#### SAVITRIBAI PHULE PUNE UNIVERSITY

(Formerly University of Pune)



**EXAMINATION CIRCULAR NO. 225 OF 2025**BACHELOR OF ENGINEERING (2019 PATTERN)

Examination of INSEM - Winter Session - 2025

(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 ENGINEERING)

#### **SEMESTER-VII**

Time-2.00 p.m. to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Tuesday 19/08/2025	Automotive Testing and Certification	416481
Wednesday 20/08/2025	Machine and Vehicle Dynamics	416482
	(ELECTIVE - III) Artificial Intelligence and Machine Learning	416484A
Friday 22/08/2025	(ELECTIVE-III) Automotive Control Systems	416484B
	(ELECTIVE-III) Internet of Things**	402044E
Saturday	(ELECTIVE-IV) Finite Elements Analysis	416485A
23/08/2025	(ELECTIVE-IV)Computational Fluid Dynamics	416485B

NOTE: \*\*COMMON WITH MECHANICAL ENGINEERING

## **B.E.** (BIOTECHNOLOGY ENGINEERING)

### **SEMESTER-VII**

#### Time-2.00 p.m. to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Tuesday 19/08/2025	Biochemical Engineering	415461
Wednesday 20/08/2025	Bioinformatics	415462
	(ELECTIVE-III) Bioprocess Equipment Design	415463A
Friday 22/08/2025	(ELECTIVE-III) Environmental Biotechnology	415463B
	(ELECTIVE-III) Genomics	415463C
	(ELECTIVE - IV) Bioenergy and Renewable Resources	415464A
Saturday	(ELECTIVE-IV) Nanotechnology	415464B
23/08/2025	(ELECTIVE - IV) Stem Cell Biology and Regenerative Medicine	415464C

## **B.E.** (CHEMICAL ENGINEERING)

Time-2.00 p.m. to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Tuesday 19/08/2025	Process Dynamics and Control	409341
Wednesday 20/08/2025	Chemical Reaction Engineering-II	409342
Thursday 21/08/2025	Chemical Engineering Design	409343
	(ELECTIVE-III) Environmental Engineering	409344A
Friday	(ELECTIVE-III) Membrane Technology	409344B
22/08/2025	(ELECTIVE-III) Industrial Piping	409344C
	(ELECTIVE-III) Petroleum Refining	409344D
	(ELECTIVE-IV)Chemical Process Synthesis	409345A
Saturday	(ELECTIVE-IV) Industrial Management & Entrepreneurship	409345B
23/08/2025	(ELECTIVE-IV) Green Technology	409345C
	(ELECTIVE-IV) Advance Separation Processes	409345D

## **B.E.** (CIVIL)

## **SEMESTER-VII**

## Time- 2.00 p.m. to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Tuesday 19/08/2025	Foundation Engineering	401001
Wednesday 20/08/2025	Transportation Engineering	401002
	(ELECTIVE-III) Coastal Engineering	401003A
	(ELECTIVE - III)Advanced Design of Concrete Structures (Time – 2.00 p.m. to 3.15 p.m.)	401003B
Friday 22/08/2025	(ELECTIVE - III) Integrated Water Resources Planning & Management	401003C
	(ELECTIVE-III)Finite Element Method	401003D
	(ELECTIVE-III) Data Analytics	401003E
	(ELECTIVE-III) Operation Research	401003F
	(ELECTIVE-IV) Air Pollution and Control	401004A
	(ELECTIVE-IV) Advanced Design of Steel Structures (Time-2.00p.mto3.15p.m.)	401004B
Saturday 23/08/2025	(ELECTIVE-IV) Statistical Analysis and Computational Method	401004C
25/08/2025	(ELECTIVE-IV) Airport and Bridge Engineering	401004D
	(ELECTIVE-IV) Design of Prestressed Concrete Structures (Time–2.00p.mto3.15p.m.)	401004E
	(ELECTIVE - IV)Formwork and Plumbing Engineering	401004F

## **B.E.** (COMPUTER ENGINEERING)

## **SEMESTER-VII**

Time- 2.00 p.m. to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Tuesday 19/08/2025	Design and Analysis of Algorithms	410241
Wednesday 20/08/2025	Machine Learning	410242
Thursday 21/08/2025	Block chain Technology	410243
	(ELECTIVE-III) Pervasive Computing	410244A
	(ELECTIVE-III) Multimedia Techniques	410244B
Friday 22/08/2025	(ELECTIVE-III) Cyber Security and Digital Forensics	410244C
	(ELECTIVE - III) Object Oriented Modeling and Design	410244D
	(ELECTIVE-III) Digital Signal Processing	410244E
	(ELECTIVE-IV) Information Retrieval	410245A
	(ELECTIVE-IV) GPU Programming and Architecture	410245B
Saturday 23/08/2025	(ELECTIVE-IV) Mobile Computing	410245C
	(ELECTIVE - IV) Software Testing and Quality Assurance	410245D
	(ELECTIVE-IV)Compilers	410245E

## **B.E.** (MECHANICAL)

#### **SEMESTER-VII**

### Time-2.00 p.m. to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Tuesday 19/08/2025	Heating Ventilation Air-Conditioning and Refrigeration	402041
Wednesday 20/08/2025	Dynamics of Machinery (Time–2.00 p.m. to 3.15p.m.)	402042
	(ELECTIVE-III) Automobile Design	402044A
	(ELECTIVE - III)Design of Heat Transfer Equipments	402044B
Friday 22/08/2025	(ELECTIVE-III) Modern Machining Processes	402044C
	(ELECTIVE-III) Industrial Engineering	402044D
	(ELECTIVE-III) Internet of Things	402044E
	(ELECTIVE-III) Computational Fluid Dynamics	402044F
	(ELECTIVE-IV) Product Design and Development	402045A
Saturday	(ELECTIVE - IV)Experimental Methods in Thermal Engineering	402045B
23/08/2025	(ELECTIVE-IV) Additive Manufacturing	402045C
	(ELECTIVE-IV) Operations Research	402045D
	(ELECTIVE - IV) Augmented Reality and Virtual Reality	402045E

## **B.E.** (ELECTRICAL)

Time -2.00 p.m. to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Tuesday 19/08/2025	Power System Operation & Control	403141
Wednesday 20/08/2025	Advanced Control System	403142
	(ELECTIVE-III) PLC and SCADA	403143A
Friday	(ELECTIVE-III) Power Quality Management	403143B
22/08/2025	(ELECTIVE-III) High Voltage Engineering	403143C
	(ELECTIVE-III) Robotics and Automation	403143D
	(ELECTIVE-IV) Alternate Energy System	403144A
Saturday	(ELECTIVE-IV) Electrical & Hybrid Vehicle	403144B
23/08/2025	(ELECTIVE-IV)Special-purpose Machines	403144C
	(ELECTIVE-IV) HVDC & FACTS	403144D

## **B.E.** (ELECTRONICS)

#### **SEMESTER-VII**

Time- 2.00 p.m. to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Tuesday 19/08/2025	VLSI Design	404201
Wednesday 20/08/2025	Advanced Power Electronics	404202
Thursday 21/08/2025	Electronic System Design	404203
	(ELECTIVE-III) Speech Processing*	404184A
	(ELECTIVE-III) Internet of Things	404204A
Friday 22/08/2025	(ELECTIVE-III) Software Defined Radio	404204B
	(ELECTIVE - III) Testing and Verification for SOC design	404204C
	(ELECTIVE-III) JavaScript*	404184C
	(ELECTIVE-IV) Mobile Communication	404205A
	(ELECTIVE-IV) Embedded Systems	404205B
Saturday 23/08/2025	(ELECTIVE-IV) Optimization Techniques	404205C
	(ELECTIVE-IV) Low power CMOS*	404185D
	(ELECTIVE-IV) Smart Antennas*	404185E

**NOTE:**\*COMMON WITH E &TC.

## **B.E.** (ELECTRONICS & TELE COMMUNICATION)

Time-2.00 p.m. to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Tuesday 19/08/2025	Radiation & Microwave Theory	404181
Wednesday 20/08/2025	VLSI Design and Technology	404182
Thursday 21/08/2025	Cloud Computing	404183
	(ELECTIVE-III) Speech Processing	404184A
	(ELECTIVE-III) PLC SCADA & Automation	404184B
Friday 22/08/2025	(ELECTIVE-III) JAVA Script	404184C
	(ELECTIVE-III) Embedded & RTOS	404184D
	(ELECTIVE-III) Modernized IoT	404184E
	(ELECTIVE-IV) Data Mining	404185A
	(ELECTIVE-IV) Electronic Product Development	404185B
Saturday 23/08/2025	(ELECTIVE-IV) Deep Learning	404185C
	(ELECTIVE-IV) Low Power CMOS	404185D
	(ELECTIVE-IV) Smart Antennas	404185E

## **B.E.** (INFORMATION TECHNOLOGY)

### **SEMESTER-VII**

Time-2.00 p.m. to 3.00 p.m.

Day& Date	SUBJECT (2019 Course)	SUBJECT CODE
Tuesday 19/08/2025	Information and Storage Retrieval	414441
Wednesday 20/08/2025	Software Project Management	414442
Thursday 21/08/2025	Deep Learning	414443
	(ELECTIVE-III) Mobile Computing	41444A
Friday	(ELECTIVE-III) High Performance Computing	414444B
22/08/2025	(ELECTIVE-III) Multimedia Technology	414444C
	(ELECTIVE-III) Smart Computing	414444D
	(ELECTIVE-IV)Bioinformatics	414445A
Saturday	(ELECTIVE-IV) Introduction to DevOps	414445B
23/08/2025	(ELECTIVE-IV) Computer Vision	414445C
	(ELECTIVE-IV) Wireless Communications	414445D

## **B. E. (INSTRUMENTATION & CONTROL)**

Time-2.00 p.m. to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Tuesday 19/08/2025	Process Control Techniques	406261
Wednesday 20/08/2025	Project Engineering and Management	406262
	(ELECTIVE-III) Digital Image Processing	406263A
Friday	(ELECTIVE-III) Data Analytics	406263B
22/08/2025	(ELECTIVE-III) Wireless Sensor Networks	406263C
	(ELECTIVE-III) Process Modelling and Optimization	406263D
	(ELECTIVE-IV) Cloud Computing	406264A
Saturday	(ELECTIVE-IV) Soft Computing	406264B
23/08/2025	(ELECTIVE-IV) Automotive Instrumentation	406264C
	(ELECTIVE-IV) Advanced Control System	406264D

## **B.E. PRINTING TECHNOLOGY**

### **SEMESTER-VII**

Time- 2.00 p.m. to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Tuesday 19/08/2025	Gravure Printing Techniques	408283
Wednesday 20/08/2025	Digital Printing Techniques	408284
Friday	(ELECTIVE - III) Paper Board and Corrugation Package Technology	408281A
22/08/2025	(ELECTIVE-III) Polymer Science	408281B
Saturday	(ELECTIVE-IV) Multimedia Advertising	408282A
23/08/2025	(ELECTIVE - IV) Process Optimization and Total Quality Management in Printing	408282B

## **B.E. PRODUCTION ENGINEERING**

Time-2.00 p.m. to 3.00 p.m.

Day& Date	SUBJECT (2019 Course)	SUBJECT CODE
Tuesday 19/08/2025	Automation and Control Engineering	411081
Wednesday 20/08/2025	Operations Research	411082
	(ELECTIVE - III) Simulation, Modeling and Digital Twin	411083A
Friday 22/08/2025	(ELECTIVE-III)Total Quality Management	411083B
	(ELECTIVE - III)Artificial Intelligence in Manufacturing	411083C
	(ELECTIVE-III) World Class Manufacturing	411083D
	(ELECTIVE - IV)Plant Maintenance and industrial safety	411084A
Saturday 23/08/2025	(ELECTIVE-IV) Surface Engineering	411084B
25, 55, 2525	(ELECTIVE-IV) Reverse Engineering	411084C
	(ELECTIVE-IV) Entrepreneurship and Innovations	411084D

#### **B.E. PRODUCTION SANDWICH ENGINEERING**

Time-2.00 p.m. to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Tuesday 19/08/2025	Manufacturing Automation	411121
Wednesday 20/08/2025	Operations Research	411122
	(ELECTIVE-III) Additive Manufacturing	411123A
Friday	(ELECTIVE-III) Industrial Robotics	411123B
22/08/2025	(ELECTIVE-III) Reliability Engineering	411123C
	(ELECTIVE-III)Micro-Electro mechanical systems	411123D
	(ELECTIVE-IV) Creative Product Design	411124A
Saturday 23/08/2025	(ELECTIVE-IV) Mechatronics	411124B
	(ELECTIVE-IV)CAD/CAM	411124C
	(ELECTIVE-IV) Data analytics	411124D

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

Time-2.00 p.m. to 3.00 p.m.

Day& Date	SUBJECT (2019Course)	SUBJECT CODE
Tuesday 19/08/2025	Machine Vision System	411501
Wednesday 20/08/2025	Robot System Reliability and Safety	411502
	(Elective-III) Advanced Computational Techniques	411503A
Friday 22/08/2025	(Elective-III) Wireless sensor network	411503B
22/08/2023	(Elective-III) Microprocessor and microcontroller	411503C
	(Elective-III) Ergonomics and work management	411503D
	(Elective-IV) Computational Fluid Dynamics	411504A
Saturday 23/08/2025	(Elective -IV) Internet of Things and Machine Learning	411504B
	(Elective -IV) Artificial Neural Networks and fuzzy systems	411504C
	(Elective-IV)Power Electronics and Drives	411504D

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

Time-2.00p.m. to 3.00p.m.

Day& Date	SUBJECT (2019 Course)	SUBJECT CODE
Tuesday 19/08/2025	Information Retrieval in AI	418541
Wednesday 20/08/2025	Cloud Computing	418542
Thursday 21/08/2025	Deep Learning for Al	418543
	(Elective-III) Quantum Computing	418544A
Friday 22/08/2025	(Elective-III) Block Chain	418544B
	(Elective-III) AI in Drones	418544C
Saturday 23/08/2025	(Elective-IV) Ethical Hacking and cyber forensics	418545A
	(Elective-IV) Augmented Reality and Virtual Reality	418545B
	(Elective-IV) DevOps in Machine Learning	418545C

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

Time-2.00 p.m. to3.00 p.m.

Day& Date	SUBJECT (2019 Course)	SUBJECT CODE
Tuesday 19/08/2025	Industrial Automation & Control Systems	402541
Wednesday 20/08/2025	Robotic Process Automation & Development	402542
	(Elective-III) Robotics: Cognitive & Medical	402544A
Friday	(Elective-III) Microprocessors and Microcontrollers	402544B
22/08/2025	(Elective-III) Modern Machining Processes	402544C
	(Elective-III) Industrial Engineering	402544D
	(Elective-III) Computational Fluid Dynamics	402544E
Saturday 23/08/2025	(Elective-IV) Lean Manufacturing	402545A
	(Elective-IV) Project Management	402545B
	(Elective-IV) Additive Manufacturing	402545C
	(Elective-IV) Operations Research	402545D
	(Elective-IV) Augmented Reality and Virtual Reality	402545E

## **B.E. ELECTRONICS AND COMPUTER ENGINEERING**

Time-2.00 p.m. to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Tuesday 19/08/2025	Data Science and Visualization	410341
Wednesday 20/08/2025	Web Technology	410342
Thursday 21/08/2025	Internet of Things	410343
	(Elective-III) Big Data & Analytics	410344A
Friday	(Elective-III) Mobile Application Development	410344B
22/08/2025	(Elective-III) Information and Cyber Security	410344C
	(Elective-III) Digital Image Processing	410344D
	(Elective-IV) Robotics & Automation	410345A
Saturday 23/08/2025	(Elective-IV) Human Computer Interface	410345B
	(Elective-IV) Digital System Design	410345C
	(Elective-IV) Augmented and Virtual Reality	410345D

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

Time- 2.00 p.m. to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Tuesday 19/08/2025	Machine Learning	417521
Wednesday 20/08/2025	Data Modeling &Visualization	417522
	(Elective-III) Quantum Artificial Intelligence	417523A
Friday	(Elective-III) Industrial Internet of Things	417523B
22/08/2025	(Elective -III) Enterprise Architecture and Components	417523C
	(Elective-III)Bioinformatics	417523D
	(Elective-IV) GPU Programming and Architecture	417524A
Saturday 23/08/2025	(Elective-IV) Information Retrieval	417524B
	(Elective-IV) UI/UX Design	417524C
	(Elective-IV) Optimization Algorithms	417524D

## **B.E. MECHATRONICS**

Time- 2.00 p.m. to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Tuesday 19/08/2025	Robot Operating System	417541
Wednesday 20/08/2025	Data Communication	417542
Thursday 21/08/2025	Micro Electro Mechanical Systems	417543
	(Elective -III) Image Processing and Computer Vision	417544-A
Friday 22/08/2025	(Elective-III) Medical Mechatronics	417544-B
	(Elective-III) Virtual Instrumentation	417544-C
	(Elective-IV) Product Design and Development	417545-A
Saturday 23/08/2025	(Elective-IV) Operation Research	417545-B
	(Elective-IV)Industry4.0	417545-C

### **B.E. COMPUTER SCIENCE AND DESIGN**

Time- 2.00 p.m. to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Tuesday 19/08/2025	Computer Vision	418241
Wednesday 20/08/2025	Deep learning	418242
Thursday 21/08/2025	Game Design and Development	418243
	(Elective -III) Object Oriented Modelling and Design	418244-A
Friday	(Elective -III) Software Testing and Quality Assurance	418244-В
22/08/2025	(Elective-III) Block chain Technology	418244-C
	(Elective-III) Information Retrieval	418244-D
	(Elective-IV) Natural Language Processing	418245-A
Saturday 23/08/2025	(Elective -IV) Software Development for Portable devices	418245-В
23/06/2023	(Elective-IV) Compiler Design	418245-C
	(Elective-IV) Advanced UI/UX Design	418245-D

### **B.E. HONORS/MINORS**

#### **SEMESTER-VII**

Time-2.00 p.m. to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
	Traffic and Transportation Planning	401401
	Work Method Statement Making	401301
	Sustainable Packaging	408214
	Smart Contracts & Cryptocurrency	404181HBCT
	Industrial Robotics & Automation	404181HR
Monday	Additive Manufacturing System Design	402014MJ
25/08/2025	Modelling and Simulation of EHV	302034MJ
	Electrical Energy Systems	402024MJ
	System modeling and simulation	302044MJ
	Machine Learning	410301
	Internet of Things and Embedded Security	410401
	Machine Learning and Data Science	410501
	Machine Learning for Internet of Things	410601
	Virtual Reality in Game Development	410701

Ganeshkhind, Pune-411007 Ref./Exam/ Coord/686 Date: 04/08/2025

Director
Board of Examinations & Evaluation

#### SAVITRIBAI PHULE PUNE UNIVERSITY

(Formerly University of Pune)



#### **EXAMINATION CIRCULAR NO. 226 OF. 2025**

#### **THIRD YEAR ENGINEERING (2019 PATTERN)**

**Insem Examination of Winter session - 2025** 

(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 othermaterials 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.

## **AUTOMOBILE**

#### SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Numerical & Optimization Methods (316481)
Wednesday, 20/08/2025	Heat Transfer (316482)
Thursday, 21/08/2025	Design of Machine Components (316483)
Friday, 22/08/2025	Automobile Electrical and Electronics (316484)
Saturday, 23/08/2025	ELECTIVE-I Advanced Forming & Joining Processes (302045-A)*
	ELECTIVE-I Machining Science and Technology (302045-B)*

Note :- \* Common with Mechanical

## **CHEMICAL**

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Mass Transfer-I (309341)
Wednesday, 20/08/2025	Chemical Technology -II (309342)
Thursday, 21/08/2025	Chemical Engineering Mathematics (309343)
Friday, 22/08/2025	Chemical Engineering Thermodynamics (309344)
	ELECTIVE-I Chemical Industry Management (409345A)
Saturday,	ELECTIVE-I Food Technology (309345 B)
23/08/2025	ELECTIVE-I Polymer Engineering (309345 C)
	ELECTIVE-I Downstream Processing (309345 D)



Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Hydrology and Water Resources Engineering (301001)
Wednesday, 20/08/2025	Water Supply Engineering (301002)
Thursday, 21/08/2025	Design of Steel Structures (301003) # (Time: 11:00 AM To 12:15 PM)
Friday, 22/08/2025	Engineering Economics and Financial Management (301004)
	ELECTIVE-I Advanced Fluid Mechanics and Hydraulic Machines (301005 a)
	ELECTIVE-I Research Methodology and IPR (301005 b)
Saturday,	ELECTIVE-I Construction Management. (301005 c)
23/08/2025	ELECTIVE-I Advanced Concrete Technology (301005 d)
	ELECTIVE-I Matrix Methods of Structural Analysis (301005 e)
	ELECTIVE-I Advanced Mechanics of Structures (301005 f)

Note : - # Please Note the time

### **COMPUTER**

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Database Management Systems (310241) * #
Wednesday, 20/08/2025	Theory of Computation (310242) #
Thursday, 21/08/2025	Systems Programming and Operating System (310243) #
Friday, 22/08/2025	Computer Networks and Security (310244)
	ELECTIVE-I Internet of Things and Embedded Systems (310245 A) #
Saturday,	ELECTIVE-I Human Computer Interface (310245 B) #
23/08/2025	ELECTIVE-I Distributed Systems (310245 C) #
	ELECTIVE-I Software Project Management (310245 D) #
Note: * Common with A.I.D.S. / # Common with Computer Science	

## **ELECTRICAL**

SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Industrial and Technology Management (303141)
Wednesday, 20/08/2025	Power Electronics (303142)
Thursday, 21/08/2025	Electrical Machines-II (303143)
Friday, 22/08/2025	Electrical Installation Design and Condition Based Maintenance (303144)
	ELECTIVE-I Advanced Microcontroller and Embedded System (303145 A)
Saturday, 23/08/2025	ELECTIVE-I Digital Signal Processing (303145 B)
	ELECTIVE-I Open Elective (303145 C)

## **ELECTRONICS**

	OEW-I
Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Power and Industrial Electronics (304201)
Wednesday, 20/08/2025	Electromagnetic Waves and Propagation Theory (304202)
Thursday, 21/08/2025	Database Management (304183) *
Friday, 22/08/2025	Microcontrollers and Applications (304204)
	ELECTIVE-I Instrumentation systems (304205)
	ELECTIVE-I Machine Learning (304205)
Saturday, 23/08/2025	ELECTIVE-I Fundamentals of JAVA Programming (304185) *
	ELECTIVE-I Data Communication (304205)
	ELECTIVE-I Computer Networks (304205)
Note :- * Common with E&TC	

## **ELECTRONICS & TELECOMMUNICATION**

SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Digital Communication (304181) #
Wednesday, 20/08/2025	Electromagnetic Field Theory (304182)
Thursday, 21/08/2025	Database Management (304183) * \$
Friday, 22/08/2025	Microcontrollers (304184) #\$
	ELECTIVE-I Digital Signal Processing (304185)
Saturday,	ELECTIVE-I Electronic Measurements (304185)
23/08/2025	<b>ELECTIVE-I</b> Fundamentals of JAVA Programming (304185) *
	ELECTIVE-I Computer Networks (304185)
Note :- * Common with Electronics / # Electronics Engineering (VLSI Design and Technology)	

Note :- "Common with Electronics / # Electronics Engineering (VLSI Design and Technology)

\$ Electronics & Communication – Advanced Communication Technology

## **INFORMATION TECHNOLOGY**

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Theory of Computation (314441)
Wednesday, 20/08/2025	Operating Systems (314442)
Thursday, 21/08/2025	Machine Learning (314443)
Friday, 22/08/2025	Human Computer Interaction (314444)
	ELECTIVE-I Design and Analysis of Algorithm (314445 A)
Saturday,	ELECTIVE-I Advanced Database and Management System (314445 B)
23/08/2025	ELECTIVE-I Design Thinking (314445 C)
	ELECTIVE-I Internet of Things (314445 D)

## **INSTRUMENTATION & CONTROL**

SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Embedded Systems (306261)
Wednesday, 20/08/2025	Industrial Automation-I (306262)
Thursday, 21/08/2025	Modern Control Theory (306263)
Friday, 22/08/2025	Operating System (306264)
	ELECTIVE-I Mechatronics & Robotics (306265 A)
Saturday,	ELECTIVE-I Data Science (306265 B)
23/08/2025	ELECTIVE-I Power Electronics (306265 C)
	ELECTIVE-I Bio-Medical Instrumentation (306265 D)

## **MECHANICAL**

SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Numerical & Statistical Methods (302041) *
Wednesday, 20/08/2025	Heat & Mass Transfer (302042) *
Thursday, 21/08/2025	Design of Machine Elements (302043) *
Friday, 22/08/2025	Mechatronics (302044) *
Saturday, 23/08/2025	ELECTIVE-I Advanced Forming & Joining Processes (302045-A) **
	ELECTIVE-I Machining Science & Technology (302045-B) **

NOTE:- \* Common to Mechanical Sandwich Engineering \*\* Common to Automobile Engineering

### **MECHANICAL-SANDWICH**

#### SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Numerical & Statistical Methods (302041) *
Wednesday, 20/08/2025	Heat & Mass Transfer (302042) *
Thursday, 21/08/2025	Design of Machine Elements (302043) *
Friday, 22/08/2025	Mechatronics (302044) *
Saturday, 23/08/2025	Fundamentals of Computer Aided Engineering (302061)

NOTE:- \* Common to Mechanical Engineering

## **B. Tech. Biotechnology**

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Analytical Techniques (315461)
Wednesday, 20/08/2025	Material Balances and Stoichiometry (315462)
Thursday, 21/08/2025	Genetic Engineering (315463)
Friday, 22/08/2025	Introduction to Immunology (315464)
	ELECTIVE-I Enzyme Technology (315465 A)
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Good Laboratory Practices and Good Manufacturing Practices (315465 B)
	ELECTIVE-I Agricultural Biotechnology (315465 C)

### Printing SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Print Statistics (308281)
Wednesday, 20/08/2025	Offset Printing Techniques (308282)
Thursday, 21/08/2025	Color Science and Measurement (308283)
Friday, 22/08/2025	Ink Technology (308284)
	ELECTIVE-I Cyber Security (308286 A)
Saturday, 23/08/2025	ELECTIVE-I Wood, Glass and Metal Based Packaging (308286 B)
	ELECTIVE-I Engineering Ethics (308286 C )

## **Production**

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Engineering Metrology and Instrumentation (311081 (A)
Wednesday, 20/08/2025	Material Forming Technology (311082) (A)
Thursday, 21/08/2025	Machining Science and Technology (311083 )(A)
Friday, 22/08/2025	Kinematics and Design of Machines (311084)(A)
	ELECTIVE-I Finite Element Analysis (311085) (A)-I)
Saturday,	ELECTIVE-I Advances in Manufacturing Processes (311085) (A)-II)
23/08/2025	ELECTIVE-I Mechatronics (311085) (A)-III )
	ELECTIVE-I Supply Chain Management (311085 )(A)-IV )

## **Production Sandwich**

#### SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Manufacturing Technology (Self Study) (311122 )(A)

## **Automation and Robotics**

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Design of Robot Elements (302521)
Wednesday, 20/08/2025	Robot Kinematics and Dynamics (302522)
Thursday, 21/08/2025	Computer Aided Engineering and Manufacturing (302523)
Friday, 22/08/2025	Signal Processing and Conditioning (302524)
Saturday, 23/08/2025	ELECTIVE-I Advanced Forming & Joining Processes (302525-A)
	ELECTIVE-I Optimization Techniques (302525-B)

## **Electronics and Computer Engineering**

SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Database Management Systems [310341]
Wednesday, 20/08/2025	Advanced Java Programming [310342]
Thursday, 21/08/2025	Data Communication [310343]
Friday, 22/08/2025	Microcontroller and Applications [310344]
	ELECTIVE-I Distributed Systems [310345 A]
Saturday, 23/08/2025	ELECTIVE-I Block Chain Technology [310345 B]
	ELECTIVE-I Digital Signal Processing [310345 C]
	ELECTIVE-I Sensors and Applications [310345 D]

## **Mechatronics Engineering**

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Machine Design [317541]
Wednesday, 20/08/2025	Manufacturing Processes [317542]
Thursday, 21/08/2025	Control System [317543]
Friday, 22/08/2025	Digital Signal Processing [317544]
Saturday, 23/08/2025	Microcontrollers [317545]

## **Robotics and Automation Engineering**

#### SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Embedded systems in Robotics [311501] (A)
Wednesday, 20/08/2025	Hydraulics and Pneumatics [311502] (A)
Thursday, 21/08/2025	Robot Kinematics and Dynamics [311503] (A)
Friday, 22/08/2025	Sensors Technology [311504] (A)
	ELECTIVE-I Statistics and Numerical Methods [311505] (A)-I
Saturday,	ELECTIVE-I Finite Element Analysis [311505] (A)-II
23/08/2025	ELECTIVE-I Industrial Robotics and Material handling Systems [311505] (A)-III
	ELECTIVE-I Intelligent Manufacturing System [311505] (A)-IV

## **Artificial Intelligence and Data Science**

#### **SEM-I**

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Data Base Management System [310241] *
Wednesday, 20/08/2025	Computer Networks [317521]
Thursday, 21/08/2025	Web Technology [310252]
Friday, 22/08/2025	Artificial Intelligence [310253]
	ELECTIVE-I Embedded Systems & Security [317522] (A)
Saturday,	ELECTIVE-I Design Thinking [314445] (C)
23/08/2025	ELECTIVE-I Pattern Recognition [317522] (B)
	ELECTIVE-I Human Computer Interface [310245] (B)

Note :- \* Common with Computer Engineering

## **Artificial Intelligence and Machine Learning**

#### **SEM-I**

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Design and analysis of Algorithm [318541]
Wednesday, 20/08/2025	IoT with Artificial Intelligence [318542]
Thursday, 21/08/2025	Web Technology [318543]
Friday, 22/08/2025	Management & Entrepreneurship for IT Industry [318544]
	ELECTIVE-I Robotics [318545] (A)
Saturday,	ELECTIVE-I Pattern Recognition [318545] (B)
23/08/2025	ELECTIVE-I Information Security [318545] (C)
	ELECTIVE-I Business Intelligence [318545] (D)

## **Computer Science and Design**

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Software Engineering and Project Management [318241]
Wednesday, 20/08/2025	Theory of Computation [318242]
Thursday, 21/08/2025	Database System Design [318243]
Friday, 22/08/2025	Design and analysis of Algorithm [318244]
	ELECTIVE-I Internet of Things [318245] (A)
Saturday,	ELECTIVE-I Pattern Recognition [318245] (B)
23/08/2025	ELECTIVE-I Distributed Systems [318245] (C)
	ELECTIVE-I Data Mining and warehousing [318245] (D)

## **Computer Science and Engineering in Data Science**

#### SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Data Warehousing & Mining [310641]
Wednesday, 20/08/2025	Computer Networks and Security [310244]
Thursday, 21/08/2025	Artificial Intelligence [310643]
Friday, 22/08/2025	Theory of Computation [310242]
	ELECTIVE-I Human Computer Interface [310645 A]
Saturday,	ELECTIVE-I Internet of Things and Embedded System [310645 B]
23/08/2025	ELECTIVE-I Software Modeling and Design [310645 C]
	ELECTIVE-I Pattern Recognition [310645 D]

## **Computer Science**

#### **SEM-I**

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Database Management Systems [310241]*
Wednesday, 20/08/2025	Theory of Computation [310242]*
Thursday, 21/08/2025	Systems Programming and Operating System [310243]*
Friday, 22/08/2025	TCP/IP Networking [310544]
	ELECTIVE-I Internet of Things and Embedded Systems [310245]*
Saturday,	ELECTIVE-I Human Computer Interface [310245]*
23/08/2025	ELECTIVE-I Distributed Systems [310245]*
	ELECTIVE-I Software Project Management [310245]*

Note: \*: These are the subjects common with TE Computer Engineering

# **Electronics Engineering** (VLSI Design and Technology)

#### SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Digital Communication [304181]*
Wednesday, 20/08/2025	Computer Architecture [304401]
Thursday, 21/08/2025	Analog and Digital CMOS Design [304402]
Friday, 22/08/2025	Microcontrollers [304184]*
	ELECTIVE-I Database Management [304403]
Saturday,	ELECTIVE-I Design for testability [304403]
23/08/2025	ELECTIVE-I Statistics and Numerical Techniques [304403]
	ELECTIVE-I Computer Networks [304403]

<sup>\*</sup> These courses are common with TE (E&TC) Engg 2019 Pattern

# **Electronics & Communication - Advanced Communication Technology**

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Cellular Networks [304301]
Wednesday, 20/08/2025	Radiation and Microwave Techniques [304302]
Thursday, 21/08/2025	Database Management [304183]*
Friday, 22/08/2025	Microcontrollers [304184]*
	ELECTIVE-I Electronic Measurements [304303]
Saturday,	ELECTIVE-I Fundamentals of JAVA Programming [304303]
23/08/2025	ELECTIVE-I Computer Networks [304303]
	ELECTIVE-I Network Security [304303]

<sup>\*</sup> These subjects are common with TE (E&TC) Engg 2019 Pattern

## **HONORS / MINORS**

SEM-I

Day & Date	Honors / Minors	Time : Time : 11:00 AM To 12:00 NOON
Monday, 25/08/2025	Artificial Intelligence And Machine	Computational Statistics (310301)
	Cyber Security	Information and Cyber Security (310401)
	Data Science	Data Science and Visualization (310501)
	Internet of Things	Embedded Systems and Internet of Things (310601)
	Virtual Reality And Augmented Reality	Virtual Reality (310701)
	Systems Engineering	Foundations of systems & systems engineering (302041MJ)
	Energy Management in Utility Systems	Energy Management (302021MJ)
	Electric Vehicles	e-Vehicle Technology (302031MJ)
	3D Printing	Additive Manufacturing Technology (302011MJ)
	Robotics	Principles of Robotics (304181 HR)
	Block Chain Technology	Introduction to Block chain (304181 HBCT)
	Metro Construction	Surveying in Metro construction (301301)
	Architecture and Town Planning	Urban Housing and Infrastructure Planning (301401)
	Advanced Packaging Technology	Internet of Things (308211)

Ganeshkhind, Pune - 411 007

Ref.No/ Exam/Coord/692

Date: 06 / 08 / 2025

Director

Board of Examinations and Evaluation