MIT-WPU

॥ विश्वशान्तिर्ध्रुवं ध्रुवा ॥

SHAPING INNOVATORS OF TOMORROW

CHEMISTRY

WPU SCHOOL OF SCIENCE & ENVIRONMENTAL STUDIES

ADMISSIONS 2024

mitwpu.edu.in

MIT World Peace University (MIT-WPU)

MIT World Peace University (MIT-WPU) is a prestigious world-class institution for higher education in India, boasting a remarkable 40-year legacy dedicated to fostering excellence in academics. With a global alumni network comprising over 100,000 professionals, MIT-WPU has consistently delivered outstanding educational outcomes. The institution offers over 150 undergraduate and postgraduate programmes that are thoughtfully designed to strike a balance between theoretical foundations and practical application. The pedagogical approach prioritises experiential learning, empowering students to translate knowledge into real-world skills. This is facilitated through immersive internships and invaluable mentor-mentee insights that serve as catalysts for personal and professional growth.

University Highlights

- 100,000+ Alumni Globally.
- 1600+ Companies visited for placement.
- International Students from 30 countries.
- Merit-Based Scholarship worth Rs. 50 Cr.
- Highest University Package: Rs. 51.36 Lakhs CTC.
- Outcome based learning aligned with Bloom's taxonomy.
- Experiential learning through Rural, National & International Immersion and Co-creation Programmes.
- Lateral learning through events like RIDE (Research, Innovation, Design, Entrepreneur-ship), SLDP (Social Leadership Development Programmes) & more.
- The curriculum is taught by international academicians, industry practitioners, and alumni.
- Practical and real-life experience with Industry sponsored Capstone projects, Internships, & Seminars.
- Holistic development through participation in Yoga, Patriotism, Peace, Agriculture & Spiritual programmes.

Why a Degree Programme in Chemistry from MIT-WPU?

- MIT-WPU offers the B.Sc. Chemistry and M.Sc. Chemistry (Industrial Polymer Chemistry) programmes. Each programme is collaboratively designed and developed by eminent Indian and international academics, ensuring a comprehensive blend of theoretical and practical learning. Students get a comprehensive understanding of Chemistry with a focus on hands-on experience, preparing them for success in the field.

Programme Offered

- B.Sc. Chemistry
- M.Sc. Chemistry

WPU School of Science & Environmental Studies

The MIT-WPU School of Science and Environmental Studies, a leading institution in India, is committed to providing students with exceptional education in natural sciences. Its Departments of Mathematics and Statistics, Physics, Chemistry, Biology, and Environmental Studies offer comprehensive undergraduate, postgraduate, and doctoral programmes, emphasising a strong foundation in the fundamental principles of these disciplines.

The school's curriculum strikes a balance between theory and practicality, promoting hands-on learning through laboratory experiments, projects, and research opportunities. Distinguished faculty members, comprising renowned academicians and corporate leaders, bring extensive experience and knowledge to the classroom, ensuring world-class teaching and learning standards.

A research-centric approach is a hallmark of the school, emphasising multidisciplinary research. This encourages students to explore their interests, gain practical experience in cutting-edge research, and develop the academic, professional, and research skills essential in today's professional landscape.

The MIT-WPU School of Science and Environmental Studies not only prepares students for successful careers in their chosen fields but also nurtures future leaders capable of driving innovation and growth within the scientific community.

Department of Chemistry

The Department of Chemistry at MIT-WPU upholds a steadfast commitment to excellence in the realm of chemistry education and research. With the objective of reinforcing the fundamental principles of chemistry, the department blends theoretical and practical facets, facilitating comprehensive learning. Additionally, it conducts cutting-edge research across diverse branches of chemistry, striving for excellence in every endeavour. The department is equally dedicated to fostering the practical application of knowledge, promoting innovation within the field of chemistry, and equipping individuals with a profound understanding of chemistry for the betterment of society.

Programme Highlights:

At MIT-WPU School of Science and Environmental Studies, the programmes stand out for their exceptional offerings that empower students with a unique set of skills and expertise:

- Faculty with extensive academic, industry, and research experience.
- A six-month full-time industry internship with reputed industries and research institutions.
- Merit-based Scholarships to deserving students.
- Opportunities to work on live projects, providing hands-on experience and a research-focused approach.
- A dedicated Centre for Industry-Academia Partnerships (CIAP) to facilitate internships and placements with world-class organisations.
- Guest lectures, seminars, and workshops conducted by industry experts and leaders from research organisations.
- More than 100 student-led clubs catering to varied interests, from technology to drama.
- Rural, National, and International Immersion programmes to sensitise students to ground-level realities and equip them to tackle complex societal issues.
- Inclusion of peace studies and yoga to impart spiritual, moral, and ethical guidance.
- Mentor-mentee interaction to provide students with a robust support system.
- Expert guidance for the preparation of competitive examinations (SET, NET, GATE).

Infrastructure (Laboratories)

In addition to the basic infrastructure, library, and smart classrooms, the department is equipped with various specialised chemistry and engineering laboratories, including:

- Organic Chemistry Laboratory
- Inorganic Chemistry Laboratory
- Physical Chemistry Laboratory
- Analytical and Research Laboratory
- Computational Chemistry Laboratory
- Polymer Chemistry Laboratory
- Polymer Processing and Rheology Laboratory
- Polymer Testing and Characterisation Laboratory

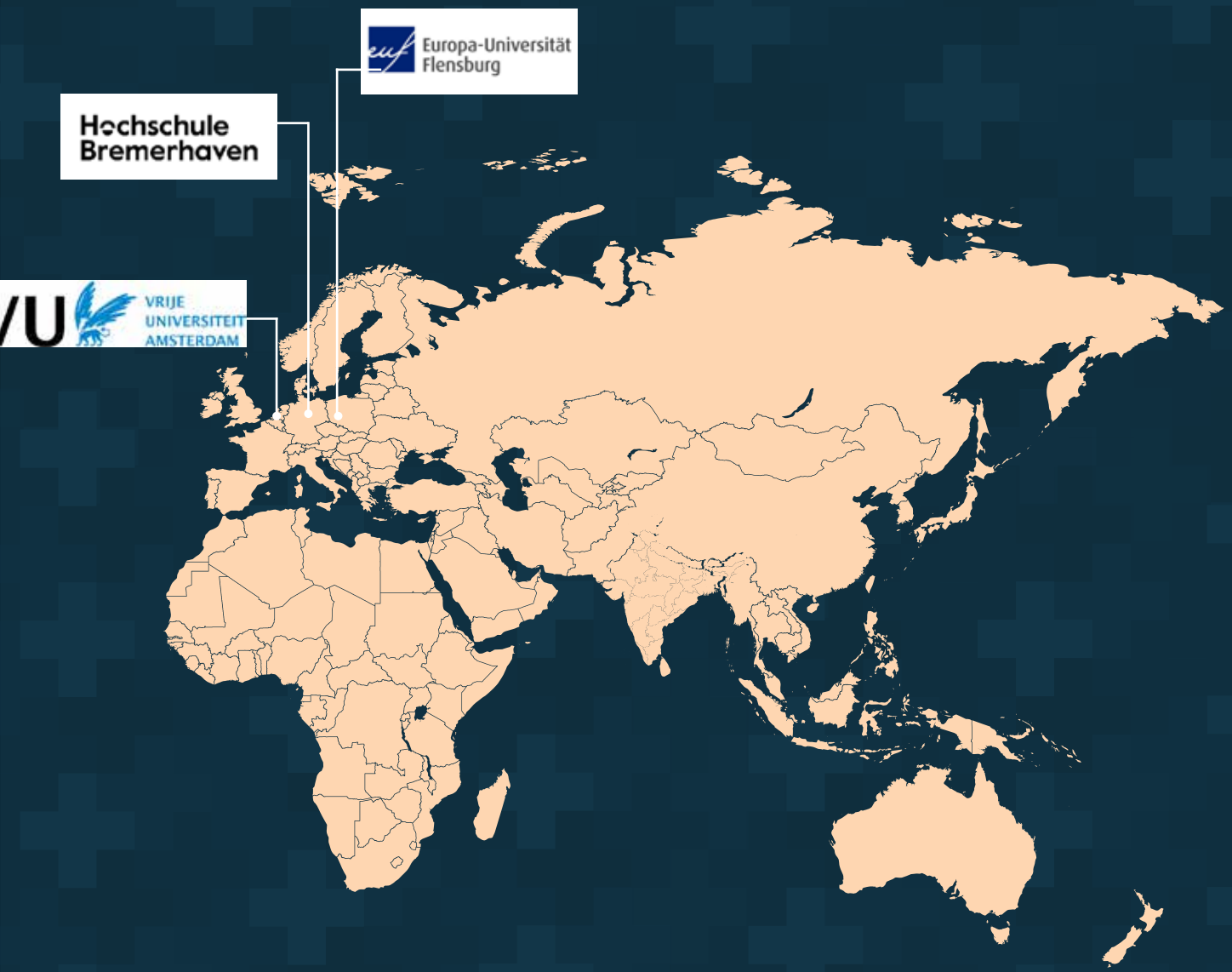
Major Equipments

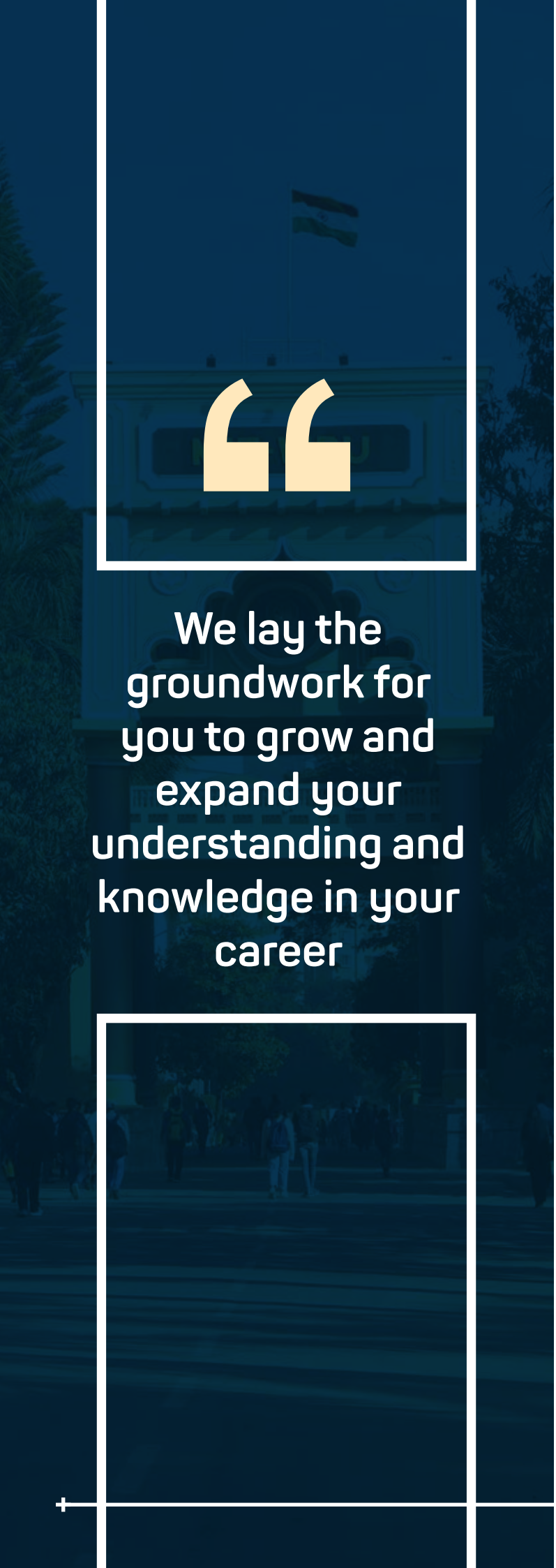
- Fourier transform infrared (FTIR) spectrometer
- UV Spectrophotometer
- Injection moulding machine
- Blown film extrusion plant
- Compression moulding machine
- Thermoforming machine
- Blow moulding machine
- Roto moulding machine
- High-frequency welding machine
- Pad printing
- Ultrasonicator
- Two roll mill
- Sigma mixer
- High-speed mixer
- Single screw extruder
- Brabender Plasticorder
- MFI tester
- Instron capillary rheometer
- Rheovis 2100 capillary rheometer
- Tensile testing machine
- Izod and Charpy impact testing machine
- Falling dart impact testing for films
- Coefficient of friction determination for films

Academic Partnerships:
Making Learning Global

The School of Science and Environmental Studies at MIT-WPU has forged partnerships with esteemed international universities, reaffirming its commitment to deliver an authentic global education. These programmes facilitate cross-border learning experiences by incorporating diverse international disciplinary approaches. MIT-WPU remains dedicated to nurturing, enriching, and sustaining global connections, fostering intercultural networks for its students through initiatives such as student and faculty exchange programmes, summer and winter programmes, research collaborations, extra credit programmes, and various other engaging activities.

The School of Science and Environmental Studies has collaborations with international universities, including:





We lay the groundwork for you to grow and expand your understanding and knowledge in your career

Associate Dean's Message

We welcome young minds to the School of Science and Environmental Studies at Dr. Vishwanath Karad MIT World Peace University (MIT-WPU). The number of career options available to students in these fields has grown exponentially as technology and industries have advanced. With vast opportunities in research, innovation and technology, these streams provide a dynamic work environment rich in specialisations to explore.

Science and technology, as a broad field, encompasses a wide range of interdisciplinary domains,including biotechnology, microbiology, physics, photonics, chemistry, polymers, mathematics, statistics, data science, bioinformatics, and tissue engineering. These fields are the backbone of the economic growth of any country. Professionals in science and technology are needed in almost every industry, from government to manufacturing to healthcare. With recent pandemics and international conflicts, the importance of being self-sufficient in science and technology has become clearer than ever. This is where a science graduate can make a difference in our country's economic growth.

The School of Science and Environmental Studies offers 12 undergraduate and postgraduate programmes in chemistry, physics, mathematics and statistics, biosciences, and environmental studies, along with doctoral programmes in these disciplines. The faculty at the School of Science and Environmental Studies work hard to achieve the mission of imparting innovative skills and value- based quality education through academic excellence and research experience at leading institutions in India and abroad. Understanding

the industry and how to excel in it after earning a degree are critical components of future success. This is where we help our students improve their skills and domain knowledge. By developing their skill sets through our teaching and learning process, we make our students highly competitive and ready for the industry. This has resulted in our students being placed in top companies with competitive salaries in all areas of mathematics, statistics, biotechnology, chemistry, physics and environmental studies.

At MIT-WPU, we lay the groundwork for you to grow and expand your understanding and knowledge in your career.

We provide our students with six-month industry internships as well as in-house research projects based on current industry and societal challenges. Our students publish research articles and present their work at international conferences on a regular basis. Furthermore, we train and mentor our students in the areas of innovation and entrepreneurship. This has led to successful university- sponsored projects in Hackathons, which have resulted in start-ups and patents. Be a part of a successful legacy which focuses on holistic development and shaping future-ready science professionals with MIT-WPU School of Science and Environmental Studies.

I look forward to working with you all – Welcome to MIT-WPU!

Prof. Dr. Anup Kale
Associate Dean, School of Science and Environmental Studies

Curriculum

The curriculum comprises a wide spectrum of topics, including organic, inorganic, and physical chemistry, along with the fundamentals of polymer science. It delves into instrumental methods of analysis and advanced polymer chemistry. By the end of the first year, students delve into polymer physics, explore structure-property relationships, and engage in in-depth case studies related to industrial polymer manufacturing processes and safety protocols. It encompasses engineering aspects related to processing and testing, both in theory and through hands-on laboratory work. Students have the opportunity to choose specialised tracks such as plastics, rubbers and elastomers, paints, fibres, adhesives & composites, and packaging technology as elective subjects, which are covered in the first and second years. The curriculum also incorporates a mandatory one-semester industrial training or research project, providing practical exposure. Furthermore, students benefit from industrial visits, soft skills development sessions, and personality development programmes, and engage in international and national expert series and seminars. These elements collectively contribute to the holistic development of each student.

Academic Programmes

B.Sc. (Hons.) Chemistry

The B.Sc. (Hons.) Chemistry degree programme offers a comprehensive and rigorous education, seamlessly integrating theoretical knowledge, practical expertise, and research exposure. It empowers students with the essential skills to excel in the realm of chemistry, contribute significantly to scientific progress, and confront the global challenges of the contemporary era. This programme is meticulously crafted to furnish students with an in-depth comprehension of chemistry's fundamental principles, theories, and practical applications.

Through the B.Sc. Chemistry degree programme, students engage in hands-on learning within state- of-the-art laboratories, where they conduct experiments, analyse data, and tackle intricate chemical puzzles. The curriculum also encompasses the utilisation of cutting-edge analytical instruments and methodologies, enabling students to master chemical analysis and characterisation techniques. Graduates from the Department of Chemistry emerge as proficient professionals primed to make transformative contributions to industries, research endeavours, and the perpetually evolving domain of scientific exploration.

Specialisations that students can opt for in their final year:

Organic Chemistry:

This specialisation in organic chemistry equips students with advanced proficiencies in organic synthesis, understanding reaction mechanisms, and employing spectroscopic analysis. Graduates are well-prepared for careers in pharmaceuticals, dyes pigments, cosmetics, perfumery, and related fields.

Analytical Chemistry:

The specialisation in analytical chemistry emphasises advanced techniques for both qualitative and quantitative analysis. Graduates possess the expertise to excel in quality control, quality assurance, and R&D departments across diverse industries, and within instrument manufacturing companies.

Polymer Chemistry:

This specialisation in polymer chemistry imparts comprehensive knowledge of polymer synthesis, characterisation, and their practical applications. Graduates are prepared for diverse career opportunities spanning paints, plastics, packaging, adhesives, textiles, rubbers, polymer recycling, and more.

Duration: 3 Years

Fee: INR 80,000/- PA

*Eligible students who opt for the 4th Year of the undergraduate programme will be awarded an Honours programme as per the National Education Policy (NEP) 2020.

Department Features

- Multidisciplinary and Industry-Oriented: A 4-year undergraduate programme aligned with the National Education Policy (NEP) 2020, offering a blend of foundational, major, and elective courses.
- Industrial Internship and Research: Includes hands-on experience with diverse instruments and opportunities for research projects.
- Placement Assistance: A dedicated placement cell facilitates career opportunities within industries.
- Industry Collaborations: Collaborations with top industries and research organisations.
- Start-Up Support: MIT-WPU offers support for student start-up ventures.
- Holistic Development: Focus on student development through project-based learning, seminars, MOOCs, guest lectures by experts from national and international institutions, industrial visits, and exhibitions.

- Project-based Learning: Students participate in hands-on projects, applying theoretical knowledge to practical situations, thereby honing their critical thinking and practical skills.
- Guest Lectures: Renowned experts and professionals are invited to deliver lectures, enriching students understanding of their respective subjects.
- MOOCs (Massive Open Online Courses): Access to a wide range of online courses from prestigious institutions, expanding students's knowledge resources.
- Industrial Visits: Visits to industries, gaining firsthand exposure to real-world operations and industry practices.
- Mini Project: Small-scale projects enable students to delve into specific topics, fostering problem-solving skills and practical application of knowledge.
- Seminar: Interactive seminars facilitate in-depth discussions and presentations, encouraging research and collaborative learning among students.

Programme Outline

- 48 Programme Major
- 32 Programme Disciplinary Foundation
- 16 Programme Electives
- 32 Programme Capstone Project, Problem-Based Learning, Seminar, and Internships
- 20 University Core
- 12 University Electives
- 160+ Total Credits

M.Sc. Chemistry (Industrial Polymer Chemistry)

The M.Sc. Chemistry (Industrial Polymer Chemistry) degree programme is meticulously structured to prepare students for the dynamic polymer industries and research sectors. It offers an interdisciplinary curriculum that spans essential chemistry, polymer chemistry, and polymer engineering. By engaging in lectures, laboratory work, research projects, and industrial internships, students develop a profound comprehension of both the fundamental principles and practical applications of polymers. They collaborate with esteemed faculty members, and experts in their respective domains, and actively contribute to cutting-edge research, addressing real-world challenges.

The M.Sc. in Chemistry (Industrial Polymer Chemistry) degree programme provides access to state-of-the-art laboratory facilities and a wealth of scientific resources, enriching students' knowledge and facilitating valuable networking opportunities with industry professionals. Specialising in industrial polymer chemistry, students acquire a holistic grasp of polymer synthesis, structure-property relationships, processing techniques, testing and characterisation, and diverse applications, thereby preparing them for rewarding careers in industry, academia, research, and advanced studies.

Programme Outline

- 5 University Core
- 4 Research Methodology (RM)
- 8 Programme Foundation (PF)
- 33 Programme Major (Theory and Laboratory) (PM)
- 16 Programme Electives (PE) from 3 tracks
- 18 Project / Internship (PR)
- 4 On-the-Job Training - OJT (PR)
- 88 Total Credits

Duration: **2 Years**

Fee: **INR 90,000/- PA**

Programme Features

1. Interdisciplinary Programme (Science and Engineering): Bridges the realms of science and engineering, offering a balanced 70:30 mix to prepare students for a wide range of applications in the polymer industry.

2. Hands-on Training with Advanced Equipment: Students receive practical training using state-of-the-art analytical instruments and polymer processing/ testing machines, including blow, injection, extrusion, and compression-moulding equipment.

3. One-Semester Full-time Internship: Students intern in a relevant polymer industry or research institution, enabling them to gain real-world experience.

4. On-the-Job Training Projects: Students engage in on-the-job training projects, offering them practical exposure and a deeper understanding of industry practices.

5. In-House Research Projects: Opportunities for students to participate in in-house research projects, fostering innovation and hands-on research skills.

6. Paid Internships for Meritorious Students: Meritorious and deserving students get the chance to secure paid internships, recognising and rewarding their achievements.

7. Industry-Sponsored Live Projects: These are sponsored by the industry to offer students valuable industry exposure and a chance to work on real-world challenges.

8. Expert Lectures: Renowned experts from industry, academia, and research organisations deliver lectures, enriching students' knowledge and offering diverse perspectives.

9. Collaborations and MoUs: Collaboration agreements with various relevant polymer industries enhance opportunities for students and foster industry connections.

10. Advanced Industry-Aligned Syllabus: Cutting-edge syllabus meticulously crafted to meet the evolving needs and demands of the polymer industry.

11. Experienced Advisory Council: A diverse and highly experienced advisory council comprising former vice-chancellors, emeritus scientists, academicians, managers, and directors from the polymer industry, providing invaluable mentorship and guidance to the course.

Industry Opportunities

- Polymer
- Paint
- Rubber
- Adhesive
- Packaging
- Textile and Fibers
- Chemical
- Pharmaceuticals
- Environment
- Healthcare
- Agrochemicals
- Electrochemical
- Energy storage devices
- Sensors
- Biomedical

Major Equipments

- Chemist (R&D/QC)
- Researchers
- Academicians
- Graduate Engineering Trainee
- Research Assistants/JRF/SRF
- Entrepreneurs
- Executives (Market Research)

Ph.D. Chemistry

The MIT-WPU Doctorate in Chemistry is a research-focused programme. It equips Ph.D. Scholars with advanced research skills and in-depth knowledge to excel in academia, industry, or research roles. The Ph.D. Chemistry programme encompasses coursework, specialised research, and the completion of a doctoral thesis. During their Ph.D. journey, students gain expertise in vital research aspects such as literature review, research ethics, experimentation, problem-solving, data analysis, and instrument handling.

The Ph.D. in Chemistry programme fosters collaboration opportunities with fellow researchers, both within the university and the wider scientific community, creating strong professional networks. Students are encouraged to publish in reputable journals and receive guidance from faculty with extensive research experience. The department's research spans diverse areas, including organic chemistry, inorganic chemistry, polymer chemistry, natural product chemistry, nanomaterials, and theoretical & computational chemistry.

Faculty members, trained in top institutions, provide exceptional mentoring for a competitive edge and excellence in chemical science. The Department of Chemistry welcomes motivated students passionate about chemistry, offering a platform for intensive research in their chosen domains. Joining this programme enables students to explore their chemistry interests and contribute significantly to the field through rigorous and innovative research.

Ph.D. Supervisors

Prof. Dr. Vasi Shaikh
Research Areas:
Polymer synthesis and modification, polymer engineering, microplastics, liquid crystalline polymers

Dr. Techn. Murthy Chavali Yadav
Research Areas:
Polymer nanocomposites, nano-sensors, Ferroelectrics, Hybrid Materials, Algal Biotechnology

Dr. Vandana Mooss
Research Areas:
Polymer blends & composites, nanocomposites, anti-corrosion coatings

MIT-WPU Pune Technology Business Incubator (TBI)

MIT-WPU Pune Technology Business Incubator (TBI) is the official innovation and entrepreneurship ecosystem of MIT World Peace University. Founded in 2016, the TBI is supported by the Department of Science and Technology (DST), Government of India.

The TBI aims at:

- Nurturing technology business incubation ecosystems.
- Supporting early-stage and experienced entrepreneurs and students through funding, mentoring and networks.
- Converting technically feasible projects into commercially viable start-ups.
- Empowering the youth and helping them become future entrepreneurs.

The incubator supports budding entrepreneurs in:

- Technical mentoring
- Business mentoring
- Legal and IP support
- Fundraising support
- Industry networking
- MIT-WPU alumni connect

MIT-WPU TBI has tie-ups with DST, NISE, NITI AAYOG as well as top-notch MNCs to provide better exposure to the aspiring entrepreneurs.


InstaQShare-3649: 234710
MIT-WPU
MIT WORLD PEACE UNIVERSITY
MIT WPU
tBi
benq

Faculty Achievements

Dr. Meghana Gote
Program Director, Department of Chemistry

6 research papers published in the field of Ionic Liquids

Mr. Sanjay B Bhagwat

2 research papers published in reputed journals in the field of wastewater treatments
1 book chapter published in Springer Nature

Dr. Vandana Mooss

8 research papers and 1 book chapter published in the field of Polymers, Conducting Polymers, Biopolymers, Nanocomposites, Protective Coating and Packaging

Dr. Kiran Kokate

6 research papers
Published in the field of Conducting Polymers, Metal Oxide Nano Composites
1 BCUD Project from SPPU during the year 2016-18

Dr. Vaishali Gaikwad

5 research papers published in the field of Inorganic Complexes,
Molecular Docking and Homology
Modelling.

Dr. Parineeta Das

5 research publications and 2 book chapters published in the fields of Polymer Science, Biopolymers, Biocatalyst, Dendrimers, Green organic synthesis, Anticorrosive coating, Biodiesel, and Computational Toxicology.

Dr. Pradnya Deshpande

7 research papers published in the field of Natural Product Chemistry
3 book chapters published by Manipal University & Springer Nature

Dr. Abdul Wasif Shaikh

5 research papers and 4 patents published in the field of Porous Polymers, Water-soluble polymers, and Phenolic resins. Worked at NCL Pune on a project from Proctor & Gamble, USA. Involved in a project from ONGC in polymer development for enhanced oil recovery. Developed a porous monolithic bioreactor at University of Stuttgart, Germany.

Dr. Soumava Biswas
25 research articles published in the field of Molecular Magnetism, Metal Organic Frameworks, Cryogenic Magnetic Refrigeration and Molecular Fluorosensors.
Received Prestigious JSPS Postdoctoral Fellowships for Foreign Researchers in Japan.
Worked as a Postdoctoral Fellow at Tohoku University, Japan.
Worked as a Postdoctoral Fellow at Central European Institute of Technology, Czech Republic

Dr. Moumita Majumder
Dr. Moumita Majumder, has over 12 years of research experience in reaction modeling and electronic structure theory. She has published 18 research articles in highly reputed international journals in the field of theoretical and computational chemistry, focusing on the computational modeling of interfacial chemical reactions, catalysis, combustion reactions, energy and data storage materials for sustainable development, and gas-phase spectroscopy. Completed one DST sponsored project under the DST Women Scientist Scheme. She has completed her doctoral study from IIT Kanpur, M.Sc. from IIT Delhi and has 3 years of postdoctoral research experience in the USA.

Dr. Vasi Shaikh
40+ research articles published in the field of Liquid Crystalline
Polymers, Polymer Composites, Biodegradable Polymers, Microplastics & Green Chemistry, Waste Water Management
Received research funding under the "Young Scientist Scheme" from DST, New Delhi.
Received the prestigious "Best Teacher Award" by Savitribai Phule Pune University (SPPU) in 2019.
Worked as a Chairman, the Board of Studies, Petroleum and Chemical Engineering and Member, Faculty of Engineering, SPPU.

Dr. Moumita Majumder
Dr. Moumita Majumder, has over 12 years of research experience in reaction modeling and electronic structure theory. She has published 18 research articles in highly reputed international journals in the field of theoretical and computational chemistry, focusing on the computational modeling of interfacial chemical reactions, catalysis, combustion reactions, energy and data storage materials for sustainable development, and gas-phase spectroscopy. Completed one DST sponsored project under the DST Women Scientist Scheme. She has completed her doctoral study from IIT Kanpur, M.Sc. from IIT Delhi and has 3 years of postdoctoral research experience in the USA.

Industry Testimonial

India has been witnessing an unprecedented double-digit growth rate in polymer consumption since the 1990s. The 'Make in India' initiative has attracted lots of investments. In India to propel and sustain the growth in various sectors like agriculture, healthcare, solar energy, packaging, consumer durables, automobiles etc., there is an emerging need to have qualified technical personnel. Given the above requirement, the curriculum "Industrial Polymer Chemistry" programme structured by MIT-WPU is quite appropriate and contemporary. Through this programme, students will get excellent exposure to the current needs of the industries. This will enable students to steer their careers on the application of Polymer Science in industries and the academic arena.

-Vikram Makar
Chairman and MD
Oriental Rubber
Industries Pvt. Ltd. Pune

This is one of the good steps taken by MIT-WPU Pune to offer the M.Sc. Industrial Polymer Chemistry programme. Polymers are and will remain to be an integral part of human life in this modern world and in each phase of life. The course & topics designed for Industrial Polymer Chemistry [IPC] by MIT-WPU are covered with essential; wide-ranging ranging and contemporary. The efforts are seen while selecting topics with the aim of Imparting in-depth knowledge to students in the field of polymers. MIT-WPU by introducing this M.Sc programme is putting efforts to provide students with a strong Sudhir R. Pitre foundation for polymer & other Industries.

-Sudhir R. Pitre
Director (Technical)
Garware Bestretch Ltd.

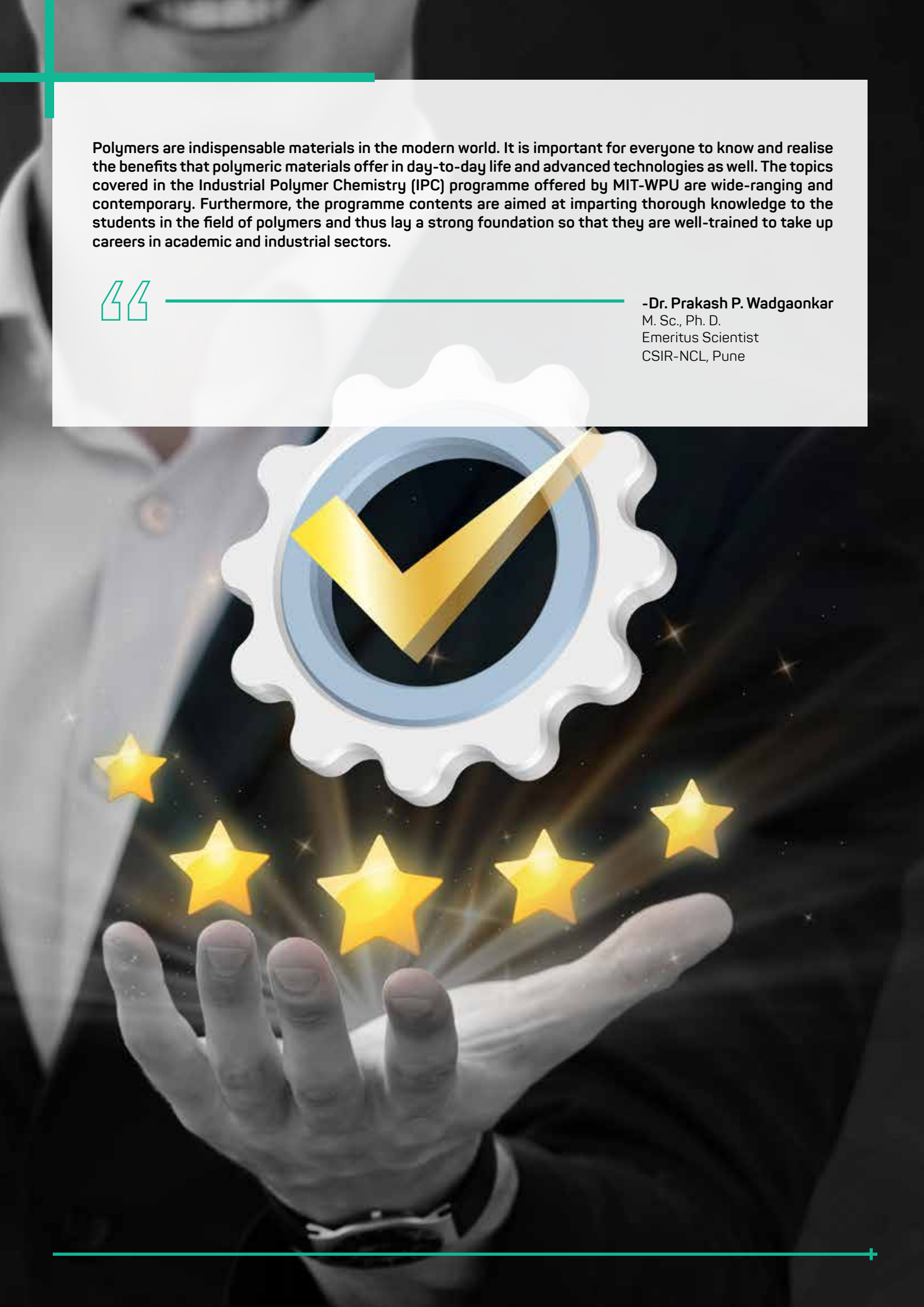
MIT- World Peace University, Pune [MIT-WPU] has taken a visionary initiative by launching the PG programme, 'M. Sc. in Industrial Polymer Chemistry (IPC).' The PG programme deals with multidimensional studies and includes all advanced aspects of plastics/ rubbers/ elastomers/ paints/ coatings/fibres/ adhesives/ composites etc. The programme is designed for young graduates, who think 'out-of-box' and are looking for knowledge in modern contemporary topics. The curriculum offered is impactful, aligning with the 'Model revised curriculum' released by the AICTE / UGC and considering the current training needs. The objective of the programme is to train students for effective industrial R&D in polymer and related industries, with a flavour of Indian ethos viz. Yoga, sports, rural immersion, personality development and World Peace Component. The new proposed PG programme has seeding of a great vision, through advisory and consultative processes.

I strongly recommend this PG programme to young graduates, and I am very sure that students would take advantage of this opportunity.

-Prof. (Dr.) N. N. Maldar
M. Sc., Ph. D., F.M.A.Sc.
Former Professor of Polymer
Chemistry & Former
Vice-Chancellor, Solapur
University.

Polymers are indispensable materials in the modern world. It is important for everyone to know and realise the benefits that polymeric materials offer in day-to-day life and advanced technologies as well. The topics covered in the Industrial Polymer Chemistry (IPC) programme offered by MIT-WPU are wide-ranging and contemporary. Furthermore, the programme contents are aimed at imparting thorough knowledge to the students in the field of polymers and thus lay a strong foundation so that they are well-trained to take up careers in academic and industrial sectors.

-Dr. Prakash P. Wadgaonkar
M. Sc., Ph. D.
Emeritus Scientist
CSIR-NCL, Pune



Eligibility and Selection Process

B.Sc. Chemistry Eligibility

- Minimum 50% aggregate score in 10+2/Class 12th or in equivalent examination in science stream, with English subject (at least 45% marks, in case of Reserved Class category candidate belonging to Maharashtra State only)

Or

- Minimum 55% aggregate score in any Engineering Diploma from Any UGC approved University

Selection Process

- The selection process for B.Sc. Chemistry and B.Sc. Physics programmes is based on MITWPU CET Personal Interaction (PI) for eligible candidates.

  *Note: All International Baccalaureate (IB) students are required to score a minimum of 24 points for six subjects.

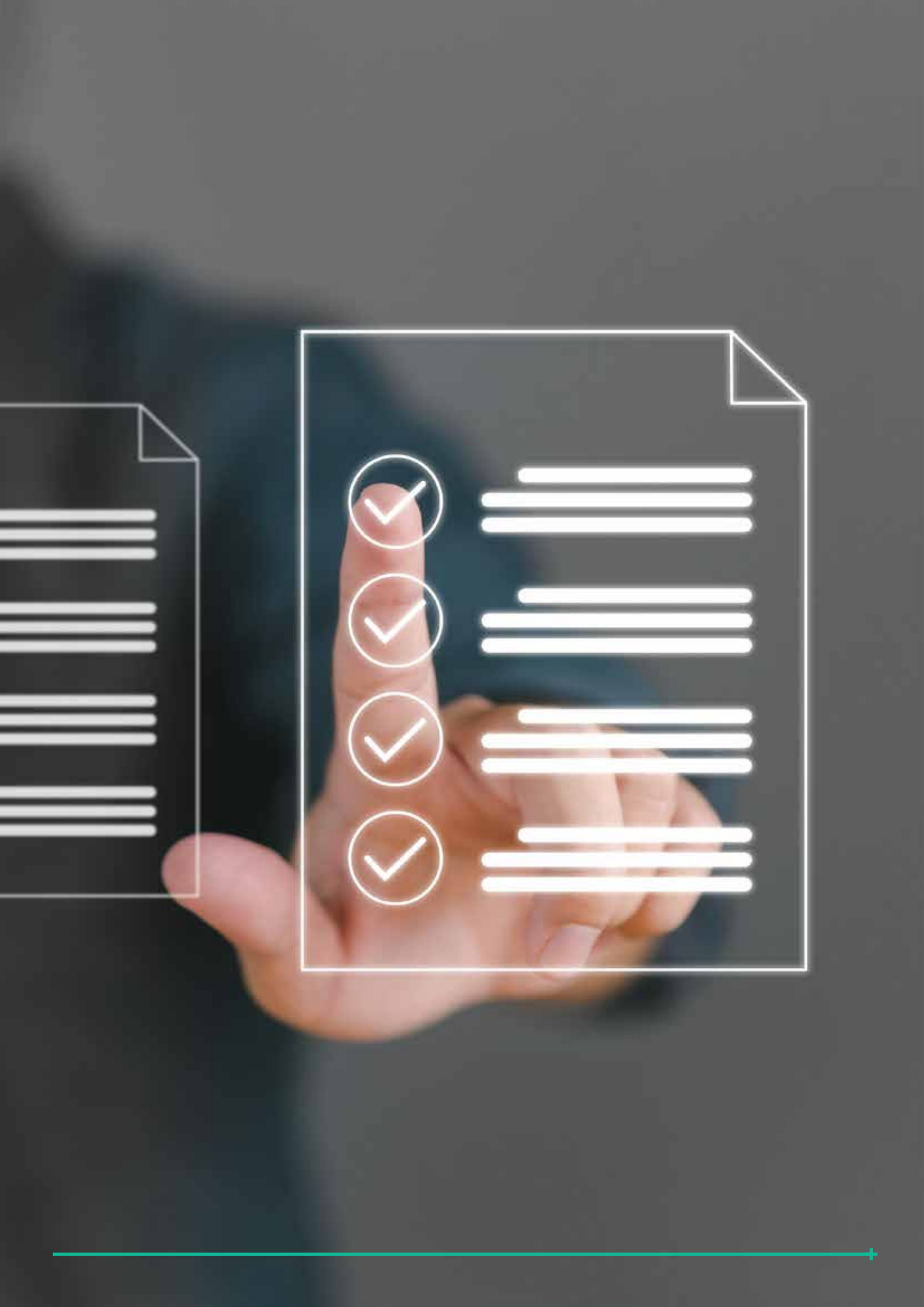
M.Sc. Chemistry (Industrial Polymer Chemistry) Eligibility

- Minimum 50% aggregate score in B.Sc. Chemistry/B.E./B.Tech 3/4-year graduation from UGC approved University or equivalent (at least 45% marks, in case of Reserved Class category candidate belonging to Maharashtra State only).

Selection Process

- The selection process for the programme is based on MIT-WPU CET PI 2024 score (Personal Interaction).

Ph.D. Programme
Please visit the website for more information
www.mitwpu.edu.in



Scholarships

MIT-WPU offers scholarships to reward and motivate meritorious students based on their performance in National/State Level Entrance tests and the MIT-WPU CET Examination, 2024-25. These scholarships are applicable throughout the programme*.

Merit Scholarship Categories:

- Dr. Vishwanath Karad Merit Scholarship AY 2024-25
- MIT-WPU Merit Scholarship AY 2024-25
- Scholarships to Elite Sportsperson AY 2024-25
- Scholarship Awarded to Wards of MIT-WPU/ MAEER's Staff Members

For more information, please visit: mitwpu.edu.in/scholarships

***Terms and Conditions:**

- All Scholarships are awarded on a First Come First Serve basis
- All Scholarships are awarded as fee adjustments.
- To continue the scholarship for the entire duration of the programme:
  a) a minimum level of academic score has to be maintained at an 8.0 CGPA across all semesters.
  b) attendance is to be maintained at a minimum of 80%.
  c) there should be no disciplinary action against the student.

B.Sc. Chemistry

Scholarship for AY 2024-25	Dr. Vishwanath Karad Scholarship (100%)		MIT-WPU Scholarship I (50%)		MIT-WPU Scholarship II (25%)	
Name of programme / Specialisation	Xth Aggregate Score	XIIth Aggregate Score	Xth Aggregate Score	XIIth Aggregate Score	Xth Aggregate Score	XIIth Aggregate Score
B.Sc. Chemistry	90 & Above	85 & Above	88 & Above	83 & Above	85 & Above	80 & Above

UG - Scholarship Note:
Note Student will have to qualify both the criteria i.e. Graduation Aggregate Score and 12th Aggregate Score for availing the scholarship.

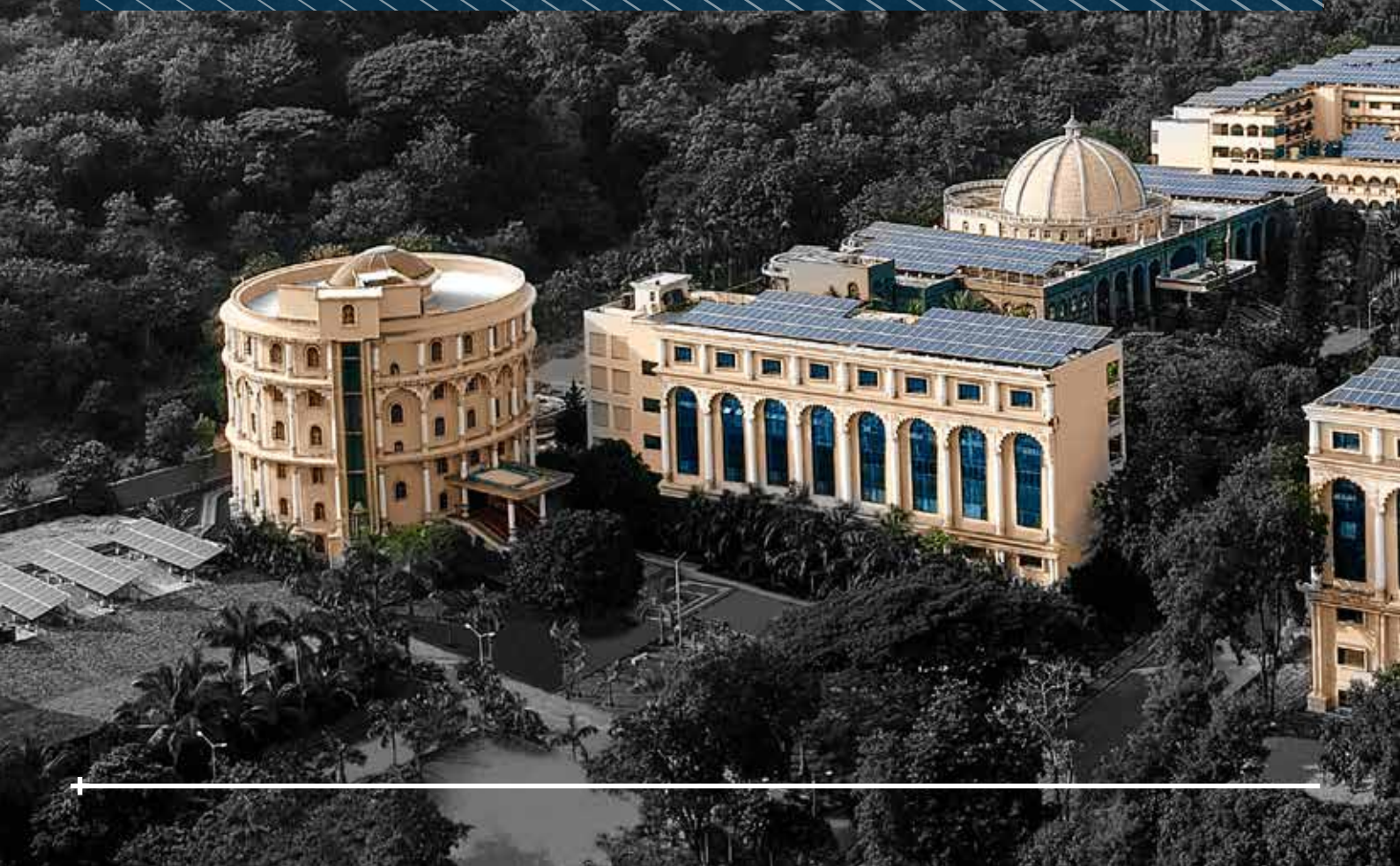
M.Sc. Industrial Polymer Chemistry

Scholarship for AY 2024-25	Dr. Vishwanath Karad Scholarship (100%)		MIT-WPU Scholarship I (50%)		MIT-WPU Scholarship II (25%)	
Name of programme / Specialisation	Graduation Aggregate Score	XIIth Aggregate Score	Graduation Aggregate Score	XIIth Aggregate Score	Graduation Aggregate Score	XIIth Aggregate Score
M.Sc. Industrial Polymer Chemistry	85 & Above	85 & Above	80 & Above	80 & Above	75 & Above	75 & Above

PG - Scholarship Note:
Student will have to qualify both the criteria i.e. Graduation Aggregate Score and 12th Aggregate Score for availing the scholarship.

Internships & Placement: Paving Pathways to Success

The dedicated Placement Cell, which is the Centre for Industry-Academia Partnerships (CIAP) at MIT-WPU, opens doors to multiple career opportunities for graduates. With a consistent track record of high placements, the cell connects students with prestigious firms, providing career guidance and preparing them for the professional arena. Complementing this, the eight-week Summer Internship, from late April to mid-July, integrates classroom knowledge with hands-on experience. This mandatory programme propels students into professional ecosystems, providing practical insights crucial for their careers. MIT-WPU maintains robust connections with over 250 industries in India and abroad. Furthermore, it has established Memorandums of Understanding (MOUs) with various government organisations and foreign educational institutions. This extensive network proactively assists students in securing internships, pursuing campus placements, nurturing entrepreneurial endeavours, and advancing their higher education pursuits. Together, strategic placements and experiential learning define the institution's commitment to shaping well-rounded, industry-ready professionals.



Bharat Serum And Vaccines Limited

Cipla

GRG

ipca
A dose of life

IISER PUNE

praj

fmi
Future Market Insights

National Chemical Laboratory

CDFD

Kan biosys
Expanding horizons in biotechnology

Rajganga Biorefineries Pvt Ltd
Enriching sustainable Lives

L'ORÉAL

intox
an aragen company

VyasLife

GENNOVA

Top Recruiters

Testimonials

Here's What Our Students Have To Say

Going into college, my only goal was to graduate with a chemistry degree. But, looking back, I realize that the MIT-WPI Department of Chemistry has played an integral part in my development as a student, both in personal and academic spheres. The university has constantly provided me with good opportunities and resources to improve myself.

- Insan Khan
Second Year B.Sc.
Hons. Chemistry

The programme is very intensive and combines theory and practice. Subjects like Peace and Yoga included in the syllabus are a need in today's world. The lab facilities and the internship and placement guidance is the highlight for me. The teachers are very helpful and encourage us at every step. The campus is lush green and very beautiful. Participating in the activities of the various clubs makes the academic year interesting for me.

- Kashish Shaikh
Second Year B.Sc. Hons.
Chemistry

I feel very fortunate that I got to know about this MSc IPC programme at MIT-WPU. The institute provided me with the best possible platform and infrastructure to excel in my career. The expert faculty members made me industry-ready, while the placement cell helped me enhance my soft skills and confidence. Due to the pandemic, I thought that the online mode of education would be very difficult but it was not so. Teachers helped us in every situation. This programme not only increased my theoretical knowledge but also gave me industrial exposure as the syllabus is a fusion of Polymer Engineering and Chemistry. I was provided with an internship in the industry and I am very happy to share that I am placed in one of the best multinational polymer companies. MIT World Peace University is a great place to study and the campus is filled with positive energy and full of opportunities.

Ms. Saraswati Arbale
(MSc. IPC 2020-22 batch)

I am thrilled to share my incredible experience as a student of batch 2021-2023 in the M.Sc. Chemistry (Industrial Polymer Chemistry) programme at MIT-WPU. The programme's comprehensive curriculum, and the guidance of renowned faculties, have provided me with a better understanding of polymer science and its fascinating applications. The laboratories and research opportunities have allowed me to engage in cutting-edge projects, fostering my practical skills. The collaborative and diverse learning environment at MIT-WPU has enriched my perspective and networking opportunities. The knowledge and experience acquired from the Department of Chemistry at MIT WPU provided me with an internship, followed by Assistant project scientist opportunities at IIT Guwahati.

- Shivani Behare
(MSc. IPC 2021-23 batch)

The MSc. Chemistry (Industrial polymer chemistry) programme is focused on education that aligns with the career goals of students. Its curriculum not only imparts foundational knowledge but also delves into advanced areas like polymer fields. The standout feature of the MSc Chemistry (Industrial Polymer Chemistry) programme lies in its convergence of academia and industry. Guest lectures, seminars, industrial visits, exhibitions and workshops provide us with invaluable real-world insights, preparing us for the polymer sector. What truly distinguishes this programme from conventional degrees is its hands-on approach and emphasis on technical skills, coupled with industry exposure, which empowers us with a tangible advantage in the market.

- Harishchandra Prajapati
(MSc. IPC 2022-24 batch)

Life @ MIT-WPU

Events @ MIT-WPU

Bharatiya Chhatra Sansad

Empowering Youth for Change

A brainchild of Shri. Rahul V. Karad and flagship initiative of MIT-WPU, Bharatiya Chhatra Sansad (BCS) is a nationally recognised initiative empowering youth in India's political landscape. Serving as a non-partisan platform, BCS engages young minds in debates, discussions, and addresses by distinguished personalities, fostering awareness of the socio-political landscape. Acknowledging the contributions of young leaders, sarpanches, and activists, BCS, with participation from 25,000 institutes nationwide, empowers youth to actively shape India's future in governance and administration.

R.I.D.E.

Igniting Innovation and Entrepreneurship

R.I.D.E. stands out as a unique educational initiative by MIT-WPU, fostering entrepreneurship beyond academics. This 5-day event, attracting over 10,000 students, showcases cutting-edge research, design thinking, and innovation across diverse domains. With 100+ startups and 50 venture capital experts, R.I.D.E. provides a real-world startup context, encouraging unconventional thinking and exposing participants to transformative dynamics and market trends.

Rural Immersion Programme

The rural immersion programme of MIT-WPU provides students with a unique educational experience. Through village visits, students engage in hands-on projects such as optimising irrigation, water conservation, waste recycling, and solar power integration. This immersive learning develop critical thinking, problem-solving skills, and community awareness, fostering a profound understanding of rural dynamics and innovative solutions.

Other MIT-WPU Events

- Design Xpo
- Aarohan
- Kala Mehfil
- Hackathon
- National Conference on Media and Journalism
- Abhivyakti
- TEXEPHYR
- Tesla
- Techogenesis
- RoboCon
- Science Expo
- World Parliament of Science, Religion and Philosophy
- Bharat Asmita National Awards
- National Women's Parliament
- International Symposium on Law and Peace
- Vidhi-Manthan
- Peace Marathon
- Sports Summit
- Social Leadership Development Programme (SLDP)

And many more...

MIT-WPU Student Clubs

MIT-WPU is a vibrant hub for student involvement, boasting over 100 clubs spanning cultural, social, sports, co-curricular, and NCC/NSS categories. Such student-led clubs provide students with a platform for active participation, connection-building, and leadership skills development.

- The Innovation Club is a hub for entrepreneurial and innovative events and workshops
- The Art and Photography Club brings together aspiring artists for creative expression
- The Sports Club, orchestrating spirited sporting events and activities
- The Cultural Club celebrates diversity and fosters cultural exchange
- Aatman- The sole Mental Health Club led by Psychology students, promoting well-being
- Team Dart- A motorsports team participating annually in the Rally Car Design Challenge (RCDC)

These clubs excel in national and international competitions, amplifying the dynamic MIT-WPU experience, nurturing leadership, and fostering holistic personal growth. Active participation in these diverse student clubs empowers students to optimise their time, enhance their skills, and contribute purposefully to the community.

CHALCHITRA

aatman

NINOX

Peace Studies: Fostering Holistic Growth

Understanding the importance of inner and social peace and conflict management skills is crucial in today's world. MIT World Peace University has adopted UNESCO's core vision of 'Building Peace in the Minds of Young Men and Women' as its guiding ethos.

The university offers a mandatory course of peace studies that lays the foundation for spiritual peace and harmony. It explores new ideas and practices from various cultures to tackle the challenges of global peace and sustainable development. The university also plans to introduce an advanced postgraduate degree programme in Peacebuilding and Conflict Management that offers state-of-the-art learning opportunities to study traditional and contemporary pedagogies of peacebuilding and conflict management.

The main objective of this course is to prepare students to become agents of social change and genuine global citizens. It trains them in non-violent communication to promote peace and prevent violence in communities and workplaces. Furthermore, the peace studies module also acquaints students with diverse yoga practices that enrich their cognitive prowess and information base, refining critical thinking and enhancing their overall personality. This interdisciplinary course, developed with input from scholars and practitioners worldwide, helps students build knowledge of India's spiritual and cultural ethos. Additionally, the course covers essential conflict management knowledge and skills that are in high demand in today's corporations.

Admission Process

The admission process at MIT-WPU is thoughtfully designed to identify and nurture talented individuals, creating a vibrant and diverse community of learners. This section will guide prospective students through the necessary steps and requirements to become part of the MIT-WPU family, where a commitment to knowledge, innovation, and personal growth is at the forefront of our educational mission.

1. Start application at admissions.mitwpu.edu.in by filling enquiry
2. Receive Login ID and Password
3. Fill Application Form and submit form till last page (Pay application fees for entrance examination- Rs.1500)
4. Receive relevant Link for MIT-WPU CET process
5. Appear for MIT-WPU CET process (Date will reflect on Student Dashboard/Website)
6. Check result on Application Student Dashboard, once results are declared (Dates notified on email)
7. Receive provisional offer of admission (if selected, on registered email)
8. Complete Programme Fee Payment (1st Instalment)
9. Complete all sections of Registration Portal (Payment/Personal/ Education/Documents)
10. 10 Receive Student PRN (Permanent Registration Number) on registered email
11. Original Document Submission
12. Welcome to MIT-WPU!

MIT-WPU
॥ विश्वशान्तिर्भूयात् ॥

Dr. Vishwanath Karad
MIT WORLD PEACE UNIVERSITY | PUNE
TECHNOLOGY, RESEARCH, SOCIAL INNOVATION & PARTNERSHIPS

Call: +91-20–71177137
WhatsApp: +91 9881492848 (Message only)
Email: admissions@mitwpu.edu.in
Website: mitwpu.edu.in
Address: MIT-WPU, Kothrud, Pune

Scan to Apply