



RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY

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M.Tech.M.E.M.Des.M.Arch2nd Sem. (C.B.C.S.).SUMMER 2023

(247 to 269)

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

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

Sr. No.	Name of Branch	Day	Monday	Wednesday	Friday	Monday	Wednesday
		Date	10-07-2023	12-07-2023	14-07-2023	17-07-2023	19-07-2023
1	Structure Engineering		Finite Element Method	Theory of Plates & Shell	Foundation Design	Research Methodology	Elective –III
2	Computer Science & Engineering		Advances in Algorithms	Advance Computer Network and Security	Advance Digital Image Processing	Foundation Course-I	Elective –III
3	CAD/CAM		Advance FEM	Product Design & Development	Mechatronics	Foundation Course-1	Elective –III
4	Environmental Engineering		Industrial Waste Water Treatment and Disposal	Air Quality Management	Municipal Solid Waste Management	Research Methodology	Elective-III
5	Chemical Tech. (Food Tech.)		Advances in Food Science & Technology	Food Biotechnology	Food Safety & Food Regulations	Research Methodology	Elective-III
6	Chemical Tech. (Petro. Tech.)		Multi component Distillation	Process Equipment and Piping Design	Petroleum Specialty Products	Research Methodology	Elective-III
7	Chemical Tech. (Oil. Tech.)		Technology of Soaps, Detergents & Surfactants	Technological Advancement of Cosmetics and Allied Products	Modification of Oil and Fat Products including Surface Coatings	Research Methodology	Elective-III
8	Chemical Tech. (Paint Tech.)		Manufacturing Methods machinery & Planning	Processing, Application & Technology of Inks	Application, Evaluation of Surface Coating & Industrial Waste Treatment	Research Methodology	Elective-III
9	VLSI		Analog VLSI Design	VLSI Testing	Modeling of Digital System and Testing	Foundation Courses - I	Elective-III
10	Mech. Engg. & Design		Advanced Mechanical Drives	Stress Analysis	Design of Mechanical Handling System	Foundation Courses - I	Elective –III
11	Electronics Engg. Communication		Smart Antenna System	High Performance Communication and Networks	Wireless Communication and Networks	Foundation Courses –I	Elective –III
12	Software System		Automata and Advanced Computability	Software Design and Construction	Device Driver Design and Development	Foundation Courses - I	Elective –III
13	Integrated Power System		HVDC and FACTS	Power Quality	Power System Protection	Research Methodology	Elective –III
14	Heat Power Engineering		Refrigeration & Air Conditioning Technologies	Thermal Engineering	Advanced Fluid Mechanics	Foundation Courses – I	Elective –III

15	Chemical Engineering	Advanced Separation Processes	Advanced Process Dynamics & Control	Advanced Biochemical Engineering	Research Methodology	Elective –III
16	Power Elect. & Power System	HVDC and FACTS	Power Quality	Advanced Electrical Drivers	Research Methodology	Elective –III
17	Electronics Engineering	Digital System Modeling and Simulation	High Performance Communication Networks	Advanced System Design	Foundation Courses –I	Elective –III
18	Industrial Drives & Control	Drivers System Design	AC Drivers	Electrical Transportation	Research Methodology	Elective –III
19	M.Des[Industrial Design]	Product Development	Product Planning and Marketing	Human Factor Design	Foundation Courses –I	*****
20	M. Arch. (In Arch. Education)	Introduction to Learning Methods –II	History of Architecture Education	Behavior and Expression Of Structures	Foundation Courses –I	*****
21	M. Arch. (Environment Architecture)	Environmental Laws and Legislation	Renewable Energy Systems and Technology	Environmental Impact Assessment and Mitigation	Foundation Courses –I	*****
23	M. Arch. (Urban Design)	Theory of Urban Form	Urban & Transport Planning Legislation & Practices	*****	Foundation Courses –I	*****
24	M. Arch. (Landscape)	Landscape Construction Service - II	Landscape Professional Practice -I	Theory of Landscape -II	Foundation Courses –I	Research –I
25	Computer Aided Structure Engineering	Advanced Steel Design.	Design of Composite Structures	Foundation Design.	Research Methodology.	Elective-III 1.High Rise Structures. 2.Analysis of Shells & Folded Plates. 3.Structural Instrumentation.

### GENERAL INSTRUCTIONS 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: 15-05-2023**

**(Dr. Prafulla M. Sable)**  
**Director**  
**Board of Examination & Evaluation**  
**Rashtrasant Tukadoji Maharaj University, Nagpur**

*P. T. O. (List of Electives)*

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

Sr. No	Name of Branch	Elective-III	
1	<b>Structure Engineering</b>	1 High Rise Structures. 2 Designs Of Composite Construction. 3 New Engineering Materials & Technology.	*****
2	<b>Computer Science &amp; Engineering</b>	1. Advance Multimedia System. 2. Internet Of Things.	*****
3.	<b>CAD/CAM</b>	1 Computer Aided Tool Design. 2 Plastics & Composites. 3 Concurrent Engineering.	*****
4	<b>Environmental Engineering</b>	1. Rural Water Supply & Sanitation. 2. Environmental Biotechnology. 3. Environmental Engineering System & Optimization.	*****
5	<b>Chemical Technology (Food Tech.)</b>	1. Food Industry Waste Management. 2. Enzyme Technology.	*****
6	<b>Chemical Technology (Petro. Tech.)</b>	1. Advanced Separation Processes. 2. Advanced Process Dynamics & Control. 3. Advanced Chemical Reaction Engineering. 4. Environment, Health & Safety Industries.	*****
7	<b>Chemical Technology (Oil. Tech.)</b>	1. Environmental Aspects Of Oil & Allied Industries. 2. Polymeric Surfactants.	*****
8	<b>Chemical Technology (Paint Tech.)</b>	1.Functional Coatings (Super Hydrophobic & Self-Healing Coatings) 2. Chemistry & Technology Of Nano-Pigments.	*****
9	<b>VLSI</b>	1. System On Chip. 2. Micro Electro Mechanical Switches. 3. High Speed Semiconductor Devices & Circuits.	*****
10	<b>Mech. Engg. &amp; Design</b>	1. Tribology & Bearing Design. 2. Design Of Hydraulic & Pneumatic System.	*****
11	<b>Electronics Engineering Communication</b>	1. Advanced Communication Technologies. 2. Mobile Communication.	*****
12	<b>Software System</b>	1) System Performance & Evaluation. 2) Organization Theory & Behavior.	*****
13	<b>Integrated Power System</b>	1. Energy Audit & Management. 2. Converter For Non-Conventional Energy Sources. 3. Power System Planning.	*****

14	<b>Heat Power Engineering</b>	1. Heat Exchange Analysis & Design. 2. Computational Fluid Dynamics. 3. Thermal Storage System..	*****
15	<b>Chemical Engineering.</b>	1. Energy Conservation & Planning. 2. Artificial Neural Network & Evolutionary Algorithms. 3. Multiphase Flow. 4. Fuel Cell Technology.	*****
16	<b>Industrial Engineering</b>	1. Materials Management. 2. Mechatronics. 3. Value Engineering. 4. Project Evaluation & Management. 5. Maintenance Engineering.	*****
17	<b>M.E. Wireless Comm. &amp; Comp.</b>	1.Signal Processing & Smart Antennas For Wireless Communication. 2. Satellite Communication.	*****
18	<b>Power Electronics &amp; Power System</b>	1. Energy Audit & Management. 2. Converter For Non-Conventional Energy Sources. 3. Power System Planning.	*****
19	<b>Electronics Engineering</b>	1. Fault Tolerance In Digital Circuits. 2. Mobile communication. 3. Advanced Digital Image Processing. 4. Advanced Communication Technologies.	*****
20	<b>Industrial Drives &amp; Control</b>	1. Energy Audit & Management. 2. Converter For Non-Conventional Energy Sources. 3. Process Control & Instrumentation.	*****
21	<b>M.Des[Industrial Design]</b>	*****	*****
22	<b>M. Arch. (In Arch. Education)</b>	*****	*****
23	<b>M. Arch. (Environment Architecture)</b>	*****	*****
24	<b>M. Arch. (In Arch. Education)</b>	*****	*****
25	<b>M. Arch. (In Arch. Education)</b>	*****	*****