



RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY

M.TECH, M.E., M.DES, M.ARCH. FIRST SEMESTER (C.B.C.S.) EXAMINATION OF WINTER 2023

(624 TO 647)

PROGRAMME: WRITTEN #
Time: 09.30 A.M. To 12.30 P.M.

Sr. No.	Name of Branch	Day	Tuesday	Thursday	Saturday	Tuesday	Thursday	Saturday
		Date	19-12-2023	21-12-2023	23-12-2023	26-12-2023	28-12-2023	30-12-2023
1	Structure Engineering		Theory of Elasticity & Elastics Stability	Matrix Analysis Of Structural	Structural Dynamics	Elective-I	Elective-II (Open)	
3	Computer Science & Engineering		Data Science	Advanced in Operating System Design	High Performance Computer Architecture	Elective-I	Elective-II (Open)	
4	CAD/CAM		Computer Integrated Manufacturing	Computer Graphics For CAD/CAM	CNC & Robotics	Elective-I	Elective-II (Open)	
5	Environmental Engineering		Environmental Chemistry & Microbiology.	Municipal & Industrial Water Treatment.	Municipal Waste Water Treatment & Disposal.	Elective-I	Elective-II (Open)	
6	Chemical Tech. (Food Tech.)		Chemistry & Biochemistry Of Food Components.	Food Product Development & Packaging.	Bioprocess Engineering.	Elective-I	Elective-II (Open)	
7	Chemical Tech. (Petro. Tech.)		Catalyst Science & Technology.	Petroleum Refinery Engineering.	Petrochemical Process Design.	Elective-I	Elective-II (Open)	
8	Chemical Tech. (Oil. Tech.)		Advanced Oil Chemistry & Oleo chemicals.	Advanced Quality Control Techniques.	Technology Of Expression, Extraction & Refining Of Oil Bearing Materials.	Elective-I	Elective-II (Open)	
9	Chemical Tech. (Paint Tech.)		Chemistry Of Film Forming Materials & Polymerization Tech.	Technology Of Pigment Extenders & Additives.	Principle & Formulations Of Surface Coatings.	Elective-I	Elective-II (Open)	
10	VLSI		VLSI Sub-system Design	Advanced Digital Signal Processing	VLSI Circuits	Elective-I	Elective-II (Open)	
11	Mech. Engg. & Design		Advanced Mechanisms	Dynamics of Machinery	Mechanical Vibrations	Elective-I	Elective-II (Open)	
12	Electronics Engg. Communication		Advanced Optical Communication	Coding Theory & Techniques	Advanced Digital Communication	Elective-I	Elective-II (Open)	
14	Integrated Power System		Advanced Power Electronics	Power System Modeling	Power System Deregulation & Automation	Elective- I	Elective-II (Open)	
15	Heat Power Engineering		Advanced Heat & Mass Transfer	Advanced Thermodynamics & Combustion Technology	Internal Combustion Engines	Elective- I	Elective-II (Open)	
16	Chemical Engineering		Modeling& Simulation In Chemical Engineering.	Advanced Transport Phenomena.	Advanced Reactor Design.	Elective-I	Elective-II (Open)	

Sr. No.	Name of Branch	Day Date	Tuesday 19-12-2023	Thursday 21-12-2023	Saturday 23-12-2023	Tuesday 26-12-2023	Thursday 28-12-2023	Saturday 30-12-2023
19	Power Elect. & Power System		Advanced Power Electronics	Power System Modeling	Advanced Control Theory	Elective-I	Elective-II (Open)	
20	Electronics Engineering		Advanced Digital Signal Processing	High Speed Semiconductor Devices & Circuits.	Advanced Embedded System Design.	Elective-I	Elective-II (Open)	
21	Industrial Drives & Control		Advanced Power Electronics	DC Drives	Advanced Control Theory	Elective-I	Elective-II (Open)	
22	Artificial Intelligence & Data Science.		Data Science Using Python	Artificial Intelligence.	Research Methodology & IPR.	Elective-I	Elective-II	
23	Defence Technology		Systems and Warfare Platforms.	Warfare Simulations & Strategies.	Advanced Engineering Mathematics.	Elective-I	Elective-II	
24	Computer Aided Structure Engineering		Finite Element Analysis.	Advanced Concrete structures.	Structural dynamics.	Elective-I	Elective-II	
25	M.Des[Industrial Design]		History of Design	Material & Processes	Craft, Creativity & Postmodernism	*****	Elective-II (Open)	
26	M. Arch. (In Arch. Education)		Introduction to Learning Methods -I	Basics of Architecture Education	Society & Architecture	*****	Elective-II (Open)	
27	M. Arch. (Environm. Architecture)		Society & Environmental Economics.	Traditional Knowledge Systems	Sustainable Building Technology & Management.	*****	Elective-II (Open)	
28	M. Arch. (Landscape)		Landscape Construction Services I	Theory Of Landscape -I	Plants and Design	*****	Elective-II(Open)	
29	M. Arch. (Urban Design)		History of Urbanity	Urban Design Methods & Techniques	Site & Urban planning	*****	*****	
30	M.Tech. (Infrastructure Enng. & Technology)		Infrastructure Planning & Finance	Urban Infrastructure Planning & Management	Digital Surveying	Earthquake Resistant infrastructures	Program Elective –I	Program Elective –II

GENERAL INSTRUCTION S FOR SEATING ARRANGEMENT

The name of the College Centre is already Printed on the Admission Card of each Candidate. However, it is notified for general information of the Candidates that: -

The seating arrangement for the Centre will be notified separately seven days prior to the Commencement of the written examination at the respective College / Centre, The Candidates concerned will also be able to get the necessary information from that chart of seating arrangement sent to the concerned College by University

Nagpur

Date: 20-11-2023

(Dr. Prafulla M. Sable)

Director

Board of Examination & Evaluation

Rashtrasant Tukadoji Maharaj University, Nagpur

List of Electives. M.TECH. & M.E. I Sem.(C.B.C.S)

Sr. No	Name of Branch	Elective-I	Elective-II (Open)
1	Structure Engineering	1 Advanced Steel Design. 2 Designs Of Earthquake Resistant Structures. 3 Designs Of Environmental Structures	01. Differential Equations 02. Linear Algebra 03. Numerical Analysis 04. Theory of Vectors 05. Nano Science and Nanotechnology 06. Advanced Materials and its Applications 07. Laser, Fiber Optics and Applications 08. Polymer Science and Technology 09. Instrumental Methods of Chemical Analysis 10. Waste Management 11. Green Buildings 12. Product Design & Development Process 13. Disaster Management & Migration 14. Internet of Things (IoT) 15. Storage Area Networks and Management 16. Chemical Engineering Mathematics 17. Modern Chemical Instrumentation 18. Chemical Engineering Mathematics 19. Modern Chemical Instrumentation 20. Advance Data Mining and Big Data Analytics 21. Cyber Forensic and Computer Crimes 22. Artificial Intelligence(Electrical)
2	Computer Aided Design Manufacture & Automation	1 Design Of Hydraulic & Pneumatic Systems. 2 Designs For Manufacturing & Assembly. 3 Computer Aided Machining. 4 Rapid Prototyping & Tooling's.	
3	Computer Science & Engineering	1. Ai & Expert System Design. 2. Software Architecture.	
4	CAD/CAM	1 Mechanical Behavior Of Engineering Materials. 2 Designs For Manufacturing & Assembly. 3 Designs Of Hydraulic & Pneumatic Systems.	
5	Environmental Engineering	1. Water Resources Management. 2. Environment Management. 3. Hazardous Waste Management.	
6	Chemical Technology (Food Tech.)	1. Advances In Food Engineering. 2. Molecular Biology. 3. Advances In Nutrition.	
7	Chemical Technology (Petro. Tech.)	1. Oil & Natural Gas Processing. 2. Modeling & Simulation In Chemical Engineering. 3. Advanced Transport Phenomena. 4. Advanced Thermodynamics.	
8	Chemical Technology (Oil. Tech.)	1. Technological Advancement In Oleo chemicals. 2. Process Economics, Utilities & Byproducts Of Oil Industry.	
9	Chemical Technology (Paint Tech.)	1. Automotive & Coil Coatings. 2. Technology Of Cosmetics & Polishes. 3. Boi-Polymers In Coatings.	
10	VLSI	1. Mixed Signal Processing. 2. Low Power VLSI Design. 3. Embedded Systems.	
11	Mech. Engg. & Design	1. Computer Aided Mechanical Design. 2. Reliability Maintainability & Wear.	
12	Electronics Engineering Communication	1. Advanced Antenna. 2. Information Theory & Stochastic Process. 3. Advanced Image Processing.	

13	Software System	1) AI & Expert System Design. 2) Network System Design.	23. Utilization of Electrical Energy 24. Biomedical System Engineering 25. Soft Computing Techniques 26. Digital Forensics 27. Nano Electronics 28. CMOS VLSI Design 29. Soft Computing 30. Entrepreneurship Development 31. Computer Aided Facilities Planning 32. Total Quality System & Engineering 33. Reliability Engineering 34. Artificial Intelligence (Mechanical) 35. Control System Engineering 36. Micro Electro Mechanical System 37. Energy Conservation and Management 38. Automobile Engineering 39. Advanced Operation Research 40. Robotics 41. Mechanization in Food Processing 42. Engineering Materials and Metallurgy 43. Real Time System & Software 44. Operation Research 45. Mobile Computing 46. Biometric Technologies and Applications 47. Global Warming & Climate Change. 48. Road Safety Engineering. 49. Life Skill / Soft Skill
14	Integrated Power System	1. Power System Dynamics & Control. 2. Application Of Microcontroller In Electrical System. 3. Micro & Smart Grid.	
15	Heat Power Engineering	1. Advanced Energy Technologies. 2. Power Plant Practice & Control. 3. Computer Aided Design & its Application In Thermal Systems.	
16	Chemical Engineering.	1. Process Design, Integration & Intensification. 2. Advanced Optimization Techniques. 3. Fluidization Engineering. 4. Computational Fluid Dynamics.	
17	Industrial Engineering	1. Marketing Management. 2. Flexible Manufacturing System & Robotics. 3. Inventory & Supply Chain Management. 4. Statics & Quality Control.	
18	M.E. Wireless Comm. & Comp.	1.Object Oriented System 2.Multimedia Communication	
19	Power Electronics & Power System	1. Power System Dynamics & Control. 2. Application Of Microcontroller In Electrical System. 3. Micro & Smart Grid.	
20	Electronics Engineering	1. Pattern Recognition. 2. Analog IC Design. 3. Advanced Digital Communication.	
21	Industrial Drives & Control	1. Analysis Of Electrical Machines. 2. Application Of Microcontroller In Electrical System. 3. Micro & Smart Grid.	
22	M.Des[Industrial Design]	-----	
23	M. Arch. (In Arch. Education)	-----	
24	M. Arch. (Environment Architecture)	-----	
25	M. Arch. (Landscape Architecture)	-----	

	Artificial Intelligence & Data Science.	Elective-I 1.Soft Computing 2. Cloud Computing. 3.Data Analytics.	Elective-II 1.Business Analytics. 2.Optimization Techniques. 3.Big Data Analytics.
	Defence Technology	Elective-I 1.Advance Thermal Engineering. 2.Communication Technology. 3.Advance Mechanical Engineering.	Elective-II 1.Optimization Theory & Application. 2.Military Electronics System Engineering. 3.System Engineering & Analysis.
	Computer Aided Structure Engineering	Elective-I 1.Computer Aided Numerical Methods. 2.Earthquake Resistant Design of Steel Buildings.3.Theory of Elasticity & Elastics Stability.	Elective-II 1.Global Warming & Climate Change. 2.Road Safety Engineering.
	M.Tech. (Infrastructure Enng. & Technology)	Program Elective-I 1.Forensic Infrastructure Engineering 2.Machineries & Equipment in Infrastructure Engineering 3.Airport Engg. & Pavement Design 4.Environmental Impact Assessment	Program Elective-II 1.Retrofitting & Rehabilitation of Structures 2.Contract and Arbitration 3.Dock Harbor and Tunnels 4.Green Building