MIT-WPU

|| विश्वशान्तिर्ध्रुवं ध्रुवा ||

A Launchpad to Engineering Excellence

M.Tech

Faculty of Engineering and 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 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 the Campus

- 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 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 M.Tech at MIT-WPU?

MIT-WPU cultivates exceptional engineering professionals through its M.Tech programmes, infusing technical expertise with a strong foundation in human values and global citizenship. These residential programmes offer well-rounded education for ambitious young minds. The institution's objective is to shape outstanding engineers by prioritising real-life industrial exposure. The M.Tech degree programmes at MIT-WPU are designed to seamlessly integrate theoretical knowledge and practical knowledge further supplemented by tech modules, offering additional benefits for a holistic learning experience and enhanced career prospects.

Programmes Offered

◆ Civil Engineering (Structural Engineering)

◆ Civil Engineering (Construction Engineering and Management)

◆ Civil Engineering (Tunnel Engineering)

◆ Environmental Engineering

◆ Mechanical Engineering (Design Engineering)

◆ Mechanical Engineering (CAD/CAM/CAE)

◆ Electronics and Communication Engineering (VLSI and Embedded Systems)

◆ e-Mobility

◆ Chemical Engineering

◆ Computer Science and Engineering (Cyber Security)

◆ Computer Science and Engineering (Data Science and Analytics)

◆ Petroleum Engineering

Faculty of Engineering and Technology

The MIT-WPU Faculty of Engineering and Technology offers an ideal combination of practical knowledge, problem-based, experiential learning, and collaborative training approaches. The academic fraternity at MIT-WPU is highly experienced and prides itself on its strong industry-academia network that enables students to acquire the best theoretical knowledge with proper industry exposure through application-oriented pedagogies, guest lectures, seminars, workshops, national and international tours, and more. Students also gain relevant experience from multiple capstone projects that focus on brainstorming and problem-solving, encouraging innovation at every step. Moreover, the Centres of Excellence, in collaboration with multiple MNCs, prepare students for bright careers ahead.

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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
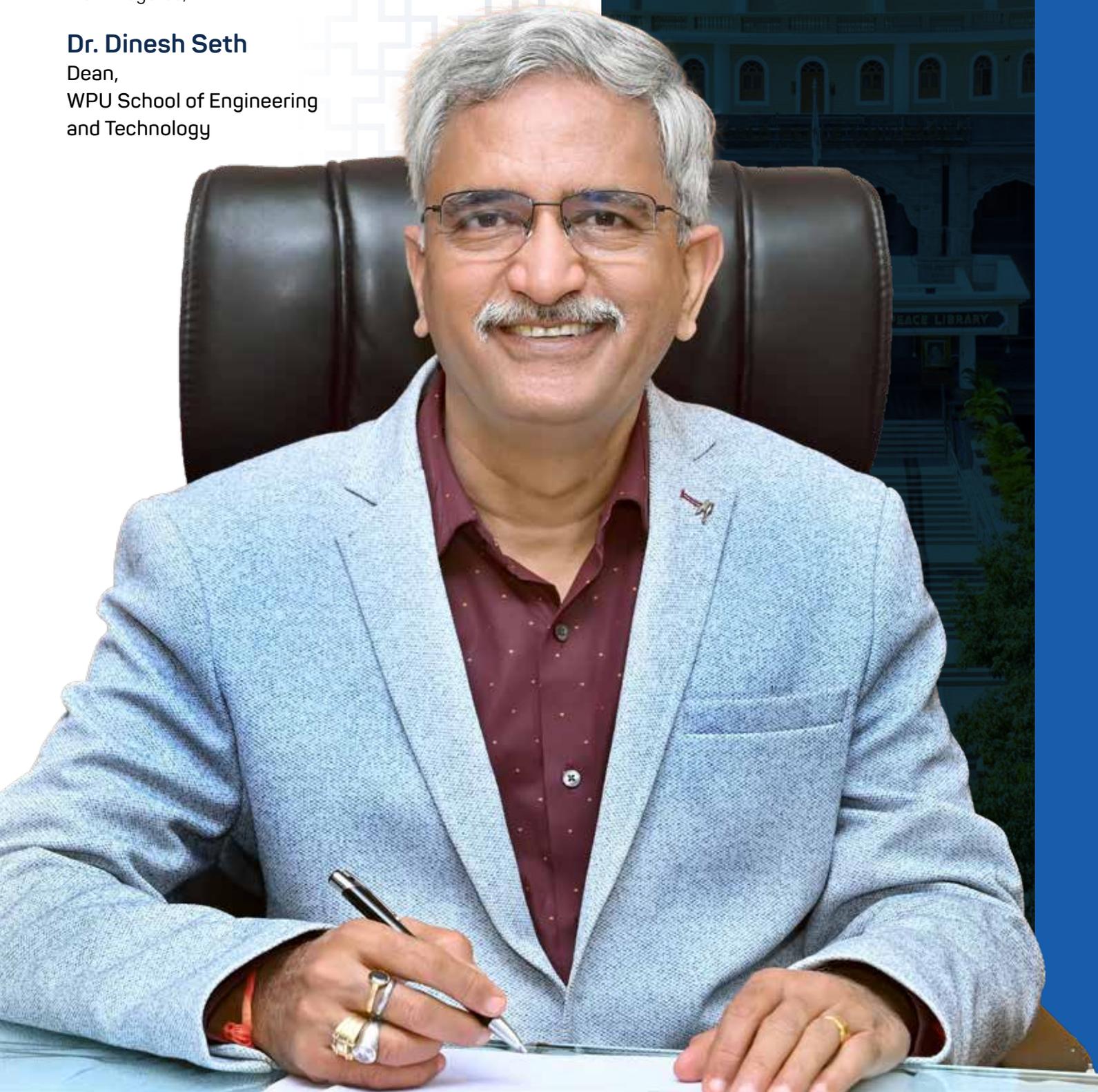
Dean's Message

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, Laboratories 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

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

Academic Partnerships:
Making Learning Global

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 inter-cultural

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.

The Faculty of Engineering and Technology has forged collaborations with top international universities.

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.

Siemens has established a 'Unified Communication Lab' dedicated to research in Communication Business.

Certified Network Associate with Exploration Version 4.0 offers specialised training in networking.

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 Subsea Pvt. Ltd., and Aker Powergas Pvt. Ltd.

- Centre of Excellence for Innovative Design and Construction Technologies with Italy's Politecnico De Milano.

Programme Highlights

1 **Personalised Learning:**
Students craft their educational path through MIT-WPU Choice-Based Credit System.

2 **Practical Skill Development:**
Students gain hands-on expertise through Project-Based Learning, preparing them for real-world challenges.

3 **Cutting-Edge Resources:**
Access to the latest tools and advanced technologies is available in top-notch facilities for research and practical training.

4 **Broadened Horizons:**
The curriculum includes MOOCs and interdisciplinary courses, enriching students' core competencies and adaptability.

5 **Industry Insights:**
Students learn from leaders in the field through guest lectures, seminars, and workshops, bridging the gap between theory and practice.

6 **Industry Immersion:**
Students have the option to undertake 6-month industry internships with renowned companies such as Tata Motors, Mercedes Benz, and more.

7 **Career Path Support:**
The Dedicated Centre of Industry-Academia Partnership (CIAP) at MIT-WPU facilitates job placements with global organisations.

8 **Global Network:**
Students join a thriving alumni community that spans the globe, offering lifelong connections and career support.

9 **Expert Faculty:**
Faculty members, with impressive research backgrounds, have numerous publications, papers, books, and patents to their credit.

10 **Corporate Collaborations:**
Students benefit from partnerships with 231+ corporations for research and training opportunities.

11 **Campus Engagement:**
Over 100 student-led clubs provide opportunities for personal growth and the development of friendships.

12 **Entrepreneurship Ecosystem:**
The entrepreneurial spirit is nurtured with funding, mentorship, and networking at MIT-WPU Pune Technology Business Incubator (TBI).

13 **Research Excellence:**
Students immerse themselves in industry-relevant research, fostering innovation and discovery.

14 **Innovation Protection:**
MIT-WPU encourages patent creation, safeguarding pioneering ideas with dedicated support.

Department of Civil Engineering

The Department of Civil Engineering at MIT-WPU is dedicated to producing ethical civil engineers capable of planning, conceptualising, designing, constructing, monitoring, operating, and maintaining infrastructure, transportation, and public utility projects. The department offers M. Tech programmes that provide students with a strong foundation in civil engineering, instilling analytical, technical, professional, and management skills. Students learn to integrate research skills and civil engineering knowledge to create an effective infrastructure that meets users' objectives and needs.

Collaborations and Funding

◆ The Department of Civil Engineering offers a collaborative programme with Burton and South Derbyshire College (BSDC) in the United Kingdom, as well as an agreement for collaborative research with organisations such as the Pune Construction Engineering Research Foundation (PCERF), the Builders Association of India (BAI), KL Structures USA, BSDC College UK, Aberdeen University, AKER solutions Pune, Ajay Kadam Associates, and CWPRS, among others.

◆ The MODROB scheme provides funding to the department to assess the seismic response of various infrastructures. It enables two-dimensional earthquake response and simulates all major earthquake scenarios from previous centuries.

Laboratories

◆ The Department of Civil Engineering, MIT-WPU has the following Laboratories equipped with the latest state-of-the-art equipment.

1. Surveying Laboratory

2. Transportation Engineering Laboratory

3. Concrete Technology Laboratory

4. Structural Dynamics Laboratory

5. Heavy Structures Laboratory

6. Environmental Engineering Laboratory

7. Geotechnical Engineering Laboratory

8. Tunnel Engineering Laboratory

9. IoT Laboratory

Grants Received: Over *INR 1 Crore*

Research Areas:

◆ Construction Risk Management, Quality Management, Resource Management and its Optimisation, Sustainable Construction, Concrete Technology, Prestressed Concrete, Composite Materials, Earthquake Engineering, Structural Engineering, Ferrocement Materials, Fracture Mechanics, Subsea Engineering, Precast Technology, Seismic Analysis and Design, Durability of Tunnels, Design of Large Diameter Tunnels, High Altitude Tunnels, Geophysical Methods EIA & EMP, Domestic & Industrial water, Sewage treatment domain areas etc.

Current Research Areas at MIT-WPU

◆ Novel Construction Materials, Sustainable Construction, Concrete Technology, Prestressed Concrete, Ferrocement Materials, Composite Materials, Earthquake Engineering, Tunnels Design and Construction, Fast Track Projects, Life Cycle Analysis, and Lean Management.

Research Facilities

◆ Earthquake Engineering, Ferrocement Technology, BIM, AR/VR, Precast Construction, Tensegrity Structures, Rocking shear walls, Risk management, Affordable housing, Pavement distresses, Sustainable material, Tunnel Engineering, Underground Construction, Adsorption Techniques for treatment of effluent, Solid Waste Management, Optimisation techniques in Water Supply, & Construction Management & Structural Design, Rehabilitation and Restoration of urban water bodies, analytical equipment like UV-spec, AAS, PCR thermal cycler, etc.

Internship and Placement Opportunities

◆ Black & Veatch, ACC, AFCONS, Geoconsult, Dhruv Consultants, J & W Structural Consultants, Precast India Ltd., B. G. Shirke Company, AFCONS Infrastructure Limited, Larsen & Toubro(L&T), Hindustan Construction Co., Gammon India, TATA Consulting Engineers, J Kumar, Shapoorji Palonji and Co., Aecom, Geodata, Smec, Strudcom Structural Consultants, Project Management Consultancy (PMC), Gammon India Limited, Indian Railways, Mumbai Metro Corporation ltd., Pune Metro (Maha-Metro Corporation Ltd.), RITES Ltd., NHIDCL, Essar Power, Greenko Group, TATA Power, VJ Developers, Sharpoorji, Pallonji Engineering & Construction & all Government Sectors.

Academic Programmes

M.Tech Civil Engineering (Structural Engineering)

Duration - 2 years

Fees - ₹ 1,95,000/- PA

Career Opportunities

- ◆ Structural Consultants
- ◆ Government Engineers
- ◆ Field Engineers
- ◆ Structural Auditor
- ◆ Construction Management Consultants

The M.Tech in Civil Engineering (Structural Engineering) is a specialised programme that focuses on training students in critical thinking and problem-solving skills for the structural engineering field. The curriculum includes hands-on training in modern engineering tools and computer simulation methods for analysing and designing civil engineering structures according to national and international standards. The programme also includes seminars, projects, and internships that allow students to gain real-world experience and connect with the industry. In addition to technical skills, the programme also emphasises value-based education through peace courses. Many graduates of this programme have secured paid internships at companies like VJ Developers and Afcons Infrastructure and have been placed at firms like L&T and Shapoorji Pallonji Engineering & Construction, Stantec, Vconstruct, TCE etc. with competitive packages.

M.Tech Civil Engineering (Construction Engineering and Management)

Duration - 2 years

Fees - ₹ 1,95,000/- PA

Career Opportunities

- Planning Engineers
- Field Engineers
- Construction Project Managers
- Project Management Consultants
- Chartered Engineer

The construction industry in India benefits from substantial government funding, making it a thriving sector with ample employment opportunities. The M.Tech. (Construction Engineering and Management) programme at MIT-WPU prepares students for careers in this field by blending engineering principles with project management skills and providing practical experience with modern materials, processes, and technologies. Students also acquire proficiency in using software programs such as MSP, Primavera, and PRRT, enhancing their competitiveness in the job market. Graduates of this two-year programme are well-equipped to take on managerial roles at project management consultancies, contracting firms, public sector organisations, private construction companies, and multinational corporations. Many students from this programme have secured paid internships at companies like VJ Developers and Afcons Infrastructure and have been placed at firms like L&T and Shapoorji Pallonji Engineering & Construction, Stantec, Vconstruct, TCE, etc., with competitive packages.

M.Tech Civil Engineering (Tunnel Engineering)

Duration - 2 years

Fees - ₹ 1,95,000/- PA

Career Opportunities

- Tunnel Engineers
- Geotechnical Engineers
- Construction Managers
- Consultants
- Researchers
- Government Regulators

The Master's degree programme in Tunnel Engineering at MIT-WPU is designed to provide students with advanced knowledge and skills in the field of tunnelling, underground construction, and geotechnical engineering. This programme typically combines theoretical coursework with practical hands-on experience to prepare students for careers in the design, construction, and management of tunnels and underground infrastructure. The Tunnel Engineering programme offers 100% placement and provides internship opportunities in various national projects, such as the Atal Tunnel in Jammu. We conduct international workshops with esteemed professors. Remember that the field of tunnel engineering is essential for the development of transportation, infrastructure, and underground facilities. Pursuing a Master's degree in this field can open up diverse and rewarding career opportunities.

M.Tech
Environmental Engineering

Duration - 2 years

Fees - ₹ 1,95,000/- PA

Career Opportunities

- Environment Engineers
- Project Engineers
- Commissioning and Auditing Engineers
- Project Environmental Engineers
- Process Engineers
- Environmental Managers
- Assistant Professor after NET SET

The interdisciplinary M.Tech in Environmental Engineering programme at MIT-WPU aims to offer a balanced training in scientific, engineering, and social aspects in this field. The course has been designed to meet the requirements of industry, consultancy services, academic and research & development organisations related to Environmental Management, treatment of emissions and effluents, and remediation of contaminated environments. The programme provides ample choice of electives to enable students to delve deeper into various aspects related to this discipline, such as Environmental Monitoring and Modeling, Environmental Impact Assessment, Industrial Air & Water Pollution Control, Solid and Hazardous Waste Management, Applications of GIS and Remote Sensing in Environmental Engineering, and Numerical Methods for Environmental Systems.

Department of Mechanical Engineering

Mechanical engineering is one of the most diverse and versatile disciplines, fostering students' ability to apply scientific knowledge for the betterment of the world. The mechanical engineering degree programme at MIT-WPU is a blend of academics and co-cu¬rricular activities, providing budding engineers with a vibrant real-life experience. This programme emphasises the design and development of modern mechanical systems for various domains such as e-mobility, bio-medical, aircraft, energy, and more, with industry partners playing an essential role in every aspect of human life. The mechanical engineering programme also explores the applications of computers in manufacturing, automation, the Industrial Internet of Things, and Artificial Intelligence, contributing to a well-rounded education for aspiring engineers.

Laboratories

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

1. E Vehicle & Electrical Mobility Lab
2. RAC & Cryogenics Lab
3. Hydraulics Lab
4. Pneumatics Lab
5. Robotics Lab
6. Automation Lab
7. Advanced Material Characterisation & Metrology Lab
8. Noise Vibration and Harshness (NVH) Lab
9. Tata Technology Visualisation and Competency Centre-I
10. Mechatronics & Sensor Technology Lab
11. Computer-Aided Design (CAD) Lab
12. Steam and Power Generation Lab
13. Thermal Engineering & Nanofluidics Research Lab
14. Hydraulics Machinery Lab
15. Advance Heat Transfer & HVAC Lab

Grants Received: Over *INR 1 Crore*

Research Areas:

◆ Design Engineering, Composite Materials, Tribology, Biomaterials and Biomedical Engineering, Material Testing, NVH - Fault Diagnosis, Reliability, Vehicle Dynamics, Metal Forming, Optimisation of Manufacturing Processes, Solar Energy, Computational Fluid Dynamics, Biomechanics, Cryogenic Applications, Heat Pipe Applications, HVAC Applications, Micro-Forming, Advanced Refrigeration System Design, Friction Stir Welding, Two-Phase Heat Transfer, E-Vehicle Battery Thermal Management, NVH, and Fault Diagnosis, New Refrigerants and Allied Applications, Design Engineering, Optimisation of Manufacturing Processes, Solar Energy-Integrated Thermal System, Computational Fluid Dynamics, Biomechanics and Bio-Engineering, Composite Materials, Metal Forming/Micro Forming, and more.

Current Research Areas at MIT-WPU

◆ Metal Micro Forming, Solar Energy and Refrigeration, Biomedical Engineering and Mechanics.

Research Facilities

◆ Multi Fuel Research Engine, Pin on Disc Tribometer, Four-Ball Tester, Universal Testing Machine, and Hydraulic Fatigue Testing. Double Disc Polishing Machine, Microscope, and Image Analyzer. CAD, Sheet Metal, and Manufacturing Simulation Lab. Harness and Impact Testing. FFT Analyzer and Electrodynamic Shaker. Renewable Energy Lab, small-scale solar heliostat system. Thermal Imaging Camera. Electrolyte Marking.

Internship and Placement Opportunities

◆ Tata Motors, JCB, Volkswagen, John Deere, Sandvik Asia, Force Motors, Bharat Forge, Mercedes Benz, PARI, Alfa Laval, L&T, EATON, Kirloskar Pneumatic Co. Ltd., HAL Nashik, CUMMINS India Ltd., ARAI Pune, Lean Maestro Pune, NCL, Magna Steyr India Pvt. Ltd., Thermax, Forbes Marshall, Godrej, Whirlpool, Lear Corporation, HAL Nashik, CUMMINS India Ltd., ARAI Pune, Lean Maestro Pune, NCL, Cosmic Refrigeration, Vacuum Plant Refrigeration Pvt. Ltd., Nissu Radiators, 3D PLM software solutions, Siemens, Geometric Solutions, HAL Nashik, Kirloskar Group of Companies, TATA Technologies, ANSYS, ARAI, CUMMINS India Ltd., ARAI Pune, Tata Motors, JCB, Volkswagen, John Deere, Thermax, Forbes Marshall, Sandvik Asia, 3D PLM software solutions, Siemens, Geometric Solutions, Force Motors, Lawkim, Godrej, Whirlpool, Lear Corporation, Kirloskar Group, Bharat Forge, Mercedes Benz, PARI, Accenture, Mubea Automotive India Pvt. Ltd., Polyone Polymers.

M.Tech Mechanical Engineering (Design Engineering)

⏱ **Duration - 2 years**

🎓 **Fees - ₹ 1,95,000/- PA**

💳 **Career Opportunities**

- ◆ Mechanical Design Engineers
- ◆ CAE Engineers
- ◆ Mechanical Design Analysts
- ◆ Automotive Systems Engineers
- ◆ Mechanical Design Consultants
- ◆ NVH Engineers
- ◆ Research & Development Establishments

Design engineering is a specialised field within mechanical engineering that focuses on the design and development of practical technologies and applications to solve real-world problems. The Master's degree programme in Design Engineering at MIT-WPU teaches students how to design and model various tools and software used in the industry, as well as how to incorporate mechanical, electrical, and electronic systems into product design. The programme also covers the selection of materials for optimal performance and provides hands-on experience through various core and elective courses. The goal of the programme is to give students the knowledge and skills necessary to understand the design elements of complex machines and to develop products that meet the needs of the industry.

Research at the Department of Mechanical Engineering

- ◆ IP Australia, on behalf of the Australian government, has granted six patents to faculties of DoME.
- ◆ DoME holds 18 patents from the Indian Patent Office.
- ◆ The department has over 500 research papers to its name, accumulating 2000 citations.
- ◆ DoME has received research funding of more than 1 crore.

M.Tech Mechanical Engineering (CAD/CAM/CAE)

Duration - 2 years

Fees - ₹ 1,95,000/- PA

Career Opportunities

- CAE Safety Engineers
- CAE Engineers
- CAE Analysts
- Application CAE Engineers
- CAE Analysts
- Sr. Analysts-CAD

Computer-aided design, manufacturing, and engineering (CAD/CAM/CAE) is a specialised field within mechanical engineering that involves the use of computer software and scientific principles to solve problems related to manufacturing and design in engineering. The M.Tech Mechanical Engineering (CAD/CAM/CAE) programme at MIT-WPU trains students in various areas of CAD/CAM/CAE, including computational geometry, artificial intelligence, customisation of CAD/CAM software, advanced sheet metal forming, design for X, composite materials, micro-nano manufacturing technology, biomechanics, mechanobiology, and more. The goal of the programme is to produce engineers who are skilled in designing high-quality, low-cost products and machines that can be used in a wide range of industries. As global markets become more interconnected and demand for these skills increases, the need for engineers trained in CAD/CAM/CAE will continue to grow in the future as well.

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.

Department Achievements

◆ National Winners for AIChE Chapter Award: 2019 and 2020

◆ The MIT-WPU Chem-E-Car team clinched an impressive second place in the Southeast Asian region and emerged as the undisputed champions in India and will be representing India in Global competition at Florida USA in November 2023.

Laboratories

◆ The Department of Chemical Engineering at MIT-WPU has the following Laboratories equipped with the latest state-of-the-art equipment.

1. Chemical Engineering Unit Operations Laboratory

2. Instrumental Analysis Laboratory

3. Fermentation and Chemical Reaction Engg Laboratory

4. Instrumentation And Process Control Laboratory

5. Chemical Process Development Laboratory

6. Bioprocess Engineering Laboratory

7. Mass Transfer and Advanced Separation Processes Laboratory

8. Bioengineering Laboratory

9. Transport Phenomena Lab

Grants Received: Over *INR 60 lakhs*

Research Areas:

◆ Pollution abatement and recovery of components from wastewater, Green Hydrogen and Bio Methane, AI/ML and Process Data Analytics, Biomaterials, Bioprocesses and Biowaste Valorisation, Flow Modeling for Process Intensification.

Current Research Areas at MIT-WPU

◆ Bioenergy and green hydrogen, energy and sustainability, reaction engineering and catalysis, novel and advanced separations, process systems engineering, green polymers and composites, nanotechnology and flow modelling.

Research Facilities

◆ Software like Aspen Plus, HYSYS along with mathematical solvers such as COMSOL, MATLAB and others. Open ware such as DWSIM, ChemSep, analytical instruments such as HPLC, GC, BOD and COD metres, experimental set-ups for Hydrodynamic Cavitation, Industrial scale Membrane Separation Unit, Integrated multiphase horizontal and vertical flow regime loop etc.

Internship and Placement Opportunities

◆ Reliance Industries Ltd, Worley India Ltd, Cummins India Ltd, NCL, NEERI etc.
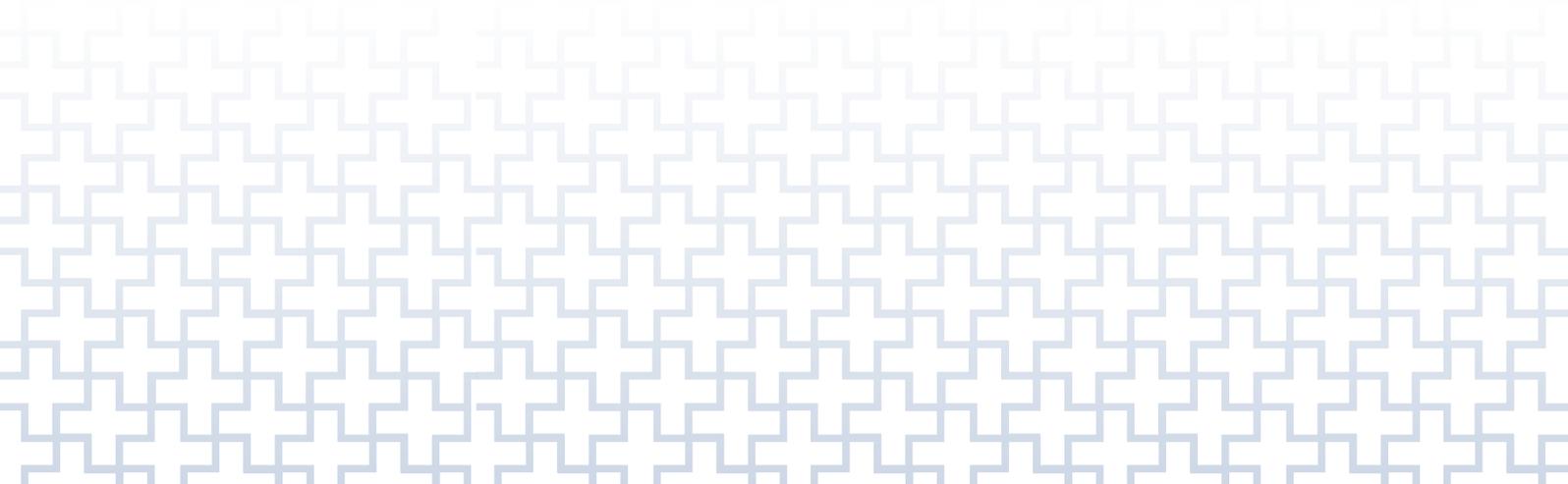
M.Tech
Chemical Engineering

Duration - 2 years

Fees - ₹ 1,95,000/- PA

Specialisation Tracks

- Water and Wastewater Technology
- Energy Engineering

Career Opportunities

- Chemical Engineers
- Process Engineers
- Senior Process Engineers
- Assistant Professors
- Chemical Process Engineers

The Master's degree programme in Chemical Engineering at MIT-WPU is designed to upskill and reskill graduate students from chemical, petrochemical, petroleum, polymer, oil, paint, environmental, applied chemistry, and related fields. The programme aims to give students the knowledge and skills needed to build on their bachelor's degree and study various streams of chemical engineering in depth, preparing them for careers in academia, research, and industry. This programme offers two specialisations: Water and Wastewater Treatment and Energy Engineering with a focus on affordable Green Hydrogen manufacturing. It also provides professional and open electives in areas such as Process Engineering, Process Data Analytics, Biochemical Engineering, Polymer Technology, and Computational Fluid Dynamics. With the establishment of the new "New and Green Hydrogen Energy Centre," M.Tech Chemical learners will have ample opportunities to pursue careers in decarbonisation, EV batteries, biomethane, and green hydrogen generation.

Department of Electrical and Electronics Engineering

The Department of Electrical and Electronics Engineering at MIT-WPU boasts a rich history of achievements over the past four decades. Equipped with outstanding technical infrastructure, a dedicated faculty, and a conducive academic environment, our students not only excel in their studies but also actively participate in co-curricular and extra-curricular activities. A key objective of the department is to groom students into industry-ready professionals by exposing them to cutting-edge technologies while ensuring a solid foundation in Science and Engineering. To achieve this, we have established robust collaborations with industry leaders and research organisations, including Texas Instruments, Nvidia, IBM, KPIT, ATMEL, INTEL, Hella, SLB, FEV, Jampot Photonics, Relyon Solar, ICTP, DRDO, and many others, engaging in work on emerging fields. The student-centric approach of the department has led students to form the IEEE Student Branch, IETE Forum, and clubs like MERC, MARS, MASS, and STeRG. Our students have achieved success in various competitions such as the Smart India Hackathon, Hyperloop, Robocon, The Inventors Challenge by STM, Vodafone competition, and more. With a strong emphasis on placements and entrepreneurship opportunities, the department boasts a formidable alumni base that spans the globe. Many of our alumni have gone on to establish successful enterprises, contributing significantly to the advancement of technology for the betterment of humanity.

MoUs

◆ MoUs signed with prestigious companies including:

1. SLB, Schlumberger India Technology Centre Private Limited
2. Ni2 Logic Pvt. Ltd
3. Pandit Dindayal Upadhyay Dental College, Solapur
4. NetAnalytics LLC
5. FEV, India Pvt. Ltd
6. KPIT Technologies Ltd.
7. InfoInnoTronics
8. Devise Electronics Pvt. Ltd.
9. Elliot Systems
10. Connecticus Technologies Pvt Ltd
11. Tech Mahindra Limited
12. Sumang Energy Solutions, Pune
13. Semi-Conductor Laboratory, Punjab
14. MAN Trucks and Buses Pvt India Ltd
15. Palash IVF Solutions Pvt. Ltd.
16. Dema Association
17. Thinking Hut IT Solutions Pvt. Ltd
18. Inavit Systems India Pvt. Ltd
19. e-Zest Solutions Ltd
20. Tata Elxsi Ltd
21. Agiliad Technologies Pvt
22. Jampot Photonics Pvt. Ltd.

Laboratories

◆ The Department of Electrical and Electronics Engineering at MIT-WPU has the following Laboratories equipped with the latest state-of-the-art equipment.

1. AI-ML and IoT Laboratory
2. Electronics Devices and Circuits Laboratory
3. Communication Laboratory
4. Automation Laboratory
5. Software Programming Lab – A
6. Software Programming Lab – B
7. VLSI and Embedded Systems Laboratory
8. Digital Signal Processing Laboratory
9. Research Laboratory
10. Basic Electronics Lab – A
11. Basic Electronics Lab – B

Grants Received: Over *INR 67 lakhs*

Research Areas:

◆ VLSI & Embedded Systems, Hardware Implementation (ASIC), Programmable Hardware (FPGA), Embedded System Product Development, 3D Power Scaling, 3D System in Chip (SIP) Architectures, Ultra-low Power IC Design, IoT (Internet of Things) and IoE (Internet of Everything), Big Data and Cloud Computing, Deep Learning, Artificial Intelligence, and Machine Learning Chip Design, Network on Chip (NOC), SOC Interconnects, EDA Algorithm Development, MEMS, Robotics, Network Security, EV Machine and Drives, Embedded Systems and Control, Power Electronics, Battery Technologies and Management Systems, Charging Infrastructures, Green Energy, EV Telematics, and VANETs, Artificial Intelligence, etc.

Current Research Areas at MIT-WPU

◆ AI & Machine Learning, LoRA, Automotive Electronics, Agro electronics, Healthcare, Software Defined Networks, VLSI, Industrial IoT, Medical Image Analysis, Network Security, LiDAR Technology, Battery Technologies and Management Systems, EV Telematics and VANETs, Artificial Intelligence, Internet of Things, EV Life Cycle Assessment, and allied areas.

Research Facilities

◆ Advanced VLSI Lab with industry-standard CAD tools like CADENCE, XILINX VIVADO, Mentor Graphics Communication Networks software tools e.g., Qualnet, Netsim, NS2/NS3, SDN Tools, KEIL, Wireless Sensor Boards, IoT Lab, Advanced Embedded system and DSP Lab, BLDC Test bench, Universal test bench for Induction, synchronous, DC Motors, Odin Machine for Battery pack manufacturing. Cadence, MATLAB, Xilinx Vivado, STMicroelectronics AI Lab AIoT SerBot Prime X Robot, Poweredge T440 Dell server with Intel XEON with SRV STD 2016OEM Licence, R440 Power Edge server Intel XEON silver 4116, 32 GB RDIMM, 2TB 7.2K SATA, E-Health sensor platform V 2.0 for Arduino & Raspberry Pi (Biometric/ Medical application), Virtex-5 Development Board with XC5VLX50 on board, Virtex - 6 Development Board with XC6LX240T on board, Educational Practice Board LPC2148, Educational Practice Board for ARM CortexM3 LPC1768, Education Practice Board 8051F340, Vector Network Analyser 6Ghz, RF Spectrum Analyser 9KHZ to 3GHZ, Logic Analyser, USB Real-time signal analyser 9khz - 6.2 GHz.

Internship and Placement Opportunities

◆ BOSH, BHTC, SIEMENS, SCL, Philips, WNS, IMEC Belgium, Volkswagen It Services, KNORR-BREMSE, MOOG INDIA, KPIT, ARAI, Schindler India Pvt Ltd, Varroc, MAN Truck & Bus, Infosys, Cognizant, HELLA India Automotive Pvt. Ltd., NVidia, Tech Mahindra, Cognizant, Wipro, L & T Infotech, John Deere, Accenture, ZS Associates, JENDAMARK India Pvt. Ltd., FEV India Pvt. Ltd., TCS, Tata Power Company Ltd., Tata Auto Component Systems, Bosh Global Software Solutions, L & T Infotech, Deloitte, KPIT Pvt Ltd.

M.Tech Electronics and Communication Engineering (VLSI and Embedded Systems)

Duration - 2 years

Fees - ₹ 1,95,000/- PA

Career Opportunities
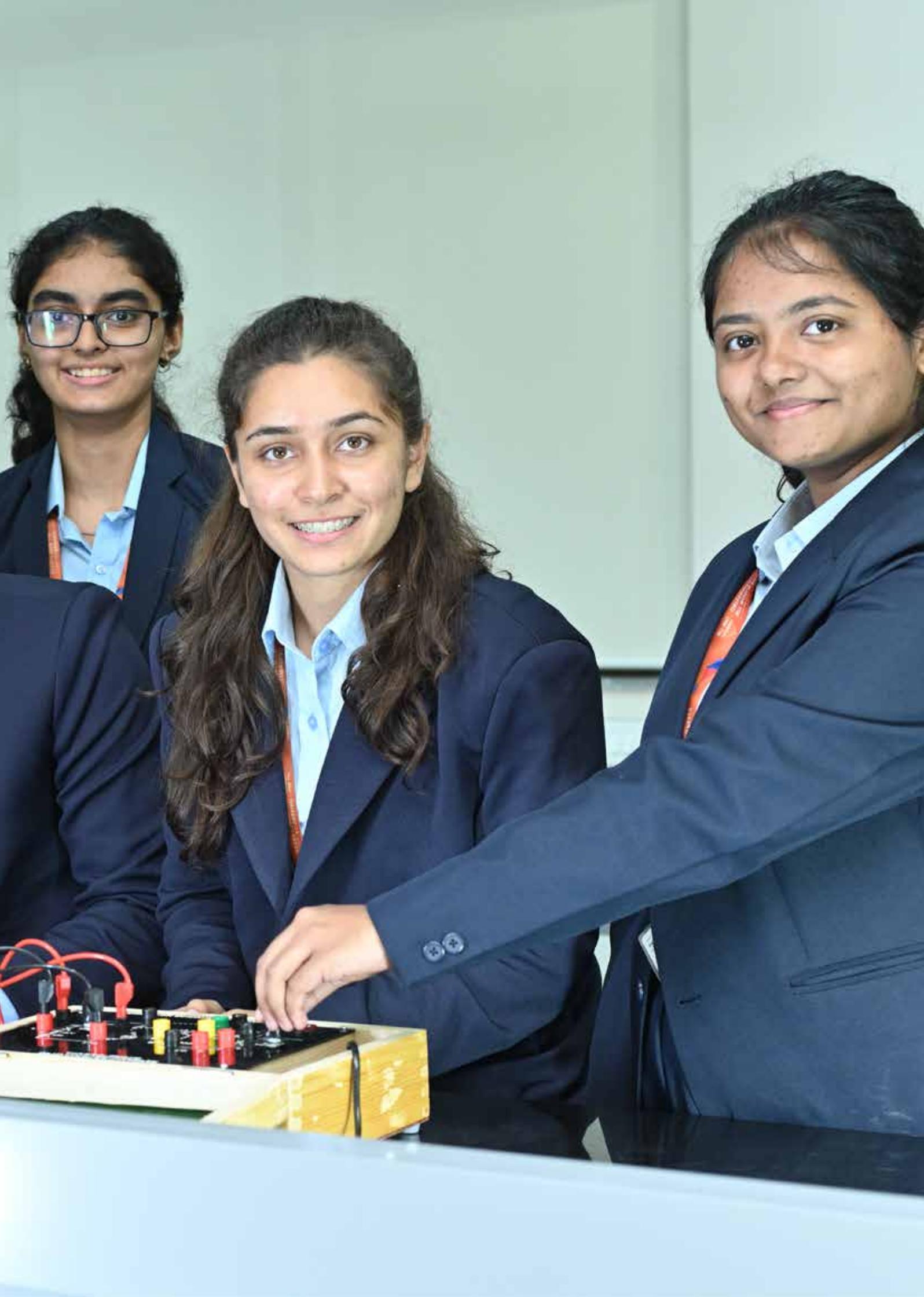
- Embedded systems Engineers
- Firmware Engineers
- Telecom Applications Support Engineers
- Field Application Engineers
- Communications Engineers

The M.Tech in Electronics and Communications Engineering in VLSI and Embedded Systems at MIT-WPU cover various domains within the field of electronics and communication engineering, including Hardware Description Languages, Algorithms, System Architectures, Design and Verification of ICs, Simulation, and Synthesis. The programme aims to provide students with the knowledge and skills needed to develop VLSI chips, which are used in advanced technologies such as AI, robotics, IoT, AR, VR, cloud computing, and mobility. Students also learn about EDA development, analogue and mixed-signal design, semiconductor chip design, FPGA development, and SOC design. The programme focuses on the analysis, design, and implementation of integrated circuits using standard tools, as well as advanced embedded systems design from an application perspective. By training students in these areas, the programme prepares professionals to establish VLSI chip design capabilities that can be applied to a wide range of technologies and industries.

Achievements in Research

The Department has received funds over Rs 2 crores from DST and ISRO for:

- Yield Prediction and Quality Assessment of Grapes in Vineyard Using LIDAR Technology (Department of Science and Technology (DST) under the Women Scientists Scheme KIRAN)
- Design and Development of Multisensory Smart Assistive Technology for the Blind (Department of Science and Technology (DST), Govt. of India)
- Development of an Algorithm for the Analysis of Vegetation Dynamics (ISRO)
- Modification of TW3 RUS for Bone Age Assessment (Department of Science and Technology (DST), Govt. of India)

M.Tech
e-Mobility

Duration - 2 years

Fees - ₹ 1,95,000/- PA

Career Opportunities

- Embedded Hardware Engineers
- Power Electronics Hardware Engineer
- System Design Engineer
- BMS Engineer
- Component Validation Engineer
- System Validation Engineer
- Automotive Mechatronics Engineer
- Telematic Engineer

Electric vehicles (EVs) have the potential to play a major role in addressing climate change by reducing greenhouse gas emissions. As the demand for EVs grows, so does the need for professionals trained in researching, developing, and working with these technologies. The M.Tech e-Mobility programme at the Department of Electrical and Electronics Engineering at MIT-WPU is designed to prepare students for careers in e-Mobility research and development. The programme focuses on helping students understand and apply complex systems in this field and addresses the challenges of working in the e-Mobility sector. By providing specialised training in this area, the programme helps students develop the skills and knowledge needed to succeed in this field.

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, and presentation are highly sought after in the field of computer engineering and 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 and Data Science, Cyber Security and Forensics. These programmes are an excellent combination of academics, industrial exposure, research opportunities, and a wide range of co-curricular and extracurricular activities. The Department also hosts a number of workshops and 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, and many more.

Laboratories

◆ The Department of Computer Engineering and Technology at MIT-WPU has the following Laboratories equipped with the latest state-of-the-art equipment.

1. Proposed Devops Laboratory
2. Emerging Technology Laboratory
3. Object Oriented Programming Lab
4. Software Development Lab
5. High-Performance Computing Laboratory
6. Embedded System Laboratory
7. Microprocessor Laboratory
8. Cyber Security Laboratory
9. Big Data Analytics Laboratory
10. System Software Laboratory
11. Cloud Computing Laboratory
12. Image Processing Laboratory
13. IoT Technologies Laboratory
14. Blockchain Technology Laboratory
15. Web Technology Laboratory
16. HCI Laboratory
17. AR/VR Laboratory
18. Computer Networks Laboratory
19. Wireless Networks Laboratory
20. Operating Systems Laboratory
21. Artificial Intelligence Laboratory
22. Machine Learning Laboratory
23. Digital Electronics Laboratory
24. Data Science & Analytics Laboratory (PG)
25. NMCS Laboratory (PG)

Grants Received: Over *INR 40 lakhs*

Research Areas:

◆ Machine Learning, Data Analytics, Deep Learning, Big Data Analytics, Data Mining, Network Security, Wireless Security Networks, Network Management, High-Performance Computing, and Parallel Computing, LLMs, Prompt Engineering, Edge Computing.

Current Research Areas at MIT-WPU

◆ Machine Learning, Deep Learning, Medical Image Analysis, Health Informatics, Network Security, Wireless Sensor Networks, and Affordable Agriculture, Edge Computing, Computer Vision, Blockchain Technology.

Research Facilities

◆ PARAM-Shavak Super Computer, NAO Humanoid Robot and Latest Software Tools, Open source software like Nmap, Metasploit, Burp Suite, Kali Linux, Wireshark; Solidity Language, High end processor- GPU-RTX3080, graphic workstation for application development and demonstration.

Internship and Placement Opportunities

◆ Phillips, Dell, Bit metric, Bitwise, Schindler, CDK Global, Varroc, VU Clips, Vizitech Solutions, Softcell, Emerson, SAS, Persistent, Cognizant, Wipro, L&T Infotech, Tech Mahindra, CDK Global, Dell, ZS Associates, Accenture, etc.

M.Tech Computer Science and Engineering (Cyber Security)

Duration - 2 years

Fees - ₹ 1,95,000/- PA

Career Opportunities

- Network Security Specialists
- Wireless Network Engineers
- Network Architects
- System Administrators
- Security Administrators
- Network Engineers
- Security Architects

The M.Tech in Cyber Security is an industry-relevant programme that deals with the study of network management, advanced cryptography, network programming, digital forensic analysis, and wireless security. The objective of the programme is to provide expertise in maintaining the security of wireless networks. Students learn how to actively monitor and defend the network, as well as apply fundamental security approaches and methods. This programme helps students apply cybersecurity principles to protect data and manage personal conduct related to protecting data and information. Students find excellent internship and placement opportunities in various domains of network management and cybersecurity.

M.Tech Computer Science and Engineering (Data Science and Analytics)

Duration - 2 years

Fees - ₹ 1,95,000/- PA

Career Opportunities

- Data Scientists/Analysts
- Data Architects
- Data Engineers
- Data Science Consultants
- Application Architects
- Business Analysts
- Machine Learning Engineers
- Business Intelligence Managers

The M.Tech in Data Science and Analytics is an innovative programme in the rapidly growing field of data science. The program trains students to become proficient data analysts and scientists through training in big data analytics, machine learning, deep learning, natural language processing, explainability in AI, and image and video analytics. The programme is highly application-oriented and involves the implementation of algorithms on real-world data in various domains. Students can find excellent internship and placement opportunities in various areas of data science after successfully completing the programme.

Department of Petroleum Engineering

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

1. Petroleum Reservoir Characterisation Lab
2. Petroleum Drilling Engineering and Fluids Lab
3. Petroleum Exploration Lab
4. Petroleum Emerging Technology Lab
5. Petroleum Modelling and Simulation Lab
6. Petroleum Production Engineering Lab
7. DST-SERB Lab

Grants Received: Over *INR 1.40 crores*

Research Areas:

◆ Reservoir Engineering, Well Engineering, Production   Engineering, Geosciences, Health Safety, Exploration, Geophysics and Geology, Drilling, Production, Reservoir, Petrophysics, Flow Assurance, Data Analytics, Geothermal energy systems, Enhanced oil recovery, etc.

Current Research Areas at MIT-WPU

◆ Conventional reservoir drilling and production, data Science and AIML for reservoir, drilling and production engineering, geothermal energy exploration and production, carbon capture utilisation and sequestration, biofuels and nanoparticle explosion.

Research Facilities

◆ Drill Bench Drilling Simulator, Consistometer, Well Completion Equipment, Porosimeter, Permeameter, Core Flooding Apparatus, Polarising Microscopes, Gas Chromatograph, Software packages like Ecrin, Landmark, CMG, Eclipse, Frac Pro, Pipe Flow, Well Flow, Oil Field Manager, Opendtect, etc.

Internship and Placement Opportunities

◆ ONGC, Cairn Vedanta, ExxonMobil, Halliburton, Schlumberger,   ESSAR, Aker Solutions, Weatherford, Baker Hughes, Techniche, Reliance Industries Limited, Enverus, Shell, DGH, L&T Info. etc
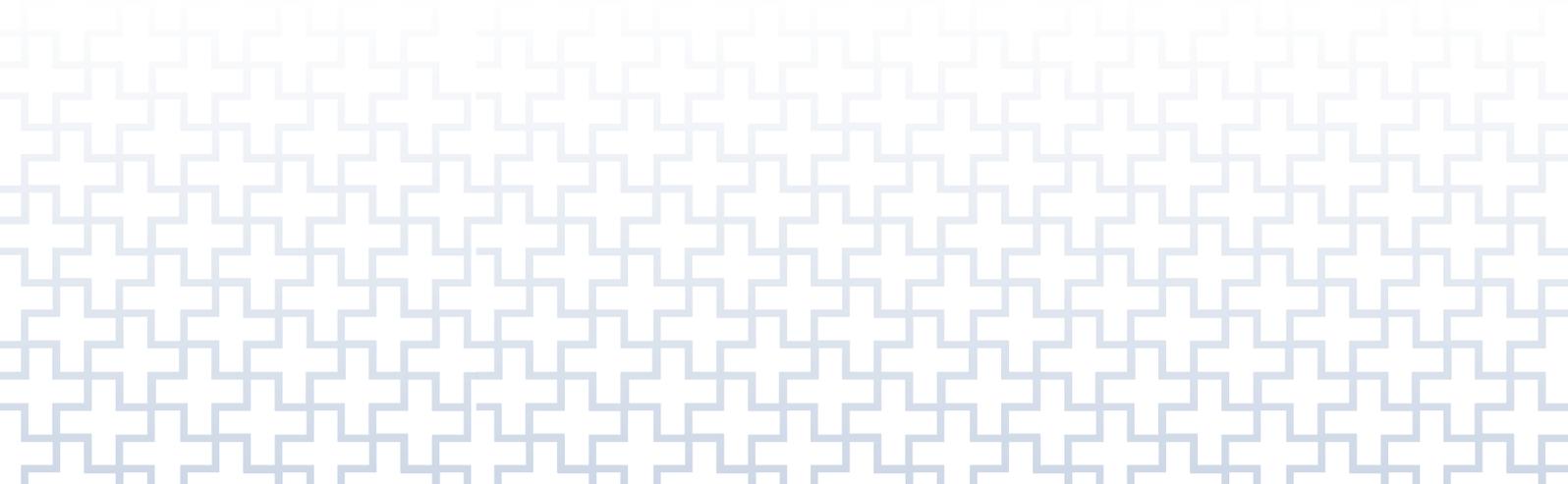
M.Tech
Petroleum Engineering

Duration - 2 years

Fees - ₹ 1,95,000/- PA

Career Opportunities

- Petroleum Production Engineers
- Petroleum Economists
- Drilling Engineers
- Reservoir Engineers
- Subsurface Data Engineers
- Petroleum Data Analysts
- Oil and Gas Project Managers
- Oil and Gas Supply Chain Managers

The M.Tech. in Petroleum Engineering at MIT-WPU focuses on the exploration, drilling, production, and management of subsurface oil and gas resources. The programme builds on the knowledge acquired in graduation and trains students in the design and use of various principles, tools, and systems to locate, extract, process, and refine crude oil and petroleum.

Students are trained in essential drilling and mining systems, as well as various environmental states, laws, and safety systems. The Department of Petroleum Engineering has developed a strong connection with leading oil and gas companies such as ONGC, OIL, Cairn, Shell India, Halliburton, Weatherford, Baker Hughes, TietoEvry, Enverus, and John Energy International, to name a few, for numerous internships and placement opportunities. The M.Tech Petroleum Engineering programme prepares students to become skilled professionals for national and multinational oil and gas companies. This curriculum is based on the graduate matrix of the Society of Petroleum Engineers and is competitive with leading international universities. The curriculum includes dedicated industrial internships and project work to train students in current industry practices. Students are also encouraged to undertake research-based projects in the field of petroleum engineering. Professional and open elective tracks of the curriculum specialise in the upcoming fields of Subsea Engineering, Health and Safety Engineering, Artificial Intelligence and Data Science, as well as Geosciences. Upon completion of the course, students pursue their careers in national and international oil companies, government agencies, consulting firms, reputed universities, as well as research organisations.

Ph.D. in Engineering

The Doctorate in Engineering at MIT-WPU is a highly research-intensive programme that offers students excellent facilities and expert guidance to support their research endeavours. The programme is designed to help postgraduate students develop research skills and prepare for careers in academia or research. It provides specialised training in research components such as hypothesis creation, research questions, literature review, research ethics, and the use of online tools and resources. The programme has a strong focus on interdisciplinary research and encourages students to pursue innovative and entrepreneurial ideas in their chosen areas of study. Students are guided in selecting relevant research topics and completing a thorough, systematic study to write their thesis of 80,000-100,000 words, which is evaluated at regular intervals. Candidates are encouraged to publish papers in reputable journals and are provided with guidance from faculty members with extensive experience in research. The programme includes common courses in the first six months to help students build scientific aptitude and optimise their research output. It supports the building of researcher networks and the development and successful execution of Ph.D. project plans, aiming to provide students with a broad base of knowledge and expertise for their future careers.

The Faculty of Engineering and Technology offers the following Ph.D. programmes:

◆ Ph.D. in Civil Engineering

◆ Ph.D. in Mechanical Engineering

◆ Ph.D. in Chemical Engineering

◆ Ph.D. in Electronics and Communication Engineering

◆ Ph.D. in Computer Science and Engineering

◆ Ph.D. in Petroleum Engineering

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

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

Centre for Subsea Engineering Research (CSER)

The MIT-WPU Centre for Subsea Engineering Research (CSER) aims to foster research, entrepreneurship, and innovation across various engineering disciplines.

The Subsea Engineering Research Laboratory at MIT-WPU, a unique operational facility and the first in the Eastern Hemisphere stands as one of only three subsea laboratories globally. This state-of-the-art laboratory, a collaborative effort between Aker Solutions and MIT-WPU, serves as a functional prototype for deep-water offshore petroleum mining activities.

Through hands-on sessions in this laboratory, Civil and Petroleum Engineering students at MIT-WPU gain comprehensive knowledge of intricate processes involved in subsea mining, fuel extraction, and other operations beneath the seafloor. The laboratory facilitates instruction in drilling and well control procedures, industrial safety and health engineering (ISHE), and oil recovery.

Faculty and students at MIT-WPU actively engage in research within the laboratory, exploring diverse fields such as:

◆ Vibration Analysis

◆ Robotics, ROVs in Subsea Engineering

◆ Fluid Dynamics

◆ Subsurface Production and Reservoir Engineering

◆ Surface Production Facilities Engineering

◆ Underwater Electronics and Fabrication

◆ Fluid Machinery

◆ Enhanced Oil Recovery

◆ Advanced Instrumentation and Process Control

◆ Flow Assurance

◆ Drilling and Well Control

◆ Pipeline Transportation

◆ Data Science and Analytics

Internships & Placements

Paving Pathways to 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/- Per Month

Highest Package:
INR 51,36,000/- Per Annum

Top Recruiters

Deloitte.	cognizant	Neilsoft The Engineering Knowledge-smiths	Infosys
PRISM RMC Complete Concrete Solution	Shapoorji Pallonji	square yards	BYJU'S
AFCONS	abzooba A UST Company	quantiphi	tcs TATA CONSULTANCY SERVICES
Persistent	ZS	accenture	MICHELIN
amdocs	vodafone	eQ Technologie	LTIMindtree
NICE	TATA COMMUNICATIONS	varroc EXCELLENCE	Capgemini
Applus IDIADA	FORVIA faurecia	HCLTech	JSW Steel
slb	ŠKODA | VOLKSWAGEN ŠKODA AUTO Volkswagen India Private Limited	TATA TATA TECHNOLOGIES	T.EN TECHNIP ENERGIES
KSB	ACES	amit ENTERPRISES HOUSING LTD.	AMS
Dhruv Consultancy Services Ltd.	pinclick		

Eligibility & Selection Criteria

Eligibility Criteria

◆ Minimum 50% aggregate score in graduation (4 years) of relevant Engineering Branch from UGC approved University or equivalent (at least 45% marks, in case of Reserved Class category candidate belonging to Maharashtra State only)

And

◆ GATE Qualified (Obtained a positive score in GATE 2022, 2023, 2024) /MIT-WPU CET 2024 /PERA 2024

Or

◆ Sponsored Candidate (Need 2 years of work experience after graduation, in field related to graduation)

Selection Process

◆ The Selection process for this programme is based on the merit of MIT-WPU CET 2024 score/PERA 2024 Score or GATE Score (2022/2023/2024) & Personal Interaction conducted by MIT-WPU.

◆ For admission under sponsored category, candidate should have minimum two years of fulltime work experience in a registered firm/ company/ industry/ educational and/or research institute/ any Government Department or Government Autonomous Organization in the relevant field in which admission is sought.

*Note: MIT-WPU retains the right to make changes to any published schedule. Any other criterion is declared from time to time by the appropriate authority as defined under the Act.

Doctoral Programmes

◆ Visit website for more information

Stipends

M.Tech Programs: Stipend		
GATE Score	MIT-WPU Stipend per month	Workload /Teaching Assistantship at MIT-WPU
Eligible General Category GATE Score for stipend as per AICTE norms	Rs. 12,500/- (For the entire duration of the program)	8 Hours per working day
GATE Score 15 and upto Eligible General Category cut-off	Rs. 8,000/- (For first year only)	6 Hours per working day
GATE Score 10 to 14.99	Rs. 6,000/- (For first year only)	4 Hours per working day

Note:

◆ During Working Hours, M.Tech Students will be considered for 'on campus job' as per MIT-WPU Policy.

◆ Stipend will be effective only after receiving complete fees for the first year.

◆ In case student is receiving any government scholarship/stipend, University stipend will not be applicable.

Testimonials

Here's What Our Students Have to Say

The atmosphere at MIT-WPU has always encouraged me to set a path toward my dreams. I got an opportunity to work as a research intern at IMEC, Belgium. IMEC has state-of-the-art research labs and cleanrooms in the field of Semiconductors. MIT-WPU is making great efforts for the overall development of the students. It has helped me to keep my vision clear about my career & excel in academics.

Nikhil Mane

I chose MIT-WPU because it is a well-renowned university with one of the best industrial tie-ups and the best academic excellence. Even in the pandemic situation, the online classes were conducted with good connectivity between students and faculties. Regular feedback was conducted to understand the problems that occurred during the online teaching session. Timely expert lectures and industrial webinars were carried out for industrial exposure. Overall, even during the pandemic, it was a great experience to gain knowledge and a practical approach using the online platform.

Akash Pawale

I am pursuing an M.Tech in CAD/CAM/CAE and my interest has increased in learning after getting admitted here at MIT-WPU. The University's infrastructure is very good and is well-equipped with all the learning facilities, and laboratories. The teaching faculties are very supportive, experienced and highly educated. They keep updating us about the recent advances. In fact, from 2020 they have introduced a unit in which they update us about the recent trends and techniques.

Neha Tiwari

My Technical knowledge has improved and this was boosted by learning with various practical approaches of the teachers. Different laboratories of engineering are always open for us to learn and grow, from which I gained a lot of knowledge. The support of teachers toward our development is worth mentioning. Apart from these studies, we had subjects like Peace, and meditation which I personally find very useful in day-to-day life.

Ganesh Makar

I am studying M.Tech at the Department of Mechanical Engineering. The teaching quality is best, teachers are very supportive. The curriculum is very updated, and it includes all the recent trends. Even our library is quite rich with learning resources in terms of books, book chapters, Journal articles etc. Yes, the experiences we gained, through seminars and many more technical programmes and several other academic competitions, surely helped hone our skills and make us job-ready.

**Kapilraj Nangare**

Events @ MIT-WPU

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.

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.
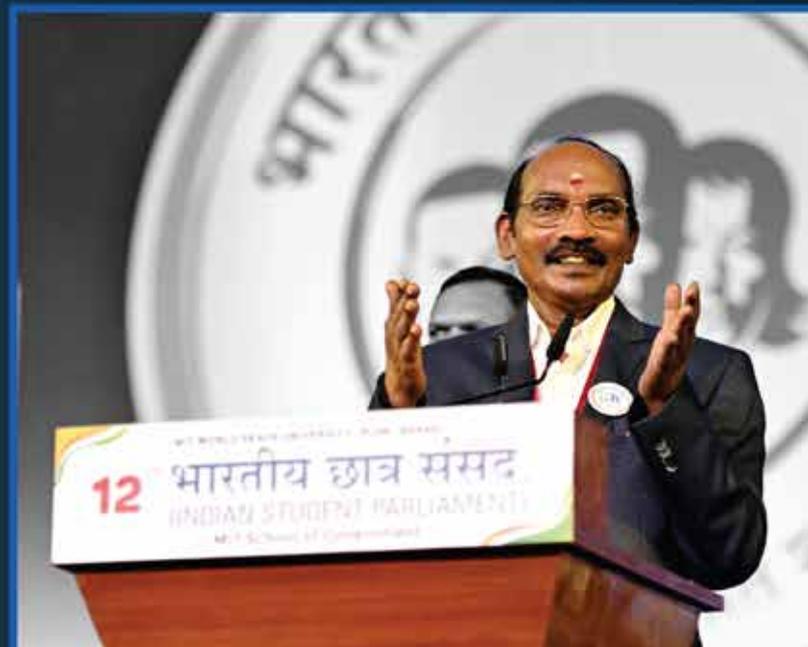
Rural Immersion Programme

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
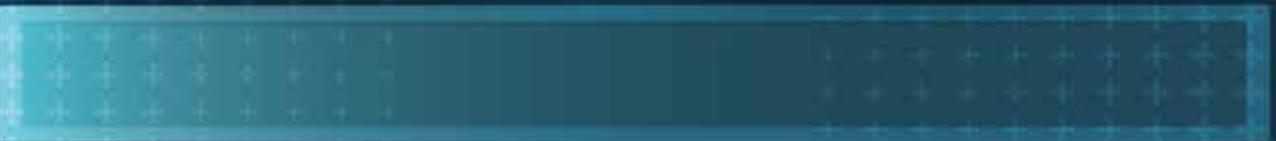
Life @ MIT-WPU
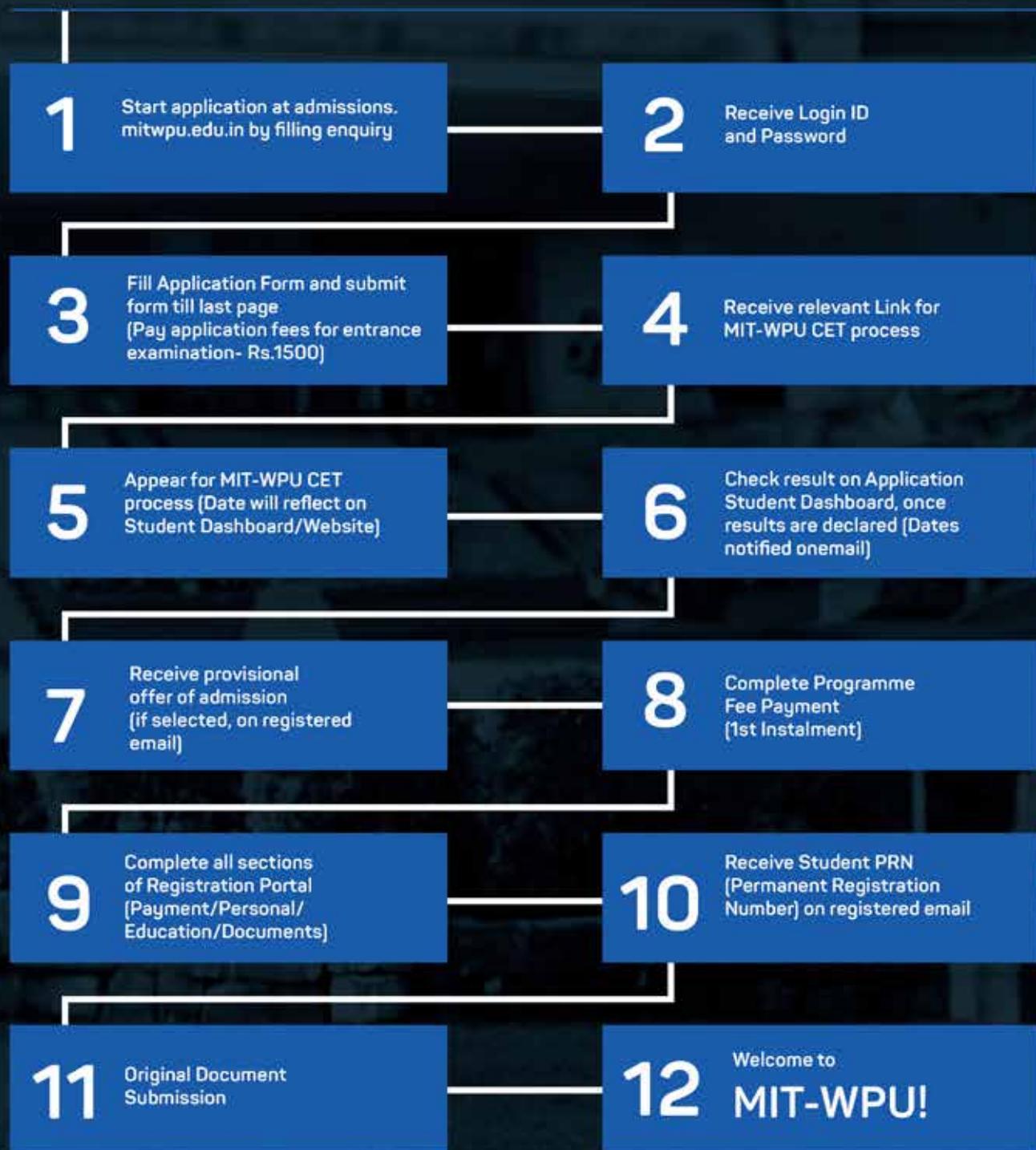
Peace Studies:
Fostering Holistic Growth

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

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 onemail)

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 Receive Student PRN (Permanent Registration Number) on registered email

11 Original Document Submission

12 Welcome to **MIT-WPU!**

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