SAVITRIBAI PHULE PUNE UNIVERSITY

(Formerly University of Pune)



EXAMINATION CIRCULAR NO.1 OF. 2020 BACHELOR OF ENGINEERING (2012 & 2015 COURSE) Examination of APR/MAY-2020

(Under Faculty of SCIENCE AND TECHNOLOGY : B)ENGINEERING)

1. Common Instructions:

- The examination will be conducted in on-line as well as in off-line mode based on the option given by students. Time slot for both examinations i.e. (on-line and off-line examination) is same.
- All relevant communication related to on-line as well as off-line examinations will be done through the email on registered email address and through sms on registered mobile number. Both these communications details are collected by the examination section through the students' profile filled by these students at the time of filling the examination form. It is suggested not to change email address and mobile number till completion of October, 2020 examination.
- Hall tickets are sent to the concerned affiliated colleges. Students can collect hall tickets from their respective colleges. To avoid inconvenience to students, examination section has provided a special facility to download hall tickets directly from student's login. Those students, who had opted for the off-line OMR based examination, shall carry hall tickets at the examination centre.
- For physically challenged students, for the on-line examination, time will automatically get set to 80 minutes. For the off-line examination, the examination centres are instructed to allot 20 minutes extra to these students. For both on-line and off-line examination permission is granted to take help of writer/assistant during the examination.

2. Instructions to candidates appearing for the on-line examinations:

- Candidates shall appear for the on-line examination from the place of their convenience.
- Candidate can login using their mobile, laptop, PC or I-Pad. Please take care that batteries of these units are properly charged prior to examination and also connected through internet facility.
- In case of any technical difficulty during the examination, software support is provided by the University. On-line examination will get resumed for the remaining duration in case of technical interruptions during the examinations. Answers of the questions attempted by student before the occurrence of the interruption will get saved automatically on University server. A mock test will be provided to all students. Time table of mock test/s will get communicated to students through Student's login.

AUTOMOBILE

Day & Date	2015 Course Time-10.00 AM To 11.00 AM	2012 Course Time-10.00 AM To 11.00 AM
Tuesday 13/10/2020	Automotive Refrigeration & Air- Conditioning (416488)	Automotive Refrigeration And Air Conditioning (416488)
Thursday 15/10/2020	Alternative Fuels & Emission Control (416489)	Automotive Chassis And Systems (416489)
Sunday 18/10/2020	Machine & Vehicle Dynamics (416490)	Machine And Vehicle Dynamics (416490)
	ELECTIVE-I Fundamentals of Computational Fluid Dynamics (416491A)	ELECTIVE-I Fundamentals Of Computational Fluid Dynamics (416491A)
Tuesday 20/10/2020	ELECTIVE-I Fundamentals of Finite Element Analysis (416491B)	ELECTIVE-I Fundamentals Of Finite Element Analysis (416491B)
	ELECTIVE-I CAE & Automation (416491C)	ELECTIVE-I CAE And Automation (416491C)
	ELECTIVE-II Special Purpose Vehicle (416492A)	ELECTIVE-II Hybrid And Fuel Cell Vehicle (416492A)
Thursday 22/10/2020	ELECTIVE-II Vehicle Maintenance (416492B)	ELECTIVE-II Automotive Materials (416492B)
	ELECTIVE-II Product Design & Development (416492C)	ELECTIVE-II Automotive Hydraulics And Pneumatics (416492C)

Day & Date	2015 Course Time-01.00 PM To 2.00 PM	2012 Course Time-01.00 PM To 2.00 PM
Tuesday 13/10/2020	Automotive Systems and Testing (416495)	Vehicle Performance And Testing. (416495)
Thursday 15/10/2020	Automotive System Design (416496)	Automotive System Design (416496)
	ELECTIVE-III Automotive NVH (416497A)	ELECTIVE - III Automotive NVH (416497A)
Sunday 18/10/2020	ELECTIVE-III Hybrid Electric and Fuel cell Vehicle (416497B)	ELECTIVE - III Off Road Vehicle (416497B)
	ELECTIVE-III Automotive Hydraulics and Pneumatics (416497C)	ELECTIVE - III Alternative Fuels And Emission Control (416497C)
	ELECTIVE-IV Operation Research (416498A)	ELECTIVE - IV Transport Management And Motor Industries (416498A)
Tuesday 20/10/2020	ELECTIVE-IV Transport Management and Motor Industries (416498B)	ELECTIVE - IV Operation Research (416498B)
	ELECTIVE-IV Engineering Economics and Financial Management (416498C)	

CHEMICAL

SEM-I		
Day & Date	2015 Course Time-10.00 AM To 11.00 AM	2012 Course Time-10.00 AM To 11.00 AM
Tuesday 13/10/2020	Process Dynamics & Control (409341)	Process Dynamics And Control (409341)
Thursday 15/10/2020	Chemical Reaction Engineering - II (409342)	Chemical Reaction Engineering-II (409342)
Sunday 18/10/2020	Chemical Engineering Design- II (409343)	Chemical Engineering Design-II (409343)
	ELECTIVE-I Environmental Engineering (409344A)	ELECTIVE-I Environmental Engineering (409344A)
_	ELECTIVE-I Membrane Technology (409344B)	ELECTIVE-I Membrane Technology (409344B)
Tuesday 20/10/2020	ELECTIVE-I Corrosion Engineering (409344C)	ELECTIVE-I Corrosion Engineering (409344C)
	ELECTIVE-I Petroleum Refining (409344D)	ELECTIVE-I Petroleum Refining (409344D)
	ELECTIVE-II Chemical Process Synthesis (409345A)	ELECTIVE-II Chemical Process Synthesis (409345A)
	ELECTIVE-II Industrial Management & Entrepreneurship (409345B)	ELECTIVE-II Industrial Management And Entrepreneurship (409345B)
Thursday 22/10/2020	ELECTIVE-II Piping Design & Engineering (409345C)	ELECTIVE-II Piping Design And Engineering (409345C)
	ELECTIVE-II Advanced Separation Processes (409345D)	ELECTIVE-II Advance Separation Processes (409345D)

	SEIVI-II	
Day & Date	2015 Course Time-01.00 PM To 2.00 PM	2012 Course Time-01.00 PM To 2.00 PM
Tuesday 13/10/2020	Process Modeling and Simulation (409349)	Process Modelling & Simulation (409349)
Thursday 15/10/2020	Process Engineering Costing & Plant Design (409350)	Process Engineering Costing & Plant Design (409350)
	ELECTIVE-III Energy Conservation In Chemical Process Industries (409351A)	ELECTIVE-III Energy Conservation In Chemical Process Industries (409351A)
Sunday	ELECTIVE-III Chemical Process Safety (409351B)	ELECTIVE-III Chemical Process Safety (409351B)
18/10/2020	ELECTIVE-III Food Technology (409351C)	ELECTIVE-III Food Technology (409351C)
	ELECTIVE-III Advanced Materials (409351D)	ELECTIVE-III Advanced Materials (409351D)
	ELECTIVE-IV Catalysis (409352A)	ELECTIVE-IV Catalysis (409352A)
	ELECTIVE-IV Nanotechnology (409352B)	ELECTIVE-IV Nanotechnology (409352B)
Tuesday 20/10/2020	ELECTIVE-IV Fuel Cell Technology (409352C)	ELECTIVE-IV Fuel Cell Technology (409352C)
	ELECTIVE-IV Petrochemical Engineering (409352D)	ELECTIVE-IV Petrochemical Engineering (409352D)

<u>CIVIL</u>

SEM-I		SEM-I
Day & Date	2015 Course Time-10.00 AM To 11.00 AM	2012 Course Time-10.00 AM To 11.00 AM
Tuesday 13/10/2020	Environmental Engineering - II (401001)	Environmental Engineering - II (401001)
Thursday 15/10/2020	Transportation Engineering (401002)	Transportation Engineering (401002)
Sunday 18/10/2020	* Structural Design & Drawing-III (401003)	* Structural Design & Drawing - III (401003)
	ELECTIVE-I Structural Design of Bridges (401004A)	ELECTIVE-I Structural Design Of Bridges (401004A)
	ELECTIVE-I Systems Approach in Civil Engineering (401004B)	ELECTIVE-I Systems Approach In Civil Engineering (401004B)
Tuesday 20/10/2020	ELECTIVE-I Advanced Concrete Technology (401004C)	ELECTIVE-I Advanced Concrete Technology (401004C)
	ELECTIVE-I Architecture and Town Planning (401004D)	ELECTIVE-I Architecture And Town Planning (401004D)
	ELECTIVE-I Advanced Engineering Geology with Rock Mechanics (401004E)	ELECTIVE-I Advanced Engineering Geology With Rock Mechanics (401004E)
	ELECTIVE-II Matrix Methods of Structural Analysis (401005A)	ELECTIVE-II Matrix Methods Of Structural Analysis (401005A)
	ELECTIVE-II Integrated Water Resources Planning & Management (401005B)	ELECTIVE-II Integrated Water Resources And Planning (401005B)
Thursday 22/10/2020	ELECTIVE-II TQM & MIS in Civil Engineering (401005C)	ELECTIVE-II TQM & MIS In Civil Engineering (401005C)
	ELECTIVE-II Earthquake Engineering (401005D)	ELECTIVE-II Earthquake Engineering (401005D)

Thursday 22/10/2020

ELECTIVE-II Advanced Geotechnical Engineering (401005E)	ELECTIVE-II Advanced Geotechnical Engineering (401005E)

Day & Date	2015 Course	2012 Course
	Time-01.00 PM To 2.00 PM	Time-01.00 PM To 2.00 PM
Tuesday 13/10/2020	Dams and Hydraulic Structures (401007)	Dams And Hydraulic Structures (401007)
Thursday 15/10/2020	Quantity Surveying, Contracts and Tenders (401008)	Quantity Surveying contracts And Tenders (401008)
	ELECTIVE-III Advanced Structural Design (401009A)	ELECTIVE-III Advanced Structural Design (401009A)
	ELECTIVE-III Statistical Analysis and Computational Methods in Civil Engineering (401009B)	ELECTIVE-III Advanced Foundation Engineering (401009B)
Sunday	ELECTIVE-III Hydropower Engineering (401009C)	ELECTIVE-III Hydropower Engineering (401009C)
18/10/2020	ELECTIVE-III Air Pollution and control (401009D)	ELECTIVE-III Air Pollution And Control (401009D)
	ELECTIVE-III Finite Element Method in Civil Engineering (401009E)	ELECTIVE-III Finite Element Method In Civil Engineering (401009E)
	ELECTIVE-III Airport and Bridge Engineering (401009F)	
	ELECTIVE-IV Construction Management (401010A)	ELECTIVE-IV Construction Management (401010A)
Tuesday 20/10/2020	ELECTIVE-IV Advanced Transportation Engineering (401010B)	ELECTIVE-IV Advanced Transportation Engineering (401010B)
	ELECTIVE-IV Advanced foundation Engineering. (401010C)	ELECTIVE-IV Statistical Analysis And Computational Methods In Civil Engineering (401010C)
	ELECTIVE-IV Coastal Engineering (401010D)	OPEN ELECTIVE Plumbing Engineering (401010DA)

	OPEN ELECTIVE Plumbing Engineering (401010EA)	OPEN ELECTIVE Green Building Technology (401010DB)
Tuesday	OPEN ELECTIVE Green Building Technology (401010EB)	OPEN ELECTIVE Ferrocement Technology (401010DC)
Tuesday 20/10/2020	OPEN ELECTIVE Ferrocement Technology (401010EC)	OPEN ELECTIVE Sub Sea Engineering (401010DD)
	OPEN ELECTIVE Sub sea Engineering (401010ED)	OPEN ELECTIVE Wave Mechanics (401010DE)
	OPEN ELECTIVE Geoinformatics (401010EE)	OPEN ELECTIVE Repairs and Retrofitting of Concrete Structure (401010DF)

COMPUTER

SEM-I		02.11.1
Day & Date	2015 Course Time-10.00 AM To 11.00 AM	2012 Course Time-10.00 AM To 11.00 AM
Tuesday 13/10/2020	High Performance Computing (410241)	Design & Analysis Of Algorithms (410441)
Thursday 15/10/2020	Artificial Intelligence & Robotics (410242)	Principles Of Modern Compiler Design (410442)
Sunday 18/10/2020	Data Analysis (410243)	Smart System Design And Applications (410443)
	ELECTIVE-I Digital Signal Processing (410244A)	ELECTIVE-I Image Processing (410444A)
Tuesday	ELECTIVE-I Software Architecture & Design (410244B)	ELECTIVE-I Computer Network Design And Modeling (410444B)
20/10/2020	ELECTIVE-I Pervasive & Ubiquitous Computing (410244C)	ELECTIVE-I Advanced Computer Programming (410444C)
	ELECTIVE-I Data Mining & Warehousing (410244D)	ELECTIVE-I Data Mining Techniques And Applications (410444D)
	ELECTIVE-II Distributed Systems (410245A)	ELECTIVE-II Problem Solving With Gamification (410445A)
Thursday 22/10/2020	ELECTIVE-II Software Testing & Quality Assurance (410245B)	ELECTIVE-II Pervasive Computing (410445B)
	ELECTIVE-II Operation Research (410245C)	ELECTIVE-II Embedded Security (410445C)
	ELECTIVE-II Mobile Communication (410245D)	ELECTIVE-II Multidisciplinary NLP (410445D)

	SEM-II		
Day & Date	2015 Course Time-01.00 PM To 2.00 PM	2012 Course Time-01.00 PM To 2.00 PM	
Tuesday 13/10/2020	Machine Learning (410250)	Software Design Methodology And Testing (410449)	
Thursday 15/10/2020	Information and Cyber Security (410251)	High Performance Computing (410450)	
	ELECTIVE-III Advanced Digital Signal Processing (410252A)	ELECTIVE-III Mobile Computing (410451A)	
	ELECTIVE-III Compilers (410252B)	ELECTIVE-III Web Technology (410451B)	
Sunday 18/10/2020	ELECTIVE-III Embedded and Real Time Operating Systems (410252C)	ELECTIVE-III Cloud Computing (410451C)	
	ELECTIVE-III Soft Computing and Optimization Algorithms (410252D)	ELECTIVE-III Cyber Security (410451D)	
	ELECTIVE-IV Software Defined Networks (410253A)	ELECTIVE-IV Business Analytic And Intelligence (410452A)	
	ELECTIVE-IV Human Computer Interface (410253B)	ELECTIVE-IV Operations Research For Algorithms In Scientific Applications (410452B)	
	ELECTIVE-IV Cloud Computing (410253C)	ELECTIVE-IV Mobile Applications (410452C)	
Tuesday 20/10/2020	ELECTIVE-IV Business Intelligence (410253DA)	OPEN ELECTIVE *Unified Communications and Contact center Applications (410452DA)	
20,10,2020	ELECTIVE-IV Enterprise Resource Planning (410253DB)	OPEN ELECTIVE Programming Paradigms for Complex Problems –case studies in Python (410452DB)	
	OPEN ELECTIVE Big Data & Data Analytics (410253DC)	OPEN ELECTIVE Concurrency on Open Source Systems (410452DC)	
		OPEN ELECTIVE Fundamentals of Software Defined Network (410452DD)	

Tuesday 20/10/2020	OPEN E (410452	ELECTIVE Big Data and Data Analytics DE)
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NOTE:-

* Common With Information Technology.

ELECTRICAL

		SEM-I
Day & Date	2015 Course Time-10.00 AM To 11.00 AM	2012 Course Time-10.00 AM To 11.00 AM
Tuesday 13/10/2020	Power System Operation & Control (403141)	Power System Operation And Control (403141)
Thursday 15/10/2020	PLC & SCADA Applications (403142)	PLC And SCADA Applications (403142)
Sunday 18/10/2020	Control System-II (403145)	Control System - II (403145)
	ELECTIVE-I Fundamentals of Microcontroller & its Applications (403143A)	ELECTIVE-I Special Purpose Machines (403143A)
	ELECTIVE-I Power Quality (403143B)	ELECTIVE-I Power Quality (403143B)
Tuesday 20/10/2020	ELECTIVE-I Renewable Energy System (403143C)	ELECTIVE-I Renewable Energy Systems (403143C)
	ELECTIVE-I Digital Signal Processing (403143D)	ELECTIVE-I Digital Signal Processing (403143D)
	ELECTIVE-II Restructuring & De Regulation (403144A)	ELECTIVE-II Restructuring And Deregulation (403144A)
	ELECTIVE-II Electromagnetic Field (403144B)	ELECTIVE-II Electromagnetic Fields (403144B)
Thursday 22/10/2020	ELECTIVE-II EHV AC Transmission (403144C)	ELECTIVE-II EHV AC Transmission (403144C)
	ELECTIVE-II Electric & Hybrid Vehicles (403144D)	ELECTIVE-II Introduction To Electrical Transportation Systems (403144D)
	ELECTIVE-II Special Purpose Machines (403144E)	

SEM-II				
Day & Date	2015 Course Time-01.00 PM To 2.00 PM	2012 Course Time-01.00 PM To 2.00 PM		
Tuesday 13/10/2020	Switchgear and Protection (403147)	Switchgear And Protection (403147)		
Thursday 15/10/2020	Power Electronic Controlled Drives (403148)	Power Electronic Controlled Drives (403148)		
	ELECTIVE-III High Voltage Engineering (403149A)	ELECTIVE-III High Voltage Engineering (403149A)		
	ELECTIVE-III HVDC and FACTS (403149B)	ELECTIVE-III HVDC And FACTS (403149B)		
Sunday 18/10/2020	ELECTIVE-III Digital Control System (403149C)	ELECTIVE-III Digital Control System (403149C)		
	ELECTIVE-III Intelligent Systems and Applications in Electrical Engineering (403149D)	ELECTIVE-III Intelligent Systems And Its Applications In Electrical Engineering (403149D)		
	ELECTIVE-III Analog Electronics and Sensing Technology [Open Elective] (403149E)			
	ELECTIVE-IV Smart Grid (403150A)	ELECTIVE-IV Smart Grid (403150A)		
	ELECTIVE-IV Robotics and Automation (403150B)	ELECTIVE-IV Robotics And Automation (403150B)		
Tuesday 20/10/2020	ELECTIVE-IV Illumination Engineering (403150C)	ELECTIVE-IV Illumination Engineering (403150C)		
	ELECTIVE-IV VLSI Design[Open Elective] (403150D)	OPEN ELECTIVE VLSI Design (403150D)		
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ELECTRONICS

Day & Date	2015 Course Time-10.00 AM To 11.00 AM	2012 Course Time-10.00 AM To 11.00 AM
Tuesday 13/10/2020	VLSI Design (404201)	VLSI Design (404201)
Thursday 15/10/2020	Advanced Power Electronics (404202)	Electronic System Design (404202)
Sunday 18/10/2020	Electronics System Design (404203)	Advance Power Electronics (404203)
	ELECTIVE-I Digital Image & Video Processing (404204A)	ELECTIVE-I Image Processing And Machine Vision (404204A)
	ELECTIVE-I Audio & Speech Processing (404204B)	ELECTIVE-I Embedded Systems And RTOS (404204B)
Tuesday 20/10/2020	ELECTIVE-I Embedded Systems & RTOS (404204C)	ELECTIVE-I Biomedical Instrumentation (404204C)
	ELECTIVE-I Internet of Things (404204D)	ELECTIVE-I Advance Measurement Systems (404204D)
	ELECTIVE-I Software Defined Radio (404204E)	
	ELECTIVE-II Mobile Communication (404205A)	ELECTIVE-II DSP Processors (404205A)
	ELECTIVE-II Bio-Medical Electronics (404205B)	ELECTIVE-II Robotics And Automation (404205B)
Thursday 22/10/2020	ELECTIVE-II Optimization Techniques (404205C)	ELECTIVE-II Electronics In Agriculture (404205C)
	ELECTIVE-II Computer Modeling & Simulation (404205D)	ELECTIVE-II Mobile Communication (404205D)
	ELECTIVE-II Digital Signal Processor TMS320C67X (404205E)	

Day & Date	2015 Course Time-01.00 PM To 2.00 PM	2012 Course Time-01.00 PM To 2.00 PM	
Tuesday 13/10/2020	Computer Networks & Security (404209)	Computer Network (404209)	
Thursday 15/10/2020	Process Instrumentation (404210)	Process Automation (404210)	
	ELECTIVE-III Automotive Electronics (404211A)	ELECTIVE-III Speech & Audio Signal Processing (404211A)	
	ELECTIVE-III Artificial Intelligence and Machine Learning (404211B)	ELECTIVE-III Audio And Video Engineering (404211B)	
Sunday 18/10/2020	ELECTIVE-III Optical and Microwave Communication (404211C)	ELECTIVE-III Optical And Microwave Communication (404211C)	
	ELECTIVE-III Audio Video Engineering (404211D)	ELECTIVE-III Soft Computing (404211D)	
	ELECTIVE-III Testing and verification for SoC Design (404211E)		
Tuesday 20/10/2020	OPEN ELECTIVE * Advanced Automotive Electronics (404192DA)	ELECTIVE-IV Biomedical Signal Processing (404212A)	
	OPEN ELECTIVE * Industrial Internet of Things (404192DB)	ELECTIVE-IV Nano Electronics & MEMS (404212B)	
	OPEN ELECTIVE * Programmable System on Chip (404192DC)	ELECTIVE-IV System On Chip (404212C)	
	OPEN ELECTIVE * Data Science & Analytics (404192DD)	ELECTIVE-IV Mechatronics (404212D)	
	ELECTIVE-IV Robotics (404212A)	OPEN ELECTIVE * Advanced Automotive Electronics (404212EA)	
	ELECTIVE-IV Wireless Sensor Networks (404212B)	OPEN ELECTIVE * Data Science and Analytic (404212EB)	

Tuesday 20/10/2020		OPEN ELECTIVE * Industrial Internet of Things (404212EC)
	ELECTIVE-IV TM4C123GH6PM Microcontroller (404212D)	

NOTE:-

* Common With E & TC.

ELECTRONICS & TELECOMMUNICATION

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SEM-I				
Day & Date	2015 Course Time-10.00 AM To 11.00 AM	2012 Course Time-10.00 AM To 11.00 AM		
Tuesday 13/10/2020	VLSI Design & Technology (404181)	VLSI Design & Technology (404181)		
Thursday 15/10/2020	Computer Networks & Security (404182)	Computer Networks (404182)		
Sunday 18/10/2020	Radiation & Microwave Techniques (404183)	Microwave Engineering (404183)		
	ELECTIVE-I Digital Image video Processing (404184A)	ELECTIVE-I Digital Image Processing (408184A)		
	ELECTIVE-I Industrial Drives & Control (404184B)	ELECTIVE-I Embedded Systems & RTOS (408184B)		
Tuesday 20/10/2020	ELECTIVE-I Embedded System & RTOS (404184C)	ELECTIVE-I Software Defined Radio (408184C)		
	ELECTIVE-I Internet of Things (404184D)	ELECTIVE-I Industrial Drives And Control (408184D)		
	ELECTIVE-II Wavelets (412185A)	ELECTIVE-II Multi Rate & Adaptive Signal Processing (412185A)		
	ELECTIVE-II Electronics Product Design (412185B)	ELECTIVE-II Electronic Product Design (412185B)		
Thursday 22/10/2020	ELECTIVE-II Optimization Techniques (412185C)	ELECTIVE-II PLCs And Automation (412185C)		
	ELECTIVE-II Artificial Intelligence (412185D)	ELECTIVE-II Artificial Intelligence (412185D)		
	ELECTIVE-II Electronics in Agriculture (412185E)			

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Day & Date	2015 Course Time-01.00 PM To 2.00 PM	2012 Course Time-01.00 PM To 2.00 PM
Tuesday 13/10/2020	Mobile Communication (404189)	Mobile Communication (404189)
Thursday 15/10/2020	Broadband Communication Systems (404190)	Broadband Communication Systems (404190)
	ELECTIVE-III Machine Learning (404191A)	ELECTIVE-III Speech & Audio Signal Processing (404191A)
	ELECTIVE-III PLC s and Automation (404191B)	ELECTIVE-III RF Circuit Design (404191B)
Sunday 18/10/2020	ELECTIVE-III Audio and Speech Processing (404191C)	ELECTIVE-III Audio Video Engineering (404191C)
	ELECTIVE-III Software Defined Radio (404191D)	ELECTIVE-III Soft Computing (404191D)
	ELECTIVE-III Audio Video Engineering (404191E)	
	ELECTIVE-IV Robotics (404192A)	OPEN ELECTIVE Advanced Automotive Electronics (404192EA)
	ELECTIVE-IV Biomedical Electronics (404192B)	OPEN ELECTIVE *Unified Communications ar Contact center Applications (404192EB)
Tuesday 20/10/2020	ELECTIVE-IV Wireless Sensor Networks (404192C)	OPEN ELECTIVE @Business Analytic And Intelligence (404192EC)
	ELECTIVE-IV Renewable Energy Systems (404192D)	OPEN ELECTIVE Data Science and Analytics (404192ED)
	OPEN ELECTIVE Advanced Automotive Electronics (404192DA)	OPEN ELECTIVE Industrial Internet of Things (404192EE)
	OPEN ELECTIVE Industrial Internet of Things (404192DB)	ELECTIVE-IV Biomedical Signal Processing (404192A)

	OPEN ELECTIVE Programmable System on Chip (404192DC)	ELECTIVE-IV Nano Electronics & MEMS (404192B)
Tuesday 20/10/2020	OPEN ELECTIVE Data Science & Analytics (404192DD)	ELECTIVE-IV Detection & Estimation Theory (404192C)
		ELECTIVE-IV Wireless Networks (404192D)

NOTE:-

* Common With Information Technology.

@ Common With Computer Engineering.

INFORMATION TECHNOLOGY

SEM-I				
Day & Date	2015 Course Time-10.00 AM To 11.00 AM	2012 Course Time-10.00 AM To 11.00 AM		
Tuesday 13/10/2020	Information & Cyber Security (414453)	Information And Cyber Security (414453)		
Thursday 15/10/2020	Machine Learning & Applications (414454)	Software Modeling And Design (414454)		
Sunday 18/10/2020	Software Design & Modeling (414455)	Machine Learning (414455)		
	ELECTIVE-I Wireless Communications (414456A)	ELECTIVE-I Soft Computing (414456A)		
	ELECTIVE-I Natural Language Processing (414456B)	ELECTIVE-I Usability Engineering (414456B)		
Tuesday 20/10/2020	ELECTIVE-I Usability Engineering (414456C)	ELECTIVE-I Modern Compiler (414456C)		
	ELECTIVE-I Multicore & Concurrent Systems (414456D)	ELECTIVE-I Parallel Algorithms And Design (414456D)		
	ELECTIVE-I Business Analytics & Intelligence (414456E)	ELECTIVE-I Cloud Computing (414456E)		
	ELECTIVE-II Software Defined Networks (414457A)	ELECTIVE-II Business Intelligence (414457A)		
Thursday 22/10/2020	ELECTIVE-II Soft Computing (414457B)	ELECTIVE-II Service Oriented Architecture (414457B)		
	ELECTIVE-II Software Testing & Quality Assurance (414457C)	ELECTIVE-II E&M Governance (414457C)		
	ELECTIVE-II Compiler Construction (414457D)	ELECTIVE-II Geo Informatics Systems (414457D)		
	ELECTIVE-II Gamification (414457E)	ELECTIVE-II Natural Language Processing (414457E)		

	SEM-II				
Day & Date	2015 Course Time-01.00 PM To 2.00 PM	2012 Course Time-01.00 PM To 2.00 PM			
Tuesday 13/10/2020	Distributed Computing System (414462)	Distributed System (414461)			
Thursday 15/10/2020	Ubiquitous Computing (414463)	Advanced Databases (414462)			
	ELECTIVE-III Internet of Things (IoT) (414464A)	ELECTIVE-III Mobile Computing (414463A)			
	ELECTIVE-III Information storage and retrieval (414464B)	ELECTIVE-III Advanced Graphics And Animation (414463B)			
Sunday 18/10/2020	ELECTIVE-III Multimedia Techniques (414464C)	ELECTIVE-III Information Storage And Retrieval (414463C)			
	ELECTIVE-III Internet and Web Programming (414464D)	ELECTIVE-III IT Enabled Services (414463D)			
	ELECTIVE-III Computational Optimization (414464E)	ELECTIVE-III Advanced Computer Networks (414463E)			
	ELECTIVE-IV Rural Technologies and Community Development (414465A)	ELECTIVE-IV Bio-Informatics (414464A)			
	ELECTIVE-IV Parallel Computing (414465B)	ELECTIVE-IV Real Time And Embedded Systems (414464B)			
Tuesday 20/10/2020	ELECTIVE-IV Computer Vision (414465C)	ELECTIVE-IV Green IT-Principles And Practices (414464C)			
	ELECTIVE-IV Social Media Analytics (414465D)	ELECTIVE-IV Internet Of Things (414464D)			
		OPEN ELECTIVE Unified Communications and Contact center Applications (414464E)			

INSTRUMENTATION & CONTROL

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2015 Course	2012 Course
Time-10.00 AM To 11.00 AM	Time-10.00 AM To 11.00 AM
Process Dynamics & Control (406261)	Process Instrumentation- I (406261)
Project Engineering & Management (406262)	Project Engineering & Management (406262)
Computer Techniques & Applications (406263)	Digital Control (406263)
ELECTIVE-I Industrial Internet of Things (406264A)	ELECTIVE-I Advanced Bio-Medical Instrumentation (406264A)
ELECTIVE-I Electrical Drives (406264B)	ELECTIVE-I Building Automation- I (406264B)
ELECTIVE-I Advanced Digital Signal Processing (406264C)	ELECTIVE-I Advanced Control Systems (406264C)
ELECTIVE-I Advanced Bio-Medical Instrumentation (406264D)	ELECTIVE-I Advanced Sensors (406264D)
ELECTIVE-I Digital Control Systems (406264E)	ELECTIVE-I Advanced Digital Signal Processing (406264E)
ELECTIVE-II Smart & Wireless Instrumentation (406265A)	ELECTIVE-II Opto- Electronics Instrumentation (406265A)
ELECTIVE-II Instrumentation & Control for Power Plants (406265B)	ELECTIVE-II Environmental Instrumentation (406265B)
ELECTIVE-II Automotive Instrumentation (406265C)	ELECTIVE-II Robotics & Automation (406265C)
ELECTIVE-II Opto-Electronics Instrumentation (406265D)	ELECTIVE-II Sensor Networks (406265D)
ELECTIVE-II Soft Computing (406265E)	ELECTIVE-II Fault Detection And Diagnosis (406265E)
	Project Engineering & Management (406262) Computer Techniques & Applications (406263) ELECTIVE-I Industrial Internet of Things (406264A) ELECTIVE-I Electrical Drives (406264B) ELECTIVE-I Electrical Drives (406264B) FLECTIVE-I Advanced Digital Signal Processing (406264C) ELECTIVE-I Advanced Bio-Medical Instrumentation (406264D) ELECTIVE-I Digital Control Systems (406264E) ELECTIVE-II Smart & Wireless Instrumentation (406265A) ELECTIVE-II Instrumentation & Control for Power Plants (406265B) ELECTIVE-II Automotive Instrumentation (406265C) ELECTIVE-II Opto-Electronics Instrumentation (406265D)

Day & Date	2015 Course 2012 Course		
	Time-01.00 PM To 2.00 PM	Time-01.00 PM To 2.00 PM	
Tuesday 13/10/2020	Process Instrumentation (406268)	Process Instrumentation- II (406267)	
Thursday 15/10/2020	Industrial Automation (406269)	Industrial Automation (406268)	
	ELECTIVE-III Building Automation (406270A)	ELECTIVE-III Digital Image Processing (406269A)	
	ELECTIVE-III Robotics and Automation (406270B)	ELECTIVE-III Building Automation- II (406269B)	
Sunday 18/10/2020	ELECTIVE-III Environmental Instrumentation (406270C)	ELECTIVE-III Process Modelling & Optimization (406269C)	
	ELECTIVE-III Digital Image Processing (406270D)	ELECTIVE-III Virtual Instrumentation (406269D)	
	ELECTIVE-III Process Modelling and Optimization (406270E)	ELECTIVE-III Computer Techniques And Applications (406269E)	
	ELECTIVE-IV Reliability Engineering (406271A)	ELECTIVE-IV Smart Material And Systems (406270A)	
Tuesday 20/10/2020	ELECTIVE-IV Renewable Energy Systems (406271B)	ELECTIVE-IV Instrumentation In Agriculture And Food Processing (406270B)	
	ELECTIVE-IV Instrumentation in Agriculture and Food Industries (406271C)	ELECTIVE-IV Neural Network And Fuzzy Logic Control (406270C)	
	ELECTIVE-IV Smart Material and Systems (406271D)	ELECTIVE-IV Automobile Instrumentation (406270D)	

MECHANICAL

2015 Course Time-10.00 AM To 11.00 AM	2012 Course
	Time-10.00 AM To 11.00 AM
@ Refrigeration and Air Conditioning (302049)	Refrigeration And Air Conditioning (402041)
Hydraulics & Pneumatics (402041)	
CAD/CAM Automation (402042)	CAD/CAM Automation (402042)
Dynamics of Machinery (402043)	Dynamics Of Machinery (402043)
ELECTIVE-I Finite Element Analysis (402044A)	ELECTIVE-I Energy Audit Management (402044A)
ELECTIVE-I Computational Fluid Dynamics (402044B)	ELECTIVE-I Tribology (402044B)
ELECTIVE-I Heating Ventilation & Air Conditioning (402044C)	ELECTIVE-I Reliability Engineering (402044C)
	ELECTIVE-I Machine Tool Design (402044D)
ELECTIVE-II Automobile Engineering (402045A)	ELECTIVE-II Gas Turbine Propulsion (402045A)
ELECTIVE-II Operation Research (402045B)	ELECTIVE-II Product Design And Development (402045B)
ELECTIVE-II Energy Audit & Management (402045C)	ELECTIVE-II Operation Research (402045C)
	ELECTIVE-II Advanced Manufacturing Processes (402045D)
	 (302049) Hydraulics & Pneumatics (402041) CAD/CAM Automation (402042) Dynamics of Machinery (402043) ELECTIVE-I Finite Element Analysis (402044A) ELECTIVE-I Computational Fluid Dynamics (402044B) ELECTIVE-I Heating Ventilation & Air Conditioning (402044C) ELECTIVE-II Automobile Engineering (402045A) ELECTIVE-II Operation Research (402045B) ELECTIVE-II Energy Audit & Management

	SEM-II		
Day & Date	2015 Course Time-01.00 PM To 2.00 PM	2012 Course Time-01.00 PM To 2.00 PM	
Tuesday 13/10/2020	Energy Engineering (402047)	Power Plant Engineering (402047)	
Thursday 15/10/2020	* Mechanical System Design (402048)	*Mechanical System Design (402048)	
	ELECTIVE-III Tribology (402049A)	ELECTIVE-III Refrigeration And Air Conditioning Equipment Design (402049A)	
Sunday 18/10/2020	ELECTIVE-III Industrial Engineering (402049B)	ELECTIVE-III Robotics (402049B)	
	ELECTIVE-III Robotics (402049C)	ELECTIVE-III Industrial Engineering (402049C)	
		ELECTIVE-III (OPEN ELECTIVE) Product Lifecycle Management (402049DA)	
		ELECTIVE-III (OPEN ELECTIVE) Automobile Engineering (402049DB)	
		ELECTIVE-III (OPEN ELECTIVE) Steam Engineering and Energy Conservations (402049DC)	
	ELECTIVE-IV Advanced Manufacturing Processes (402050A)	ELECTIVE-IV Computational Fluid Dynamics (402050A)	
Tuesday 20/10/2020	ELECTIVE-IV Solar & Wind Energy (402050B)	ELECTIVE-IV Finite Element Analysis (402050B)	
	ELECTIVE-IV Product Design and Development (402050C)	ELECTIVE-IV Design Of Pumps Blowers And Compressors (402050C)	

NOTE:-

Note :-

@ The Students who have not studied the subject Refrigeration & Air Conditioning in T.E. 2012 pattern and who got admitted in B.E. 2015 pattern.

MECHANICAL-SANDWICH

Day & Date	2015 Course Time-10.00 AM To 11.00 AM	2012 Course Time-10.00 AM To 11.00 AM
Tuesday 13/10/2020	Automobile Engineering (Self-Study-III) (402064)	Automobile Engineering (Self Study-III) (402064)
Thursday 15/10/2020	Plant Engineering and Maintenance (Self- Study-III) (402065)	Power Plant Engineering (Self Study-IV) (402065)

SEM-II		
Day & Date	2015 Course Time-01.00 PM To 2.00 PM	2012 Course Time-01.00 PM To 2.00 PM
Tuesday 13/10/2020	** Energy Engineering (402047)	Mechanical Vibrations (402066)
Thursday 15/10/2020	** Mechanical System Design (402048)	** Mechanical System Design (402048)
Sunday 18/10/2020	Mechanical Vibrations (402066)	Industrial Hydraulics And Pneumatics (402067)
Tuesday 20/10/2020	ELECTIVE-I Computational Fluid Dynamics (402068A)	ELECTIVE-I Refrigeration And Air Conditioning (402068 A)
	ELECTIVE-I CAD/ CAM Automation (402068B)	ELECTIVE-I Computational Fluid Dynamics (402068 B)
	ELECTIVE-I Finite Element Analysis (402068C)	ELECTIVE-I Design Of Pumps, Blowers & Compressors (402068 C)
	ELECTIVE-I Hydraulics and Pneumatics (402068D)	ELECTIVE-I CAD / CAM Automation (402068 D)
Thursday 22/10/2020		ELECTIVE-II Energy Audit And Management (402069 A)
	ELECTIVE-II Energy Audit and Management (402069A)	ELECTIVE-II Operations Research (402069 B)
	ELECTIVE-II Operations Research (402069B)	ELECTIVE-II Robotics (402069 C)
		ELECTIVE-II Tribology (402069 D)

SEM-II

NOTE:-

** Common With Mechanical Engineering.

Ganeshkhind, Pune - 411 007 Ref.No/XCT/106

Date:04/10/2020

APR/MAY-2020