Department of Chemical Engineering

Induction Program – 2025 (For B.Tech I Year Students)

Day 1 – Foundation & Orientation (18.08.2025)

Theme: Introduction to Institute, Department, and Academic Framework

Time	Activity	Resource Person(s)
10:00-11:30	Student Registration ● Mandatory registration on IUMS	Dr. Shourabh Singh Raghuwanshi
11:30-11:45	About the Institute ● Foundation and Legacy ● Administrative and Academic Dignitaries ● Vision and Mission ● Academic Strength ● Infrastructure and Facilities ● Research, Innovation & Industry MoUs ● Achievements and Recognition	Dr. M.K. Gaur
11:45-12:15	Departmental Profile ● Vision & Mission of the Department ● Programs Offered ● Academic & Pedagogical Approach ● Faculty Strength & Expertise ● Laboratories & Research Facilities Student Achievements ● Research, Innovation & Collaboration ● Co-Curricular and Professional Society Activities ● Placement & Higher Studies Support	Dr. M.K. Gaur
12:15-12:30	Faculty Interaction	All Faculty
12:30-01:30	Interaction with Alumni ● Profile of Alumni Guests, with expected themes of discussion.	Alumnis
BREAK		

| 02:30-03:00 | Academic Curriculum Overview
Academic Guideline:
● Overview of academic policies, semester timelines, and credit requirements.
● Attendance rules (minimum % required to appear in exams).
● Importance of continuous learning and regular participation in classes, labs, and assignments.
● Academic integrity: avoiding plagiarism, cheating, and malpractice
● Multiple Exit-Entry Provision
Scheme:
● Explanation of the programme structure: total semesters, credits, and course distribution (core, electives, labs, projects).
● Credit load per semester and the minimum credits needed for promotion/graduation.
● Allocation of theory, practical, and project components.
● Integration of interdisciplinary and skill-oriented courses.
● Provision for minor and honor degrees
● Mandatory Audit Courses
● Mandatory Workshops
Syllabus & Dynamic Contents:
● Significance of dynamic content in syllabus
● Linkage between syllabus and industry skill requirements.
● Partial content delivery by industry experts
Open Category (OC) & Departmental Elective (DE) Courses:
● Guideline for registration. Significance & Need for interdisciplinary and cross-disciplinary knowledge.
● Availability of MITS-MOOCs | Dr. Shourabh Singh Raghuwanshi |

03:00-03:30	**SWAYAM/NPTEL** ● NPTEL Local Chapter and its Rank in the Country ● Credit transfer facilitation. ● Encouragement to pursue at least one course per year aligned with career goals, for self-learning. ● Process for registration, tracking, and certification	Dr. Shourabh Singh Raghuwanshi
03:30-04:00	Novel Engaging Courses (NEC) ● Institute's initiative to introduce innovative, engaging, and interdisciplinary courses beyond the core curriculum. ● Activity & project-driver learning to boost creativity and problem-solving. ● Often delivered in collaborative mode with industry experts or visiting faculty	Dr. Shourabh Singh Raghuwanshi

04:00-04:15	**Professional Skills & Competencies** ● Focus on developing soft skills: communication, teamwork, leadership, adaptability. ● Technical competencies: coding, domain-specific tools, and modern software. ● Workshops on resume writing, interview skills, and presentation techniques. ● Regular skill assessments to track progress and readiness for industry. **Internship:** Provision of SIP-I, II, SEP, Research Internship and full semester internship **Coding Skills/Proficiency:** ● Encouragement to maintain a skills portfolio showcasing certifications, projects, and achievements. ● Focus on enhancing competitive coding skills using online platforms like: LeetCode, Codechef, HackerRank etc. ● Continuous monitoring through CPTrack (an interface developed by the students). **Professional Development Component:** to encourage co-curricular involvement	Dr. Shourabh Singh Raghuwanshi
04:15-04:30	**Outcome-Based Education (OBE)** ● Inform the students regarding COs, POs, PSO, PEOs ● Continuous assessment of outcomes through assignments, projects, and exams etc. ● Importance of mapping personal learning to these outcomes for self-improvement.	Dr. Shourabh Singh Raghuwanshi
04:30-04:45	**Project-Based Learning Framework (Minor/Macro/Cornerstone and Cornerstone Projects)**-Significance, Allotment, Rubrics based evaluation through project expo	Dr. Shourabh Singh Raghuwanshi

Day 2 – Skill Building & Academic Enablers (19.08.2025)
Theme: Digital Tools, Professional Conduct, and Career Mapping

Time	Activity	Resource Person(s)
11:30-12:00	**IMS & Moodle Demonstration-** ● Online registration for semesters, NEC, Elective courses. ● Faculty Feedback Procedure and importance ● Access to academic records, attendance, and grade sheets. ● Downloading admit cards, fee receipts, and official notices. ● Quiz/Assignment, Lecture material and other academic contents through MOODLE	Dr. Shourabh Singh Raghuwanshi
12:00-12:15	**Gender Awareness** Institutional Provisions: Internal Complaints Committee (ICC), Women's Cell, Counseling & Support Services, Awareness Campaigns.	Dr. Anjula Gaur
12:15-12:30	**Discipline & Code of Conduct** ● **Punctuality & Attendance:** Students must be regular and punctual in lectures, laboratories, and official events. Minimum attendance requirements must be strictly met as per MITS-Deemed University regulations. ● **Identity & Decorum:** Students must wear their valid MITS identity card at all times within the campus. Dress modestly and maintain professional behavior. Deemed University ● **Respect & Professionalism**: Treat all faculty, staff, fellow students, and institute property with respect.	Dr. Anjula Gaur

| 12:30-01:00 | **Co-Curricular Engagement (NSS/NCC/Sports/Clubs/Student Chapters)**
● Holistic education, combining academic rigor with personality development, physical fitness, creativity, and social responsibility.
● List of prominent Clubs, student chapters and professional society chapters.
● Achievements of students are disseminated/ published in the e-newsletter. | Ms Shivangi Sharma |

01:00-01:30	**Career Development Opportunities (Intenship/hackathon/Training & Placement/Start-Up/Incubation/Competitive exams for higher studies**	Dr. Shourabh Singh Raghuwanshi
	● Regular participation in Smart India Hackathon (SIH) and other national-level innovation challenges.	
	● The institute organizes internal hackathons to prepare students for larger competitions, encouraging problem solving, rapid prototyping, and teamwork.	
	● Students are guided by faculty mentors and industry experts during these events.	
	● Winners get exposure to funding opportunities, incubation support, and recognition at national platforms.	
	● Activities for placement preparations include soft skills training, aptitude building, group discussion practice, technical interviews, and resume writing workshops etc.	
	● Many top recruiters such as TCS, Capgemini, Zensar, Infosys, Jaro Education, Persistent Systems, and Amazon visit MITS for campus placements.	
	● Students with innovative ideas receive mentorship, seed funding guidance, and networking support.	
	● The incubation ecosystem supports prototyping, patent filing, product validation, and investor connections.	
	● Structured guidance for students aspiring to pursue M.Tech, MBA, MS, or Ph.D. through national and international exams such as GATE, CAT, GRE, IELTS, TOEFL.	
	● Faculty mentors conduct special preparatory classes, mock tests, and counseling sessions for higher studies.	
	Research Ecosystem:	
	MITS Journal: Students can submit their research paper in the institute's journal	
	● Financial support for Conference paper presentations outside the institute.	

02:30-03:00	**Mentor-Mentee Interaction** ● Required for providing a supportive environment, career planning, skill enhancement, and personality development. ● Responsibilities of Mentor and Mentee.	Faculty Mentors
03:00-03:30	Student Profiling (Identification of Communication Skills, Coding Skills, Aptitude, Other Skills, Hobbies and Interests)	Mentor Team
03:30-04:00	**Departmental Project Demonstrations** Demonstrate innovative projects that will inspire the newly admitted students	Ms Shivangi Sharma
04:00-04:15	Laboratory & Facility Tour	All Faculties

Day 3 – Professional Integration (20.08.2025)
Theme: Bridging Academia and Industry

Time	Activity	Resource Person(s)
10:30-01:00	**Bridge-up Session: Beginning the Professional Journey** The workshop may include: Fundamental Concepts Refresher, Emerging Tech Awareness, Mini Hackathon and Creative & Cultural Immersion.	All faculties & Students (II-III Year)
01:00-01:30	Registration for Technical Clubs/Societies	Faculty & Student Coordinators
02:30-03:30	Institute Facility Tour	All faculties
03:30-04:00	Feedback & Suggestions	Dr Shourabh Singh Raghuwanshi

Prof Anish P Jacob   Dr. M. K. Gaur
Assistant Professor & Coordinator   I/C Head, Chemical Engg.
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