

## SAVITRIBAI PHULE UNIVERSITY OF PUNE



### EXAMINATION CIRCULAR No. 171 of 2014

Revised Programme of M.E. 2008, 2012 Pattern & 2013 Credit Pattern (All Branches) Examination Dec.2014

As on 14/10/2014

#### 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.
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 & Elective II & Elective III (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)

**M.E. (Civil) (Construction Management) (2008 Pattern & 2013 Credit Pattern) (Sem. I)****Time: 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. I)</b>	<b>2013 (Credit Pattern) (Sem. I)</b>
<b>Friday, 12/12/2014</b>	*Mathematics (501101)	Applications of Statistical Methods in Construction (501021)
<b>Tuesday, 16/12/2014</b>	*Management & Project Planning in Construction (501102)	Management and Project Planning in Construction (501022)
<b>Friday, 19/12/2014</b>	*Construction Technology (501103)	Construction Technology (501023)
<b>Tuesday, 23/12/2014</b>	* <b>Elective-I (501104)</b> *a) New Construction Materials *b) Disaster Management *c) Repairs Rehabilitation, Retro. of Structures *d) Construction Safety	Research Methodology Treatment (501004)
<b>Friday, 26/12/2014</b>	* <b>Elective-II (501105)</b> *a) Resources Management *b) TQM in Construction *c) Value Engineering *d) Project Risk Analysis & Mitigation Techniques	Elective – I (501024)

**M.E. (Civil) (Construction Management) (2008 Pattern & 2013 Credit Pattern) (Sem. II)****Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. II)</b>	<b>2013 (Credit Pattern) (Sem. II)</b>
<b>Saturday, 13/12/2014</b>	*Construction Contracts Administration & Management (501108)	Construction Contracts Administration and Management (501026)
<b>Wednesday, 17/12/2014</b>	*Project Economics & Financial Mgt. (501109)	Project Economics and Financial Management (501027)
<b>Saturday, 20/12/2014</b>	*Operation Research (501110)	Operation Research (501028)
<b>Wednesday, 24/12/2014</b>	* <b>Elective – III (501111)</b> *a) Advanced Construction Technology *b) Infrastructure Development *c) International Contracting	Elective – II (501029)
<b>Saturday, 27/12/2014</b>	* <b>Elective IV (Open) (501112)</b> a) Trust areas in Project Management	-----

**\* Note - Papers marked are of four hours duration (between 2-30 p.m. to 6-30 p.m.)****M.E. (Civil) (Construction Management) (2013 Credit Pattern) (Sem. III)****Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2013 Credit Pattern (Sem. III)</b>
<b>Monday, 15/12/2014</b>	Environment and Energy for Sustainable Construction (501113)
<b>Thursday, 18/12/2014</b>	TQM in Construction (501114)
<b>Monday, 22/12/2014</b>	Elective – III (501115)

**M.E. (Civil) (Geotechnical Engineering) (2008 Pattern & 2013 Credit Pattern) (Sem. I)**

**Time: 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. I)</b>	<b>2013 (Credit Pattern) (Sem. I)</b>
<b>Friday, 12/12/2014</b>	Mathematics (501201)	Advance Soil Mechanics (501121)
<b>Tuesday, 16/12/2014</b>	System Approach to Management & Development of Human Resources (501202)	Ground Improvement Techniques (501122)
<b>Friday, 19/12/2014</b>	Engineering Behavior of soils (501203)	Rock Mechanics (501123)
<b>Tuesday, 23/12/2014</b>	<b><u>Elective-I (501204)</u></b> a) Applied Soil Mechanics b) Site Investigations & Ground Improvement c) Rock Mechanics & Tunneling d) Shallow and Deep Foundation	Research Methodology (501004)
<b>Friday, 26/12/2014</b>	<b><u>Elective-II (501205)</u></b> a) Soil Stabilization b) Soil Structure Interaction c) Geo-environmental Engineering d) Earth Pressure & Retaining Structures	Elective – I (501124)

**M.E. (Civil) (Geotechnical Engineering) (2008 Pattern & 2013 Credit Pattern) (Sem. II)**

**Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. II)</b>	<b>2013 (Credit Pattern) (Sem. II)</b>
<b>Saturday, 13/12/2014</b>	Finite Element Methods in Geotechnical Engineering (501208)	Advance Foundation Engineering (501126)
<b>Wednesday, 17/12/2014</b>	Reinforce Earth and Geo-synthetics (501209)	Construction Methods in Geotechnical (501127)
<b>Saturday, 20/12/2014</b>	Foundation Design and Detailing (501210)	Stability of Slopes and Earth Dam (501128)
<b>Wednesday, 24/12/2014</b>	<b><u>Elective III (501211)</u></b> a) Slope Stability & Earth Dams b) Geotechnical Earthquake Engineering c) Foundation of Offshore Structures d) Geosynthetics	Elective – II (501129)
<b>Saturday, 27/12/2014</b>	<b><u>Elective IV (Open) (501212)</u></b>	-----

**M.E. (Civil) (Geotechnical Engineering) (2013 Credit Pattern) (Sem. III)**

**Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2013 Credit Pattern (Sem. III)</b>
<b>Monday, 15/12/2014</b>	Geotechnical Earthquake Engineering (601132)
<b>Thursday, 18/12/2014</b>	Geoenvironmental Engineering (601133)
<b>Monday, 22/12/2014</b>	Elective – III (601134)

**M.E. (Civil) (Hydraulics Engineering) (2008 Pattern & 2013 Credit Pattern) (Sem. I)**

**Time: 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. I)</b>	<b>2013 (Credit Pattern) (Sem. I)</b>
<b>Friday, 12/12/2014</b>	Computational Methods in Hydraulics (501301)	Fluid Mechanics (501041)
<b>Tuesday, 16/12/2014</b>	Water Resource Planning & Management (501302)	Irrigation and Drainage (501042)
<b>Friday, 19/12/2014</b>	Fluid Mechanics (501303)	Planning and Management of Water Resources (501043)
<b>Tuesday, 23/12/2014</b>	<b><u>Elective-I (501304)</u></b> a) Remote Sensing & GIS in Water Resource Engineering b) Dam Engineering c) Systems Techniques in Water Resource Engineering	Research Methodology (501004)
<b>Friday, 26/12/2014</b>	<b><u>Elective-II (501305)</u></b> a) Closed Conduit Flow b) Hydro Informatics & Simulation c) Hydropower	Elective – I (501044)

**M.E. (Civil) (Hydraulics Engineering) (2008 Pattern & 2013 Credit Pattern) (Sem. II)**

**Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. II)</b>	<b>2013 (Credit Pattern) (Sem. II)</b>
<b>Saturday, 13/12/2014</b>	Open Channel Hydraulics (501308)	Open Channel Hydraulics (501046)
<b>Wednesday, 17/12/2014</b>	Hydrology (501309)	Sediment Transport and River Mechanics (501047)
<b>Saturday, 20/12/2014</b>	Sediment Transport & River Mechanics (501310)	Hydrology (501048)
<b>Wednesday, 24/12/2014</b>	<b><u>Elective III (501311)</u></b> a) Irrigation & Drainage b) Coastal Engineering c) Water Management & Conveyance System	Elective II (501049)
<b>Saturday, 27/12/2014</b>	<b><u>Elective IV (Open) (501312)</u></b>	-----

**M.E. (Civil) (Hydraulics Engineering) (2013 Credit Pattern) (Sem. III)**

**Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2013 Credit Pattern (Sem. III)</b>
<b>Monday, 15/12/2014</b>	Dam Engineering
<b>Thursday, 18/12/2014</b>	Optimization Techniques
<b>Monday, 22/12/2014</b>	Elective – III

**M.E. (Civil) (Structure) (2008 Pattern & 2013 Credit Pattern) (Sem. I)**

**Time: 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. I)</b>	<b>2013 (Credit Pattern) (Sem. I)</b>
<b>Friday, 12/12/2014</b>	*Structural Mathematics (501401)	Advanced Mechanics of Solids (501401)
<b>Tuesday, 16/12/2014</b>	*Advanced Solid Mechanics (501402)	Structural Dynamics (501402)
<b>Friday, 19/12/2014</b>	*Structural Dynamics (501403)	Advanced Design of Steel Structures (501403)
<b>Tuesday, 23/12/2014</b>	<b>*Elective-I (501404)</b> *a) Advanced Design of concrete Structures *b) Structural Design of Concrete Bridges *c) Design of Composite Construction *d) Design of Foundations	Research Methodology Treatment (501004)
<b>Friday, 26/12/2014</b>	<b>Elective-II (501405)</b> *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	Elective – I (501405)

**M.E. (Civil) (Structure) (2008 Pattern & 2013 Credit Pattern) (Sem. II)**

**Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. II)</b>	<b>2013 (Credit Pattern) (Sem. II)</b>
<b>Saturday, 13/12/2014</b>	*Theory of Plates and Shells (501408)	Finite Element Analysis (501407)
<b>Wednesday, 17/12/2014</b>	*Finite Element Method (501409)	Theory of Plates and Shells (501408)
<b>Saturday, 20/12/2014</b>	*Management in Structural Engineering (501410)	Advanced Design of Concrete Structures (501409)
<b>Wednesday, 24/12/2014</b>	<b>*Elective – III (501411)</b> *a) Earthquake Resistant Design of Structures *b) Structural Stability *c) Structural Reliability *d) Non-linear Analysis of Structures	Elective – II (501410)
<b>Saturday, 27/12/2014</b>	<b>*Elective IV (Open) (501412)</b> 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.)**

**M.E. (Civil) (Structure) (2013 Credit Pattern) (Sem. III)**

**Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2013 Credit Pattern (Sem. III)</b>
<b>Monday, 15/12/2014</b>	Earthquake Engineering and Disaster Management (5014013)
<b>Thursday, 18/12/2014</b>	Design of RCC & Pr.CC Bridges (5014014)
<b>Monday, 22/12/2014</b>	Elective – III (5014015)

**M.E. (Civil) (Environmental Engineering) (2008 Pattern & 2013 Credit Pattern) (Sem. I)**

**Time: 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. I)	2013 (Credit Pattern) (Sem. I)
Friday, 12/12/2014	Numerical Methods and Applied Statistics ( 501501)	Environmental Legislation & Management Systems (501061)
Tuesday, 16/12/2014	Air Pollution and Control ( 501502)	Environmental Chemistry & Micro-Biology (501062)
Friday, 19/12/2014	Physico- Chemical Process for Water and Waste Water Treatment (501503)	Physico-Chemical Process for Water and Waste Water Treatment (501063)
Tuesday, 23/12/2014	<u>Elective –I( 501504)</u> a) Air and Water Quality Modeling b) Environmental Legislation and Management System c) Environmental Impact Assessment and Management	Research Methodology (501004)
Friday, 26/12/2014	<u>Elective – II(501505)</u> a) Occupation Safety and Health b) Principles and Design of Biological Treatment System c) Environmental Risk Assessment and Management	Elective – I (501064)

**M.E. (Civil) (Environmental Engineering) (2008 Pattern & 2013 Credit Pattern) (Sem. II)**

**Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. II)	2013 (Credit Pattern) (Sem. II)
Saturday, 13/12/2014	Industrial Waste Water Management ( 501508)	Industrial Waste Water Management (501066)
Wednesday, 17/12/2014	Environmental Chemistry and Microbiology (501509)	Air Pollution and Control (501067)
Saturday, 20/12/2014	Solid Waste and Hazardous Waste Management (501510)	Solid Waste and Hazardous Waste Management (501068)
Wednesday, 24/12/2014	<u>Elective – III (501511)</u> a) Ground Water Contamination and Pollution Transport b) Agricultural Pollution Control and Environmental Biotechnology c) Environmental Sanitation	Elective – II (501069)
Saturday, 27/12/2014	<u>Elective-IV(501512)</u> Open Elective a) Ground Water Contamination and Pollution Transport b) Environmental Sanitation	-----

**M.E. (Civil) (Environmental Engineering) (2013 Credit Pattern) (Sem. III)**

**Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2013 Credit Pattern (Sem. III)
Monday, 15/12/2014	Environmental Sanitation
Thursday, 18/12/2014	E I A
Monday, 22/12/2014	Open Elective

**M.E. (Civil) (Water Resources & Environmental Engineering)  
(2012 Pattern & 2013 Credit Pattern) (Sem. I)  
Time: 2.30 p.m. to 5.30 p.m.**

Day & Date	2012 Pattern (Sem. I)	2013 (Credit Pattern) (Sem. I)
Friday, 12/12/2014	Environmental Chemistry & Microbiology (501601)	Planning and Management of Water Resources (501081)
Tuesday, 16/12/2014	Environmental Management (501602)	Environmental Chemistry and Microbiology (501082)
Friday, 19/12/2014	Advance Fluid Mechanics (501603)	Fluid Mechanics (501083)
Tuesday, 23/12/2014	<u>Elective – I (501604)</u> a) Ground Water Contamination & Transport b) Hydrology & Groundwater c) Air Pollution Engineering d) Solid & Hazardous Waste Management	Research Methodology Treatment (501004)
Friday, 26/12/2014	<u>Elective-II (501605)</u> 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	Elective – I (501084)

**M.E. (Civil) (Water Resources & Environmental Engineering)  
(2012 Pattern & 2013 Credit Pattern) (Sem. II)  
Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2012 Pattern (Sem. II)	2013 (Credit Pattern) (Sem. II)
Saturday, 13/12/2014	Optimization Technique ( 501608)	Environmental Hydraulics and Environmental Structures (501086)
Wednesday, 17/12/2014	Open Channel Hydraulics (501609)	Hydrology (501087)
Saturday, 20/12/2014	Advance Waste Water Treatment (501610)	Open Channel Hydraulics (501088)
Wednesday, 24/12/2014	<u>Elective – III (501611)</u> 1. Computational Method in Water Resources 2. Noise Pollution and Control Technique 3. Ground Water Modeling 4. Industrial Waste Management	Elective II (501089)
Saturday, 27/12/2014	<u>Elective – IV (501612)</u> 1. Dam Engineering 2. Energy and Environment 3. Closed Conduit Flow 4. Research Methodology and Intellectual Property Right	-----

**M.E. (Civil) (Water Resources & Environmental Engineering) (2013 Credit Pattern) (Sem. III)  
Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2013 Credit Pattern (Sem. III)
Monday, 15/12/2014	Advanced Water and Waste Water Treatment
Thursday, 18/12/2014	Optimization Techniques
Monday, 22/12/2014	Elective - III

**M.E. (Mechanical) (Heat Power Engineering) (2008 Pattern & 2013 Credit Pattern) (Sem. I)****Time: 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. I)</b>	<b>2013 (Credit Pattern) (Sem. I)</b>
<b>Friday, 12/12/2014</b>	Numerical Methods in Thermal & Fluid Engineering (502101)	Advanced Mathematics and Numerical Methods (507101)
<b>Tuesday, 16/12/2014</b>	Advanced Thermodynamics (502102)	Advanced Thermodynamics and Combustion Technology (502102)
<b>Friday, 19/12/2014</b>	Technology & Financial Management (502103) (Common to Design & Mechatronics)	Advanced Fluid Mechanics (502103) (Common to Energy Engineering – 2013 Credit Pattern)
<b>Tuesday, 23/12/2014</b>	<b><u>Elective-I (502104)</u></b> a) Performance Assessment of Mechanical Equipments b) Refrigeration Technology c) Energy Conservation & Management d) Convective Heat Transfer Analysis	Research Methodology (502104) (Common to All Mechanical Branches – 2013 Credit Pattern)
<b>Friday, 26/12/2014</b>	<b><u>Elective-II (502105)</u></b> a) Internal Combustion Engines b) Advanced Air Conditioning & Heating & Ventilation c) Conventional Power Plants d) Advanced Gas Dynamics	Elective – I (502105)

**M.E. (Mechanical) (Heat Power Engineering) (2008 Pattern & 2013 Credit Pattern) (Sem. II)****Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. II)</b>	<b>2013 (Credit Pattern) (Sem. II)</b>
<b>Saturday, 13/12/2014</b>	Advanced Heat Transfer (502108)	Advanced Heat Transfer (502107)
<b>Wednesday, 17/12/2014</b>	Measurement Techniques and Data Analysis (502109)	Air Conditioning Technology (502108)
<b>Saturday, 20/12/2014</b>	Advanced Fluid Mechanics (502110)	Measurements and Controls (502109)
<b>Wednesday, 24/12/2014</b>	<b><u>Elective – III (502111)</u></b> a) Internal Combustion Engines – fuels b) Cryogenic Engineering c) Non Conventional Power Plants	Elective – II (502110)
<b>Saturday, 27/12/2014</b>	<b><u>Elective – IV (502112)</u></b> a) Heat Exchanger System Design and Performance b) Computational Fluid Dynamics OPEN (SELF STUDY)** i) Computer Aided Engineering (Design)	-----

**M.E. (Mechanical) (Heat Power Engineering) (2013 Credit Pattern) (Sem. III)****Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2013 Credit Pattern (Sem. III)</b>
<b>Monday, 15/12/2014</b>	Computational Fluid Dynamics (602113)
<b>Thursday, 18/12/2014</b>	Design of Heat Transfer Equipments (602114)
<b>Monday, 22/12/2014</b>	Elective – III (602115)



**M.E. (Mechanical) (Design Engineering) (2008 Pattern & 2013 Credit Pattern) (Sem. I)****Time: 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. I)</b>	<b>2013 (Credit Pattern) (Sem. I)</b>
<b>Friday, 12/12/2014</b>	Mathematical Modeling & Analysis (502201)	Advanced Mathematics (507201)
<b>Tuesday, 16/12/2014</b>	Advanced Stress Analysis (502202)	Material Science and Mechanical Behavior of Materials (502202)
<b>Friday, 19/12/2014</b>	Technology & Financial Management (502203) (Common to Heat Power & Mechatronics)	Advanced Stress Analysis (502203)
<b>Tuesday, 23/12/2014</b>	<b><u>Elective-I (502204)</u></b> a) Instrumentation & Automatic Control b) Advanced Material Science c) Optimization Techniques	Research Methodology (502204) (Common to All Mechanical Branches – 2013 Credit Pattern)
<b>Friday, 26/12/2014</b>	<b><u>Elective-II (502205)</u></b> a) Material Handling Equipment Design b) Process Equipment Design c) Robotics	Elective – I (502205)

**M.E. (Mechanical) (Design Engineering) (2008 Pattern & 2013 Credit Pattern) (Sem. II)****Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. II)</b>	<b>2013 (Credit Pattern) (Sem. II)</b>
<b>Saturday, 13/12/2014</b>	Vibration & Noise Control (502208)	Analysis and Synthesis of Mechanisms (502207)
<b>Wednesday, 17/12/2014</b>	Advanced Machine Design (502209)	Advanced Mechanical Vibrations (502208)
<b>Saturday, 20/12/2014</b>	Analysis & Synthesis of Mechanisms (502210)	Finite Element Method (502209)
<b>Wednesday, 24/12/2014</b>	<b><u>Elective – III (502211)</u></b> a) Reliability Engineering b) Engineering Fracture Mechanics c) Computer Aided Engineering	Elective – II (502210)
<b>Saturday, 27/12/2014</b>	<b><u>Elective – IV (502212)</u></b> a) Vehicle dynamics b) Industrial Tribology c) OPEN (SELF STUDY)**	-----

**M.E. (Mechanical) (Design Engineering) (2013 Credit Pattern) (Sem. III)****Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2013 Credit Pattern (Sem. III)</b>
<b>Monday, 15/12/2014</b>	Optimization Techniques (602213)
<b>Thursday, 18/12/2014</b>	Mechanical Measurements and Controls (602214)
<b>Monday, 22/12/2014</b>	Elective – III (602215)

**M.E. (Mechanical) (Mechatronics) (2008 Pattern & 2013 Credit Pattern) (Sem. I)****Time: 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. I)	2013 (Credit Pattern) (Sem. I)
<b>Friday, 12/12/2014</b>	Applied Numerical Methods and Computational Techniques (502801)	System Modeling, Identification and Simulation (502801)
<b>Tuesday, 16/12/2014</b>	Mechanical of Electronic Measurements (502802)	Control System – I (502802)
<b>Friday, 19/12/2014</b>	Technology and Financial Management (502103) (Common to Heat Power & Design)	Sensors, Transducers and Interfacing Techniques (502803)
<b>Tuesday, 23/12/2014</b>	<u>Elective - I(502804)</u> a) Design of Machine Elements b) Digital Signal Processing c) Advanced Material Science	Research Methodology (502804) (Common to All Mechanical Branches – 2013 Credit Pattern)
<b>Friday, 26/12/2014</b>	<u>Elective – II(502805)</u> a) Control Systems b) Theory of Machines and Mechanisms c) Instrumentation & Automatic Control	Elective – I (502805)

**M.E. (Mechanical) (Mechatronics) (2008 Pattern & 2013 Credit Pattern) (Sem. II)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. II)	2013 (Credit Pattern) (Sem. II)
<b>Saturday, 13/12/2014</b>	Microcontrollers (502808)	PLC Programming (502807)
<b>Wednesday, 17/12/2014</b>	Industrial Automation (502809)	Control Systems – II (502808)
<b>Saturday, 20/12/2014</b>	Drives & Actuators (502810)	Industrial Drives and Actuators (502809)
<b>Wednesday, 24/12/2014</b>	<u>Elective – III (502811)</u> a) Computer Aided Design b) Robotics c) Automotive Electronics	Elective – II (502810)
<b>Saturday, 27/12/2014</b>	<u>Elective IV (502812)</u> a) Embedded Systems b) Fuzzy Logic and Neural Networks c) Open (Self Study)	-----

**M.E. (Mechanical) (Mechatronics) (2013 Credit Pattern) (Sem. III)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2013 (Credit Pattern) (Sem. III)
<b>Monday, 15/12/2014</b>	Microcontroller Applications in Embedded Systems (602813)
<b>Thursday, 18/12/2014</b>	Flexible Manufacturing Systems (602814)
<b>Monday, 22/12/2014</b>	Elective – III (602815)

**M.E. (Mechanical) (Automotive Engineering) (2008 Pattern & 2013 Credit Pattern) (Sem. I)****Time: 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. I)	2013 (Credit Pattern) (Sem. I)
Friday, 12/12/2014	Mathematical Modeling & Analysis (502201)	Advanced Mathematics (507201)
Tuesday, 16/12/2014	Automotive Engine Design (502301)	Automotive Engine Design (502302)
Friday, 19/12/2014	Technology and Financial Management (502103)	Automotive Safety and Regulations (502303)
Tuesday, 23/12/2014	<b>Elective – I (502302)</b> a) Advanced Heat Transfer b) Finite Element Method c) Advanced Hydraulics and Pneumatic Systems	Research Methodology (502304) (Common to All Mechanical Branches – 2013 Credit Pattern)
Friday, 26/12/2014	<b>Elective – II (502303)</b> a) Tribology and Preventive Maintenance b) Automotive Safety and Regulations c) Automobile Air Conditioning	Elective – I (502305)

**M.E. (Mechanical) (Automotive Engineering) (2008 Pattern & 2013 Credit Pattern) (Sem. II)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. II)	2013 (Credit Pattern) (Sem. II)
Saturday, 13/12/2014	Automotive Fuels and Emissions (502306)	Engine Combustion Technology (502307)
Wednesday, 17/12/2014	Autoerotic (502307)	Noise Vibration and Harshness (502308)
Saturday, 20/12/2014	Fundamentals of Vehicle Dynamics (502308)	Automotive Chassis Design (502309)
Wednesday, 24/12/2014	<b>Elective – III (502309)</b> a) Noise Vibrations and Harshness b) Automotive Materials c) Vehicle Aerodynamics	Elective – II (502310)
Saturday, 27/12/2014	<b>Elective – IV (502310)</b> a) Computational Fluid Dynamics b) Automotive Chassis Design c)** Open Elective (Self Study)	-----

**M.E. (Mechanical) (Automotive Engineering) (2013 Credit Pattern) (Sem. III)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2013 (Credit Pattern) (Sem. III)
Monday, 15/12/2014	Vehicle Dynamics (602313)
Thursday, 18/12/2014	Autotronics (602314)
Monday, 22/12/2014	Elective – III (602315)

**M.E. (Mechanical) (Energy Engineering) (2012 Pattern & 2013 Credit Pattern) (Sem. I)****Time: 2.30 p.m. to 5.30 p.m.**

Day & Date	2012 Pattern (Sem. I)	2013 (Credit Pattern) (Sem. I)
Friday, 12/12/2014	Advanced Engineering Mathematics (502501)	Advanced Mathematics and Numerical Methods (507101)
Tuesday, 16/12/2014	Advanced Thermodynamics (502502)	Advanced Thermodynamics (502502)
Friday, 19/12/2014	Energy Conversion Systems (502503)	Advanced Fluid Mechanics (502103) (Common to Heat Power Engineering – 2013 Credit Pattern)
Tuesday, 23/12/2014	<u>Elective – I (502504)</u> a) Nuclear Materials and Reactor Fundamentals b) Process Optimization c) Plant Operation, Dynamics and Control	Research Methodology (502504) (Common to All Mechanical Branches – 2013 Credit Pattern)
Friday, 26/12/2014	<u>Elective – II (502505)</u> a) Electromechanical and Reactor Systems b) Process Integration c) Non Conventional Energy Sources	Elective – I (502505)

**M.E. (Mechanical) (Energy Engineering) (2012 Pattern & 2013 Credit Pattern) (Sem. II)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2012 Pattern (Sem. II)	2013 (Credit Pattern) (Sem. II)
Saturday, 13/12/2014	Convective Heat Transfer (502508)	Advanced Heat Transfer (502107)
Wednesday, 17/12/2014	Energy Systems Modeling and Analysis (502509)	Energy Conversion Systems (502508)
Saturday, 20/12/2014	Energy Management (502510)	Energy Management (502509)
Wednesday, 24/12/2014	<u>Elective – III (502511)</u> a) Radiation Safety and Shielding b) Energy and Climate c) Energy Regulatory Frameworks	Elective – II (502510)
Saturday, 27/12/2014	<u>Elective – IV (502512)</u> a) Nuclear Measurement and Detection b) Energy Resources and Economics c) Processing Storage & Disposal of Nuclear Waste d) Open Elective	-----

**M.E. (Mechanical) (Energy Engineering) ( 2013 Credit Pattern) (Sem. III)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2013 (Credit Pattern) (Sem. III)
Monday, 15/12/2014	Nuclear Materials and Reactor Fundamentals (602513)
Thursday, 18/12/2014	Energy Systems Modeling and Analysis (602514)
Monday, 22/12/2014	Elective - III

**M.E. (Mechanical) (Computer Aided Design Manufacture & Engineering)  
(2012 Pattern & 2013 Credit Pattern) (Sem. I)  
Time: 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2012 Pattern (Sem. I)</b>	<b>2013 (Credit Pattern) (Sem. I)</b>
<b>Friday, 12/12/2014</b>	Advanced Machine Design ( 520401)	Advanced Mathematics (507201)
<b>Tuesday, 16/12/2014</b>	Mathematical Modeling (502402)	Advanced Machine Design (502402)
<b>Friday, 19/12/2014</b>	Computer Aided Design ( 520403)	Computer Aided Design (502403)
<b>Tuesday, 23/12/2014</b>	<b><u>Elective – I (502404)</u></b> a) Material for Engineering Applications b) Advanced Manufacturing Processes c) Customization of CAD/CAM Software's d) CAD/CAM Practices in Metal Forming	Research Methodology (502404) (Common to All Mechanical Branches – 2013 Credit Pattern)
<b>Friday, 26/12/2014</b>	<b><u>Elective – II (502405)</u></b> a) Finite Element Analysis b) Integrated Product Design & Development c) Computational Fluid Dynamics d) Robotics	Elective – I (502405)

**M.E. (Mechanical) (Computer Aided Design Manufacture & Engineering)  
(2012 Pattern & 2013 Credit Pattern) (Sem. II)  
Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2012 Pattern (Sem. II)</b>	<b>2013 (Credit Pattern) (Sem. II)</b>
<b>Saturday, 13/12/2014</b>	Management of Technology (502408)	Computer Integrated Manufacturing (502407)
<b>Wednesday, 17/12/2014</b>	Computer Aided Manufacturing (502409)	Industrial Product Design & Product Life Cycle Management (502408)
<b>Saturday, 20/12/2014</b>	Computer Integrated Manufacturing (502410)	Automated Manufacturing System Modeling (502409)
<b>Wednesday, 24/12/2014</b>	<b><u>Elective – III (502411)</u></b> a) Design for X b) Automated Manufacturing System Modeling c) Simulation and Modeling d) Optimization Techniques	Elective – II (502410)
<b>Saturday, 27/12/2014</b>	<b><u>Elective – IV (502412)</u></b> a) Product Lifecycle Management b) Rapid Prototyping c) Data Base Management System d) Robust Design of Product / Process e) Open Elective	-----

**M.E. (Mechanical) (Computer Aided Design Manufacture & Engineering)  
(2013 Credit Pattern) (Sem. III)  
Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2013 (Credit Pattern) (Sem. III)</b>
<b>Monday, 15/12/2014</b>	Simulation Modeling (602413)
<b>Thursday, 18/12/2014</b>	Optimization Techniques (602414)
<b>Monday, 22/12/2014</b>	Elective – III (602415)

**M.E. (Electrical) (Control System) (2008 Pattern & 2013 Credit Pattern) (Sem. I)**

**Time: 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. I)</b>	<b>2013 (Credit Pattern) (Sem. I)</b>
<b>Friday, 12/12/2014</b>	Advanced Mathematical Technique for Control System (503101)	Computational Technique for Control System (503101)
<b>Tuesday, 16/12/2014</b>	Process Control Management (503102)	Process Control Management (503102)
<b>Friday, 19/12/2014</b>	Nonlinear Control System (503103)	Non Linear Control System (503103)
<b>Tuesday, 23/12/2014</b>	<b><u>Elective-I (503104)</u></b> a) Automation & Robotics b) Modeling & Dynamic System	Research Methodology (503104)
<b>Friday, 26/12/2014</b>	<b><u>Elective-II (503105)</u></b> a) Advanced Topics in Control Systems b) Computer Aided Control Systems Design c) SCADA System & Applications	Elective – I (503105)

**M.E. (Electrical) (Control System) (2008 Pattern & 2013 Credit Pattern) (Sem. II)**

**Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. II)</b>	<b>2013 (Credit Pattern) (Sem. II)</b>
<b>Saturday, 13/12/2014</b>	Multivariable & Optimal Control System (503108)	Multivariable and Optimal Control System (503107)
<b>Wednesday, 17/12/2014</b>	System Identification & Adaptive Control (503109)	System Identification and Adaptive Control (503108)
<b>Saturday, 20/12/2014</b>	Advanced Digital Control Technique (503110)	Advanced Digital Control Techniques (503109)
<b>Wednesday, 24/12/2014</b>	<b><u>Elective – III (503111)</u></b> a) Robust Control Systems b) Stochastics Dynamical Systems c) Large Scale System	Elective – II (503110)
<b>Saturday, 27/12/2014</b>	<b><u>Elective – IV (503112)</u></b> a) Intelligent Control b) Advanced Drives & Control c) Open	-----

**M.E. (Electrical) (Control System) (2013 Credit Pattern) (Sem. III)**

**Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2013 (Credit Pattern) (Sem. III)</b>
<b>Monday, 15/12/2014</b>	Advanced Drives and Control (603101)
<b>Thursday, 18/12/2014</b>	Computer Aided Control System Design ((603102)
<b>Monday, 22/12/2014</b>	Elective – III (603103)

**M.E. (Electrical) (Power System) (2008 Pattern & 2013 Credit Pattern) (Sem. I)****Time: 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. I)</b>	<b>2013 (Credit Pattern) (Sem. I)</b>
<b>Friday, 12/12/2014</b>	Computer Applications in power Systems (503201)	Computer Applications in Power Systems (503201)
<b>Tuesday, 16/12/2014</b>	Power Sector Economics, Management & Restructuring (503202)	Power Sector Economics and Management (503202)
<b>Friday, 19/12/2014</b>	Power System Modeling (503203)	Power System Modeling (503203)
<b>Tuesday, 23/12/2014</b>	<b><u>Elective-I (503204)</u></b> a) Digital Signal Processing & its Applications b) Advanced Power Electronics	Research Methodology (503204)
<b>Friday, 26/12/2014</b>	<b><u>Elective-II (503205)</u></b> a) Artificial Intelligence & its Application in Power System b) Renewable Energy Sources	Elective – I (503205)

**M.E. (Electrical) (Power System) (2008 Pattern & 2013 Credit Pattern) (Sem. II)****Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. II)</b>	<b>2013 (Credit Pattern) (Sem. II)</b>
<b>Saturday, 13/12/2014</b>	Power System Dynamics (503208)	Power System Dynamics (503207)
<b>Wednesday, 17/12/2014</b>	Power System Planning & Reliability (503209)	Power System Planning & Reliability (503208)
<b>Saturday, 20/12/2014</b>	High Voltage Power Transmission (503210)	HVDC and Flexible AC Transmission (503209)
<b>Wednesday, 24/12/2014</b>	<b><u>Elective – III (503211)</u></b> a) Digital Power System Protection b) Power Electronics Applications in Power Systems	Elective – II (503210)
<b>Saturday, 27/12/2014</b>	<b><u>Elective – IV (503212)</u></b> a) Power Quality Assessment and Mitigation b) Partial Discharges in Electrical Power Apparatus c) Open	-----

**M.E. (Electrical) (Power System) (2013 Credit Pattern) (Sem. III)****Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2013 (Credit Pattern) (Sem. III)</b>
<b>Monday, 15/12/2014</b>	Advanced Power System Protection (603201)
<b>Thursday, 18/12/2014</b>	Power Quality Assessment and Mitigation (603202)
<b>Monday, 22/12/2014</b>	Elective – III (603203)

**M.E. (Electrical) (Power Electronics & Drives)(2008 Pattern & 2013 Credit Pattern) (Sem. I)****Time: 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. I)	2013 (Credit Pattern) (Sem. I)
<b>Friday, 12/12/2014</b>	Modeling and Analysis of Electrical Machines ( 503301)	Modeling and Analysis of Electrical Machines (503301)
<b>Tuesday, 16/12/2014</b>	Energy Management and Power Quality in Electrical Drives ( 503302)	Energy Management and Power Quality in Electrical Drives (503302)
<b>Friday, 19/12/2014</b>	Power Electronic Devices and Circuits ( 503303)	Power Converters (503303)
<b>Tuesday, 23/12/2014</b>	<u>Elective – I ( 503304)</u> a) DSP and its Applications in Electrical Drives b) Data Acquisition and Signal Conditioning c) Digital Simulation of Power Electronic Systems	Research Methodology (503304)
<b>Friday, 26/12/2014</b>	<u>Elective – II (503305)</u> a) FACTS and HVDC b) Harmonics and their Mitigation	Elective – I (503305)

**M.E. (Electrical) (Power Electronics & Drives)(2008 Pattern & 2013 Credit Pattern)(Sem.II)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. II)	2013 (Credit Pattern) (Sem. II)
<b>Saturday, 13/12/2014</b>	Controlled Electrical Drives ( 503308)	AC and DC Drives (503307)
<b>Wednesday, 17/12/2014</b>	Power Electronic Applications ( 503309)	Design of Power Electronic Systems (503308)
<b>Saturday, 20/12/2014</b>	Design of Power Electronic Systems (503310)	Advanced Control Systems (503309)
<b>Wednesday, 24/12/2014</b>	<u>Elective – III (503311)</u> a) Automation in Industrial Drives b) Computer Aided Design of Electrical Machines c) Microcontroller Applications	Elective – II (503310)
<b>Saturday, 27/12/2014</b>	<u>Elective – IV (503312)</u> a) Artificial Intelligence in Electrical Drives b) Special Topics in Power Electronics and Drives c) Open Elective	-----

**M.E. (Electrical) (Power Electronics & Drives) (2013 Credit Pattern) (Sem.III)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2013 (Credit Pattern) (Sem. III)
<b>Monday, 15/12/2014</b>	Power Electronics Applications (603301)
<b>Thursday, 18/12/2014</b>	Power Electronics in Smart Grid (603302)
<b>Monday, 22/12/2014</b>	Elective – III (603303)



**M.E. (E & TC) (Microwave) (2008 Pattern & 2013 Credit Pattern) (Sem. I)****Time: 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. I)	2013 (Credit Pattern) (Sem. I)
<b>Friday, 12/12/2014</b>	Electromagnetics & Antenna Theory (504222)	Electromagnetics and Antenna Theory (504301)
<b>Tuesday, 16/12/2014</b>	Principles & Practices for IT Management (504182) (Common to VSLI, Electronics)	RF and Microwave Circuits (504302)
<b>Friday, 19/12/2014</b>	RF Wave & Microwave Circuit Design (504223)	Microwave Measurements (504303)
<b>Tuesday, 23/12/2014</b>	<b><u>Elective-I (504224)</u></b> a) Applications of Microwaves to Radar & Satellite b) Digital Image processing & Analysis c) Communication Networks	Research Methodology (504104) (Common to All E & TC Branches and Electronics Branch – 2013 Credit Pattern)
<b>Friday, 26/12/2014</b>	<b><u>Elective-II (504225)</u></b> a) Smart Antennas b) Speech Processing & Application c) Semiconductor Device Modeling & Technology	Elective – I (504305)

**M.E. (E & TC) (Microwave) (2008 Pattern & 2013 Credit Pattern) (Sem. II)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. II)	2013 (Credit Pattern) (Sem. II)
<b>Saturday, 13/12/2014</b>	Microwave Integrated Circuits (504228)	Computational Electromagnetic (504307)
<b>Wednesday, 17/12/2014</b>	Signal Processing for Wireless Communication (504229)	RF and MMIC Technology (504308)
<b>Saturday, 20/12/2014</b>	Mobile Communication – GSM and CDMA (504230)	Wireless Communication System (504309)
<b>Wednesday, 24/12/2014</b>	<b><u>Elective – III (504231)</u></b> a)Fiber Optic Communication b)System Design c)EMI and EMC Techniques	Elective – II (504310)
<b>Saturday, 27/12/2014</b>	<b><u>Elective – IV (Open) (504232)</u></b> Any one subject of Elective IV from the following Branches a)Electronics b)Computer c)Information Technology <u>Open Elective</u> i))Software Project Management ii) Digital Signal Compression	-----

**M.E. (E & TC) (Microwave) (2013 Credit Pattern) (Sem. III)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2013 (Credit Pattern) (Sem. III)
<b>Monday, 15/12/2014</b>	EMI and EMC Techniques (604301)
<b>Thursday, 18/12/2014</b>	Radar and Satellite Communications (604302)
<b>Monday, 22/12/2014</b>	Elective – III (604103)

**M.E. (E & TC) (VLSI & Embedded Systems) (2008 Pattern & 2013 Credit Pattern) (Sem. I)****Time: 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. I)</b>	<b>2013 (Credit Pattern) (Sem. I)</b>
<b>Friday, 12/12/2014</b>	Analog & Digital CMOS IC Design (504181)	Digital CMOS Design (504201)
<b>Tuesday, 16/12/2014</b>	Principles & Practices for IT Management (504182)	Embedded System Design (504103)
<b>Friday, 19/12/2014</b>	Embedded System Design (504183)	Reconfigurable Computing (504203)
<b>Tuesday, 23/12/2014</b>	<b><u>Elective-I (504184)</u></b> a) ASIC Design & Modeling b) Nanotechnology c) Machine Intelligence	Research Methodology (504104) (Common to All E & TC Branches and Electronics Branch – 2013 Credit Pattern)
<b>Friday, 26/12/2014</b>	<b><u>Elective-II (504185)</u></b> a) Reconfigurable Computing b) Memory Technologies c) VLSI EDA Tools	Elective – I (504205)

**M.E. (E & TC) (VLSI & Embedded Systems) (2008 Pattern & 2013 Credit Pattern) (Sem. II)****Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. II)</b>	<b>2013 (Credit Pattern) (Sem. II)</b>
<b>Saturday, 13/12/2014</b>	Real Time Operating Systems (504188)	Analog CMOS Design (504207)
<b>Wednesday, 17/12/2014</b>	Embedded Signal Processing (504189)	System on Chip (504208)
<b>Saturday, 20/12/2014</b>	RF IC Design (504190)	Embedded Signal Processors (504209)
<b>Wednesday, 24/12/2014</b>	<b><u>Elective – III (504191)</u></b> a) Fault Tolerant System Design b) Biomedical Signals and Systems c) Advanced Digital System Design	Elective – II (504210)
<b>Saturday, 27/12/2014</b>	<b><u>Elective IV – (Open) ( 504192)</u></b> a) Embedded Automotive Systems b) System on Chip (SOC) c) Software Defined Radio d) High Performance Computer Network (Com. to I.T.)	-----

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

<b>Day &amp; Date</b>	<b>2013 (Credit Pattern) (Sem. III)</b>
<b>Monday, 15/12/2014</b>	Fault Tolerant Systems (604201)
<b>Thursday, 18/12/2014</b>	ASIC Design (604202)
<b>Monday, 22/12/2014</b>	Elective – III (604103)

**M.E. (E & TC) (Signal Processing) (2008 Pattern & 2013 Credit Pattern) (Sem. I)**

**Time: 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. I)</b>	<b>2013 (Credit Pattern) (Sem. I)</b>
<b>Friday, 12/12/2014</b>	Liner Algebra & Random Processes ( 504501 )	Image Processing and Analysis (504401)
<b>Tuesday, 16/12/2014</b>	Principles & Practices for I.T. Management ( 504182) ( Common to E.& TC, V.L.S.I. & Electronic )	Signal Processing Techniques (504402)
<b>Friday, 19/12/2014</b>	Signal Processing Techniques ( 504502 )	Mixed Signal Processing Systems and Design (504403)
<b>Tuesday, 23/12/2014</b>	<u><b>Elective-I (504503)</b></u> a) Digital Image Processing b) Automotive Electronics c) Artificial Intelligence	Research Methodology (504104) (Common to All E & TC Branches and Electronics Branch – 2013 Credit Pattern)
<b>Friday, 26/12/2014</b>	<u><b>Elective-II (504504)</b></u> a) Bio-Medical Signal Processing b) Wireless & Mobile Communication c) Smart Antennas	Elective – I (504405)

**M.E. (E & TC) (Signal Processing) (2008 Pattern & 2013 Credit Pattern) (Sem. II)**

**Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. II)</b>	<b>2013 (Credit Pattern) (Sem. II)</b>
<b>Saturday, 13/12/2014</b>	Statistical Signal Processing (504507)	Speech Signal Processing (504407)
<b>Wednesday, 17/12/2014</b>	Advanced Digital Signal Processing ( 504508)	Architecture for Signal Processing Algorithms (504408)
<b>Saturday, 20/12/2014</b>	VLSI in Signal Processing ( 504509 )	Biomedical Signal Processing (504409)
<b>Wednesday, 24/12/2014</b>	<u><b>Elective – III: (504510)</b></u> a) Acoustic & Speech Processing b) Digital Signal Compression c) Multimedia Techniques	Elective – II (504410)
<b>Saturday, 27/12/2014</b>	<u><b>Elective – IV (504511)</b></u> a) Radar & Satellite Signal Processing b) Operating Systems & Open Source Systems c) Computer Vision	-----

**M.E. (E & TC) (Signal Processing) (2013 Credit Pattern) (Sem. III)**

**Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2013 (Credit Pattern) (Sem. III)</b>
<b>Monday, 15/12/2014</b>	Statistical Signal Processing (604401)
<b>Thursday, 18/12/2014</b>	Still Image and Moving Picture Compression Standards (604402)
<b>Monday, 22/12/2014</b>	Elective – III (604103)

**M.E. (E & TC) (Communication Networks) (2008 Pattern & 2013 Credit Pattern) (Sem. I)****Time: 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. I)	2013 (Credit Pattern) (Sem. I)
<b>Friday, 12/12/2014</b>	Coding & Modulation Techniques (504601)	Modeling and Simulation of Communication Networks (504501)
<b>Tuesday, 16/12/2014</b>	Principles & Practices of IT Management (504182)	Spread spectrum and CDMA Systems (504502)
<b>Friday, 19/12/2014</b>	Modeling & Simulation of Communication Network (504602)	Detection and Estimation Theory (504503)
<b>Tuesday, 23/12/2014</b>	<u>Elective – I (504603)</u> a) Microwave and Antenna Theory b) Signal Detection and Estimation c) Ad-hoc Networks	Research Methodology (504104) (Common to All E & TC Branches and Electronics Branch – 2013 Credit Pattern)
<b>Friday, 26/12/2014</b>	<u>Elective – II (504604)</u> a) RF MRMs b) Network Architecture & Design c) Computational Electromagnetics	Elective – I (504505)

**M.E. (E & TC) (Communication Networks) (2008 Pattern & 2013 Credit Pattern) (Sem. II)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. II)	2013 (Credit Pattern) (Sem. II)
<b>Saturday, 13/12/2014</b>	Wired and Wireless Networks ( 504607)	Traffic Analysis and QOS (504507)
<b>Wednesday, 17/12/2014</b>	Network Traffic Analysis and Qos ( 504608)	Broadband Wireless Technologies (504508)
<b>Saturday, 20/12/2014</b>	Wireless System Design ( 504609)	Optical Networks (504509)
<b>Wednesday, 24/12/2014</b>	<u>Elective – III ((504610)</u> a) Wireless Sensor Networks b) Mobile Computing c) Network Security	Elective – II (504510)
<b>Saturday, 27/12/2014</b>	<u>Elective – IV (504611)</u> a) Software Radio b) Neural Networks in Communication c) Hardware Platforms for Networking Applications	-----

**M.E. (E & TC) (Communication Networks) (2013 Credit Pattern) (Sem. III)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2013 (Credit Pattern) (Sem. III)
<b>Monday, 15/12/2014</b>	Mobile Computing (604501)
<b>Thursday, 18/12/2014</b>	Digital Communication Receivers (604502)
<b>Monday, 22/12/2014</b>	Elective – III (604103)

**M.E. (Electronics) (Digital System) (2008 Pattern & 2013 Credit Pattern) (Sem. I)****Time: 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. I)	2013 (Credit Pattern) (Sem. I)
<b>Friday, 12/12/2014</b>	Microelectronics (504195)	Microelectronics (504101)
<b>Tuesday, 16/12/2014</b>	Principles & Practices for IT Management (504182)	Digital Signal Processing Architectures (504102)
<b>Friday, 19/12/2014</b>	Signal Processing Architectures (504196)	Embedded System Design (504103)
<b>Tuesday, 23/12/2014</b>	<b><u>Elective-I (504197)</u></b> a) Fault Tolerant System Design b) Advanced Digital System Design c) Wireless & Mobile Technologies	Research Methodology (504104) (Common to All E & TC Branches and Electronics Branch – 2013 Credit Pattern)
<b>Friday, 26/12/2014</b>	<b><u>Elective-II (504198)</u></b> a) Machine Intelligence b) Advanced Computing Architectures c) Memory Technologies	Elective – I (504105)

**M.E. (Electronics) (Digital System) (2008 Pattern & 2013 Credit Pattern) (Sem. II)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. II)	2013 (Credit Pattern) (Sem. II)
<b>Saturday, 13/12/2014</b>	Embedded Systems (504201)	Design for Testability (504107)
<b>Wednesday, 17/12/2014</b>	Communication Network and Security (504202)	PLDs and ASIC Design (504108)
<b>Saturday, 20/12/2014</b>	Image Processing and Pattern Recognition (504203)	Random Signals and Processes (504109)
<b>Wednesday, 24/12/2014</b>	<b><u>Elective – III (504204)</u></b> a) Digital Systems using PLDs b) Biomedical Signals and Systems c) Embedded Video processing	Elective – II (504110)
<b>Saturday, 27/12/2014</b>	<b><u>Elective – IV (OPEN) (504205)</u></b> a) Reconfigurable Computing b) Embedded Automotive Systems c) Digital Signal Compression	-----

**M.E. (Electronics) (Digital System) (2013 Credit Pattern) (Sem. III)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2013 (Credit Pattern) (Sem. III)
<b>Monday, 15/12/2014</b>	Image Processing and Computer Vision (604101)
<b>Thursday, 18/12/2014</b>	Wireless and Mobile Technologies (604102)
<b>Monday, 22/12/2014</b>	Elective – III (604103)

**M.E. (Production) (Production & Production CAD/CAM) (2008 Pattern) (Sem. I)****Time: 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>Production - 2008 Pattern (Sem. I)</b>	<b>Production CAD/CAM – 2008 Pattern (Sem. I)</b>
<b>Friday, 12/12/2014</b>	Mathematics and Statistics (511101)	Computer Aided Design (511201)
<b>Tuesday, 16/12/2014</b>	CAD/CAM/CIM (511102)	Computer Aided Manufacturing (511202)
<b>Friday, 19/12/2014</b>	Advanced Manufacturing Processes (511103)	Optimization Techniques (511203)
<b>Tuesday, 23/12/2014</b>	<b><u>Elective-I (511104)</u></b> a) Advanced Mechatronics b) Reliability & Failure Analysis c) Supply Chain Management d) Advanced Machine Tool Design	<b><u>Elective I ( 511204)</u></b> a)Advanced Stress Analysis b)Tribology & Surface Engineering c)Industrial Robotics & Artificial Intelligence d)Concurrent Product Design
<b>Friday, 26/12/2014</b>	<b><u>Elective-II (511105)</u></b> a) Advance Robotics b) Sheet Metal Processing c) Tool and Die Design d) Engineering Economics & Accounting	<b><u>Elective – II (511205)</u></b> a) Mechatronics b) Rapid Prototyping c) Energy Management d) CAD/CAM/CAE Software Development

**M.E. (Production) (Production & Production CAD/CAM) (2008 Pattern) (Sem. II)****Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>Production - 2008 Pattern (Sem. II)</b>	<b>Production CAD/CAM – 2008 Pattern (Sem. II)</b>
<b>Saturday, 13/12/2014</b>	Material Technology (511108)	Computer Integrated Manufacturing (511208)
<b>Wednesday, 17/12/2014</b>	Manufacturing Management (511109)	Finite Element Analysis (511209)
<b>Saturday, 20/12/2014</b>	Industrial Automation (511110)	Advanced Mathematics (511210)
<b>Wednesday, 24/12/2014</b>	<b><u>Elective – III (511111)</u></b> a) Plastics Processing b) Product Life Cycle Management c) Welding & Joining d) Surface Treatment processes	<b><u>Elective –III: ( 511211)</u></b> a) Product Life Cycle Management b) Advanced Materials and Processing c) Manufacturing System Design d) Quality & Reliability Engineering
<b>Saturday, 27/12/2014</b>	<b><u>Elective – IV (Open) (511112)</u></b> a) Optimization Techniques b) Research Methodologies c) Intellectual Property Rights & Product Design d) Energy management	<b><u>Elective – IV :(511212)</u></b> a) Computer Aided Process Planning b) Technology Management c) Design of Experiments & Research Methodology d) Computational Fluid Dynamics

**M.E. (Production) (Production CAD/CAM & Production Manufacturing & Automation)**

**(2013 Credit Pattern) (Sem. I)**

**Time: 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>Production CAD/CAM 2013 Credit Pattern (Sem. I)</b>	<b>Production Manufacturing &amp; Automation 2013 (Credit Pattern) (Sem. I)</b>
<b>Friday, 12/12/2014</b>	Computer Aided Design (511301)	Mathematics & Statistics (511101)
<b>Tuesday, 16/12/2014</b>	Computer Aided Manufacturing (511302)	Industrial Automation (511102)
<b>Friday, 19/12/2014</b>	Advanced Mathematics and Statistics (511303)	Advanced Manufacturing Processes (511103)
<b>Tuesday, 23/12/2014</b>	Design of Experiments & Research Methodology (511304)	Research Methodology (511104)
<b>Friday, 26/12/2014</b>	Elective – I (511305)	Elective – I (511105)

**M.E. (Production) (Production CAD/CAM & Production Manufacturing & Automation)**

**( 2013 Credit Pattern) (Sem. II)**

**Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>Production CAD/CAM 2013 Credit Pattern (Sem. II)</b>	<b>Production Manufacturing &amp; Automation 2013 (Credit Pattern) (Sem. II)</b>
<b>Saturday, 13/12/2014</b>	Computer Integrated Manufacturing (511307)	Computer Integrated Manufacturing (511107)
<b>Wednesday, 17/12/2014</b>	Finite Element Analysis (511308)	Tool and Die Design (511108)
<b>Saturday, 20/12/2014</b>	Optimization Techniques (511309)	Advanced Joining Processes (511109)
<b>Wednesday, 24/12/2014</b>	Elective – II (511310)	Elective – II (511110)

**M.E. (Production) (Production CAD/CAM & Production Manufacturing & Automation)**

**( 2013 Credit Pattern) (Sem. III)**

**Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>Production CAD/CAM 2013 Credit Pattern (Sem. III)</b>	<b>Production Manufacturing &amp; Automation 2013 (Credit Pattern) (Sem. III)</b>
<b>Monday, 15/12/2014</b>	Advanced Stress Analysis (511313)	Advanced Robotics (611101)
<b>Thursday, 18/12/2014</b>	Computer Aided Production Planning (511314)	Surface Engineering (611102)
<b>Monday, 22/12/2014</b>	Elective – III (511315)	Elective – III (611103)

**M.E. (Computer) (Computer Engineering) (2008 Pattern & 2013 Credit Pattern) (Sem. I)**

**Time: 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. I)	2013 (Credit Pattern) (Sem. I)
<b>Friday, 12/12/2014</b>	Applied Algorithms (510101) (Common to Network Engineering)	Applied Algorithms (510101)
<b>Tuesday, 16/12/2014</b>	Emerging Trends in Computer Architecture (510102) (Common to Network Engineering)	High Performance Databases (510102)
<b>Friday, 19/12/2014</b>	Principles & Practices for IT Management (510103) (Common to Network Engineering)	Advanced Computer Architecture (510103)
<b>Tuesday, 23/12/2014</b>	<b>Elective-I (510104)</b> a) Advance Software Engineering b) Intelligent Systems c) Internet Routing Design d) Mobile computing	Research Methodology (510104)
<b>Friday, 26/12/2014</b>	<b>Elective-II (510105)</b> a) Information & Network Security b) Advanced compilers c) Web Services and SOA d) Embedded System Design	Elective – I (510105)

**M.E. (Computer) (Computer Engineering) (2008 Pattern & 2013 Credit Pattern) (Sem. II)**

**Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. II)	2013 (Credit Pattern) (Sem. II)
<b>Saturday, 13/12/2014</b>	Distributed System (510108)	Operating System Design (510107)
<b>Wednesday, 17/12/2014</b>	High Performance Database System (510109) (Common to Network Engineering)	Software Design and Architecture (510108)
<b>Saturday, 20/12/2014</b>	Network Design, Modeling and Analysis (510110)	Advanced Computer Networks (510109)
<b>Wednesday, 24/12/2014</b>	<b>Elective – III (510111)</b> a) Software Design and Architecture b) Pattern Recognition and Machine Vision c) Network Programming d) Advanced Internet Programming	Elective – II (510110)
<b>Saturday, 27/12/2014</b>	<b>Elective – IV (510112)</b> a) Software Project Management b) Infrastructure Management c) Data Warehousing and Data Mining d) Open Elective (Self Study)	-----

**M.E. (Computer) (Computer Engineering) (2013 Credit Pattern) (Sem. III)**

**Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2013 (Credit Pattern) (Sem. III)
<b>Monday, 15/12/2014</b>	Advanced Storage Systems and Infrastructure Management (610101)
<b>Thursday, 18/12/2014</b>	Advanced Unix Programming (610102)
<b>Monday, 22/12/2014</b>	Elective – III (610103)



**M.E. (Computer) (Computer Networks) (2008 Pattern & 2013 Credit Pattern) (Sem. I)****Time: 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. I)	2013 (Credit Pattern) (Sem. I)
<b>Friday, 12/12/2014</b>	Applied Algorithms (510301) (Common to Computer Engineering)	Advanced Network Algorithms (510201)
<b>Tuesday, 16/12/2014</b>	Emerging Trends in Computer Architecture (510302) (Common to Computer Engineering)	Wireless Communication (510202)
<b>Friday, 19/12/2014</b>	Principles & Practices for IT Management (510303) (Common to Computer Engineering)	Advanced Databases (510203)
<b>Tuesday, 23/12/2014</b>	<u>Elective – I (510304)</u> a)Internet Routing Design b)Advanced TCP / IP	Research Methodology (510204)
<b>Friday, 26/12/2014</b>	<u>Elective - II(510305)</u> a)Wireless Technology b)Information Security Audit & Management	Elective – I (510205)

**M.E. (Computer) (Computer Networks) (2008 Pattern & 2013 Credit Pattern) (Sem. II)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. II)	2013 (Credit Pattern) (Sem. II)
<b>Saturday, 13/12/2014</b>	Operating System Design (510308)	Network Design, Modeling and Analysis (510207)
<b>Wednesday, 17/12/2014</b>	High Performance Database Systems (510309) (Common to Computer Engineering)	Distributed Systems (510208)
<b>Saturday, 20/12/2014</b>	Advanced Software Engineering (510310)	High Performance Networks (510209)
<b>Wednesday, 24/12/2014</b>	<u>Elective – III (510311)</u> a)Network Programming b)Network Design, Modeling and Analysis	Elective – II (510210)
<b>Saturday, 27/12/2014</b>	<u>Elective – IV (510312)</u> a) Infrastructure Management b) Convergence Technology c) Open Elective ( Self Study)	-----

**M.E. (Computer) (Computer Networks) (2013 Credit Pattern) (Sem. III)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2013 (Credit Pattern) (Sem. III)
<b>Monday, 15/12/2014</b>	Advanced TCP / IP (610201)
<b>Thursday, 18/12/2014</b>	System Operations and Maintenance (610202)
<b>Monday, 22/12/2014</b>	Elective – III (610203)

**M.E. (Chemical) (2008 Pattern & 2013 Credit Pattern) (Sem. I)****Time: 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. I)	2013 (Credit Pattern) (Sem. I)
Friday, 12/12/2014	Applied Statistics for Chemical Engineers (509101)	Mathematical and Statistical Methods (509101)
Tuesday, 16/12/2014	Management of R & D in Chemical Industries (509102)	Process Optimization (509102)
Friday, 19/12/2014	Advanced Separation Processes (509103)	Advanced Separation Processes (509103)
Tuesday, 23/12/2014	<b>Elective-I (509104)</b> a) Computational Fluid Dynamics b) Process Design & Synthesis c) Advanced Thermodynamics d) Computer Aided Design	Research Methodology (509104)
Friday, 26/12/2014	<b>Elective-II (509105)</b> a) Industrial Pollution Control b) Process Optimization c) Drugs & Pharmaceutical Engineering d) Fluidization Engineering	Elective – I (509105)

**M.E. (Chemical) (2008 Pattern & 2013 Credit Pattern) (Sem. II)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. II)	2013 (Credit Pattern) (Sem. II)
Saturday, 13/12/2014	Process Modeling and Simulation (509108)	Advanced Transport Phenomena (509107)
Wednesday, 17/12/2014	Advanced Transport Phenomena (509109)	Advanced Process Control (509108)
Saturday, 20/12/2014	Advanced Process Control (509110)	Advanced Reaction Engineering (509109)
Wednesday, 24/12/2014	<b>Elective – III (509111)</b> a) Catalysis and Surface Phenomenon b) Advanced Reaction Engineering c) Mathematical Methods in Chemical Engineering d) Bioprocess Engineering	Elective – II (509110)
Saturday, 27/12/2014	<b>Elective – IV OPEN (509112)</b> a) Catalysis and Surface Phenomenon b) Process Optimization c) Fuel Cells Technology	-----

**M.E. (Chemical) (2013 Credit Pattern) (Sem. III)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2013 (Credit Pattern) (Sem. III)
Monday, 15/12/2014	Process Modeling and Simulation (509113)
Thursday, 18/12/2014	Advanced Thermodynamics (509114)
Monday, 22/12/2014	Elective – III (509115)

**M.E. (Chemical) (Environmental Engineering)(2008 Pattern & 2013 Credit Pattern) (Sem. I)****Time: 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. I)	2013 (Credit Pattern) (Sem. I)
<b>Friday, 12/12/2014</b>	Applied Statistics for Environmental Engineers (509131)	Applied Statistics for Environmental Engineers (509131)
<b>Tuesday, 16/12/2014</b>	Environmental Geosciences (509132)	Environmental Management (509132)
<b>Friday, 19/12/2014</b>	Environmental Chemistry (509133)	Environmental Chemistry (509133)
<b>Tuesday, 23/12/2014</b>	<b><u>Elective-I (509134)</u></b> a) Modeling of Environmental Systems b) Groundwater Contamination and Pollution Transport. c) Environmental Policies and Legislations d) Air and Noise Pollution Control	Research Methodology (509134)
<b>Friday, 26/12/2014</b>	<b><u>Elective-II (509135)</u></b> a) Membrane Technology in Environmental Engineering b) Environmental Auditing and EMS c) Agricultural Pollution and control d) Environmental Impact Assessment and Economics	Elective – I (509135)

**M.E. (Chemical) (Environmental Engineering)(2008 Pattern & 2013 Credit Pattern) (Sem. II)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. II)	2013 (Credit Pattern) (Sem. II)
<b>Saturday, 13/12/2014</b>	Wastewater Treatment & Design (509138)	Wastewater Treatment and Design (509137)
<b>Wednesday, 17/12/2014</b>	Solid Waste Management (509139)	Solid Waste Management (509138)
<b>Saturday, 20/12/2014</b>	Industrial Waste Treatment (509140)	Industrial Waste Treatment (509139)
<b>Wednesday, 24/12/2014</b>	<b><u>Elective III (509141)</u></b> a) Ecology and Risk Assessment b) Water Quality Modeling c) Modern Trends in Environmental Engineering d) Environmental Biotechnology	Elective – II (509140)
<b>Saturday, 27/12/2014</b>	<b><u>Elective IV (OPEN) (509142)</u></b> Ground Water Contamination & Pollution Control	-----

**M.E. (Chemical) (Environmental Engineering) (2013 Credit Pattern) (Sem. III)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2013 (Credit Pattern) (Sem. III)
<b>Monday, 15/12/2014</b>	Remote Sensing & GIS Applications in Environmental Engineering (509143)
<b>Thursday, 18/12/2014</b>	Industrial Pollution Prevention & Cleaner Production (509144)
<b>Monday, 22/12/2014</b>	Elective – III (509145)

**M.E. (Petroleum Engineering) (2008 Pattern & 2013 Credit Pattern) (Sem. I)**

**Time: 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. I)</b>	<b>2013 (Credit Pattern) (Sem. I)</b>
<b>Friday, 12/12/2014</b>	Numerical Methods & Simulation in Petroleum Engineering (512101)	Numerical Simulation in Petroleum Engineering (512101)
<b>Tuesday, 16/12/2014</b>	Petroleum Reservoir Management (512102)	Geology in Reservoir Description (512102)
<b>Friday, 19/12/2014</b>	Horizontal Multilateral & Intelligent Wells (512103)	Advanced Drilling Engineering (512103)
<b>Tuesday, 23/12/2014</b>	<b><u>Elective-I (512104)</u></b> a) Advanced Geological Methods in Petroleum Exploration & Development b) Reservoir Petro-physics c) Oil & Gas Field Development d) Petroleum Business Strategies & Risk Analysis	Research Methodology (512104)
<b>Friday, 26/12/2014</b>	<b><u>Elective-II (512105)</u></b> a) Modern Completion Technology b) Well Design & Engineering c) Well Testing & Analysis d) Well control	Elective – I (512105)

**M.E. (Petroleum Engineering) (2008 Pattern & 2013 Credit Pattern) (Sem. II)**

**Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. II)</b>	<b>2013 (Credit Pattern) (Sem. II)</b>
<b>Saturday, 13/12/2014</b>	GIS and Computer Applications in Petroleum Industry (512108)	Advanced Reservoir Engineering (512107)
<b>Wednesday, 17/12/2014</b>	Environmental Management Technology and Safety Measures (512109)	Environmental Technology in Petroleum Engineering (512108)
<b>Saturday, 20/12/2014</b>	Advanced Natural Gas Engineering (512110)	Advanced Production Engineering (512109)
<b>Wednesday, 24/12/2014</b>	<b><u>Elective – III (512111)</u></b> a) Artificial Lift Techniques b) Advanced Stimulation Techniques c) Piping Design and Engineering	Elective – II (512110)
<b>Saturday, 27/12/2014</b>	<b><u>Elective – IV OPEN (512112)</u></b> 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. III)**

**Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2013 (Credit Pattern) (Sem. III)</b>
<b>Monday, 15/12/2014</b>	Advanced Well Testing (512113)
<b>Thursday, 18/12/2014</b>	Advanced Well Control (512114)
<b>Monday, 22/12/2014</b>	Elective – III (512115)

**M.E. (Petrochemical Engineering) (2013 Credit Pattern) (Sem. I)**

**Time : 2.30 p.m. to 5.30 p.m.**

<b>Day and Date</b>	<b>M.E. Petrochemical Engineering (2013 Credit Pattern) (Sem. I)</b>
<b>Friday, 12/12/2014</b>	Recent Trends in Petroleum Refining Operations (512201)
<b>Tuesday, 16/12/2014</b>	Advanced Transport Phenomena (512202)
<b>Friday, 19/12/2014</b>	Advanced Numerical and Statistical Methods (512203)
<b>Tuesday, 23/12/2014</b>	Research Methodology (512204)
<b>Friday, 26/12/2014</b>	Elective – I (512205)

**M.E. (Petrochemical Engineering) (2013 Credit Pattern) (Sem. II)**

**Time : 2.30 p.m. to 5.30 p.m.**

<b>Day and Date</b>	<b>M.E. Petrochemical Engineering (2013 Credit Pattern) (Sem. II)</b>
<b>Saturday, 13/12/2014</b>	Applied Process Design and Synthesis (512207)
<b>Wednesday, 17/12/2014</b>	Safety, Health and Environment in Petrochemical Plants (512208)
<b>Saturday, 20/12/2014</b>	Advanced Process Control (512209)
<b>Wednesday, 24/12/2014</b>	Elective – II (512210)

**M.E. (Petrochemical Engineering) (2013 Credit Pattern) (Sem. III)**

**Time : 2.30 p.m. to 5.30 p.m.**

<b>Day and Date</b>	<b>M.E. Petrochemical Engineering (2013 Credit Pattern) (Sem. III)</b>
<b>Monday, 15/12/2014</b>	Advanced in Petrochemical Processes (512213)
<b>Thursday, 18/12/2014</b>	Advanced in Process Optimization (512214)
<b>Monday, 22/12/2014</b>	Elective – III (512215)

**M.E. (Information Technology) (2008 Pattern & 2013 Credit Pattern) (Sem. I)****Time: 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. I)	2013 (Credit Pattern) (Sem. I)
<b>Friday, 12/12/2014</b>	Applied Algorithms (514421)	Mathematical Foundation of Information Technology (514401)
<b>Tuesday, 16/12/2014</b>	Software Engineering Methodologies (514402)	Applied Algorithms (514402)
<b>Friday, 19/12/2014</b>	Advance Operating Systems (514403)	Advance Operating System (514403)
<b>Tuesday, 23/12/2014</b>	<u>Elective-I (514422)</u> a) Software Architecture(514404)(A) b) Real Time & Embedded System (514404)(B) c) Bioinformatics (514422)(C)	Research Methodology (514404)
<b>Friday, 26/12/2014</b>	<u>Elective-II (514423)</u> a) Information Assurance & Security (514405)(A) b) Network Programming (514422)(B) c) Geographical Information Systems (514405)(C)	Elective – I (514405)

**M.E. (Information Technology) (2008 Pattern & 2013 Credit Pattern) (Sem. II)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. II)	2013 (Credit Pattern) (Sem. II)
<b>Saturday, 13/12/2014</b>	Net centric Computing (514426)	Wireless Communication Technologies (514407)
<b>Wednesday, 17/12/2014</b>	Advance Trends in Database Systems (514409)	Advanced Database Systems (514408)
<b>Saturday, 20/12/2014</b>	Management Trends in Information Technology (514427)	Advance Computer Architecture (514409)
<b>Wednesday, 24/12/2014</b>	<u>Elective – III (514428)</u> 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)	Elective – II (514410)
<b>Saturday, 27/12/2014</b>	<u>Elective – IV (514439)</u> a) Internet Routing Design (514428)(A) b) Advance Network Programming (514412)(B) c) High Performance Computer Networks (514412)(C) <u>Open Elective II (Self Study)**</u> i)Service Oriented Architecture (514429)(D)	-----

**M.E. (Information Technology) (2013 Credit Pattern) (Sem. III)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2013 (Credit Pattern) (Sem. III)
<b>Monday, 15/12/2014</b>	Information Assurance and Security (514413)
<b>Thursday, 18/12/2014</b>	Network Programming (514414)
<b>Monday, 22/12/2014</b>	Open Elective (514415)

**M.E. (Industrial Engineering) (2008 Pattern & 2013 Credit Pattern) (Sem. I)****Time: 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. I)	2013 (Credit Pattern) (Sem. I)
Friday, 12/12/2014	Economics (511201)	Economics (511201)
Tuesday, 16/12/2014	Work Study & Ergonomics (511202)	Work Study & Ergonomics (511202)
Friday, 19/12/2014	Optimization Techniques & Simulation Modeling (511203)	Optimisation Techniques and Simulation (511203)
Tuesday, 23/12/2014	<b><u>Elective-I (511204)</u></b> a) Marketing Management b) Human Resource Management c) Entrepreneurship Development d) World Class Manufacturing	Environmental Engineering & Energy Resource Management (511204)
Friday, 26/12/2014	<b><u>Elective-II (511205)</u></b> a) Facilities planning b) Network & Project Management c) Enterprise Resource Planning & Supply Chain Management d) System Engineering	Elective – I (511205)

**M.E. (Industrial Engineering) (2008 Pattern & 2013 Credit Pattern) (Sem. II)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2008 Pattern (Sem. II)	2013 (Credit Pattern) (Sem. II)
Saturday, 13/12/2014	Reliability Engineering & Research Methodology (511208)	Reliability Engineering & Research Methodology (511208)
Wednesday, 17/12/2014	Costing & Finance (511209)	Costing & Finance (511209)
Saturday, 20/12/2014	Productivity Management (511210)	Productivity Management (511210)
Wednesday, 24/12/2014	<b><u>Elective – III (511211)</u></b> a) Human Factors Engineering b) Process Planning & Manufacturing Engineering c) Management of Service Sector d) Industrial & Commercial law	Elective – II (511211)
Saturday, 27/12/2014	<b><u>Elective IV – OPEN (511212)</u></b> 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. III)****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	2013 (Credit Pattern) (Sem. III)
Monday, 15/12/2014	Organizational Behavior (611201)
Thursday, 18/12/2014	Operations Management (611202)
Monday, 22/12/2014	Elective – III (611203)

**M.E. (Instrumentation & Control) (Process Instrumentation & Biomedical Instrumentation)  
(2008 Pattern) (Sem. I)**

**Time: 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. I)</b>
<b>Friday, 12/12/2014</b>	Transducer Design (506101)
<b>Tuesday, 16/12/2014</b>	Mathematical Methods in Instrumentation (506102)
<b>Friday, 19/12/2014</b>	Communication Protocols for Instrumentation (506103)
<b>Tuesday, 23/12/2014</b>	Analytical Instrumentation (506104)
<b>Friday, 26/12/2014</b>	<p><b><u>Elective : I (5061105)</u></b></p> <p>a)Industrial Automation (506105) b)Building Automation (506105) c)Geotechnical Instrumentation (506105)</p> <p><b><u>Biomedical Instrumentation (5061201)</u></b></p> <p>a)Fundamentals of Biomedical Instrumentation(5061201) b)Introduction to Physiology and Anatomy (5061201)</p>

**M.E. (Instrumentation & Control) (Process Instrumentation & Biomedical Instrumentation)  
(2008 Pattern) (Sem. II)**

**Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. II)</b>
<b>Saturday, 13/12/2014</b>	Control System Design ( 5061108)
<b>Wednesday, 17/12/2014</b>	Advanced Signal Processing ( 5061109 )
<b>Saturday, 20/12/2014</b>	Organisational Behaviour & Management ( 5061110)
<b>Wednesday, 24/12/2014</b>	<p><b><u>Elective : II (5061111)</u></b></p> <p>a) Modern Control Theory ( (5061111) b) Mechatronics (5061111) c) Robotics (5061111)</p> <p><b><u>Biomedical Instrumentation(5061204)</u></b></p> <p>a) Biosignal Processing ( 5061204) b) Rehabilitation Engineering (5061204)</p>
<b>Saturday, 27/12/2014</b>	<p><b><u>Elective : III (5061112)</u></b></p> <p>a) Advanced Process Instrumentation (5061112) b) Automobile Instrumentation ( 5061112) c) Open Elective</p> <p><b><u>Biomedical Instrumentation*(5061205)</u></b></p> <p>a) Bio-imaging Modality (5061205) b) Biophotonics (5061205) c) Open Elective</p>



**M.E. (Instrumentation & Control) (Process Instrumentation & Biomedical Instrumentation) (2013 Credit Pattern) (Sem. I)**

**Time: 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>Process Instrumentation – 2013 Credit Pattern (Sem. I)</b>	<b>Biomedical Instrumentation 2013 (Credit Pattern) (Sem. I)</b>
<b>Friday, 12/12/2014</b>	Mathematical Methods in Instrumentation (506101) (Common to Bio-Medical Instrumentation)	Mathematical Methods in Instrumentation (506101) (Common to Process Instrumentation)
<b>Tuesday, 16/12/2014</b>	Transducer Design (506102)	Bio-Signal Processing (506202)
<b>Friday, 19/12/2014</b>	Industrial Automation (506103)	Analytical Instrumentation (506203)
<b>Tuesday, 23/12/2014</b>	Research Methodology (506104) (Common to Bio-Medical Instrumentation)	Research Methodology (506104) (Common to Process Instrumentation)
<b>Friday, 26/12/2014</b>	Elective – I (506105)	Elective – I (506205)

**M.E. (Instrumentation & Control) (Process Instrumentation & Biomedical Instrumentation) (2013 Credit Pattern) (Sem. II)**

**Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>Process Instrumentation – 2013 Credit Pattern (Sem. II)</b>	<b>Biomedical Instrumentation 2013 (Credit Pattern) (Sem. II)</b>
<b>Saturday, 13/12/2014</b>	Advanced Process Control (506107)	Transducer Design (506207)
<b>Wednesday, 17/12/2014</b>	Embedded System Design (506108)	Digital Image Processing (506208)
<b>Saturday, 20/12/2014</b>	Advanced Control System (506109)	Communication Protocols for Instrumentation (506209)
<b>Wednesday, 24/12/2014</b>	Elective – II (506110)	Elective – II (506210)

**M.E. (Instrumentation & Control) (Process Instrumentation & Biomedical Instrumentation)**

**(2013 Credit Pattern) (Sem. III)**

**Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>Process Instrumentation – 2013 Credit Pattern (Sem. III)</b>	<b>Biomedical Instrumentation 2013 (Credit Pattern) (Sem. III)</b>
<b>Monday, 15/12/2014</b>	Advanced Signal Processing (606101)	Medical Imaging Techniques (606201)
<b>Thursday, 18/12/2014</b>	Building Automation (606102)	Advanced Digital Signal Processing (606202)
<b>Monday, 22/12/2014</b>	Elective – III (606103)	Elective – III (606103)

**M.E. (Polymer) (2008 Pattern & 2013 Credit Pattern) (Sem. I)****Time: 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. I)</b>	<b>2013 (Credit Pattern) (Sem. I)</b>
<b>Friday, 12/12/2014</b>	Mathematical and Statistical Methods (509115)	Mathematical and Statistical Methods (509115)
<b>Tuesday, 16/12/2014</b>	Principles of Management (509116)	Principles of Management (509116)
<b>Friday, 19/12/2014</b>	Polymer Processing and Testing (509117)	Advanced Polymer Technology (509117)
<b>Tuesday, 23/12/2014</b>	<b><u>Elective I : (509118)</u></b> a) Polymer Reaction Engineering b) Transport Phenomena in Polymers c) Synthesis and Chemistry of Polymers	Research Methodology (509118)
<b>Friday, 26/12/2014</b>	<b><u>Elective II : (509119)</u></b> a) Polymer Rheology b) Mold and Die Design c) Packaging Technology	Elective – I (509119)

**M.E. (Polymer) (2008 Pattern & 2013 Credit Pattern) (Sem. II)****Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. II)</b>	<b>2013 (Credit Pattern) (Sem. II)</b>
<b>Saturday, 13/12/2014</b>	Polymer Physics and Characterization (509122)	Polymer Processing and Testing (509121)
<b>Wednesday, 17/12/2014</b>	Polymer Structure and Properties (509123)	Polymer Physics and Characterization (509122)
<b>Saturday, 20/12/2014</b>	Processing and Mechanics of Composites (509124)	Polymer Structure and Properties (509123)
<b>Wednesday, 24/12/2014</b>	<b><u>Elective – III: (509125)</u></b> a) Science and Engineering of Fibers b) Polymer Product Design c) Specialty Polymer Materials	Elective – II (509124)
<b>Saturday, 27/12/2014</b>	<b><u>Elective - IV : (509126) (Open)</u></b> a) Paints and Adhesives Elective IV b) Elastomer Technology c) Open Elective	-----

**M.E. (Polymer) (2013 Credit Pattern) (Sem. III)****Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2013 (Credit Pattern) (Sem. III)</b>
<b>Monday, 15/12/2014</b>	Polymer Rheology (509127)
<b>Thursday, 18/12/2014</b>	Transport Phenomenon in Polymers (509128)
<b>Monday, 22/12/2014</b>	Elective – III (509129)

**M.E. (Printing) (2008 Pattern & 2013 Credit Pattern) (Sem. I)****Time: 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. I)</b>	<b>2013 (Credit Pattern) (Sem. I)</b>
<b>Friday, 12/12/2014</b>	Probability, Statistics & Queuing Theory (508101)	Probability, Statistics and Regression Analysis (508101)
<b>Tuesday, 16/12/2014</b>	Printing Technology Management (508102)	Printing Technology Management (508102)
<b>Friday, 19/12/2014</b>	Modern Trends in Printing (508103)	Modern Trends in Printing (508103)
<b>Tuesday, 23/12/2014</b>	<b><u>Elective-I (508104)</u></b> a) Workflow Management in Printing Industry b) Printing & Packaging Materials c) Design of Experiments & Research Methodology	Research Methodology (508104)
<b>Friday, 26/12/2014</b>	<b><u>Elective-II (508105)</u></b> a) Digital Printing b) Entrepreneurship in Printing & Allied Fields c) Quality Control Systems & Productivity	Elective – I (508105)

**M.E. (Printing) (2008 Pattern & 2013 Credit Pattern) (Sem. II)****Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2008 Pattern (Sem. II)</b>	<b>2013 (Credit Pattern) (Sem. II)</b>
<b>Saturday, 13/12/2014</b>	Print Media Communications ( 508108)	Colour Science (508107)
<b>Wednesday, 17/12/2014</b>	Web Handling on Press (508109)	Web Handling on Press (508108)
<b>Saturday, 20/12/2014</b>	Substrate and Ink (508110)	Substrate and Ink (508109)
<b>Wednesday, 24/12/2014</b>	<b><u>Elective – III : (508111)</u></b> a) Multimedia Systems and Communication b) Total Productive Maintenance in Printing c) Press Finger Printing	Elective – II (508110)
<b>Saturday, 27/12/2014</b>	<b><u>Elective – IV ( 508112 )</u></b> a) Open Elective (Self study) b) Advances in Converting and Packaging c) Analysis of Spot and Process inks	-----

**M.E. (Printing) (2008 Pattern & 2013 Credit Pattern) (Sem. III)****Time : 2.30 p.m. to 5.30 p.m.**

<b>Day &amp; Date</b>	<b>2013 (Credit Pattern) (Sem. III)</b>
<b>Monday, 15/12/2014</b>	Printed Electronics and RFID (608101)
<b>Thursday, 18/12/2014</b>	Advances in Converting and Packaging (608102)
<b>Monday, 22/12/2014</b>	Elective – III (608103)

University of Pune  
Ganeshkhind, Pune-411007  
Ref. No. XCT/985  
Date : 14/10/2014

**Dr.V.B.Gaikwad**  
**Controller of Examinations**