

# **SAVITRIBAI PHULE PUNE UNIVERSITY**

**(Formerly University of Pune)**



**EXAMINATION CIRCULAR NO. 366 OF. 2023**

**BACHELOR OF ENGINEERING(2019 COURSE)**

**Examination of NOV./DEC.-2023**

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

## **INSTRUCTIONS FOR CANDIDATES**

- Candidates are required to be present at the examination centre, THIRTY MINUTES before the stipulated time.
- Candidates are forbidden from taking any material into the examination hall that can be treated as a malpractice.
- Candidates are requested to see the Notice Board at their center of examination regularly for changes if any that may be notified later in the program.
- No request shall be granted for change in time or date for the University Examination on any ground.
- Candidates are requested to note the Day, Date and Time of Paper.
- Candidates are permitted to use stencils at the time of examination.
- The exchanges of side-rules, drawing instruments of other materials used in the examination hall is not permitted at the time of examination. Candidates must bring their own instruments and will not be allowed to borrow from each other under any circumstances.
- Use of non-programmable battery operated electronic pocket size Calculator is allowed. The exchange of Calculators is not allowed. Electronics Devices including mobile are not allowed at the time of examination.
- The written examination will be conducted in the following order.

## **B.E. AUTOMOBILE**

SEMESTER - VII

**Time:- 2.00 PM. TO 4.30 PM.**

<b>Day &amp; Date</b>	<b>Paper Code</b>	<b>Subject</b>
Thursday 30/11/2023	416481	Automotive Testing and Certification
Saturday 02/12/2023	416482	Machine and Vehicle Dynamics
Tuesday 05/12/2023	416483	Industrial Engineering* <b>Time:- 2.00 PM. TO 4.00 PM.</b>
Thursday 07/12/2023	416484 A	(ELECTIVE - III) Artificial Intelligence and Machine Learning
	416484 B	(ELECTIVE - III) Automotive Control Systems
	402044 E	(ELECTIVE - III) Internet of Things**
Monday 11/12/2023	416485 A	(ELECTIVE - IV) Finite Elements Analysis
	416485 B	(ELECTIVE - IV) Computational Fluid Dynamics

SEMESTER - VIII

**Time:- 2.00 PM. TO 4.30 PM.**

<b>Day &amp; Date</b>	<b>Paper Code</b>	<b>Subject</b>
Wednesday 29/11/2023	416489	Hybrid and Electric Vehicle
Friday 01/12/2023	416490	Automotive System Design
Wednesday 06/12/2023	416491 A	(ELECTIVE - V) Alternative Fuels and Emission control
	416491 B	(ELECTIVE - V) Renewable Energy
Saturday 09/12/2023	416492 A	(ELECTIVE - VI) Transport Management and Automobile Industry
	416492 B	(ELECTIVE - VI) Automotive Safety
	416492 C	(ELECTIVE - VI) Process Planning and Cost Estimation

NOTE: -

\* PLEASE NOTE THE TIME

\*\* COMMON WITH MECHANICAL ENGINEERING

## BIOTECHNOLOGY

SEMESTER - VII

Time:- 2.00 PM. TO 4.30 PM.

Day & Date	Paper Code	Subject
Thursday 30/11/2023	415461	Biochemical Engineering
Saturday 02/12/2023	415462	Bioinformatics
Thursday 07/12/2023	415463 A	(ELECTIVE - III) Bioprocess Equipment Design
	415463 B	(ELECTIVE - III) Environmental Biotechnology
	415463 C	(ELECTIVE - III) Genomics
Monday 11/12/2023	415464 A	(ELECTIVE - IV) Bioenergy and Renewable Resources
	415464 B	(ELECTIVE - IV) Nanotechnology
	415464 C	(ELECTIVE - IV) Stem Cell Biology and Regenerative Medicine

SEMESTER - VIII

Time:- 2.00 PM. TO 4.30 PM.

Day & Date	Paper Code	Subject
Wednesday 29/11/2023	415471	Bioprocess Modeling and Simulation
Friday 01/12/2023	415472	Plant Engineering and Project costing
Wednesday 06/12/2023	415473 A	(ELECTIVE - V) Biomaterials
	415473 B	(ELECTIVE - V) Molecular diagnostics
	415473 C	(ELECTIVE - V) Bio-therapeutics Technology
Saturday 09/12/2023	415474 A	(ELECTIVE - VI) Management and Entrepreneurship
	415474 B	(ELECTIVE - VI) IPR, Intellectual Property Rights.
	415474 C	(ELECTIVE - VI) Industrial Organization and Management

## B.E. CHEMICAL

SEMESTER - VII

Time:- 2.00 PM. TO 4.30 PM.

Day & Date	Paper Code	Subject
Thursday 30/11/2023	409341	Process Dynamics and Control
Saturday 02/12/2023	409342	Chemical Reaction Engineering- II
Tuesday 05/12/2023	409343	Chemical Engineering Design
Thursday 07/12/2023	409344 A	(ELECTIVE - III) Environmental Engineering
	409344 B	(ELECTIVE - III) Membrane Technology
	409344 C	(ELECTIVE - III) Industrial Piping
	409344 D	(ELECTIVE - III) Petroleum Refining
Monday 11/12/2023	409345 A	(ELECTIVE - IV) Chemical Process Synthesis
	409345 B	(ELECTIVE - IV) Industrial Management & Entrepreneurship
	409345 C	(ELECTIVE - IV) Green Technology
	409345 D	(ELECTIVE - IV) Advance Separation Processes

SEMESTER - VIII

Time:- 2.00 PM. TO 4.30 PM.

Day & Date	Paper Code	Subject
Wednesday 29/11/2023	409349	Process Modeling and Simulation
Friday 01/12/2023	409350	Process Engineering Costing & Plant Design
Wednesday 06/12/2023	409351 A	(ELECTIVE - V) Energy Audit and Conservation
	409351 B	(ELECTIVE - V) Chemical Process Safety
	409351 C	(ELECTIVE - V) Computational Fluid Dynamics
	409351 D	(ELECTIVE - V) Advanced Materials
Saturday 09/12/2023	409352 A	(ELECTIVE - VI) Catalysis
	409352 B	(ELECTIVE - VI) Nanotechnology
	409352 C	(ELECTIVE - VI) Fuel Cell Technology
	409352 D	(ELECTIVE - VI) Petrochemical Engineering

**B.E. CIVIL**

SEMESTER - VII

Time:- 2.00 PM. TO 4.30 PM.

<b>Day &amp; Date</b>	<b>Paper Code</b>	<b>Subject</b>
Thursday 30/11/2023	401001	Foundation Engineering
Saturday 02/12/2023	401002	Transportation Engineering
Thursday 07/12/2023	401003 A	(ELECTIVE - III) Coastal Engineering
	401003 B	(ELECTIVE - III) Advanced Design of Concrete Structures Time:- 2.00 PM. TO 5.00 PM.
	401003 C	(ELECTIVE - III) Integrated Water Resources Planning & Management
	401003 D	(ELECTIVE - III) Finite Element Method
	401003 E	(ELECTIVE - III) Data Analytics
	401003 F	(ELECTIVE - III) Operation Research
Monday 11/12/2023	401004 A	(ELECTIVE - IV) Air Pollution and Control
	401004 B	(ELECTIVE - IV) Advanced Design of Steel Structures Time:- 2.00 PM. TO 5.00 PM.
	401004 C	(ELECTIVE - IV) Statistical Analysis and Computational Method
	401004 D	(ELECTIVE - IV) Airport and Bridge Engineering
	401004 E	(ELECTIVE - IV) Design of Prestressed Concrete Structures Time:- 2.00 PM. TO 5.00 PM.
	401004 F	(ELECTIVE - IV) Formwork and Plumbing Engineering

NOTE: -

\* PLEASE NOTE THE TIME

**B.E. CIVIL**

SEMESTER - VIII

Time:- **2.00 PM. TO 4.30 PM.**

<b>Day &amp; Date</b>	<b>Paper Code</b>	<b>Subject</b>
Wednesday 29/11/2023	401011	Dams and Hydraulics Structures
Friday 01/12/2023	401012	Quantity Surveying, Contracts and Tenders Time:- <b>2.00 PM. TO 5.00 PM.</b>
Wednesday 06/12/2023	401013 A	(ELECTIVE - V) Earthquake Engineering
	401013 B	(ELECTIVE - V) Structural Design of Bridges
	401013 C	(ELECTIVE - V) Irrigation and Drainage
	401013 D	(ELECTIVE - V) Design of Precast and Composite Structures
	401013 E	(ELECTIVE - V) Hydropower Engineering
	401013 F	(ELECTIVE - V) Structural Audit and Retrofitting of Structures
Saturday 09/12/2023	401014 A	(ELECTIVE - VI) TQM and MIS
	401014 B	(ELECTIVE - VI) Advanced Transportation Engineering
	401014 C	(ELECTIVE - VI) Geo Synthetic Engineering
	401014 D	(ELECTIVE - VI) Structural Design of Foundations
	401014 E	(ELECTIVE - VI) Green Structures and Smart Cities
	401014 F	(ELECTIVE - VI) Rural Water Supply and Sanitation

NOTE: -

\* PLEASE NOTE THE TIME

## B.E. COMPUTER

SEMESTER - VII

Time:- **2.00 PM. TO 4.30 PM.**

Day & Date	Paper Code	Subject
Thursday 30/11/2023	410241	Design and Analysis of Algorithms
Saturday 02/12/2023	410242	Machine Learning
Tuesday 05/12/2023	410243	Blockchain Technology
Thursday 07/12/2023	410244 A	(ELECTIVE - III) Pervasive Computing
	410244 B	(ELECTIVE - III) Multimedia Techniques
	410244 C	(ELECTIVE - III) Cyber Security and Digital Forensics
	410244 D	(ELECTIVE - III) Object Oriented Modeling and Design
	410244 E	(ELECTIVE - III) Digital Signal Processing
Monday 11/12/2023	410245 A	(ELECTIVE - IV) Information Retrieval
	410245 B	(ELECTIVE - IV) GPU Programming and Architecture
	410245 C	(ELECTIVE - IV) Mobile Computing
	410245 D	(ELECTIVE - IV) Software Testing and Quality Assurance
	410245 E	(ELECTIVE - IV) Compilers

SEMESTER - VIII

Time:- **2.00 PM. TO 4.30 PM.**

Day & Date	Paper Code	Subject
Wednesday 29/11/2023	410250	High Performance Computing
Friday 01/12/2023	410251	Deep Learning
Wednesday 06/12/2023	410252 A	(ELECTIVE - V) Natural Language Processing
	410252 B	(ELECTIVE - V) Image Processing
	410252 C	(ELECTIVE - V) Software Defined Networks
	410252 D	(ELECTIVE - V) Advanced Digital Signal Processing
Saturday 09/12/2023	410253 A	(ELECTIVE - VI) Pattern Recognition
	410253 B	(ELECTIVE - VI) Soft Computing
	410253 C	(ELECTIVE - VI) Business Intelligence
	410253 D	(ELECTIVE - VI) Quantum Computing

**B.E. ELECTRICAL**

SEMESTER - VII

Time:- **2.00 PM. TO 4.30 PM.**

<b>Day &amp; Date</b>	<b>Paper Code</b>	<b>Subject</b>
Thursday 30/11/2023	403141	Power System Operation & Control
Saturday 02/12/2023	403142	Advanced Control System
Thursday 07/12/2023	403143 A	(ELECTIVE - III) PLC and SCADA
	403143 B	(ELECTIVE - III) Power Quality Management
	403143 C	(ELECTIVE - III) High Voltage Engineering
	403143 D	(ELECTIVE - III) Robotics and Automation
Monday 11/12/2023	403144 A	(ELECTIVE - IV) Alternate Energy System
	403144 B	(ELECTIVE - IV) Electrical & Hybrid Vehicle
	403144 C	(ELECTIVE - IV) Special-purpose Machines
	403144 D	(ELECTIVE - IV) HVDC & FACTS

SEMESTER - VIII

Time:- **2.00 PM. TO 4.30 PM.**

<b>Day &amp; Date</b>	<b>Paper Code</b>	<b>Subject</b>
Wednesday 29/11/2023	403148	Switchgear and Protection
Friday 01/12/2023	403149	Advanced Electrical Drives & Control
Wednesday 06/12/2023	403150 A	(ELECTIVE - V) Digital Control System
	403150 B	(ELECTIVE - V) Restructuring and Deregulation
	403150 C	(ELECTIVE - V) Smart Grid
	403150 D	(ELECTIVE - V) Sensor Technology (Open Elective)
Saturday 09/12/2023	403151 A	(ELECTIVE - VI) EHV AC Transmission
	403151 B	(ELECTIVE - VI) Illumination Engineering
	403151 C	(ELECTIVE - VI) Electromagnetic Fields
	403151 D	(ELECTIVE - VI) AI and ML (Open Elective)



## B.E. ELECTRONICS & TELECOMMUNICATION

SEMESTER - VII

Time:- **2.00 PM. TO 4.30 PM.**

Day & Date	Paper Code	Subject
Thursday 30/11/2023	404181	Radiation & Microwave Theory
Saturday 02/12/2023	404182	VLSI Design and Technology
Tuesday 05/12/2023	404183	Cloud Computing
Thursday 07/12/2023	404184 A	(ELECTIVE - III) Speech Processing
	404184 B	(ELECTIVE - III) PLC SCADA & Automation
	404184 C	(ELECTIVE - III) JAVA Script
	404184 D	(ELECTIVE - III) Embedded & RTOS
	404184 E	(ELECTIVE - III) Modernized IoT
Monday 11/12/2023	404185 A	(ELECTIVE - IV) Data Mining
	404185 B	(ELECTIVE - IV) Electronic Product Development
	404185 C	(ELECTIVE - IV) Deep Learning
	404185 D	(ELECTIVE - IV) Low Power CMOS
	404185 E	(ELECTIVE - IV) Smart Antennas

SEMESTER - VIII

Time:- **2.00 PM. TO 4.30 PM.**

Day & Date	Paper Code	Subject
Wednesday 29/11/2023	404190	Fiber Optic Communication
Wednesday 06/12/2023	404191 A	(ELECTIVE - V) Biomedical Signal Processing
	404191 B	(ELECTIVE - V) Industrial Drives & Automation
	404191 C	(ELECTIVE - V) Android Development
	404191 D	(ELECTIVE - V) Embedded System Design
	404191 E	(ELECTIVE - V) Mobile Computing
Saturday 09/12/2023	404192 A	(ELECTIVE - VI) System on Chip
	404192 B	(ELECTIVE - VI) Nano Electronics
	404192 C	(ELECTIVE - VI) Remote Sensing
	404192 D	(ELECTIVE - VI) Digital Marketing

## B.E. ELECTRONICS

SEMESTER - VII

Time:- **2.00 PM. TO 4.30 PM.**

Day & Date	Paper Code	Subject
Thursday 30/11/2023	404201	VLSI Design
Saturday 02/12/2023	404202	Advanced Power Electronics
Tuesday 05/12/2023	404203	Electronic System Design
Thursday 07/12/2023	404184 A	(ELECTIVE - III) Speech Processing *
	404184 C	(ELECTIVE - III) Java Script*
	404204 A	(ELECTIVE - III) Internet of Things
	404204 B	(ELECTIVE - III) Software Defined Radio
	404204 C	(ELECTIVE - III) Testing and Verification for SOC design
Monday 11/12/2023	404185 D	(ELECTIVE - IV) Low power CMOS*
	404185 E	(ELECTIVE - IV) Smart Antennas*
	404205 A	(ELECTIVE - IV) Mobile Communication
	404205 B	(ELECTIVE - IV) Embedded Systems
	404205 C	(ELECTIVE - IV) Optimization Techniques

SEMESTER - VIII

Time:- **2.00 PM. TO 4.30 PM.**

Day & Date	Paper Code	Subject
Wednesday 29/11/2023	404210	Process Instrumentation
Wednesday 06/12/2023	404191 C	(ELECTIVE - V) Android Development *
	404211 A	(ELECTIVE - V) Biomedical Electronics
	404211 B	(ELECTIVE - V) Artificial Intelligence and Neural Network
	404211 C	(ELECTIVE - V) Audio Video Engineering
	404211 D	(ELECTIVE - V) Automotive Electronics
Saturday 09/12/2023	404192 C	(ELECTIVE - VI) Remote Sensing *
	404192 D	(ELECTIVE - VI) Digital Marketing *
	404212 A	(ELECTIVE - VI) Renewable Energy System & DSM
	404212 B	(ELECTIVE - VI) Wireless Sensor Network

NOTE: \* COMMON WITH E.& TC.

## B.E. INFORMATION TECHNOLOGY

SEMESTER - VII

Time:- **2.00 PM. TO 4.30 PM.**

Day & Date	Paper Code	Subject
Thursday 30/11/2023	414441	Information and Storage Retrieval
Saturday 02/12/2023	414442	Software Project Management
Tuesday 05/12/2023	414443	Deep Learning
Thursday 07/12/2023	414444 A	(ELECTIVE - III) Mobile Computing
	414444 B	(ELECTIVE - III) High Performance Computing
	414444 C	(ELECTIVE - III) Multimedia Technology
	414444 D	(ELECTIVE - III) Smart Computing
Monday 11/12/2023	414445 A	(ELECTIVE - IV) Bioinformatics
	414445 B	(ELECTIVE - IV) Introduction to DevOps
	414445 C	(ELECTIVE - IV) Computer Vision
	414445 D	(ELECTIVE - IV) Wireless Communications

SEMESTER - VIII

Time:- **2.00 PM. TO 4.30 PM.**

Day & Date	Paper Code	Subject
Wednesday 29/11/2023	414450	Distributed Systems
Wednesday 06/12/2023	414451 A	(ELECTIVE - V) Software Defined Networks
	414451 B	(ELECTIVE - V) Social Computing
	414451 C	(ELECTIVE - V) Natural Language Processing
	414451 D	(ELECTIVE - V) Soft Computing
	414451 E	(ELECTIVE - V) Game Engineering
Saturday 09/12/2023	414452 A	(ELECTIVE - VI) Ethical Hacking and Security
	414452 B	(ELECTIVE - VI) Augmented and Virtual Reality
	414452 C	(ELECTIVE - VI) Business Analytics and Intelligence
	414452 D	(ELECTIVE - VI) Blockchain Technology

## B.E. INSTRUMENTATION & CONTROL

SEMESTER - VII

Time:- **2.00 PM. TO 4.30 PM.**

Day & Date	Paper Code	Subject
Thursday 30/11/2023	406261	Process Control Techniques
Saturday 02/12/2023	406262	Project Engineering and Management
Thursday 07/12/2023	406263 A	(ELECTIVE - III) Digital Image Processing
	406263 B	(ELECTIVE - III) Data Analytics
	406263 C	(ELECTIVE - III) Wireless Sensor Networks
	406263 D	(ELECTIVE - III) Process Modelling and Optimization
Monday 11/12/2023	406264 A	(ELECTIVE - IV) Cloud Computing
	406264 B	(ELECTIVE - IV) Soft Computing
	406264 C	(ELECTIVE - IV) Automotive Instrumentation
	406264 D	(ELECTIVE - IV) Advanced Control System

SEMESTER - VIII

Time:- **2.00 PM. TO 4.30 PM.**

Day & Date	Paper Code	Subject
Wednesday 29/11/2023	406268	Process Instrumentation
Friday 01/12/2023	406269	Advanced Embedded System
Wednesday 06/12/2023	406270 A	(ELECTIVE - V) Electric Vehicles
	406270 B	(ELECTIVE - V) Safety Instrumentation Systems
	406270 C	(ELECTIVE - V) Renewable Energy Systems
	406270 D	(ELECTIVE - V) Optical Instrumentation
Saturday 09/12/2023	406271 A	(ELECTIVE - VI) Cyber Security
	406271 B	(ELECTIVE - VI) Automation in Agriculture
	406271 C	(ELECTIVE - VI) Environmental Instrumentation

## B.E. MECHANICAL

SEMESTER - VII

Time:- **2.00 PM. TO 4.30 PM.**

Day & Date	Paper Code	Subject
Thursday 30/11/2023	402041	Heating Ventilation Air-Conditioning and Refrigeration
Saturday 02/12/2023	402042	Dynamics of Machinery
Tuesday 05/12/2023	402043	Turbomachinery * <b>Time:- 2.00 PM. TO 4.00 PM</b>
Thursday 07/12/2023	402044 A	(ELECTIVE - III) Automobile Design
	402044 B	(ELECTIVE - III) Design of Heat Transfer Equipments
	402044 C	(ELECTIVE - III) Modern Machining Processes
	402044 D	(ELECTIVE - III) Industrial Engineering
	402044 E	(ELECTIVE - III) Internet of Things
	402044 F	(ELECTIVE - III) Computational Fluid Dynamics
Monday 11/12/2023	402045 A	(ELECTIVE - IV) Product Design and Development
	402045 B	(ELECTIVE - IV) Experimental Methods in Thermal Engineering
	402045 C	(ELECTIVE - IV) Additive Manufacturing
	402045 D	(ELECTIVE - IV) Operations Research
	402045 E	(ELECTIVE - IV) Augmented Reality and Virtual Reality

**NOTE: - \* PLEASE NOTE THE TIME**

**B.E. MECHANICAL**

SEMESTER - VIII

Time:- 2.00 PM. TO 4.30 PM.

<b>Day &amp; Date</b>	<b>Paper Code</b>	<b>Subject</b>
Wednesday 29/11/2023	402048	Computer Integrated Manufacturing
Friday 01/12/2023	402049	Energy Engineering
Wednesday 06/12/2023	402050 A	(ELECTIVE - V) Quality and Reliability Engineering
	402050 B	(ELECTIVE - V) Energy Audit and Management
	402050 C	(ELECTIVE - V) Manufacturing Systems and Simulation
	402050 D	(ELECTIVE - V) Engineering Economics and Financial Management
	402050 E	(ELECTIVE - V) Organizational Informatics
	402050 F	(ELECTIVE - V) Computational Multi Body Dynamics
Saturday 09/12/2023	402051 A	(ELECTIVE - VI) Process Equipment Design
	402051 B	(ELECTIVE - VI) Renewable Energy Technologies
	402051 C	(ELECTIVE - VI) Automation and Robotics
	402051 D	(ELECTIVE - VI) Industrial Psychology and Organizational Behavior
	402051 E	(ELECTIVE - VI) Electrical and Hybrid Vehicle

## B.E. MECHANICAL SANDWICH

SEMESTER - VII

Time:- 2.00 PM. TO 4.30 PM.

Day & Date	Paper Code	Subject
Thursday 07/12/2023	402064	ENERGY ENGINEERING AND MANAGEMENT(SELF-STUDY-III)
Monday 11/12/2023	402065	INDUSTRIAL ENGINEERING AND ORGANIZATIONAL MANAGEMENT(SELF-STUDY-IV)

SEMESTER - VIII

Time:- 2.00 PM. TO 4.30 PM.

Day & Date	Paper Code	Subject
Wednesday 29/11/2023	402066	Design of Transmission Elements * Time:- 2.00 PM. TO 5.00 PM.
Friday 01/12/2023	402067	Machine Dynamics and Vibration
Monday 04/12/2023	402068	Artificial Intelligence in Mechanical Engineering
Wednesday 06/12/2023	402069 A	(ELECTIVE - I) Automobile Engineering
	402069 B	(ELECTIVE - I) Refrigeration and Air-Conditioning
	402069 C	(ELECTIVE - I) Fluid Power Control
	402045 C	(ELECTIVE - I) Additive Manufacturing
	402051 C	(ELECTIVE - I) Automation and Robotics
Saturday 09/12/2023	402044 E	(ELECTIVE - II) Internet of Things
	402045 A	(ELECTIVE - II) Product Design and Development
	402045 D	(ELECTIVE - II) Operations Research
	402050 A	(ELECTIVE - II) Quality and Reliability Engineering
	402051 E	(ELECTIVE - II) Electrical and Hybrid Vehicle

NOTE: - \* PLEASE NOTE THE TIME

**B.E. PRINTING TECHNOLOGY**

SEMESTER - VII

Time:- 2.00 PM. TO 4.30 PM.

<b>Day &amp; Date</b>	<b>Paper Code</b>	<b>Subject</b>
Thursday 30/11/2023	408283	Gravure Printing Techniques
Saturday 02/12/2023	408284	Digital Printing Techniques
Thursday 07/12/2023	408281 A	(ELECTIVE - III) Paper Board and Corrugation Package Technology
	408281 B	(ELECTIVE - III) Polymer Science
Monday 11/12/2023	408282 A	(ELECTIVE - IV) Multimedia Advertising
	408282 B	(ELECTIVE - IV) Process Optimization and Total Quality Management in Printing

SEMESTER - VIII

Time:- 2.00 PM. TO 4.30 PM.

<b>Day &amp; Date</b>	<b>Paper Code</b>	<b>Subject</b>
Wednesday 29/11/2023	408290	Operations Management in Printing and Packaging
Friday 01/12/2023	408291	Adhesives and Coatings in Packaging
Wednesday 06/12/2023	408288 A	(ELECTIVE - V) Food and Pharmaceutical Packaging
	408288 B	(ELECTIVE - V) Printed Electronics
Saturday 09/12/2023	408289 A	(ELECTIVE - VI) Sustainable Packaging
	408289 B	(ELECTIVE - VI) Management Information Systems and Data Science



## B.E. PRODUCTION ENGINEERING

SEMESTER - VII

Time:- 2.00 PM. TO 4.30 PM.

Day & Date	Paper Code	Subject
Thursday 30/11/2023	411081	Automation and Control Engineering
Saturday 02/12/2023	411082	Operations Research
Thursday 07/12/2023	411083 A	(ELECTIVE - III) Simulation, Modeling and Digital Twin
	411083 B	(ELECTIVE - III) Total Quality management
	411083 C	(ELECTIVE - III) Artificial Intelligence in Manufacturing
	411083 D	(ELECTIVE - III) World Class Manufacturing
Monday 11/12/2023	411084 A	(ELECTIVE - IV) Plant Maintenance and industrial safety
	411084 B	(ELECTIVE - IV) Surface Engineering
	411084 C	(ELECTIVE - IV) Reverse Engineering
	411084 D	(ELECTIVE - IV) Entrepreneurship and Innovations

SEMESTER - VIII

Time:- 2.00 PM. TO 4.30 PM.

Day & Date	Paper Code	Subject
Wednesday 29/11/2023	411088	Computer Integrated Design and Manufacturing
Friday 01/12/2023	411089	Industrial Robotics
Wednesday 06/12/2023	411090 A	(ELECTIVE - V) E-Mobilty in Automobile
	411090 B	(ELECTIVE - V) Smart Manufacturing
	411090 C	(ELECTIVE - V) Manufacturing System design
	411090 D	(ELECTIVE - V) Ergonomics and Work Management
Saturday 09/12/2023	411091 A	(ELECTIVE - VI) Facility Planning
	411091 B	(ELECTIVE - VI) Additive Manufacturing
	411091 C	(ELECTIVE - VI) Reliability Engineering
	411091 D	(ELECTIVE - VI) Data Analytics

## B.E. PRODUCTION SANDWICH ENGINEERING

SEMESTER - VII

Time:- **2.00 PM. TO 4.30 PM.**

Day & Date	Paper Code	Subject
Thursday 30/11/2023	411121	Manufacturing Automation
Saturday 02/12/2023	411122	Operations Research
Thursday 07/12/2023	411123 A	(ELECTIVE - III) Additive Manufacturing
	411123 B	(ELECTIVE - III) Industrial Robotics
	411123 C	(ELECTIVE - III) Reliability Engineering
	411123 D	(ELECTIVE - III) Micro-Electro mechanical systems
Monday 11/12/2023	411124 A	(ELECTIVE - IV) Creative Product Design
	411124 B	(ELECTIVE - IV) Mechatronics
	411124 C	(ELECTIVE - IV) CAD/CAM
	411124 D	(ELECTIVE - IV) Data analytics

SEMESTER - VIII

Time:- **2.00 PM. TO 4.30 PM.**

Day & Date	Paper Code	Subject
Wednesday 06/12/2023	411134 A	(ELECTIVE - V) Supply Chain Management
	411134 B	(ELECTIVE - V) Plant Engineering and Maintenance
	411134 C	(ELECTIVE - V) Industrial Relation and Human Resource Management
	411134 D	(ELECTIVE - V) Marketing mgmt.

**B.E. ARTIFICIAL INTELLIGENCE & MACHINE LEARNING**

SEMESTER - VII

Time:- 2.00 PM. TO 4.30 PM.

<b>Day &amp; Date</b>	<b>Paper Code</b>	<b>Subject</b>
Thursday 30/11/2023	418541	Information Retrieval in AI
Saturday 02/12/2023	418542	Cloud Computing
Tuesday 05/12/2023	418543	Deep Learning for AI
Thursday 07/12/2023	418544 A	(ELECTIVE - III) Quantum Computing
	418544 B	(ELECTIVE - III) Block Chain
	418544 C	(ELECTIVE - III) AI in Drones
Monday 11/12/2023	418545 A	(ELECTIVE - IV) Ethical Hacking and cyber forensics
	418545 B	(ELECTIVE - IV) Augmented Reality and Virtual Reality
	418545 C	(ELECTIVE - IV) DevOps in Machine Learning

## **B.E. AUTOMATION & ROBOTICS ENGINEERING**

SEMESTER - VII

**Time:- 2.00 PM. TO 4.30 PM.**

<b>Day &amp; Date</b>	<b>Paper Code</b>	<b>Subject</b>
Thursday 30/11/2023	402541	Industrial Automation & Control Systems
Saturday 02/12/2023	402542	Robotic Process Automation & Development
Tuesday 05/12/2023	402543	Artificial Neural Networks and Deep Learning <b>* Time:- 2.00 PM. TO 4.00 PM</b>
Thursday 07/12/2023	402544 A	(ELECTIVE - III) Robotics: Cognitive & Medical
	402544 B	(ELECTIVE - III) Microprocessors and Microcontrollers
	402544 C	(ELECTIVE - III) Modern Machining Processes
	402544 D	(ELECTIVE - III) Industrial Engineering
	402544 E	(ELECTIVE - III) Computational Fluid Dynamics
Monday 11/12/2023	402545 A	(ELECTIVE - IV) Lean Manufacturing
	402545 B	(ELECTIVE - IV) Project Management
	402545 C	(ELECTIVE - IV) Additive Manufacturing
	402545 D	(ELECTIVE - IV) Operations Research
	402545 E	(ELECTIVE - IV) Augmented Reality and Virtual Reality

**NOTE: - \* PLEASE NOTE THE TIME**

**B.E. ROBOTICS & AUTOMATION**

SEMESTER - VII

Time:- 2.00 PM. TO 4.30 PM.

Day & Date	Paper Code	Subject
Thursday 30/11/2023	411501	Machine Vision System
Saturday 02/12/2023	411502	Robot System Reliability and Safety
Thursday 07/12/2023	411503 A	(ELECTIVE - III) Advanced Computational Techniques
	411503 B	(ELECTIVE - III) Wireless sensor network
	411503 C	(ELECTIVE - III) Microprocessor and microcontroller
	411503 D	(ELECTIVE - III) Ergonomics and work management
Monday 11/12/2023	411504 A	(ELECTIVE - IV) Computational Fluid Dynamics
	411504 B	(ELECTIVE - IV) Internet of Things and Machine Learning
	411504 C	(ELECTIVE - IV) Artificial Neural Networks and fuzzy systems
	411504 D	(ELECTIVE - IV) Power Electronics and Drives

**B.E. ELECTRONICS & COMPUTER**

SEMESTER - VII

Time:- 2.00 PM. TO 4.30 PM.

Day & Date	Paper Code	Subject
Thursday 30/11/2023	410341	Data Science and Visualization
Saturday 02/12/2023	410342	WebTechnology
Tuesday 05/12/2023	410343	Internet of Things
Thursday 07/12/2023	410344 A	(Elective -III) Big Data & Analytics
	410344 B	(Elective -III) Mobile Application Development
	410344 C	(Elective -III) Information and Cyber Security
	410344 D	(Elective -III) Digital Image Processing
Monday 11/12/2023	410345 A	(Elective -IV) Robotics & Automation
	410345 B	(Elective -IV) Human Computer Interface
	410345 C	(Elective -IV) Digital System Design
	410345 D	(Elective -IV) Augmented and Virtual Reality

**B.E. ARTIFICIAL INTELLIGENCE & DATA SCIENCE**

SEMESTER - VII

Time:- 2.00 PM. TO 4.30 PM.

<b>Day &amp; Date</b>	<b>Paper Code</b>	<b>Subject</b>
Thursday 30/11/2023	417521	Machine Learning
Saturday 02/12/2023	417522	Data Modeling & Visualization
Thursday 07/12/2023	417523 A	(Elective -III) Quantum Artificial Intelligence
	417523 B	(Elective -III) Industrial Internet of Things
	417523 C	(Elective -III) Enterprise Architecture and Components
	417523 D	(Elective -III) Bioinformatics
Monday 11/12/2023	417524 A	(Elective -IV) GPU Programming and Architecture
	417524 B	(Elective -IV) Information Retrieval
	417524 C	(Elective -IV) UI/UX Design
	417524 D	(Elective -IV) Optimization Algorithms

**B.E. MECHATRONICS ENGINEERING**

SEMESTER - VII

Time:- **2.00 PM. TO 4.30 PM.**

<b>Day &amp; Date</b>	<b>Paper Code</b>	<b>Subject</b>
Thursday 30/11/2023	417541	Robot Operating System
Saturday 02/12/2023	417542	Data Communication
Tuesday 05/12/2023	417543	Micro Electro Mechanical Systems
Thursday 07/12/2023	417544- A	(Elective -III) Image Processing and Computer Vision
	417544- B	(Elective -III) Medical Mechatronics
	417544- C	(Elective -III) Virtual Instrumentation
Monday 11/12/2023	417545- A	(Elective -IV) Product Design and Development
	417545- B	(Elective -IV) Operation Research
	417545- C	(Elective -IV) Industry 4.0



**B.E. HONORS/MINORS**

SEMESTER - VII

Time:- 2.00 PM. TO 4.30 PM.

Day & Date	Paper Code	Subject
Wednesday 13/12/2023	401301	Work Method Statement Making
	401401	Traffic and Transportation Planning
	402014 MJ	Additive Manufacturing System Design
	402024 MJ	Electrical Energy Systems
	302034 MJ	Modelling and Simulation of EHV
	302044 MJ	System modelling and simulation
	404181 HR	Industrial Robotics & Automation
	404181 HBCT	Smart Contracts & Cryptocurrency
	408214	Sustainable Packaging
	410301	Machine Learning
	410401	Internet of Things and Embedded Security
	410501	Machine Learning and Data Science
	410601	Machine Learning for Internet of Things
410701	Virtual Reality in Game Development	

**B.E. HONORS/MINORS**

SEMESTER - VIII

Time:- 2.00 PM. TO 4.30 PM.

<b>Day &amp; Date</b>	<b>Paper Code</b>	<b>Subject</b>
Tuesday 12/12/2023	401303	Tunnel Engineering
	401403	Land Use and Land Cover
	402016 MJ	3D Printing Applications & Entrepreneurship
	402026 MJ	Sustainable Energy Conversion Systems
	302036 MJ	e-Vehicle Standards, Charging & Safety
	302046 MJ	Systems Engineering Management
	404183 HR	Artificial Intelligence in Robotics
	404183 HBCT	Block Chain Solutions
	408216	Brand and Packaging Management
	410303	Soft Computing and Deep Learning
	410403	Information Systems Management
	410503	Artificial Intelligence for Big Data Analytics
	410603	Internet of Things Security
410703	Application Development using Augmented Reality and Virtual Reality	

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Date:02/11/2023

**Director,  
Board of Examinations and Evaluation**