performance Databases (510102)	Wireless Communication (510202)
Saturday, 07/12/2013	Advanced Computer Architecture (510103)	Advanced Databases (510203)
Tuesday, 10/12/2013	Research Methodology (510104)	Research Methodology (510204)
Thursday 12/12/2013	Elective – I (510105)	Elective – I (510205)

ME Chemical (2008 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Chemical Engineering – Sem. I
Monday, 02/12/2013	Applied Statistics for Chemical Engineers (509101)
Wednesday 04/12/2013	Management of R & D in Chemical Industries (509102)
Saturday, 07/12/2013	Advanced Separation Processes (509103)
Tuesday, 10/12/2013	**Elective-I (509104)** a) Computational Fluid Dynamics b) Process Design & Synthesis c) Advanced Thermodynamics d) Computer Aided Design
Thursday 12/12/2013	**Elective-II (509105)** a) Industrial Pollution Control b) Process Optimization c) Drugs & Pharmaceutical Engineering d) Fluidization Engineering

ME Chemical (2008 Pattern) Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Chemical Engineering – Sem. II
Tuesday, 03/12/2013	Process Modeling and Simulation (509108)
Thursday, 05/12/2013	Advanced Transport Phenomena (509109)
Monday, 09/12/2013	Advanced Process Control (509110)
Wednesday 11/12/2013	**Elective – III (509111)** a) Catalysis and Surface Phenomenon b) Advanced Reaction Engineering c) Mathematical Methods in Chemical Engineering d) Bioprocess Engineering
Friday 13/12/2013	**Elective – IV OPEN (509112)** a)Catalysis and Surface Phenomenon b)Process Optimization c)Fuel Cells Technology

ME Chemical (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Chemical Engineering – Sem. I
Monday, 02/12/2013	Mathematical and Statistical Methods (509101)
Wednesday 04/12/2013	Management of R & D in Chemical Industries (509102)
Saturday, 07/12/2013	Advanced Separation Processes (509103)
Tuesday, 10/12/2013	Research Methodology (509104)
Thursday 12/12/2013	Elective – I (509105)

ME Chemical (Environmental Engg.) (2008 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Chemical (Environmental Engg.) – Sem. I
Monday, 02/12/2013	Applied Statistics for Environmental Engineers (509131)
Wednesday 04/12/2013	Environmental Geosciences (509132)
Saturday, 07/12/2013	Environmental Chemistry (509133)
Tuesday, 10/12/2013	**Elective-I (509134)** a) Modeling of Environmental Systems b) Groundwater Contamination and Pollution Transport. c) Environmental Policies and Legislations d) Air and Noise Pollution Control
Thursday 12/12/2013	**Elective-II (509135)** a) Membrane Technology in Environmental Engineering b) Environmental Auditing and EMS c) Agricultural Pollution and control d) Environmental Impact Assessment and Economics

ME Chemical(Environmental Engg.) (2008 Pattern) Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Chemical (Environmental Engg.) – Sem. II
Tuesday, 03/12/2013	Wastewater Treatment & Design (509138)
Thursday, 05/12/2013	Solid Waste Management (509139)
Monday, 09/12/2013	Industrial Waste Treatment (509140)
Wednesday 11/12/2013	**Elective III (509141)** a)Ecology and Risk Assessment b)Water Quality Modeling c)Modern Trends in Environmental Engineering d)Environmental Biotechnology
Friday 13/12/2013	**Elective IV (OPEN) (509142)** Ground Water Contamination & Pollution Control

ME Chemical (Environmental Engg.) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Chemical (Environmental Engg.) – Sem. I
Monday, 02/12/2013	Applied Statistics for Environmental Engineers (509131)
Wednesday 04/12/2013	Environmental Management (509132)
Saturday, 07/12/2013	Environmental Chemistry (509133)
Tuesday, 10/12/2013	Research Methodology (509134)
Thursday 12/12/2013	Elective – I (509135)

M.E. (Petroleum Engineering) (2008 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Petroleum Engineering – Sem. I
Monday, 02/12/2013	Numerical Methods & Simulation in Petroleum Engineering (512101)
Wednesday 04/12/2013	Petroleum Reservoir Management (512102)
Saturday, 07/12/2013	Horizontal Multilateral & Intelligent Wells (512103)
Tuesday, 10/12/2013	**Elective-I (512104)** a) Advanced Geological Methods in Petroleum Exploration & Development b) Reservoir Petro-physics c) Oil & Gas Field Development d) Petroleum Business Strategies & Risk Analysis
Thursday 12/12/2013	**Elective-II (512105)** a) Modern Completion Technology b) Well Design & Engineering c) Well Testing & Analysis d) Well control

ME (Petroleum Engineering) (2008 Pattern) Sem.II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Petroleum Engineering – Sem. II
Tuesday, 03/12/2013	GIS and Computer Applications in Petroleum Industry (512108)
Thursday, 05/12/2013	Environmental Management Technology and Safety Measures (512109)
Monday, 09/12/2013	Advanced Natural Gas Engineering (512110)
Wednesday 11/12/2013	**Elective – III (512111)** a)Artificial Lift Techniques b)Advanced Stimulation Techniques c)Piping Design and Engineering
Friday 13/12/2013	**Elective – IV OPEN (512112)** a)Technology of Coal Bed Methane b)Unconventional Hydrocarbon Resources and Development Strategies c)Advanced offshore Technology d)Open elective, can be taken from any branch of elective

M.E. (Petroleum Engineering) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Petroleum Engineering – Sem. I
Monday, 02/12/2013	Numerical Simulation in Petroleum Engineering (512101)
Wednesday 04/12/2013	Geology in Reservoir Description (512102)
Saturday, 07/12/2013	Advanced Drilling Engineering (512103)
Tuesday, 10/12/2013	Research Methodology (512104)
Thursday 12/12/2013	Elective – I (512105)

M.E. (Petrochemical Engineering) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Petrochemical Engineering – Sem. I
Monday, 02/12/2013	Recent Trends in Petroleum Refining Operations (512201)
Wednesday 04/12/2013	Advanced Transport Phenomena (512202)
Saturday, 07/12/2013	Advanced Numerical and Statistical Methods (512203)
Tuesday, 10/12/2013	Research Methodology (512204)
Thursday 12/12/2013	Elective – I (512205)

ME Information Technology (2008 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Information Technology – Sem. I
Monday, 02/12/2013	Applied Algorithms (514421)
Wednesday 04/12/2013	Software Engineering Methodologies (514402)
Saturday, 07/12/2013	Advance Operating Systems (514403)
Tuesday, 10/12/2013	**Elective-I (514422)** a) Software Architecture(514404)(A) b) Real Time & Embedded System (514404)(B) c) Bioinformatics (514422)(C)
Thursday 12/12/2013	**Elective-II (514423)** a) Information Assurance & Security (514405)(A) b) Network Programming (514422)(B) c) Geographical Information Systems (514405)(C)

M.E. Information Technology (2008 Pattern) Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Information Technology – Sem. II
Tuesday, 03/12/2013	Net centric Computing (514426)
Thursday, 05/12/2013	Advance Trends in Database Systems (514409)
Monday, 09/12/2013	Management Trends in Information Technology (514427)
Wednesday 11/12/2013	**Elective – III (514428)** a) Internet and Web Technologies (514411)(A) b) Advanced Topics in Operating Systems (514411)(B) c) Mobile Computing and M Commerce (514411)(C) d) User Interface Design (514428) (D)
Friday 13/12/2013	**Elective – IV (514439)** a) Internet Routing Design (514428)(A) b) Advance Network Programming (514412)(B) c) High Performance Computer Networks (514412)(C) Open Elective II (Self Study)** i)Service Oriented Architecture (514429)(D)

ME Information Technology (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Information Technology – Sem. I
Monday, 02/12/2013	Mathematical Foundation of Information Technology (514401)
Wednesday 04/12/2013	Applied Algorithms (514402)
Saturday, 07/12/2013	Advance Operating System (514403)
Tuesday, 10/12/2013	Research Methodology (514404)
Thursday 12/12/2013	Elective – I (514405)

M.E Industrial Engineering (2008 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Industrial Engineering – Sem. I
Monday, 02/12/2013	Economics (511201)
Wednesday 04/12/2013	Work Study & Ergonomics (511202)
Saturday, 07/12/2013	Optimization Techniques & Simulation Modeling (511203)
Tuesday, 10/12/2013	**Elective-I (511204)** a) Marketing Management b) Human Resource Management c) Entrepreneurship Development d) World Class Manufacturing
Thursday 12/12/2013	**Elective-II (511205)** a) Facilities planning b) Network & Project Management c) Enterprise Resource Planning & Supply Chain Management d) System Engineering

ME Industrial Engineering (2008 Pattern) Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Industrial Engineering – Sem. II
Tuesday, 03/12/2013	Reliability Engineering & Research Methodology (511208)
Thursday, 05/12/2013	Costing & Finance (511209)
Monday, 09/12/2013	Productivity Management (511210)
Wednesday 11/12/2013	**Elective – III (511211)** a)Human Factors Engineering b)Process Planning & Manufacturing Engineering' c)Management of Service Sector d)Industrial & Commercial law
Friday 13/12/2013	**Elective IV – OPEN (511212)** a)Organizational Behavior b)Operations Management c)Product Design & Intellectual Property Rights d) Environmental Engineering & Energy Management.

M.E Industrial Engineering (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Industrial Engineering – Sem. I
Monday, 02/12/2013	Economics (511201)
Wednesday 04/12/2013	Work Study & Ergonomics (511202)
Saturday, 07/12/2013	Optimisation Techniques and Simulation (511203)
Tuesday, 10/12/2013	Environmental Engineering & Energy Resoruce Management (511204)
Thursday 12/12/2013	Elective – I (511205)

M.E. Instrumentation & Control (Process Instru. Biomedical Instru.) (2008 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Instrumentation & Control (Process Instru. Biomedical Instru.) Sem –I
Monday, 02/12/2013	Transducer Design (5061101)
Wednesday 04/12/2013	Mathematical Methods in Instrumentation (5061102)
Saturday, 07/12/2013	Communication Protocols for Instrumentation (5061103)
Tuesday, 10/12/2013	Analytical Instrumentation (5061104)
Thursday 12/12/2013	**Elective : I (5061105)** a)Industrial Automation (5061105) b)Building Automation (5061105) c)Geotechnical Instrumentation (5061105) **Biomedical Instrumentation (5061201)** a)Fundamentals of Biomedical Instrumentation(5061201) b)Introduction to Physiology and Anatomy (5061201)

ME Instrumentation & Control (Process Instru. Biomedical Instru.) (2008 Pattern) Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Instrumentation & Control (Process Instru. Biomedical Instru.) Sem –II
Tuesday, 03/12/2013	Control System Design (5061108)
Thursday, 05/12/2013	Advanced Signal Processing (5061109)
Monday, 09/12/2013	Organisational Behaviour & Management (5061110)
Wednesday 11/12/2013	**Elective : II (5061111)** a)Modern Control Theory ((5061111) b)Mechatronics (5061111) c)Robotics (5061111) **Biomedical Instrumentation(5061204)** a)Biosignal Processing (5061204) b)Rehabilitation Engineering (5061204)
Friday 13/12/2013	**Elective : III (5061112)** a)Advanced Process Instrumentation (5061112) b) Automobile Instrumentation (5061112) c)Open Elective **Biomedical Instrumentation*(5061205)** a)Bio-imaging Modality (5061205) b)Biophotonics (5061205) c) Open Elective

M.E. Instrumentation & Control (Process Instrumentation) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Instrumentation & Control (Process Instrumentation) Sem –I
Monday, **02/12/2013**	Mathematical Methods in Instrumentation (506101) (Common to Bio-Medical Instrumentation)
Wednesday **04/12/2013**	Transducer Design (506102)
Saturday, **07/12/2013**	Industrial Automation (506103)
Tuesday, **10/12/2013**	Research Methodology (506104) (Common to Bio-Medical Instrumentation)
Thursday **12/12/2013**	Elective – I (506105)

M.E. Instrumentation & Control (Bio-Medical Instrumentation) (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Instrumentation & Control (Bio-Medical Instrumentation) Sem –I
Monday, **02/12/2013**	Mathematical Methods in Instrumentation (506101) (Common to Process Instrumentation)
Wednesday **04/12/2013**	Bio-Signal Processing (506202)
Saturday, **07/12/2013**	Analytical Instrumentation (506203)
Tuesday, **10/12/2013**	Research Methodology (506104) (Common to Process Instrumentation)
Thursday **12/12/2013**	Elective – I (506205)

ME Polymer (2008 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Polymer Sem. I
Monday, 02/12/2013	Mathematical and Statistical Methods (509115)
Wednesday 04/12/2013	Principles of Management (509116)
Saturday, 07/12/2013	Polymer Processing and Testing (509117)
Tuesday, 10/12/2013	**Elective I : (509118)** a) Polymer Reaction Engineering b) Transport Phenomena in Polymers c) Synthesis and Chemistry of Polymers
Thursday 12/12/2013	**Elective II : (509119)** a)Polymer Rheology b)Mold and Die Design c)Packaging Technology

ME Polymer (2008 Pattern) Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Polymer Sem. II
Tuesday, 03/12/2013	Polymer Physics and Characterization (509122)
Thursday, 05/12/2013	Polymer Structure and Properties (509123)
Monday, 09/12/2013	Processing and Mechanics of Composites (509124)
Wednesday 11/12/2013	**Elective – III: (509125)** a) Science and Engineering of Fibers b) Polymer Product Design c) Specialty Polymer Materials
Friday 13/12/2013	**Elective - IV : (509126) (Open)** a) Paints and Adhesives Elective IV b) Elastomer Technology C) Open Elective

ME Polymer (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Polymer Sem. I
Monday, **02/12/2013**	Mathematical and Statistical Methods (509115)
Wednesday **04/12/2013**	Principles of Management (509116)
Saturday, **07/12/2013**	Advanced Polymer Technology (509117)
Tuesday, **10/12/2013**	Research Methodology (509118)
Thursday **12/12/2013**	Elective – I (509119)

ME Printing (2008 Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Printing Sem. I
Monday, 02/12/2013	Probability, Statistics & Queueing Theory (508101)
Wednesday 04/12/2013	Printing Technology Management (508102)
Saturday, 07/12/2013	Modern Trends in Printing (508103)
Tuesday, 10/12/2013	**Elective-I (508104)** a) Workflow Management in Printing Industry b) Printing & Packaging Materials c) Design of Experiments & Research Methodology
Thursday 12/12/2013	**Elective-II (508105)** a) Digital Printing b) Entrepreneurship in Printing & Allied Fields c) Quality Control Systems & Productivity

ME Printing (2008 Pattern) Sem. II
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Printing Sem. II
Tuesday, 03/12/2013	Print Media Communications (508108)
Thursday, 05/12/2013	Web Handling on Press (508109)
Monday, 09/12/2013	Substrate and Ink (508110)
Wednesday 11/12/2013	**Elective – III : (508111)** a) Multimedia Systems and Communication b)Total Productive Maintenance in Printing c) Press Finger Printing
Friday 13/12/2013	**Elective – IV (508112)** a)Open Elective (Self study) b)Advances in Converting and Packaging c)Analysis of Spot and Process inks

ME Printing (2013 Credit Pattern) Sem. I
Time : 2.30 p.m. to 5.30 p.m.

Day and Date	M.E. Printing Sem. I
Monday, 02/12/2013	Probability , Statistics and Regression Analysis (508101)
Wednesday 04/12/2013	Printing Technology Management (508102)
Saturday, 07/12/2013	Modern Trends in Printing (508103)
Tuesday, 10/12/2013	Research Methodology (508104)
Thursday 12/12/2013	Elective – I (508105)

University of Pune
Ganeshkhind, Pune-411007   **Dr.Sampada Joshi**
Ref. No. XCT/1057   **Controller of Examinations**
Date **: 18/11/2013**