

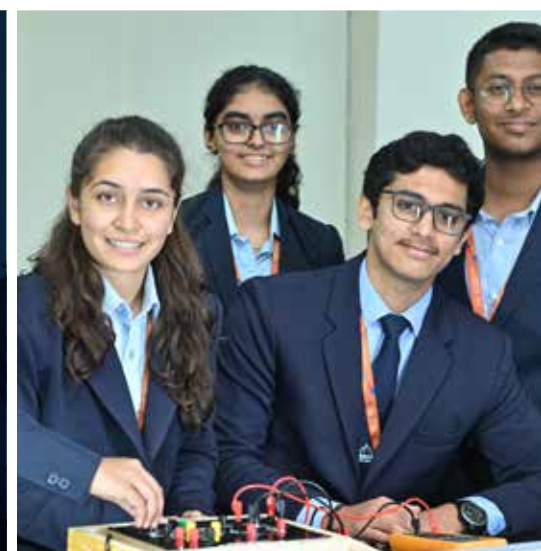
MIT-WPU

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Engineer. Innovate. Elevate.

B.Tech

*Faculty of Engineering
& Technology*



**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 & postgraduate programmes that are thoughtfully designed to strike a balance between theoretical foundations & practical application. The pedagogical approach prioritises experiential learning, empowering students to translate knowledge into real-world skills. This is facilitated through immersive internships & invaluable mentor-mentee insights that serve as catalysts for personal & professional growth.



University Highlights



100,000+
Alumni Globally



1600+
Companies
visited the
Campus



Research &
Innovation Labs
for Budding
Entrepreneurs



150+
Future-ready &
Industry relevant
programmes



140+
Laboratories



100%
Internship
assistance



International, National
& Rural Immersion
programmes



International
Students from
30 countries



Merit-Based
Scholarship worth
Rs. 50 Cr

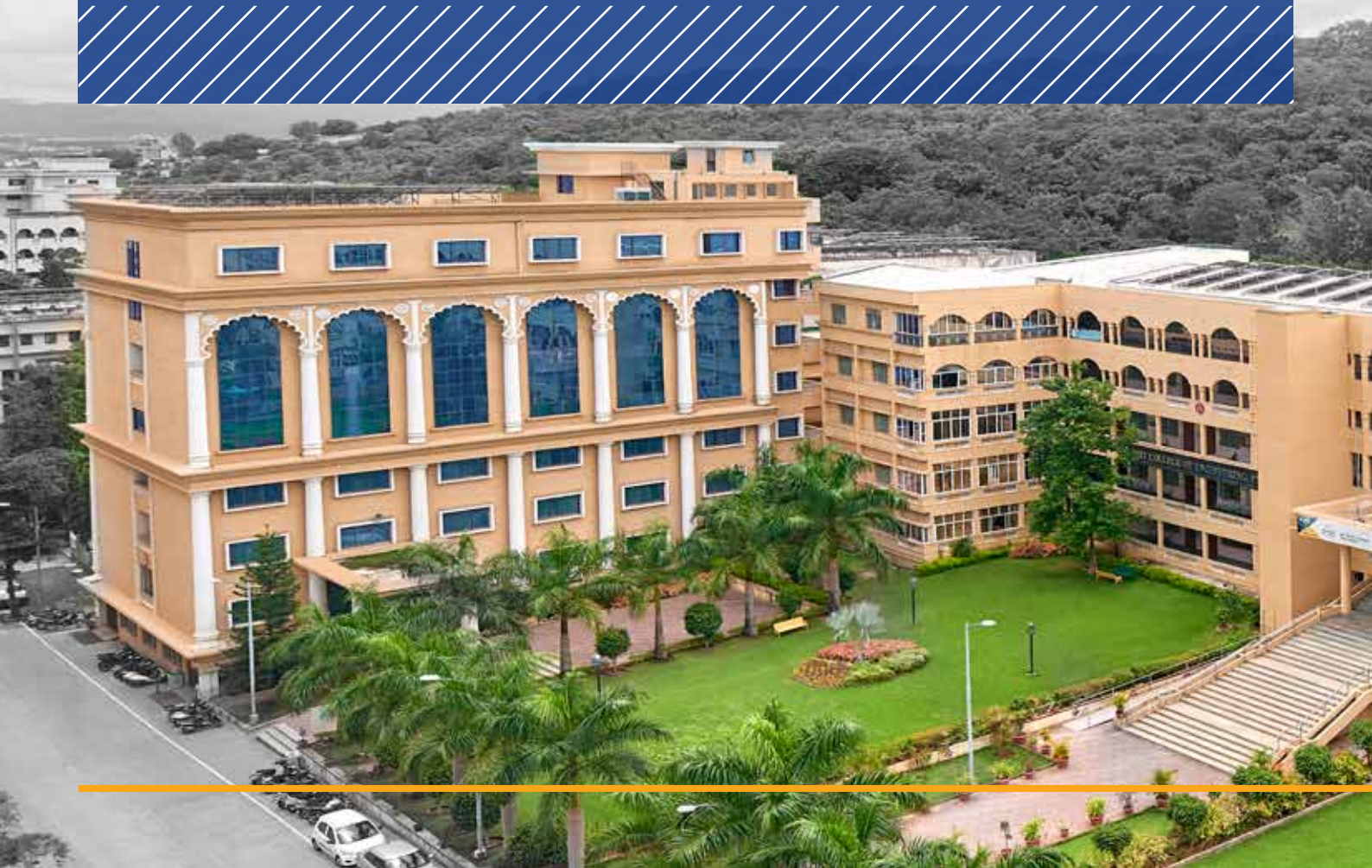


Highest Annual
Package: Rs.
51.36 Lakhs CTC



Why B.Tech Programme at MIT-WPU?

The B.Tech programmes at MIT-WPU offer a comprehensive & enriching engineering education that goes beyond technical expertise. Alongside technical skills, MIT-WPU instils a strong ethical framework, promoting values such as integrity, honesty, & social responsibility. The B.Tech degree programme at MIT-WPU encompasses a comprehensive range of engineering disciplines, spanning both foundational and modern engineering aspects. It offers a high-calibre educational experience, led by accomplished researchers and industry experts, all supported by modern, state-of-the-art facilities and laboratories. The curriculum integrates theoretical knowledge with real-life industrial exposure through mandatory internships, immersion programmes, & industry-focused projects. This ensures students are industry-ready with technical skills & hands-on experience in engineering projects, giving them a competitive edge in their future tech careers. This approach delivers a multidisciplinary learning experience that positions students for success in a perpetually evolving world of engineering and technology. Mindful of this evolving professional landscape, the B.Tech degree programme has been curated and developed to align with current demands and trends so that every student is not only well-prepared but is industry-ready to take on key roles in the engineering and technology space.



Programmes Offered:



B.Tech Computer Science and Engineering



**B.Tech Computer Science and Engineering
(Artificial Intelligence & Data Science)**



**B.Tech Computer Science and Engineering
(Cyber Security & Forensics)**



**B.Tech Electronics and Communication
Engineering**



**B.Tech Electronics and Communication
Engineering (Artificial Intelligence & Machine
Learning)**



B.Tech Electrical and Computer Engineering



B.Tech Civil Engineering



**B.Tech Civil Engineering
(Smart Infrastructure & Construction)**



B.Tech Mechanical Engineering



**B.Tech Mechanical Engineering
(Robotics & Automation)**



B.Tech Chemical Engineering



B.Tech Bioengineering



B.Tech Petroleum Engineering



**B.Tech Materials Science and
Engineering**



Faculty of Engineering & Technology

MIT-WPU Faculty of Engineering & Technology carries forward the 40-year legacy of MIT World Peace University, Pune, focusing on creating 'future-ready' engineers who excel in the technological spectrum. With an emphasis on the practical application of theoretical knowledge, MIT-WPU has one of the best placement records in India. Concurrent with the aim to achieve practical excellence, MIT-WPU is the first university to offer

a 'Peace Studies' programme for the spiritual & moral enhancement of the students. With cutting-edge infrastructure, MIT-WPU aims to be a leading centre for research & the development of new technologies, addressing global issues such as the environment, food shortages, & energy deficiency.

WPU School of Engineering & Technology

At the WPU School of Engineering & Technology at MIT-WPU, students receive a stellar engineering education that transcends traditional boundaries. What sets the school apart is its multifaceted approach, aimed at prioritising extensive exposure to industry practices, both at national & international levels, through immersive programmes, hands-on industrial internships, engaging capstone projects, & electives spanning various disciplines. The educational philosophy at the school revolves around active learning methodologies, encompassing Problem-Based Learning (PBL), experiential learning, & collaborative learning. These approaches enable students to explore their chosen fields in depth, fostering a comprehensive understanding of the engineering landscape. This also ensures that aspiring engineers gain both a solid core knowledge

base & a broad understanding of interdisciplinary insights, preparing them for dynamic careers in the field of engineering & technology. The WPU School of Engineering and Technology brings extensive experience to the classroom, delivering a high-quality learning experience to students. They also foster strong connections between academia & industry, ensuring that students are not only technically proficient but also industry-ready. As a result of this comprehensive approach, graduates of the WPU School of Engineering & Technology at MIT-WPU are exceptionally well-prepared for a wide array of impactful careers in engineering. They possess the skills & knowledge necessary to address complex challenges, excel in team-based environments, think critically, & assume leadership roles, both on a national & global scale.

WPU School of Computer Science and Engineering

The WPU School of Computer Science and Engineering at MIT-WPU stands at the frontier of new-age technological education. With a comprehensive suite of programmes encompassing emerging domains like Data Science, Blockchain, & Web Development, the school primes students for a dynamic future in the IT sector. Led by an esteemed faculty comprising industry experts & seasoned academics, the school puts emphasis on practical knowledge through hands-on experiences & an industry-aligned curriculum.

It fosters collaborations with industry giants, fortifying bridges between academia & industry demands. Committed to staying at the vanguard of technological innovation, the WPU School of Computer Science and Engineering at MIT-WPU instills a passion for exploration, innovation, & ethical practice in its students. It endeavours to produce adept future leaders & professionals poised to tackle the challenges of the digital age, armed with practical skills, industry insights, & a global perspective.

Key Features

Innovation Labs

Access cutting-edge Innovation Labs that empower students to explore entrepreneurial potential through research.

Expert Faculty

Benefit from a distinguished faculty with extensive industry, academic, & research backgrounds, ensuring a rich learning environment.

100% Internships

Guarantee hands-on experience with 100% internship opportunities, providing practical insights & industry exposure.

Industry Connections

Connect with over 1600 leading companies visiting the campus for placements, opening avenues for diverse career opportunities.

Global Exposure

Expand horizons through international, national, & rural immersion programmes, fostering a global perspective.

Renowned Faculty

Gain insights from faculty members of international & national repute, contributing 10% of academic instruction.

Scholarships

Pursue excellence with merit-based scholarships worth **Rs. 50 Crores**, supporting academic achievement.

Tech-Driven Curriculum

Stay at the forefront of technology with the B.Tech programme integrating Linux, Python, AI/ML, IoT, & Data Science, ensuring graduates are industry-ready.



Message for Future Ready Technocrats and Entrepreneurs

Dean's Message

Dear Students and Esteemed Parents,

It is with immense pleasure and pride that I extend a warm welcome to you to our prestigious institution. As the Dean of Engineering and Technology, I am delighted to invite you to embark on a journey of knowledge, innovation, and personal growth with us.

At WPU School of Engineering and Technology, we are committed to fostering an environment where academic excellence, practical skills, and ethical values converge to shape future leaders in the field of engineering and technology. Our faculty members are not just educators but mentors who are dedicated to nurturing your potential and guiding you towards success.

Through state-of-the-art facilities, cutting-edge research opportunities, and industry partnerships, we provide our students with the tools they need to thrive in today's dynamic and competitive world. Whether your passion lies in robotics, sustainable energy, computer science, or any other facet of engineering and technology, our diverse range of programmes ensures that you find your path to success.

To the parents, I want to assure you that your child's well-being and academic journey are our top priorities. We understand the trust you place in us, and we are committed to providing a supportive and enriching educational experience that prepares your child for a fulfilling career and a fulfilling life beyond the campus walls.

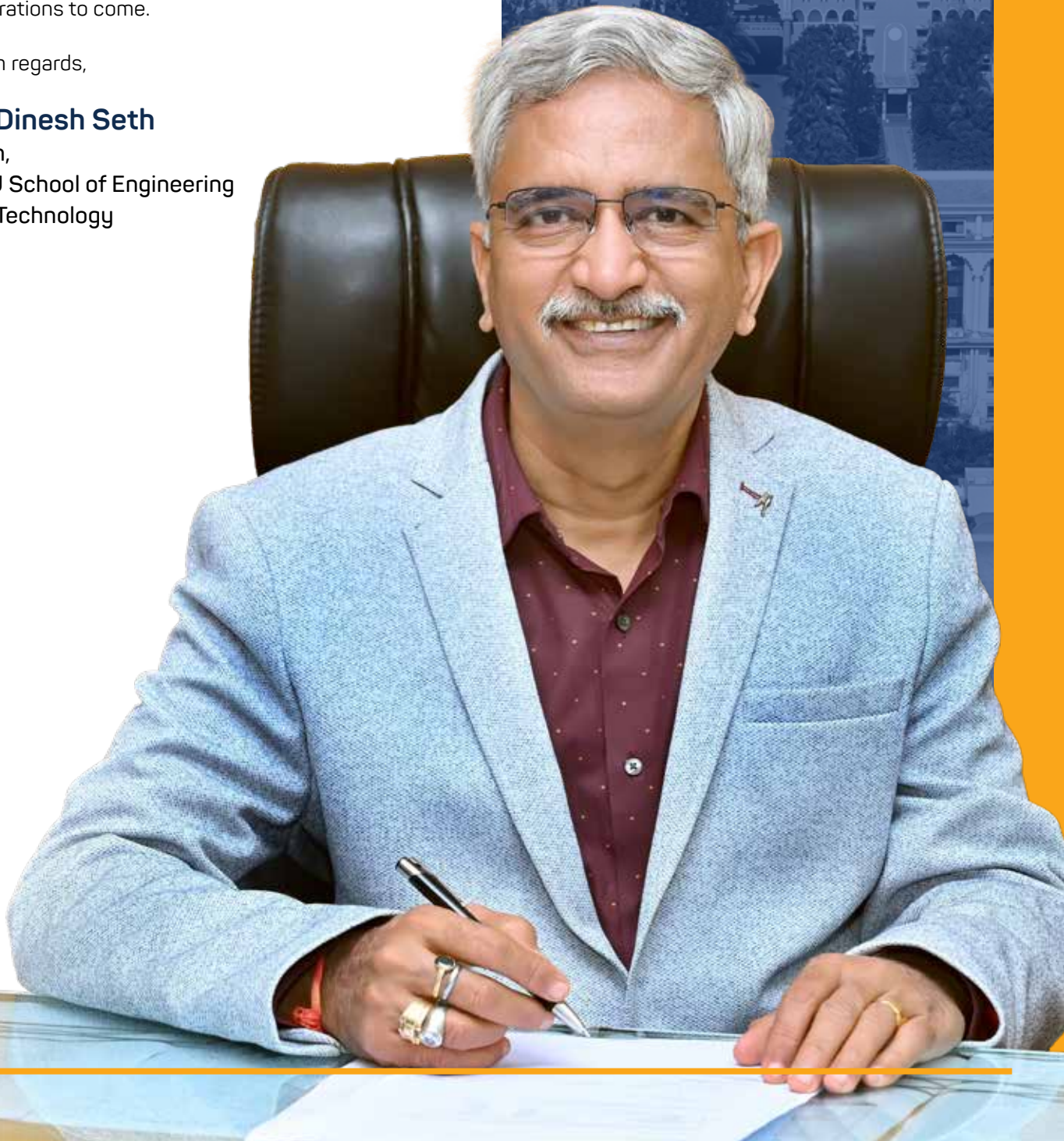


As you peruse through our brochure, I encourage you to envision yourself as a part of our vibrant community, where opportunities abound and dreams are transformed into reality. Join us as we strive towards excellence in engineering and technology, shaping a brighter future for generations to come.

Warm regards,

Dr. Dinesh Seth

Dean,
WPU School of Engineering
and Technology



Dean's Message

Dear Students and Parents,

There is a huge demand for industry-ready manpower that is conversant with the latest technologies adopted by the industry. Therefore, it is necessary, as academicians, that we contribute to the growth of our nation by grooming professionals, who are conversant with the current advances and practices in the industry.

Building a strong industry-academia connection is a priority for the various Departments at the Faculty of Engineering and Technology. My team of faculty members is continuously revising the engineering curriculum in consultation with the top industry experts. Keeping the latest technological advancements in mind, the courses like Python programming, Basic IoT Laboratory, Data Science for Engineers, Artificial Intelligence and Machine Learning, and Probability and Statistics find a place in all our B. Tech programmes.

To add to this significant change in our curriculum, the Faculty of Engineering and Technology offers a minor in Computer Science for all engineering students, except for those already pursuing Computer Science or Computer Engineering. This change has been made in view of the surge in demand for professionals with a background in Computer Science along with domain knowledge of other subjects in fields like Civil, Chemical, Mechanical, Polymer, etc.



I firmly believe that our nation needs research-oriented education that pushes our young minds toward innovation that can provide solutions to real-life problems. This will truly make the dream of Atma Nirbhar Bharat, a reality.

Fostering the spirit of innovation and experimentation is at the heart of the Faculty of Engineering and Technology. As the Dean, it is my priority to facilitate infrastructure, labs and latest equipment to make sure that my faculty members and students pursue several innovative, interdisciplinary projects across various domains.

With the above-mentioned impactful changes that align us further with the industry and with innovative practices, I am confident that the Faculty of Engineering and Technology at MIT-WPU will produce global professionals, leaders, and lifelong learners with holistic personalities, who will contribute to the well-being of mankind.

Dr. Mangesh V Bedekar
Dean,
WPU School of Computer Science
and Engineering

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Pushing our young
minds towards
innovation &
contribute to the
well-being of
mankind

Academic Collaborations

Making Learning Global

The Faculty of Engineering and Technology has forged collaborations with top international universities, including:

- » Deakin University, Melbourne, Australia
- » Macquarie University, Sydney, Australia
- » University of La Trobe, Victoria, Australia
- » University of Wisconsin, Parkside, USA
- » University of Vermont, USA
- » Eastern Michigan University, USA
- » Virginia Commonwealth University, USA
- » Utah Valley University, Utah, USA
- » John Hopkins University, USA
- » University of Massachusetts, USA
- » University of Texas, USA
- » Nottingham Trent University, UK
- » IMT Mines Albi, France
- » Vrije Universiteit, Netherlands



Commitment to global education is showcased through strategic academic partnerships with renowned international universities. These programmes facilitate learning that transcends geographical boundaries, encouraging the exchange of diverse international disciplinary approaches. MIT-WPU continues to foster, strengthen, and

sustain global relationships and extends intercultural networks for its students through student and faculty exchange programmes, summer and winter programmes, research associations, international immersions and semester abroad programmes, project mentorship, extra credit programmes, and enriching intercultural activities.



NTU
Nottingham Trent
University

IMT
IMT Mines Albi-Carmaux
École Mines-Télécom

VU
VRIJE
UNIVERSITEIT
AMSTERDAM

MACQUARIE
University
SYDNEY • AUSTRALIA

 **LA TROBE**
UNIVERSITY

 **DEAKIN**
UNIVERSITY

Industry Collaborations Designed For Success

MIT-WPU fosters robust industry ties, bolstering student placements, research endeavours, and seed funding initiatives. These collaborations offer students hands-on experience, exposure to real-world projects, and interactions with industry professionals. Additionally, they enable faculty members to stay abreast of industry trends, fostering research collaboration and funding opportunities. These partnerships play a pivotal role in equipping students with the skills for successful careers and providing crucial support for faculty research and innovation. The university, in turn, benefits from industry expertise, funding, and resources, elevating the overall quality of education and research at MIT-WPU.

- » 'AMDOCS Innovation Lab' provides a unique on-campus facility, fostering the transformation of students' innovative ideas into reality through collaboration with AMDOCS India.
- » Certified Network Associate with Exploration Version 4.0 offers specialised training in networking.
- » Siemens has established a 'Unified Communication Lab' dedicated to research in Communication Business.

Centre of Excellence

- » Centre of Excellence for Cryptography and Cyber Security with Ziroh Labs.
- » Centre of Excellence for Blockchain Technology with Snapper FutureTech.
- » Centre of Excellence for Parallel/Distributed Computing with NVIDIA CUDA.
- » SUBSEA Lab – An initiative of MIT-WPU with Aker Powergas Pvt. Ltd.
- » Centre of Excellence for Innovative Design and Construction Technologies with Italy's Politecnico De Milano.



MIT-WPU Pune Technology Business Incubator (TBI)

The MIT-WPU Pune Technology Business Incubator (TBI) stands as the official innovation and entrepreneurship ecosystem affiliated with MIT-WPU. Established in 2016, TBI enjoys the backing of 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

TBI has established partnerships with prominent entities such as DST, NISE, NITI AAYOG, and leading multinational corporations, thereby enhancing the exposure and opportunities available to aspiring entrepreneurs.

Department of Civil Engineering

The Department of Civil Engineering fosters a deep understanding of the engineering field, emphasising creativity and razor-sharp analytical skills. The department inspires and instil in students the values of discipline and teamwork. It places a strong emphasis on cultivating a robust research ecosystem, equipping students with the ethical values of integrity and social responsibility as well as technical skills essential for thriving careers in civil engineering. In its pursuit of excellence, the department has crystallized its educational objectives to encompass a holistic understanding of all aspects of civil engineering.

The educational objectives of the Department of Civil Engineering underscore the importance of practical knowledge, ensuring programme-specific outcomes. Graduates become adept at effectively addressing engineering challenges and taking on roles that are both innovative and result-driven. The department fosters a well-rounded education and comprehensive professional development for aspirants, preparing them for excellence in the field of civil engineering.

Laboratories

The labs have following well equipped state-of-the-art laboratories.

- » Surveying Laboratory
- » Transportation Engineering Laboratory
- » Concrete Technology Laboratory
- » Structural Dynamics Laboratory
- » Heavy Structures Laboratory
- » Environmental Engineering Laboratory
- » Geotechnical Engineering Laboratory
- » Tunnel Engineering Laboratory
- » IoT Laboratory





Research & Collaborations

The Department of Civil Engineering at MIT-WPU actively engages in collaborative programmes and research agreements. It has established a partnership with Burton and South Derbyshire College (BSDC) in the United Kingdom, fostering international collaboration. Additionally, the department collaborates on research initiatives with notable organisations like Pune Construction Engineering Research Foundation (PCERF), Builders Association of India (BAI), KL Structures USA, BSDC College UK, Aberdeen University, Aker Solutions, Ajay Kadam Associates, and CWPRS, among others.

Under the MODROB scheme, the department secures funding to assess the seismic response of various infrastructures. This initiative facilitates a two-dimensional earthquake response, simulating scenarios from significant earthquakes in previous centuries.

Demonstrating a commitment to sustainable practices, the department has received funding of INR 26 Lakhs from the Rajiv Gandhi Science and Technology Commission. This funding supports research on the end-of-life use of solar panel waste in construction applications, contributing to environmentally conscious practices in the field.

Department Achievements

Aditya Gawhale

- » Secured AIR 1 in TGC-133 list.
- » Received merit for the Indian Military Academy, Dehradun.

Rohit Patil

- » Awarded BEST DELEGATE.
- » Represented 3 countries of UN Women in IMUN ONLINE CONFERENCE 14.0.

Vedang Patil

- » National Level Two teams in top 30 amongst the 300+ teams in Manipal Hackathon 2020 one team receiving the special mention (4th out of 300+ team) prize.
- » Placed two teams in the top 30 among 300+ teams in Manipal Hackathon 2020.
- » Received a special mention prize for one team (4th out of 300+ teams).

Mr. Atharva Nimbalkar

- » Pursuing MS in Civil, Environmental & Sustainable Engineering with a \$6000 scholarship.

Ms. Samrudhhi Mangrulkar

- » Selected for Tata Power, Mumbai.

Mr. Ajay Patkar

- » Pursuing MS Construction Management with a \$16000 scholarship at NYU Tandon WPU School of Engineering.

Mr. Aditya Shah

- » Pursuing MS in Building Construction and Facility Management at Georgia Institute of Technology.

Mr. Hemak Panghal

- » Pursuing Masters in Construction Management Technology at Purdue University.

Ms. Payal Navale

- » Pursuing Masters in Construction Management at TU Delft University of Technology.

Mr. Sahil Ambedkar

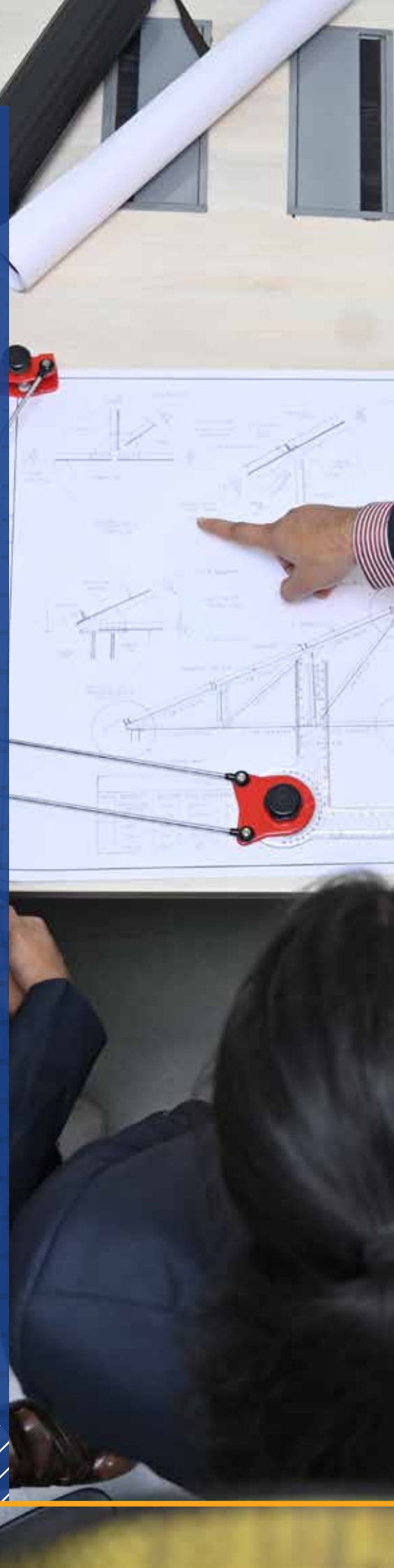
- » Pursuing Masters in Civil Engineering at Purdue University.

Mr. Piyush Kaduskar

- » Pursuing Masters in Construction Management and Technology at Arizona State University.

Mr. Devendra Patil

- » Pursuing Masters in Infrastructure Design and Management at Indian Institute of Technology Kharagpur.



Department Clubs

CESA

- » Auto-CAD workshop
- » Road Safety programme
- » Guest Lecture
("Green Buildings-The GRIHA way")

Industry-Academia Collaboration Forum (IACF)

- » Established in November 2021
- » Inauguration of IGS Chapter
- » Visit to Pune metro
- » Guest lecture on Typical research and industry opportunities for Civil Engineers
- » Blog & Information series " Building opportunities" (20 Episodes have been released till date)
- » Expert Session on Lean Construction

Student Chapters

- » Indian Society of Structural Engineers (ISSE) STUDENT CHAPTER, MIT WPU Pune
- » Indian Concrete Institute
- » Indian Green Building Council (IGBC)

Initiative and Activities

NIRMITEE, an annual National Level Civil Engineering symposium, serves as a platform where the anticipated revolution in construction gains momentum. It propels the world into a digital euphoria while preserving our cultural lineage. The theme for the recent event was "e-Credible India," acknowledging the evolving landscape of construction.

- | | |
|-----------------|----------------------|
| » Technoquiz | » Paper Presentation |
| » e-Tendering | » Pitch hunt |
| » Town Planning | » CV Cruits |
| » Softcon | » R.Y.L.A. |

B.Tech Civil Engineering

The **B.Tech Civil Engineering programme** at MIT-WPU prepares students to design & develop infrastructure by combining knowledge from mathematics, physics, mechanics, geotechnics, materials science, hydraulics, & statistical analysis. Students are taught how to use engineering & management principles to govern a project in a multidisciplinary environment while keeping environmental, legal, financial, & ethical constraints in mind. Students are also taught design thinking to develop critical problem-solving skills in the field of civil engineering. They learn to apply their knowledge through hands-on projects, assignments, & internships in industry-related fields such as subsea engineering, structural engineering, & construction management, thus preparing them to enter the industry ecosystem with confidence.

Major Tracks



**Geotechnical
& Foundation
Engineering**



**Structural
Analysis, Design &
Materials**



**Water Resources,
Remote Sensing &
GIS**



**Infrastructure,
Construction Engineering
& Management**



**Environmental
Engineering**



**Transportation
Engineering**



Duration: 4 Years



Fee: INR 2,55,000 per annum



Career Opportunities

- » Structural Auditor
- » Structural Consultants
- » Construction Management Consultants
- » Project Managers
- » Surveying Consultants
- » Structure Designers
- » Quantity Surveyors
- » GIS Analyst and Developers
- » Town planners
- » Transportation Engineers for Highways, Railways, Runways, Bridges
- » Government Jobs in Indian Engineering Services, State-Central Engineering Services for the Department of Water Resources/PwD/Irrigation/CPWD/BRO/AAI

B.Tech

Civil Engineering in Smart Infrastructure and Construction

The B.Tech Civil Engineering degree programme at MIT-WPU, with a specialisation in Smart Infrastructure & Construction, prepares students to construct innovative infrastructures. It blends physical infrastructure assets & construction processes with digital technologies, collectively known as smart technologies. The curriculum is designed to impart skills in effective infrastructure management, incorporating various smart technologies. These include sensors & citizen science, actuators, data transmission, the Internet of Things (IoT), big data analytics, data visualisation, blockchain, Artificial Intelligence & Machine Learning (AI & ML), data science, dimensional building modelling & simulation, & drone technology. Students graduate with a comprehensive understanding of how to integrate these smart technologies into modern infrastructure development.

Major Tracks



Advanced Transportation Engineering & Intelligent Transport System



Sustainable Construction Materials & Management



Water Resources, Remote Sensing & GIS



Advanced Irrigation Technologies



Robotics & Automation in Civil Construction



Geotechnical & Foundation Engineering



Structural Analysis & Design, Materials



Infrastructure, Construction Engineering & Management



Environmental Engineering



Duration: 4 Years



Fee: INR 2,55,000 per annum





Career Opportunities

- » Structural Consultants
- » Construction Management Consultants
- » Project Managers
- » Surveying Consultants
- » Structure Designers
- » Quantity Surveyors
- » GIS Analyst and Developers
- » Town planners
- » Transportation Engineers for Highways, Railways, Runways, and Bridges
- » Government Jobs in Indian Engineering Services, State-Central Engineering Services for the Department of Water Resources/PwD/Irrigation/CPWD/BRO/AAI

Department of Mechanical Engineering

The Department of Mechanical Engineering at MIT-WPU covers a wide range of disciplines, including design, thermodynamics, materials science, manufacturing processes, automation, and robotics. Students explore areas like e-mobility, bio-medical applications, aircraft, energy systems, and modern industrial processes, gaining a holistic view of mechanical engineering. Well-equipped laboratories support hands-on learning, allowing students to apply theoretical knowledge practically. The department collaborates with government entities such as DRDO and CME, involving faculty in research initiatives. Partnerships with top organisations provide academic structure, guest lectures, industry visits, and internships. The education offered is comprehensive, preparing students for diverse career opportunities in the evolving field of mechanical engineering.

Laboratories

The Department of Mechanical Engineering at MIT-WPU has the following labs equipped with the latest state-of-the-art equipment.

- » E-Vehicle & Electrical Mobility Laboratory
- » Heat Transfer Laboratory
- » RAC & Cryogenics Laboratory
- » Hydraulics & Pneumatics Laboratory
- » Robotics & Automation Laboratory
- » Advanced Material Characterisation & Metrology Laboratory
- » Theory of Machines & Dynamics of Machinery Laboratory
- » Engineering Metallurgy Laboratory
- » Noise Vibration and Harshness (NVH) Laboratory
- » Tata Technology Visualisation and Competency Center-I
- » Mechatronics & Sensor Technology Laboratory
- » Biomaterials/Biomedical Technology Innovation & Vehicle dynamics Laboratory
- » Computer-Aided Design (CAD) Laboratory
- » Steam and Power Generation Laboratory
- » Thermal Engineering & Nanofluidics Research Laboratory
- » Hydraulics Machinery Laboratory
- » Advance Heat Transfer & HVAC Laboratory





Research & Collaborations

Academic Collaborations

- » Partnership with over 50 companies.
- » Industry involvement in academic structuring.
- » Guest lectures and industry visits.
- » Internship opportunities for students.
- » Industry participation in assessments of PG/ Ph.D. students.

Research Collaborations

- » Collaborations with Government undertakings such as DRDO and CME.
- » Regular funded projects with these organisations.
- » Active involvement of department faculty in collaborative research initiatives.

Department Achievements

B.Tech Mechanical engineering students won a cash prize of INR 50000/- in the Forbes Marshall Outstanding Project Competition, 2023.

Department Clubs

- » PIRHANA RACING (Off-road all-terrain Vehicle)
- » Vegapod Hyperloop
- » SUPRA (Acceleracers)
- » Team BOLT
- » Team DART
- » Dancing Drone
- » ROBOCON
- » Skytroopers

B.Tech Mechanical Engineering

Mechanical engineers play a pivotal role in creating a diverse array of everyday utility devices, including batteries, athletic equipment, medical devices, personal computers, air conditioners, automobile engines, and power plants. The **B.Tech Mechanical Engineering** programme at MIT-WPU is tailored to equip students with the skills to design, manufacture, and maintain complex mechanical systems across various fields such as e-mobility, biomedicine, aviation, and energy. Students undergo comprehensive education through research and industry projects, gaining practical insights into the field. Industry tours and rural immersion programmes further enhance their understanding of real-world applications. Graduates of this programme are well-prepared to find employment in areas such as manufacturing, automation, industry, the Internet of Things, and artificial intelligence. This programme also ensures that students are not only knowledgeable but also ready to contribute to the ever-evolving field of mechanical engineering.

Major Tracks



Design Engineering



Energy
Engineering



Materials,
Manufacturing and
Automation



Robotics and Artificial
Intelligence



Duration: 4 Years



Fee: INR 3,15,000 per annum



Career Opportunities

Mechanical Engineering graduates will have ample opportunities for higher studies, entrepreneurship and employment in the following domains.

- » **Automotive**
- » **Robotics & Automation**
- » **Manufacturing**
- » **Mining**
- » **Aerospace**
- » **Healthcare**
- » **Energy Sectors**
- » **State/Central Government Services including DRDO, ISRO, HAL, BHEL, NTPC, CSIR and Tri-Services**

B.Tech

Mechanical Engineering

(Robotics and Automation)

Robotics and Automation involve the design and development of robots integrated with intelligent control systems. This field encompasses the principles of electromechanical and computer engineering. In today's era, the growing demand in the industry necessitates professionals with added expertise in this field of 'Robotics and Automation'.

The Robotics and Automation degree programme at MIT-WPU is designed to provide students with a comprehensive understanding of the intricacies involved in creating and implementing robotic systems. From electromechanical principles to computer engineering, students gain the knowledge and skills needed to meet the evolving needs of the industry. This specialisation ensures that graduates are well-equipped to contribute to the dynamic and high-demand field of Robotics and Automation.

Major Tracks



Mechanical Design
and Simulation



Control
Engineering



Materials,
Manufacturing and
Automation



IoT and Artificial
Intelligence



Robot System
Building



Duration: 4 Years



Fee: INR 3,15,000 per annum



Career Opportunities

- » Mechanical Design Engineers
- » CAE Engineers
- » Mechanical Design Analysts
- » Automotive Systems Engineers
- » Mechanical Design Consultants
- » NVH Engineers

Department of Chemical Engineering

The Department of Chemical Engineering at MIT-WPU offers a comprehensive blend of academics, experiential research, industrial training, and practical projects to prepare students for diverse careers. Graduates are equipped for roles in industries spanning petroleum refining, petrochemicals, polymers, biochemicals, biomedical devices, materials, drugs, fertilizers, dyes, textiles, ceramics, and foods. The department also prepares students for emerging fields such as data analytics for predictive process solutions, smart manufacturing technologies, process automation and control, process modelling simulation and optimisation, green energy, artificial intelligence, machine learning, and more. Notably, the department has secured numerous research grants from national funding agencies, fostering a conducive environment for cutting-edge research and innovation.

Laboratories

The Department of Chemical Engineering, MIT-WPU has the following laboratories equipped with the latest state-of-the-art equipment.

- » Chemical Engineering Unit Operations Laboratory
- » Instrumentation and Process Control Laboratory
- » Mass Transfer Laboratory
- » Advanced Separation Processes Laboratory
- » Fuel Testing and Characterisation Laboratory
- » Chemical and Biological Analysis Techniques Laboratory
- » Chemical Reaction Laboratory
- » Chemical Process Development Laboratory
- » Bioprocess Engineering Laboratory
- » Biomedical Engineering Laboratory
- » Bioengineering Lab-1
- » Bioengineering Lab-2
- » Computational Lab-1
- » Computational Lab-1

Research

The Department has secured funding from RGSTC (Rajiv Gandhi Science and Technology Commission), Government of Maharashtra, amounting to Rs. 28 Lakhs. This funding supports the project titled "Utilisation of Jackfruit (*Artocarpus Heterophyllus*) Waste for Making Value-Added Polymers and Novel Adsorbents." This initiative underscores the department's commitment to innovative research and sustainable practices, contributing to both scientific advancement and environmental well-being.





Department Achievements

The MIT-WPU Department of Chemical Engineering proudly holds membership in AIChE (American Institute of Chemical Engineers), the world's foremost organisation for Chemical Engineering professionals, boasting over 60,000 members from more than 110 countries. The department's AIChE Student Chapter has been honoured with the prestigious "AIChE Outstanding Student Chapter Award" for an impressive four consecutive years, spanning 2019, 2020, 2021, and 2022. This esteemed award is presented annually to Student Chapters showcasing exceptional levels of participation, enthusiasm, programme quality, professionalism, and community involvement.

The AIChE Student Chapter at the Department of Chemical Engineering, MIT World Peace University, Pune, achieved a remarkable feat by winning the Chem-E-Car competition during the AIChE Student Regional Conference 2023. The event, organised by SVNIT, Surat, Gujarat from 18th to 20th August 2023, saw our car ZnCognito secure victory in the regional competition, ranking second in Southeast Asia and first in India. This achievement qualifies ZnCognito to represent South Asia at the Annual Student Conference (ASC) of AIChE in November 2023 at Hyatt Regency, Orlando, Florida, United States of America.

Prestigious Awards

The MIT-WPU Department of Chemical Engineering has earned several notable accolades and positions within AIChE (American Institute of Chemical Engineers), underscoring its commitment to academic excellence and leadership development:

- » Donald F. Othmer Sophomore Academic Excellence Award: Presented by AIChE, this award signifies outstanding academic achievements and contributions by sophomores within the field of Chemical Engineering.
- » AIChE-Southern Asia Regional Liaison: The department holds the distinguished position of Southern Asia Regional Liaison within AIChE, highlighting its active involvement in regional initiatives and collaborations.
- » International Position of Regional Liaison at the Executive Student Committee - AIChE: Further extending its impact, the department holds an international position as the Regional Liaison at the Executive Student Committee of AIChE, contributing to the global community of chemical engineering professionals.
- » Freshman Recognition Award by AIChE: The AIChE Freshman Recognition Award acknowledges the department's commitment to nurturing and recognising early talents in the field.

Beyond these achievements, the AIChE Student Chapter at the department actively supports students in engaging in co-curricular activities and social impact projects. This not only fosters the development of communication, team-building, and leadership skills but also sensitises students to real-world challenges, empowering them to find meaningful solutions.

B.Tech Chemical Engineering

Students pursuing the **B.Tech Chemical Engineering** programme at MIT-WPU learn to design, develop, and manage industrial processes for creating useful products from chemicals and materials. The programme covers essential topics and stays updated with the latest in Chemical Engineering through a modern syllabus, cutting-edge labs, and regular interactions with industry experts and alumni. This ensures that graduates are well-prepared and knowledgeable. Upon completion, students are ready for various roles in industries like pharmaceuticals, healthcare, petrochemicals, specialty chemicals, polymers, biotechnology, and more. The practical education equips graduates for the dynamic challenges of the Chemical Engineering industry.

Major Tracks



Water & Wastewater
Treatment



Refining & Petrochemical
Technology



Bioengineering



Energy Engineering



Polymer Technology

Career Opportunities

- » Process Engineer
- » Project Engineer
- » Design and Commissioning Engineer
- » Production Engineer
- » Biochemical Process Engineer
- » Technical Consultant
- » Process Simulation Engineer
- » Research Scientist
- » Quality Control Associate
- » Piping Engineer



Duration: 4 Years



Fee: INR 3,15,000 per annum



MoUs

The Department of Chemical Engineering at MIT-WPU has signed MoUs with following industries and research organisations:

- » National Chemical Laboratory
- » Rastriya Chemicals and Fertilizers Ltd.
- » Reliance Industries Limited
- » Praj Industries Limited
- » Worley
- » Honeywell
- » Equinox Software Services
- » Academy of Water Technology & Environ Management
- » HIKAL
- » Reva Process Technologies
- » Bell Engineering Software Technologies Ltd. Pune
- » Michelman
- » Rosefield b2b
- » Vivira Process Technologies
- » Tridiagonal Solutions Ltd.
- » Jackson Industries India
- » MIST Resonance Engineering Pvt. Ltd.
- » Hydrocons Systems
- » Nespro Renewable Energy Solutions
- » Beznovators
- » Patpert
- » Xeon Waste Managers
- » Rahul Engineering Global
- » Amophil Chemicals
- » Agile Ventures

B.Tech Bioengineering

The **B.Tech Bioengineering** programme at MIT-WPU is a comprehensive and interdisciplinary course that combines principles from biological, physical, chemical, mathematical, and life sciences. It places special emphasis on key areas like bioinformatics, biomechanics, bioenergy, bio-nanotechnology, biopolymers, and biomedical instrumentation. The programme covers essential subjects such as cell and molecular biology, human anatomy and physiology, biochemistry and microbiology, heat and fluid flow, bioreaction engineering, biomaterials, industrial biotechnology, and more. This programme prepares students to be well-equipped for various roles to design, develop, and provide solutions in the dynamic field of Bioengineering.

Major Tracks



Biomechanics



Biomedical
Instrumentation



Bioprocess
Engineering



Bioinformatics



Genetic Engineering

Career Opportunities

- » Biomedical Engineers
- » Bioinformatics Software Developers
- » Bioprocess Engineers
- » Project Engineers
- » Genetic Engineers
- » Design Engineers
- » Research Associate
- » Biomechanics Associate
- » Service Engineer



Duration: 4 Years



Fee: INR 3,15,000 per annum



Major Recruiter Companies for Bioengineers

- » Biocon
- » TCS Life Science
- » Reliance Life Science
- » Serum Institute of India
- » Infosys
- » Wipro
- » GVK Life Sciences
- » IBM
- » Cognizant
- » Genova
- » GE healthcare
- » Siemens
- » Phillips
- » L&T
- » Johnson and Johnson
- » KLS Martin
- » Medtronic
- » Samsung Healthcare
- » Skanray Healthcare
- » Toshiba Medical Systems

Department of Materials Science Engineering

At the Department of **Materials Science Engineering**, MIT-WPU, students delve into the intricacies of designing and improving products, systems, and processes using an array of materials such as metals, polymers, ceramics, and more. The applications of Material Science Engineering span across diverse sectors, including medicine, agriculture, automation, electronics, and sports. Known for its non-conventional approach, this engineering branch equips students for interdisciplinary projects. Through project-based learning and partnerships with industry bodies like the Rubber Skill Development Council (RSDC), All India Plastics Manufacturers' Association (APIMA), All India Rubber Industries Association (AIRIA), Electronica, and SKYi, students gain practical insights. The department has set overarching objectives that guide its mission. Firstly, it aims to develop globally recognised materials science engineering professionals known for their ethical and responsible practices. Secondly, the department is dedicated to fostering higher education, research, innovation, and entrepreneurship among graduates, contributing significantly to infrastructure development. Moreover, it places a strong emphasis on instilling social responsibility, ethical behaviour, and professional industry practices through strategic partnerships. Lastly, the department strives to be a centre of excellence by actively collaborating across various disciplines, ensuring a holistic and enriched educational experience for students.

Laboratories

The Department of Materials Science Engineering, MIT-WPU has the following laboratories equipped with the latest state-of-the-art equipment.

- » Materials Processing Laboratory
- » Materials Testing & Characterisation Laboratory
- » Materials Synthesis Laboratory
- » Materials Processing & Compounding Laboratory



Department Achievements

The Centre of Excellence in Materials Science Research, actively supported by the industry, is set to establish its presence. The school has achieved a significant milestone by successfully completing a project on the development of "BiofreshPak" Material. This project was undertaken with a research grant of INR 1.57 crores, generously provided under the UK Innovate and DBT Government of India initiative.



B.Tech Materials Science and Engineering

The **B.Tech. in Materials Science and Engineering (MSE)** is a comprehensive programme that explores the design, development, manufacturing, processing, and recycling of materials. It combines engineering sciences such as Fluid Mechanics, Heat and Mass Transfer, Kinetics, and Thermodynamics with fundamental sciences like Physics and Chemistry, covering the structure of matter from the atomic to millimetre scale, and Mathematics. The programme includes core courses addressing major material classes like polymers, semiconductors, metals, and ceramics. Special attention is given to the development of new and advanced materials, with a focus on solving real-world challenges in areas such as nanotechnology, biotechnology, information technology, energy, sustainability, manufacturing, and other significant engineering disciplines. The programme also ensures students are well-prepared to consider economic, legal, social, and environmental factors when solving problems, fostering a holistic and practical approach to materials science and engineering.

Major Tracks



Intelligent & Smart
Materials



Materials Modelling &
Simulation



Nanomaterials



Composites



Biomaterials



Duration: 4 Years



Fee: INR 2,55,000 per annum





Industry Opportunities

Materials Science and Engineering graduates will have ample opportunities for higher studies, entrepreneurship and employment in the following domains.

- » Materials Design and Development
- » Electronics Manufacturing
- » Sustainability Solutions
- » Glass and Ceramics Manufacturing
- » Product and Process Engineering
- » Production Management and Quality Assurance
- » Higher education opportunities in reputed universities at national and international levels.
- » Government organisations such as DRDO, HEMRL, BHEL, BEL, C-MET, CSIR-NCL, etc.

Career Opportunities

- » Production
- » Technical Sales
- » Quality Assurance
- » Research and Development
- » Design Engineering
- » Modeling and Simulation
- » Material Scientist (R&D)
- » Entrepreneurship

Department of Electrical and Electronics Engineering

The Department of Electrical and Electronics Engineering (EEE) at MIT-WPU stands at the forefront of technological innovation, playing a pivotal role in shaping the future of engineering. It is committed to excellence in education, research, & innovation in the field of Electrical and Electronics Engineering. The department strives to produce graduates who are well-versed in the fundamental principles of electrical & electronics engineering & possess the creativity, problem-solving skills, & ethical values needed to address the complex challenges of the modern world. The department envisions a future where electrical & electronics engineering continues to drive technological progress & societal transformation. The commitment is to produce graduates who will lead in solving the world's most pressing challenges, from sustainable energy solutions to advanced automation & beyond. Whether it's a prospective student, current student, faculty member, or industry partner, there are opportunities & possibilities for all within the department. It prepares students to be engineers of the future.

Laboratories

The Department of Electrical and Electronics Engineering (EEE) is well equipped with state-of-the-art computer & hardware laboratories to provide students with the best hands-on practical experience.

- » Automation Laboratory
- » Computer Vision Laboratory
- » Digital Systems Laboratory
- » Electronics Devices & Circuits Laboratory
- » Digital Signal Processing Laboratory
- » Communication Laboratory
- » Research Lab-A
- » VLSI Laboratory
- » Embedded Systems Laboratory
- » Artificial Intelligence-Machine Learning Laboratory
- » IOT Laboratory
- » Linear Integrated Circuits Laboratory
- » Software Programming Laboratory (A&B)
- » Basic Electronics Laboratory (A&B)
- » EV & Automation Laboratory
- » Programming & DBMS Laboratory
- » Electrical Machines and Control Laboratory
- » Advanced Machines Laboratory
- » Power Electronics & Power Systems Laboratory
- » Switchgear & Renewable Energy Laboratory
- » Artificial Intelligence & Data Science Laboratory
- » Smart Grid Laboratory
- » Project Laboratory



Department Clubs

The Electrical and Electronics Engineering Students' Clubs at MIT-WPU are vibrant and inclusive teams of students united by a passion for innovation, technology, and the limitless possibilities of electrical and electronics engineering. Their mission is to enhance the students' experience by providing a platform for learning, collaboration, and personal development. The goal is to establish a supportive environment where students can explore their interests, acquire new skills, and connect with like-minded peers.

Following are the clubs in the department:

- » IEEE Student Chapter
- » Student Research Club
- » Meta Association of Study Skills (MASS)
- » Meta Association of Recreational Sports (MARS)
- » Cultural Hive and Recreational Mesh (CHARM)



B.Tech Electronics and Communication Engineering

The **B.Tech in Electronics and Communication Engineering** programme at MIT World Peace University is designed to equip students with a strong foundation in electronics, communication systems, & cutting-edge technologies. It offers a comprehensive curriculum that blends theoretical knowledge with practical skills, preparing students for a dynamic & rapidly evolving field. It is committed to nurturing the next generation of engineers & innovators who will shape the future of technology & communication. It provides a comprehensive educational experience that combines academic rigour, practical skills, & a global perspective to prepare students for success in the ever-evolving field of electronics & communication.

The B.Tech Electronics and Communication Engineering at MIT-WPU is a dynamic & promising branch of engineering, representing a multifaceted, versatile, & high-demand sector within the engineering field. Electronics engineers enjoy extensive career prospects both within India & globally, covering various opportunities in hardware & software domains. With the proactive 'Make in India' initiative by the Government of India, the growing demand for electronics in the defense sector, & the thriving high-tech industry, the demand for professionals in Electronics & Communication Engineering (ECE) has never been greater.

Major Tracks



Communication
Engineering - IoT



Signal & Image Processing
- Computer Vision



Artificial Intelligence



VLSI & Embedded



Applied Electronics



Duration: 4 Years



Fee: INR 3,15,000 per annum





Higher Education Opportunities for ECE Engineers:

- » Postgraduate degrees (MS/ME/M. Tech) in India and abroad
- » Doctoral studies in related fields
- » MBA programme to prepare for leadership roles within the high-tech industry

Core Career Opportunities

- » Electronic Design Engineer
- » Telecommunications Engineer
- » Embedded Systems Engineer
- » VLSI (Very Large Scale Integration) Engineer
- » RF (Radio Frequency) Engineer
- » Control Systems Engineer
- » Power Electronics Engineer
- » Instrumentation Engineer
- » Avionics Engineer
- » Research and Development Engineer

Opportunities beyond the Core

- A Prestigious IT and other diversified companies.

Government Sector Opportunities

- » Civil services
- » Employment in public service organisations
- » Positions in financial services

Entrepreneurship Opportunities

- » Establish thriving start-ups in various subfields of Electronics and Communication Engineering

B.Tech Electronics and Communication Engineering

(Artificial Intelligence and Machine learning)

The B. Tech. Electronics and Communication Engineering (Artificial Intelligence and Machine learning) programme is a dynamic and promising branch of engineering that blends the versatile and high-demand fields of electronics, communication, & AI&ML within the engineering domain. This innovative degree programme equips students with a unique skill set, making them pioneers in technological innovation with a deep understanding of the application of Artificial Intelligence and Machine learning in various industries. Students learn to identify, formulate, & design intelligent solutions for fields such as computer vision, robotics, automotive electronics, biomedical signal processing, healthcare, human-computer interface, & business solutions, among others. Industrial internships, immersion programmes and capstone projects offer hands-on and practical exposure, equipping students with a well-rounded foundation and specialised expertise, preparing them to contribute to global advancements & the development of emerging technologies.

Major Tracks



Edge Intelligence



AI in Healthcare



AI Computing Platform



Deep Learning Architectures



Augmented and Virtual Reality



Duration: 4 Years



Fee: INR 3,15,000 per annum





Career Opportunities

ECE graduates specialising in AI & ML enjoy diverse career prospects both in India & internationally, covering various opportunities in hardware and software domains. Aligned with the 'Make in India' initiative by the Indian government, the growing demand for electronics in the defence sector and the thriving high-tech industry present substantial opportunities for professionals in ECE AI-ML.

Higher Studies

ECE AI-ML specialists have the option to pursue:

- » MS/ME/M. Tech programmes in India & abroad.
- » Doctoral studies in relevant fields.
- » MBA programmes to prepare for roles in the high-tech industry.

Core Jobs

- » Machine Learning Engineer
- » Data Scientist
- » Computer Vision Engineer
- » Natural Language Processing (NLP) Engineer
- » AI Research Scientist
- » Deep Learning Engineer
- » AI/ML Consultant

Opportunities beyond the Core

- » ECE AI-ML engineers have the flexibility to secure on & off-campus placements with renowned IT & other companies in non-technical consulting roles.

Career Opportunities in the Public Sector

- » Civil services
- » Public service organisations
- » Positions in financial services

B.Tech Electrical and Computer Engineering

The B.Tech Electrical and Computer Engineering programme at MIT-WPU is a comprehensive and interdisciplinary offering that seamlessly integrates academia, industry, and research. With a primary focus on preparing students for the challenges of Industrial Revolution 4.0, this programme covers a wide range of cutting-edge technologies, including electric vehicles, data structures, algorithms, software programming, artificial intelligence, data science, the Internet of Things, cloud computing, cybersecurity, automation, smart grids, and more. Students have the flexibility to choose major tracks that align with their specific interests and career goals. Upon completion of this programme, graduates are well-prepared for a wide range of career opportunities. They possess a deep understanding of cutting-edge technologies, equipping them for roles in electric vehicle development, artificial intelligence research, data science, smart grid management, industrial automation, software development, and cybersecurity. The versatility and knowledge gained from this B.Tech degree programme make graduates valuable assets in a rapidly evolving technological landscape.

Major Tracks



Smart Electric
Mobility



Artificial Intelligence



Data Science



Smart Grid & Energy
Systems



Robotics & Industrial
Automation



Duration: 4 Years



Fee: INR 3,15,000 per annum



Career Opportunities

- » AIML/Data Science/
Software Engineer
- » Full Stack Developer/Cloud
Specialist
- » Embedded Hardware
Engineer
- » EV Engineer
- » Communication/IoT
Engineer

Government Sector Opportunities

- » Civil services
- » Employment in public
service organisations
- » Positions in financial
services

Department of Computer Engineering and Technology

The ubiquity of digitisation in all aspects of life has led to a significant surge in Computer Science & Engineering. Skills related to innovation, design, development, deployment, usability, & presentation are highly sought after in the field of computer engineering & technology. To meet the unprecedented demand for aspiring engineers, the Department of Computer Engineering and Technology at MIT-WPU offers cutting-edge programmes with specialisation in Artificial Intelligence & Data Science, Cyber Security & Forensics, Computer Systems, & Business Systems. These programmes are an excellent combination of academics, industrial exposure, research opportunities, & a wide range of co-curricular & extracurricular activities. The Department also hosts a number of workshops & skill-building courses to provide hands-on experience such as Linux, Python, IoT, Data Science tools, Blockchain Technology, Deep Learning models, Cyber Security, AR/VR, Edge Computing, & many more.

Laboratories

The Department of Computer Engineering and Technology at MIT-WPU has well-equipped state-of-the-art laboratories.

- » Emerging Technology Laboratory
- » Object Oriented Programmimg Laboratory
- » Software Development Laboratory
- » High Performance Computing Laboratory
- » Embedded System Laboratory
- » Microprocessor Laboratory
- » Cyber Security Laboratory
- » Big Data Analytics Laboratory
- » System Software Laboratory
- » Cloud Computing Laboratory
- » Image Processing Laboratory
- » IoT Technologies Laboratory
- » Blockchain Technology Laboratory
- » Web Technology Laboratory
- » HCI Laboratory
- » AR/VR Laboratory
- » Computer Network Laboratory
- » Wireless Networks Laboratory
- » Operating Systems Laboratory
- » Artificial Intelligence Laboratory
- » Machine Learning Laboratory
- » Digital Electronics Laboratory
- » Data Science & Analytics Laboratory (PG)
- » NMCS Laboratory (PG)



MoUs

The Department of Computer Engineering and Technology has established over 60 Memorandums of Understanding (MoUs) with big names like Tata Consultancy Services (TCS), Capgemini, Volkswagen, Ziroh Labs, Snapper FutureTech, NCS, EC Council, & Symphony Tech, among others.

Department Achievements

Startups

- » HACK-X – Tanmay Dighe
- » Inator LLP - Harsh Savergaonkar
- » VendOut - Kuldeep ChotraniTechnovision

Industry attached Laboratories

- » Industry 4.0 Technology Lab with Capgemini
- » Data Privacy Lab in association with Ziroh Labs Pvt. Ltd.
- » NCS Innovation Lab in association with NCS Singapore
- » Blockchain Lab in association with Snapper Technologies

Under the mentorship of Prof. Bhavana Tiple, Muskan Singh, Rushikesh Patade, Era Aggarwal, Jatin Chellani, Tushar Mittal, Amit Pile, & Monish Kamtikar secured the first prize in SIH 2022, earning a cash prize of INR 1 lakh for their project "NaksheKADAM."

Piyush Motwani received the Super Speaker Season 2 Hunt accolade in the country, distinguishing himself as one of the youngest participants to reach the Top 250 out of 2.1 lakh participants across India.

Department Clubs

» Student Chapters of Professional Societies

- » ACM Student chapter
- » CSI Student chapter
- » SWE Student chapter
- » IET Student chapter
- » ISTE

» Student Clubs

- » Innovators Hub
- » Hack – X
- » GDSC – MIT-WPU
- » Ananta Tantra
- » Script
- » CodersEra

B.Tech Computer Science and Engineering

The **B.Tech Computer Science and Engineering** programme at MIT-WPU provides students with comprehensive insights into & knowledge of computer engineering. Students delve into the fundamentals of both hardware & software, essential building blocks in computer engineering. The curriculum emphasises algorithmic analysis, crucial for designing efficient software systems. Learners acquire skills to analyse, design, & develop software systems, gaining proficiency in programming languages like C, C++, JAVA, & Python. The department fosters experiential learning to enhance problem-solving & critical-thinking abilities. The programme identifies & refines students' research and innovation skills by developing creative solutions to complex problems. The programme covers cutting-edge technologies, including Artificial Intelligence, Machine Learning, Data Analytics, Cloud Computing, High-Performance Computing, Internet of Things (IoT), Network and Cyber Security, and Computer Forensics. Experienced and eminent faculty members impart these subjects to ensure a well-rounded education for the students.

Major Tracks



Data Science



Information & Cyber
Security



Multimedia &
Computer Vision



Software Design &
Development



Duration: 4 Years



Fee: INR 3,55,000 per annum



Career Opportunities

- » Software Developer
- » Data Scientist
- » Full Stack Developer
- » Software Architect
- » Product Developer
- » AI ML Developer



B.Tech

Computer Science and Engineering

(Artificial Intelligence & Data Science)

The **B.Tech Computer Science and Engineering** programme with a specialisation in **Artificial Intelligence & Data Science** at MIT-WPU equips students to address real-world challenges in statistics, knowledge discovery, machine learning, big data analytics, data visualisation, cognitive computing, & deep learning. The curriculum enables students to develop critical thinking & problem-solving skills applicable to various domains such as legal, healthcare, finance, etc., using artificial intelligence & data science tools. Graduates are well-prepared for roles in industries & organisations relying on data-driven decision-making & advanced analytical techniques. This four-year course prepares students for diverse career paths, including roles as Data Scientists, Business Analysts, & Researchers. These opportunities empower aspiring engineers to tackle real-world challenges in fields like Machine Learning, Statistics, Knowledge Discovery, & Data Visualisation.

Major Tracks



Systems & Edge Computing



Extended Reality



Business Analytics



Computational Intelligence



Duration: 4 Years



Fee: INR 3,55,000 per annum





Career Opportunities

- » Software Developers
- » Data Scientists
- » Data Analysts
- » Product Analysts
- » Business Intelligence Developers

B.Tech **Computer Science and** **Engineering** **(Cyber Security & Forensics)**

The **B.Tech Computer Science and Engineering** programme with a specialisation in **Cyber Security & Forensics** plays a vital role in safeguarding crucial data from theft & damage across various sectors, including corporate, healthcare, e-commerce, education, research, & government organisations. Cybersecurity professionals are dedicated to protecting business data, customer data, & other sensitive proprietary information amidst the rising global cyber threats. Given its pivotal role in defending against diverse threats, cybersecurity stands as a critical asset for any organisation, leading to an increasing demand for skilled computer engineers capable of addressing real-world problems in cybersecurity domains, including information, cognitive, & social aspects. This programme equips students with the essential knowledge of cybersecurity, preparing them for the workforce.

Major Tracks



**Networking &
Security**



**Software Design &
Development**



Digital Forensics



**Information
Management**



Duration: 4 Years



Fee: INR 3,55,000 per annum





Career Opportunities

- » Software Developers
- » Computer Forensics Analyst
- » Network Security Analyst
- » Information Security Crime Investigator
- » Cloud Security Specialist
- » Penetration Tester

Department of Petroleum Engineering

The Department of Petroleum Engineering, the second oldest in India & the only one in Maharashtra, offers a distinctive B.Tech Petroleum Engineering with a specialised, industry-focused curriculum. This programme prepares students to tackle challenges & contribute to the nation's energy security. The curriculum covers reservoir, production, drilling engineering, & petroleum exploration, drawing from various engineering disciplines such as mechanical, electrical, electronics, & chemical engineering. Students also gain exposure to data sciences, machine learning, computer modeling & simulation, & alternate energy, ensuring their readiness for the industry. The department hosts four prominent professional students' chapters, facilitating direct interaction between students & the professional petroleum engineering community.

The MIT-WPU SPE student chapter has consistently received the "Student Chapter Excellence Award" for the past five years.

Laboratories

The Department of Petroleum Engineering, MIT-WPU has the following laboratories equipped with the latest state-of-the-art equipment.

- » Petroleum Reservoir Characterisation Laboratory
- » Petroleum Drilling Engineering & Fluids Laboratory
- » Petroleum Exploration Laboratory
- » Petroleum Emerging Technology Laboratory
- » Petroleum Modelling & Simulation Laboratory
- » Petroleum Production Engineering Laboratory
- » DST-SERB Laboratory





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SPV2 BST4 GHRV

STB

B.Tech Petroleum Engineering

The **B.Tech Petroleum Engineering** degree programme at MIT-WPU is strategically crafted to foster a new generation of adept engineering professionals. This programme adheres to the rigorous standards set forth by the Society of Petroleum Engineers, positioning it as a competitive force among the world's leading institutions. The programme's foundation is rooted in industry-relevant knowledge & practices. It includes an extensive industrial internship & project work, providing students with firsthand experience in the current petroleum industry methodologies. Emphasis on research equips students with the analytical & problem-solving skills necessary for addressing complex industry problems & driving innovation. Upon successful completion of the **B.Tech Petroleum Engineering programme**, graduates are well-prepared to embark on exciting career paths in national & international oil companies, government agencies, consulting firms, reputed universities, & research organisations. Their skills & knowledge become assets to the ever-evolving & critical oil & gas sector, making them valuable contributors to the industry's growth & sustainability.

Major Tracks



Production
Engineering



Exploration &
Economics



Reservoir
Engineering



Drilling Engineering



Data Analytics



Subsea Engineering



Health Safety &
Environment



Duration: 4 Years



Fee: INR 2,55,000 per annum



Career Opportunities

- » Petroleum Production Engineer
- » Petroleum Economist
- » Drilling Engineer
- » Reservoir Engineer
- » Subsurface Data Engineer
- » Petroleum data analyst
- » Oil & Gas Project Manager
- » Oil & Gas Supply Chain Manager

Direct Second Year (Lateral Entry) **After a 3-year Diploma in Engineering**

MIT-WPU offers various three-year direct entry courses that allow students to gain direct admission to the second year of engineering. These courses are accessible to students who have successfully completed a three-year diploma after the 10th standard from any institution approved by the All-India Council for Technical Education, Central Government, State Government, or equivalent.





Internships & Placements: Paving Pathways to Career Success

The dedicated Placement Cell, known as 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.

Highest Stipend:

INR: 60,000/-

University Highest Package:

INR: 51.36 LPA



Top Recruiters

Infosys®

Compuplast

Microsoft

ZS

Synechron
Open Source Community Technology

wipro

EMC²
where information lives®

Cognizant

Deloitte.

SUNGARD®
Availability Services

amdocs

ThoughtWorks®

Honeywell

NVIDIA.

Mphasis
Unleash the Next

TATA
TATA TECHNOLOGIES

Rakuten

Deutsche Bank

amazon

accenture
High performance. Delivered

LTI
Let's Solve

CAIRN

Capgemini

The Hackett Group
World Class Mind and Method

FIS

SKODA

Forbes
Marshall

PIAGGIO

KPMG

Shapoorji Pallonji
Built to last...since 1850

MNGL

L'ORÉAL

EXIDE

HALLIBURTON

HCL
HCL TECHNOLOGIES

JSW Steel Limited

ImaginXP

MAN

Schlumberger

_VOIS

HIKAL

praj

Reliance

ONGC

L&T Technology Services

Eligibility & Selection Criteria

B. Tech programmes

Eligibility Criteria

1. For all **B. Tech programmes** candidates should have appeared in JEE 2024 / MHTCET 2024 / PERA 2024 / MHTCET-B* 2024 / NEET* 2024 score. [*Applicable only for Bioengineering programme]
2. Minimum 50% aggregate score in PCM/PCB* or Physics & Mathematics with any Technical Vocational Subject.
3. Physics, Mathematics & English is Compulsory with Chemistry/Biotechnology* or Biology*/Technical Vocational Courses in 10+2/Class 12th or equivalent examination AND 50% aggregate score in Class 12th/HSC.

[*Applicable only for Bio engineering programme] (at least 45% marks, in case of Reserved class category candidate belonging to Maharashtra State only)

OR

Minimum 60% aggregate score in Diploma in Engineering & Technology in an appropriate branch from UGC approved University (without backlog).

Selection Criteria

The selection process for B.Tech programmes is based on JEE 2024 / MHTCET 2024 / PERA 2024 / MHTCET-B* 2024 / NEET* 2024 score and a Statement of Purpose (500 words) written by the student for those candidates who meet the Eligibility criteria. [*Applicable only for Bioengineering programme]

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

Direct Second Year (Lateral Entry)

Eligibility Criteria

Passed Diploma Course in the academic year 2023-24, 2022-23, & 2021-22 in Engineering and Technology with a minimum of 60% marks in appropriate branch of Engineering and Technology from an All-India Council for Technical Education or Central or State Government approved Institution or its equivalent (at least 55% marks, in case of Reserved Class category candidate belonging to Maharashtra State only)

Selection Criteria

The selection process for the programmes is based on Diploma score and a Statement of Purpose (500 words) written by the student. (Provisional Admissions are offered based on 5th semester scores in case results of final semester are awaited.)



Scholarships

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

Merit Scholarship Categories:

- » Dr. Vishwanath Karad Merit Scholarship
- » MIT-WPU Merit Scholarship
- » Scholarships for Elite Sportspersons
- » Scholarship for Wards of MIT-WPU/MAEER's Staff Members

Terms & Conditions:

- » Scholarships are granted on a First Come First Serve basis.
- » Scholarships are awarded as fee adjustments.
- » To maintain the scholarship throughout the programme, students must maintain a minimum academic score of 8 CGPA across all semesters, attendance of at least 80%, and a clean disciplinary record.

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



B.Tech Programmes

Scholarship for AY 2024-25	Dr. Vishwanath Karad Scholarship (100%)		MIT-WPU Scholarship I (50%)		MIT-WPU Scholarship II (25%)	
Name of programme/ Specialisation	JEE Percentile	MHT-CET Percentile	JEE Percentile	MHT-CET Percentile	JEE Percentile	MHT-CET Percentile
B.Tech Computer Science and Engineering	97 & Above	98 & Above	96 & Above	97 & Above	95 & Above	96 & Above
B.Tech CSE - Artificial Intelligence and Data Science						
B.Tech CSE - Cyber Security & Forensics						
B.Tech Electronics and Communication Engineering	94 & Above	95 & Above	92 & Above	93 & Above	91 & Above	92 & Above
B.Tech Electronics and Communication Engineering (AI & ML)						
B.Tech Electrical and Computer Engineering						
B.Tech Bioengineering						
B.Tech Mechanical Engineering						
B.Tech Mechanical Engineering (Robotics and Automation)						
B.Tech Civil Engineering	89 & Above	90 & Above	87 & Above	88 & Above	86 & Above	87 & Above
B.Tech Civil Engineering (Smart Infrastructure & Construction)						
B.Tech Materials Science and Engineering						
B.Tech Chemical Engineering	90 & Above	91 & Above	88 & Above	89 & Above	87 & Above	88 & Above
B.Tech Petroleum Engineering						

Note: Best of JEE 2024 or MHT-CET 2024 Score will be considered for availing the scholarship.

Event @

MIT-WPU



Bharatiya Chhatra Sansad: Empowering Youth for Change

Bharatiya Chhatra Sansad (BCS), the flagship initiative of MIT-WPU and brainchild of Shri. Rahul V. Karad is a nationally recognised event fostering youth engagement in India's political framework, governance, and administration. This non-partisan platform enlightens young minds about the evolving socio-political landscape through debates, discussions, and addresses by distinguished personalities—chief ministers, governors, union ministers, and parliamentarians. BCS unequivocally acknowledges the contributions of young sarpanches, local leaders, and social activists catalysing positive change. Witnessing participation from 25,000 institutes nationwide, BCS empowers youth to actively shape India's future.

R.I.D.E.: Igniting Innovation and Entrepreneurship

R.I.D.E., a one-of-its-kind and exceptional annual conclave hosted by the Innovation Club of MIT-WPU, pioneers an educational paradigm beyond academics, channelling students towards entrepreneurship. This event exposes participants to cutting-edge research, entrepreneurship, design thinking, and innovation across various domains. With a footfall of over 10,000 students, the 5-day conclave features 100+ startups from diverse sectors like technology, healthcare, sustainable energy, and more. Over 50 venture capital experts address students, discussing transformative startup dynamics and market trends, fostering unconventional thinking within a real-world startup context.





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 develops critical thinking, problem-solving skills, and community awareness, fostering a profound understanding of rural dynamics and innovative solutions.



Other Events @ MIT-WPU

MIT-WPU stands distinguished for its dynamic and immersive academic and extracurricular events, offering students a plethora of opportunities for learning, growth, and community engagement. The university hosts over 100 student-led events annually, spanning diverse interests and topics. These include cultural festivals, illuminating guest lectures, impactful community service projects, and spirited sporting events. Participating in these events equips students with invaluable skills, facilitates meaningful connections, and fosters their active involvement in the thriving MIT-WPU community. Following are a few such events:



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

And many more...

MIT-WPU Student Clubs

MIT-WPU is a vibrant hub of student engagement, housing a diverse and dynamic student community with more than 100 clubs and organisations catering to a spectrum of interests and passions. These student-led clubs not only facilitate active participation and forging new connections but also foster the development of leadership skills.

Categorically, the clubs at MIT-WPU fall into five main categories: cultural, social, sports, co-curricular, and NCC/NSS. This ensures that students have ample opportunities to delve into and explore their specific areas of interest. A glimpse into a few of these engaging clubs:

- » **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 fosters 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)**

Engaging in these clubs empowers students to optimise their time, enhance their skills, and contribute purposefully to the community. These clubs also participate and excel in national and international competitions, gaining recognition and prominence. These student-led endeavours amplify the dynamic MIT-WPU experience, nurturing leadership and fostering holistic personal growth.





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.





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.

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