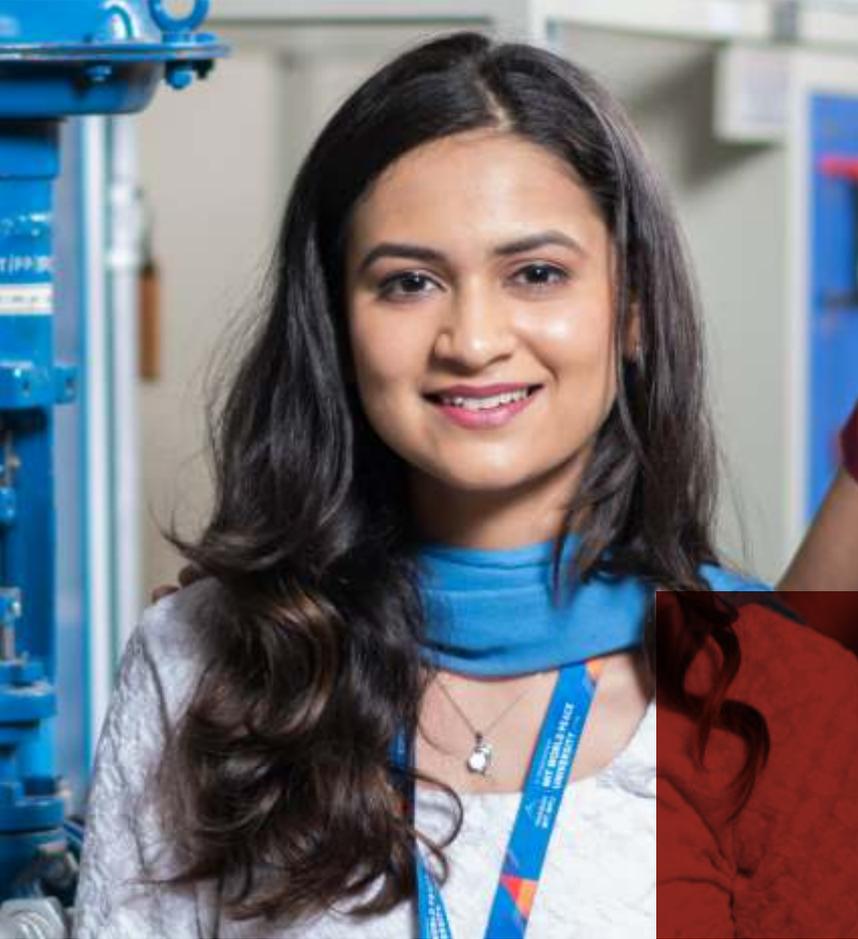




Dr. Vishwanath Karad
**MIT WORLD PEACE
UNIVERSITY** | PUNE
TECHNOLOGY, RESEARCH, SOCIAL INNOVATION & PARTNERSHIPS



Faculty of
Engineering and Technology

M. Tech

Education as it should be
For Mind, Body and Soul

2023 - 24

- + M.Tech Civil Engineering (Structural Engineering)
- + M.Tech Civil Engineering (Construction Engineering & Management)
- + M.Tech Civil Engineering (Tunnel Engineering)
- + M.Tech by Research in Environment Engineering
- + M.Tech Mechanical Engineering (Thermal Engineering)
- + M.Tech Mechanical Engineering (Design Engineering)
- + M.Tech Mechanical Engineering (CAD/CAM/CAE)
- + M.Tech Chemical Engineering
- + M.Tech Electronics and Communication Engineering (VLSI and Embedded Systems)
- + M.Tech by Research in e-Mobility
- + M.Tech Computer Science and Engineering (Network Management and Cyber Security)
- + M.Tech Computer Science and Engineering (Data Science And Analytics)
- + M.Tech Petroleum Engineering

REACH US @



WORLD'S FIRST UNIVERSITY FOR
LIFE TRANSFORMATION



WE LIVE
IN AN ERA OF
CREATIVE
PROGRESS

MIT-WPU School of Engineering and Technology

With a rich legacy of 40 years in fostering world-class academic excellence and over 100,000 alumni across the globe, MIT World Peace University is one of the premier centers of higher learning in India.

The Faculty of Engineering and Technology at MIT-WPU provides an ideal blend of practical knowledge with problem-based, experiential and collaborative learning. The academic fraternity of 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 Centers of Excellence in collaboration with multiple MNC's prepare students for bright careers ahead.

Highlights

- Choice Based Credit System Pattern
- Project based Learning
- State-of-the-art facilities equipped with the latest tools and advanced technologies for research & practical training
- Guest lectures, seminars, and workshops by industry experts and leaders from multinational companies
- Rural, National, and International Immersion programs
- 6 months industry internships with companies and corporations which include Tata Motors, JCB, Volkswagen, John Deere, Sandvik Asia, Force Motors, Bharat Forge, Mercedes Benz, PARI, Alpha Laval, L & T, EATON, Kirloskar Pneumatic Co. Ltd., HAL Nashik, CUMMINS India Ltd. ARAI Pune, and many others.
- MOOCs and interdisciplinary courses included in the curriculum to boost core competencies in students
- Institutional collaborations with Multi- National Corporations such as Tata Technologies, Mercedes Benz, Blue Star
- Dedicated Centre for Industry-Academia partnerships to support students through internships and job placements with world-class organizations
- Strong alumni network across the globe.
- Scholarships for meritorious students.



Dr. Dinesh Seth

Ph.D, ME, BE
Professor & Dean,
Faculty of Engineering and Technology

Dean's Message

Dear Students and Parents,

Having won accolades nationally, evident from our NIRF and TIMES Rankings, we are striving hard to be recognized at the international level as well. In this endeavor, 'Industry-Readiness at The Global Level' and "Research & Innovation" are our key focus areas.

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 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, we are introducing the following important courses in our B. Tech curriculum for the benefit of all students enrolled in engineering, irrespective of their chosen branch in engineering: Python Programming, Basic IoT Laboratory, Data Science for Engineers, Artificial Intelligence and Machine Learning, and Probability and Statistics.

To add to this significant change in our curriculum, the Faculty of Engineering and Technology has done another path-breaking change in the structure of its engineering education with the introduction of 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 Engineering 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.

As the Dean of the Faculty of Engineering and Technology, providing infrastructural support and encouragement to my team of faculty members, along with their bright young engineering students, is a priority for me. It gives me immense pleasure to inform you that this team is currently working on a number of 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.



Department of Civil Engineering

The Department of Civil Engineering at MIT-WPU is committed to creating ethical civil engineers of the future who are well-versed in planning, conceiving, designing, building, monitoring, operating, and maintaining infrastructure, transportation, and public utility projects. Our students develop an aptitude for research and a keen knowledge of various civil engineering materials and learn to integrate them into developing infrastructure which effectively meets the users' objectives and needs. The two B.Tech programmes offered by the Department build a solid foundation in the domain of Civil Engineering and instill analytical, technical, professional & management skills in our students.



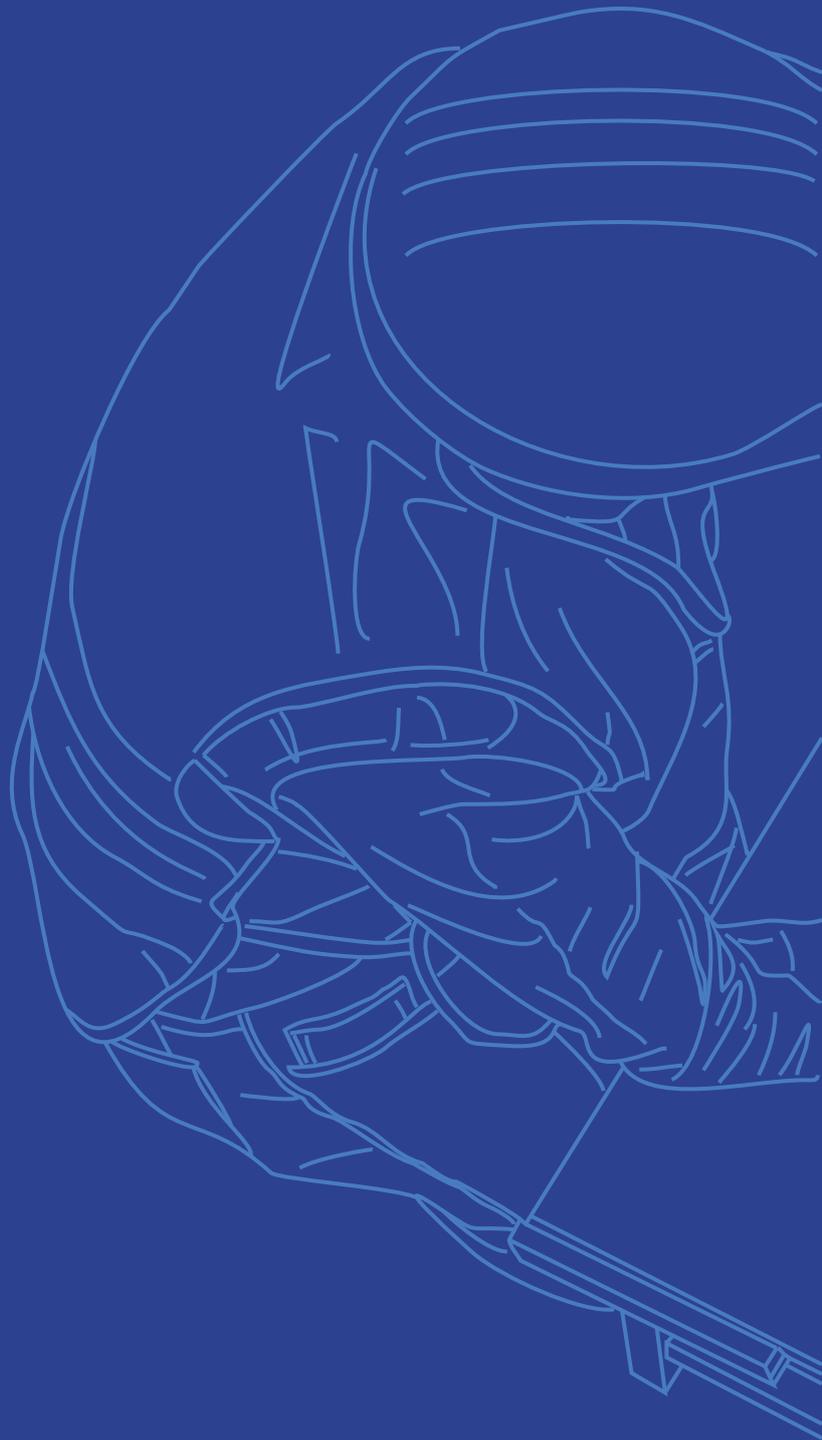
Let Your Passion
Be your Career

M.Tech

Civil Engineering

(Structural Engineering)

The M. Tech Civil Engineering in Structural Engineering is a specialised course in Civil Engineering that develops students in acquiring critical thinking to analyse complex problems in the structural engineering field. The program trains the students in a hands-on manner in modern engineering tools along with computer simulation methods for analyzing and designing civil engineering structures using codal provisions laid by Indian and International standards. The program includes seminars, projects, and internships interdisciplinary courses for the students to connect with the industry. Value-based education is imparted through peace courses. Students can make successful careers as Site Engineers, Structural Consultants, Construction Management Consultants, Project Managers, Government Engineers post IES, JE Surveying consultants, etc.





M.Tech

Civil Engineering

(Construction Engineering & Management)

The Indian Government's annual budgetary spending on the construction sector is just second to agriculture. The infrastructure sector is booming due to government initiatives, support, and adequate funding. There are a huge number of job opportunities for individuals specially trained in the domain. The M.Tech Civil Engineering in Construction Engineering and Management Program, with a curriculum based on the global Project Management Body of Knowledge (PMBOK) areas, is a perfect blend of engineering knowledge and application of modern materials, processes, systems, machinery, and technologies vis-a-vis the softer side competencies connected with the project life cycle, finance, human resources development, contractual implementation and the use of software.. The two-year program will enable the engineers to work in the various project management consultancy organizations in managerial levels with reputed contracting firms and in Public Sector Undertakings (PSU's), Government Organizations and Private Construction Companies. Multinational Companies (MNC's), etc.





M.Tech

Civil Engineering

(Tunnel Engineering)

India is one of the fastest-growing markets for tunnel construction due to various infrastructure projects underway throughout the country. A total of 2200 km of tunnel length has been constructed so far, and about 4,000 km is either under construction or planned. However, there has been a dearth of qualified tunnel engineers in India. To cater to this need, the Department of Civil Engineering has started the Masters' Program in Tunnel Engineering, the only postgraduate program in Tunnel Engineering in India, in collaboration with Montan University in Leoben, Austria, the leader in Tunnel Engineering education. The program offers in-depth knowledge of the technologies, machinery, software, and equipment essential in tunnel engineering and is taught by eminent faculty and tunneling industry experts. The students can make successful careers as Site Engineers, Structural Consultants, Construction Management Consultants, Project Managers, Government Engineers post IES, JE Surveying consultants, etc.





M.Tech

by Research in Environment Engineering

The M. Tech/MS by Research in Environmental Engineering is an exclusive programme by the Department of Civil Engineering that offers blended learning opportunities with an emphasis on research within different domains of environmental engineering. It is aimed at equipping the graduates with advanced conceptual knowledge, and an ability to pursue research in their field. The curriculum encompasses cutting-edge knowledge about emerging areas in environmental engineering with a well-defined research project, culminating in a dissertation with research publications in scientific journals of repute.

The Department of Civil Engineering has a dedicated Centre of Excellence for 'Innovative Design and Construction Technologies', in collaboration with the Building Science department of the Politecnico De Milano of Italy.

The Department also offers a collaborative programme with Burton and South Derbyshire College (BSDC), UK

Department has signed Memorandums of Understanding (MoUs) for collaborative research with organizations like Pune Construction Engineering Research Foundation (PCERF), Builders Association of India (BAI), KL Structures USA, BSDC College UK., Aberdeen University, AKER solutions Pune, Ajay Kadam Associates, CWPRS, among others.

Active MoUs with organizations like PCERF IGS. IBE. BAL KL Structures USA, BSDC College UK, Plymouth University UK, AKER Solutions, and more facilitate collaborative research opportunities for our students.

The Department is funded by the MODROB scheme to assess the seismic response of various infrastructures. It facilitates two-dimensional earthquake response and simulates all major earthquake situations from past centuries.





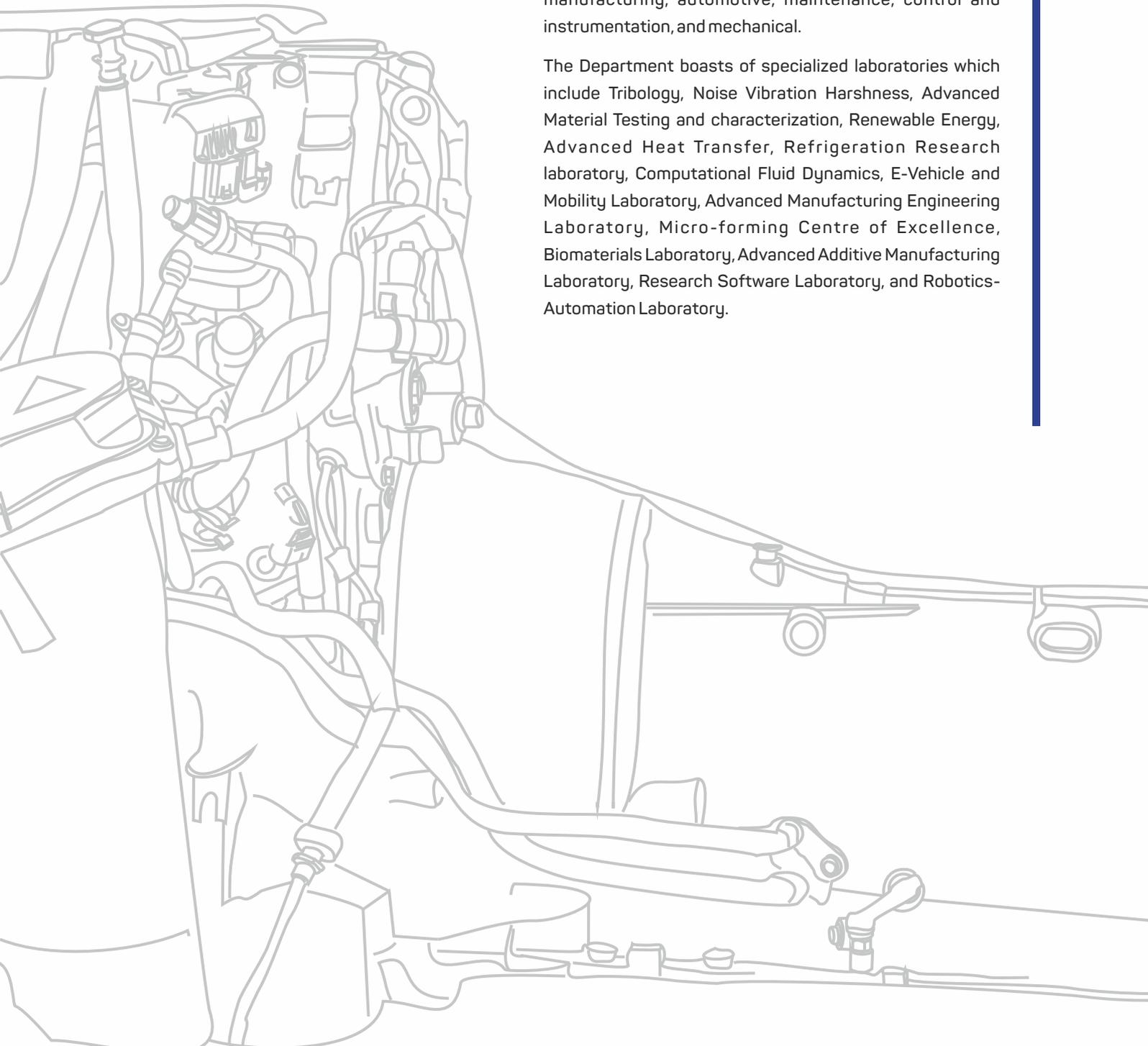


Department of Mechanical Engineering

Mechanical Engineering involves the design, development, and manufacturing of products, systems, and processes for various applications. These applications include automotive, aerospace, conventional and non-conventional power engineering, Robotics and Automation, Biomedical engineering, among other fields.

The Department of Mechanical Engineering at MIT-WPU offers world-class theoretical education and hands-on training in various machinery, equipment, and software. The programs equip the students to develop sustainable solutions to a variety of industrial and societal, real-life problems within the constraints of the economy and environment. The department aims to produce ethical engineers who can innovate, meet the ever-changing needs of society, and build smarter machines for the future. The students can opt for flourishing careers in the fields of manufacturing, automotive, maintenance, control and instrumentation, and mechanical.

The Department boasts of specialized laboratories which include Tribology, Noise Vibration Harshness, Advanced Material Testing and characterization, Renewable Energy, Advanced Heat Transfer, Refrigeration Research laboratory, Computational Fluid Dynamics, E-Vehicle and Mobility Laboratory, Advanced Manufacturing Engineering Laboratory, Micro-forming Centre of Excellence, Biomaterials Laboratory, Advanced Additive Manufacturing Laboratory, Research Software Laboratory, and Robotics-Automation Laboratory.

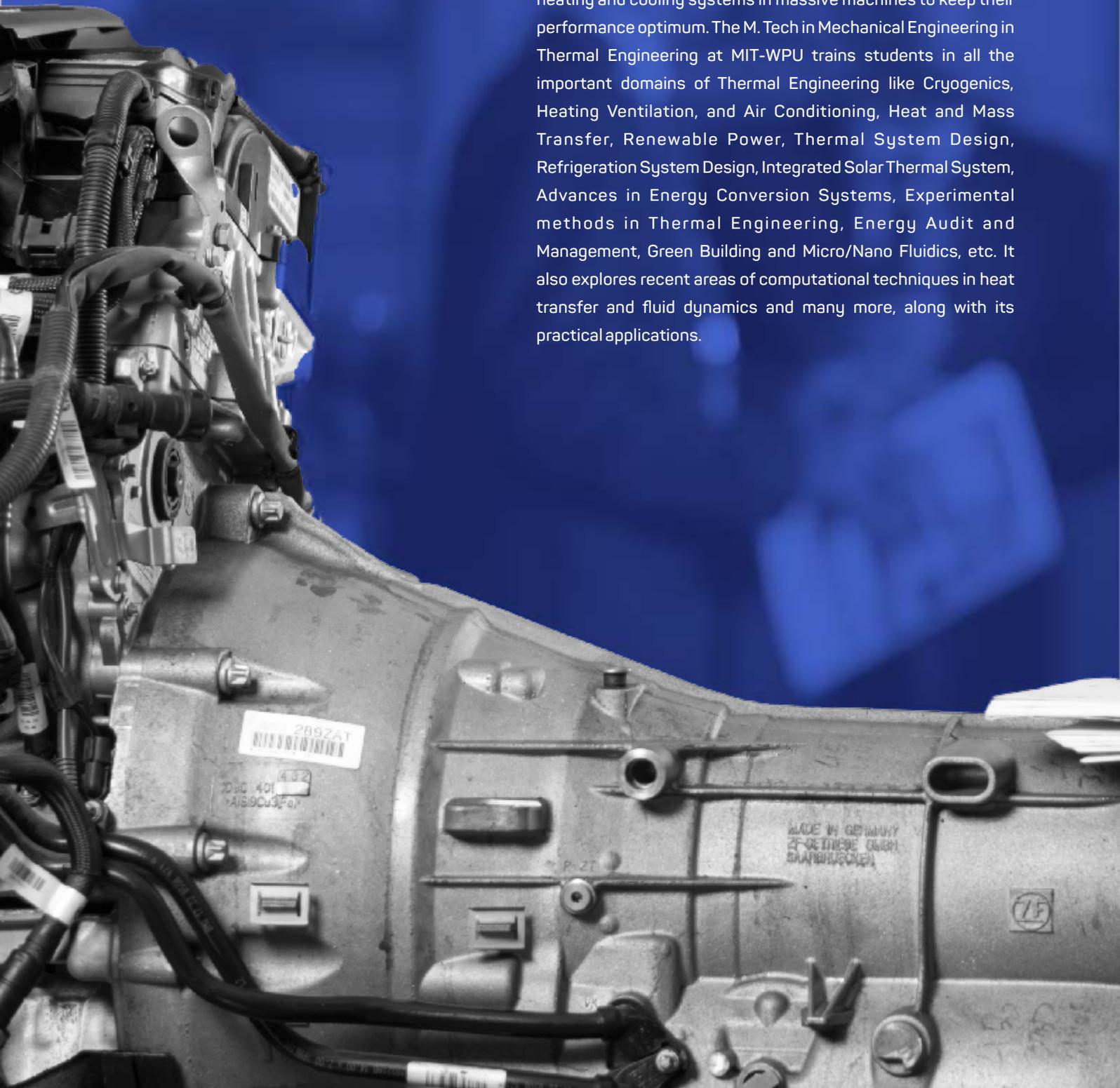


M.Tech

Mechanical Engineering

(Thermal Engineering)

Thermal Engineering, as a sub-branch of Mechanical Engineering, deals with the movement and transfer of heat and energy. It includes the planning, designing, and maintenance of heating and cooling systems in massive machines to keep their performance optimum. The M. Tech in Mechanical Engineering in Thermal Engineering at MIT-WPU trains students in all the important domains of Thermal Engineering like Cryogenics, Heating Ventilation, and Air Conditioning, Heat and Mass Transfer, Renewable Power, Thermal System Design, Refrigeration System Design, Integrated Solar Thermal System, Advances in Energy Conversion Systems, Experimental methods in Thermal Engineering, Energy Audit and Management, Green Building and Micro/Nano Fluidics, etc. It also explores recent areas of computational techniques in heat transfer and fluid dynamics and many more, along with its practical applications.





OUR CENTRES OF EXCELLENCE

The **Technology & Visualization Centre of Excellence** in association with **Tata Technologies Pvt. Ltd.** was established at the Department of Mechanical Engineering, MIT-WPU in October 2019. Our students are trained in advanced software platforms like Hyperworks, NASTRAN. And Abaqus among others in this CoE.

The **Centre of Excellence for Advanced Manufacturing Engineering** with state-of-the-art manufacturing facilities in line with Industry 4.0 was established in October 2019 at the Department in association with **Tata Technologies Pvt. Ltd.** The centre is equipped with an advanced 3D Printing machine, industrial robots, laser cutting machine, and other hi-tech pieces of equipment. Our students gain sound training in these pieces of equipment through various hands-on projects throughout their B.Tech degree.

The **Micro-Forming Research Center** was established at the Department of Mechanical Engineering, MIT-WPU in collaboration with **ARDB DRDO, New Delhi** in November 2020. This center provides opportunities for students to carry out investigations on micro-forming on various grades of materials for aerospace, automotive, and biomedical applications.

M.Tech

Mechanical Engineering

(Design Engineering)

Design Engineering is a branch of Mechanical Engineering that emphasises the design and development of real-life applications and technologies to solve real-world problems. The Master's in Design Engineering at MIT-WPU prepares the students to understand the design elements of machines with their complex geometry and gives the students hands-on experience in the design and modelling of various tools and software used in the industry. Through multiple core and elective courses, the program trains students in the computational modelling of product functions, integrating mechanical, electrical, and electronic systems, the choice of the appropriate materials, and their design for optimum performance.







The success of MIT-WPU in ABU Robocon

Robocon is a contest organized by Asia Pacific Broadcasting Union (ABU) and its member countries. The MIT-WPU team has participated in this competition since 2008 and represented India on many international platforms. MIT-WPU's tech team has to its name the highest rank secured by any Indian team- 5th International Position in the year 2012. MIT-WPU's team has qualified 5 times at the international level to date. The team of students from MIT-WPU's DoME won the competition at the national level and represented India on the international platform in Fiji in 2020.



Research and Innovations



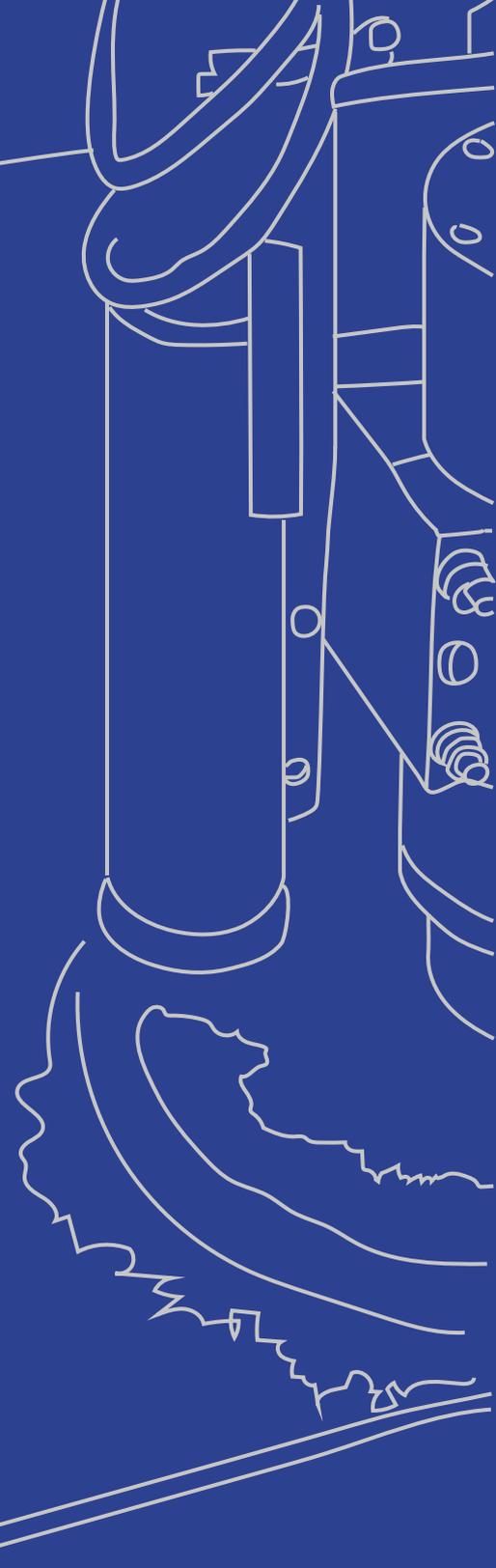
1. IP Australia on behalf of the Australian government has granted six patents to faculties of DoME
2. DoME also has 18 patents from the Indian Patent Office to its credit.
3. The Department has to its name over 500 research papers, with 2000 citations, and research funding of more than 1 crore

M.Tech

Mechanical Engineering

(CAD/CAM/CAE)

CAD/CAM/CAE, i.e. Computer-Aided Design/Manufacturing/Engineering is a branch of Mechanical Engineering that deals with the use and application of computer software and scientific principles to solve the problems related to manufacturing and design in engineering. As the markets become borderless and the demands increase, there is a demand for engineers who can design products and machines which are high quality and low cost. The M.Tech Mechanical Engineering (CAD/CAM/CAE) program at MIT-WPU trains the students in the domains of CAD/CAM/CAE like Computational Geometry, Artificial Intelligence, Customization of CAD/CAM software, Advanced Sheet Metal Forming, Design for X, Composite Material, Micro-Nano Manufacturing Technology, BioMechanics, and Mechan-Biology and many more to create individuals who can find job opportunities in numerous domains.







Department of Chemical Engineering

Chemical engineering encompasses the design, development, and operation of industrial processes and chemical plants which convert raw materials into useful products. Chemical engineering touches on several domains in everyday life like petroleum, petrochemicals, polymers, microelectronics, biomedical devices, paper, dyes, textiles, materials, ceramics, drugs, fertilizers, and foods.

The Department of Chemical Engineering at MIT-WPU offers a perfect blend of experimental research, industrial training, and experiential projects to train students in industry-relevant fields like Data Analytics for Predictive Process Solutions, Smart Manufacturing Technologies, Process Automation, and Control, Process Modeling Simulation and Optimization, Green Energy, Artificial Intelligence and Machine Learning, etc.



M.Tech Chemical Engineering

The Master's Program in Chemical Engineering aims to upskill and reskill graduate students from Chemical, Petrochemical, Petroleum, Polymer, Oil, and Paints and allied branches into technology practitioners. The program equips students to build on the knowledge acquired in their bachelor's and study the various streams of Chemical Engineering in depth for careers in academia, research, and industry. The program offers six specialisations, namely Water and Wastewater Treatment, Energy Engineering, Biochemical Engineering, Polymer Technology, and Computational Fluid Dynamics, and open career opportunities in numerous fields.

Achievements & Awards

The Department of Chemical Engineering, MIT-WPU is associated with the international AIChE (American Institute of Chemical Engineers) Student Chapter. This student chapter has won the Global Outstanding Student Chapter Award for 3 consecutive years 2019, 2020, and 2021.





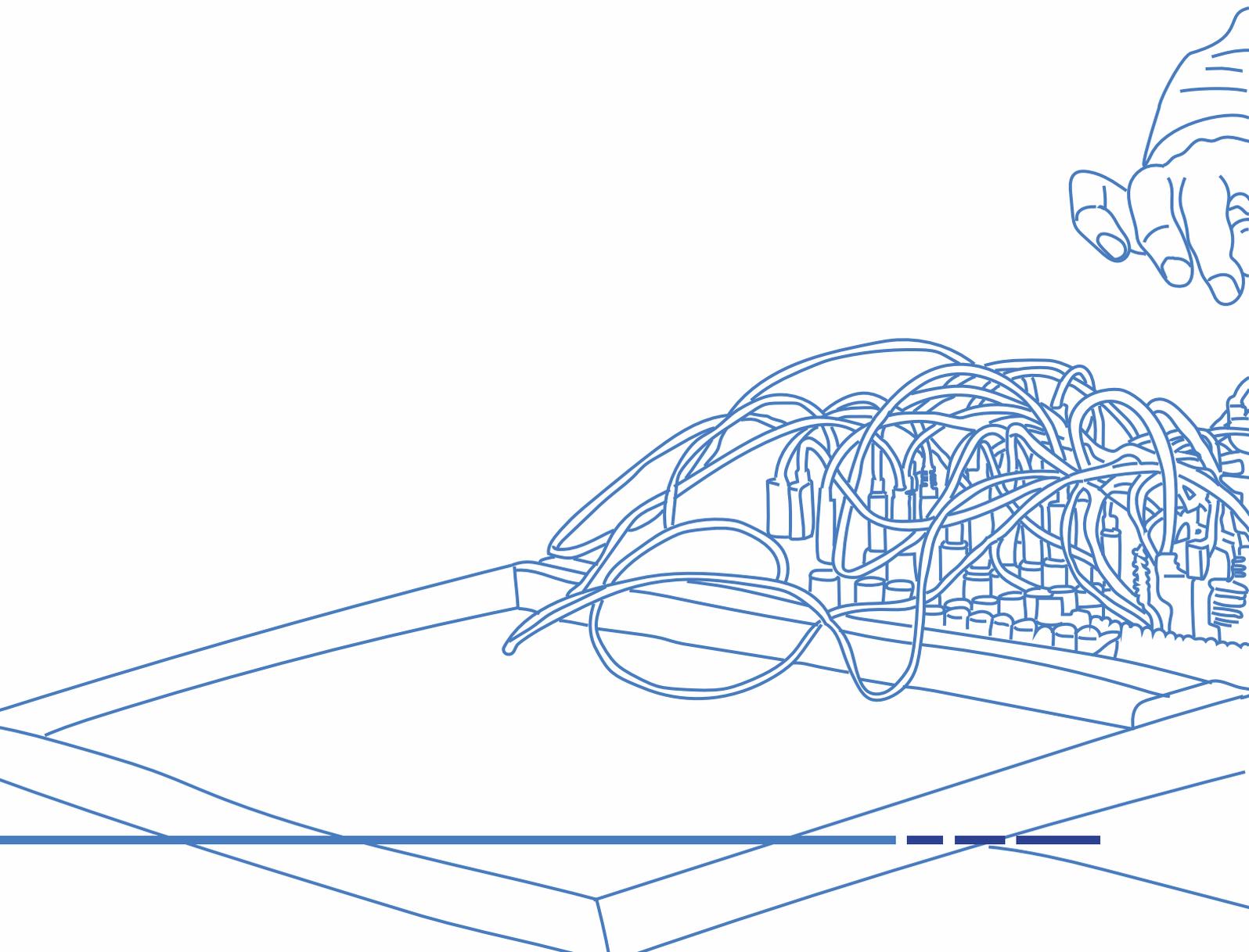
The department has to its name several prestigious awards, namely:

- Donald F. Othmer Sophomore Academic Excellence Award presented by AIChE
- AIChE- Southern Asia Regional Liaison
- International Position of Regional Liaison at the Executive Student Committee- AIChE
- Freshman Recognition Award by AIChE
- Project Based Learning hackathon by IUCEE. (Indo Universal Collaboration for Engineering Education)

This student chapter also helps the students to effectively engage in co-curricular and social activities which develop communication skills, team-building skills, and leadership skills among our students.

Department of Electronics and Electrical Engineering

Electronic and electrical engineering is concerned with the practical application of electricity, its generation, transmission, and distribution. It deals with the real-time problems of operation, maintenance, and control of power systems and electrical machines. At the department of Electronics and Electrical Engineering, specially curated programmes are taught in tandem with critical industry requirements. Hands-on projects, industry visits, and internships prepare students to enter the professional world confidently.







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

Embedded systems design focuses on writing code that is implemented on a flexible piece of hardware, while VLSI focuses on translating programming instructions into a structure for an integrated circuit. The M.Tech Electronics and Communications Engineering in VLSI and Embedded Systems at MIT-WPU covers various domains like Hardware Descriptive Languages, Algorithms, System Architectures, Design and Verification of ICs, Simulation, and Synthesis in the field of electronics and communication engineering. The students are acquainted with the requirements of EDA development, analog and mixed-signal design, semiconductor chip design, FPGA development, and SOC design. Analysis, design, and implementation of integrated circuits using standard tools.

It also offers strong knowledge of advanced embedded systems design from an application perspective. Professionals can establish VLSI chip design capabilities that can enable cutting-edge technologies like AI, Robotics, IoT, AR, VR, Cloud computing, and mobility.

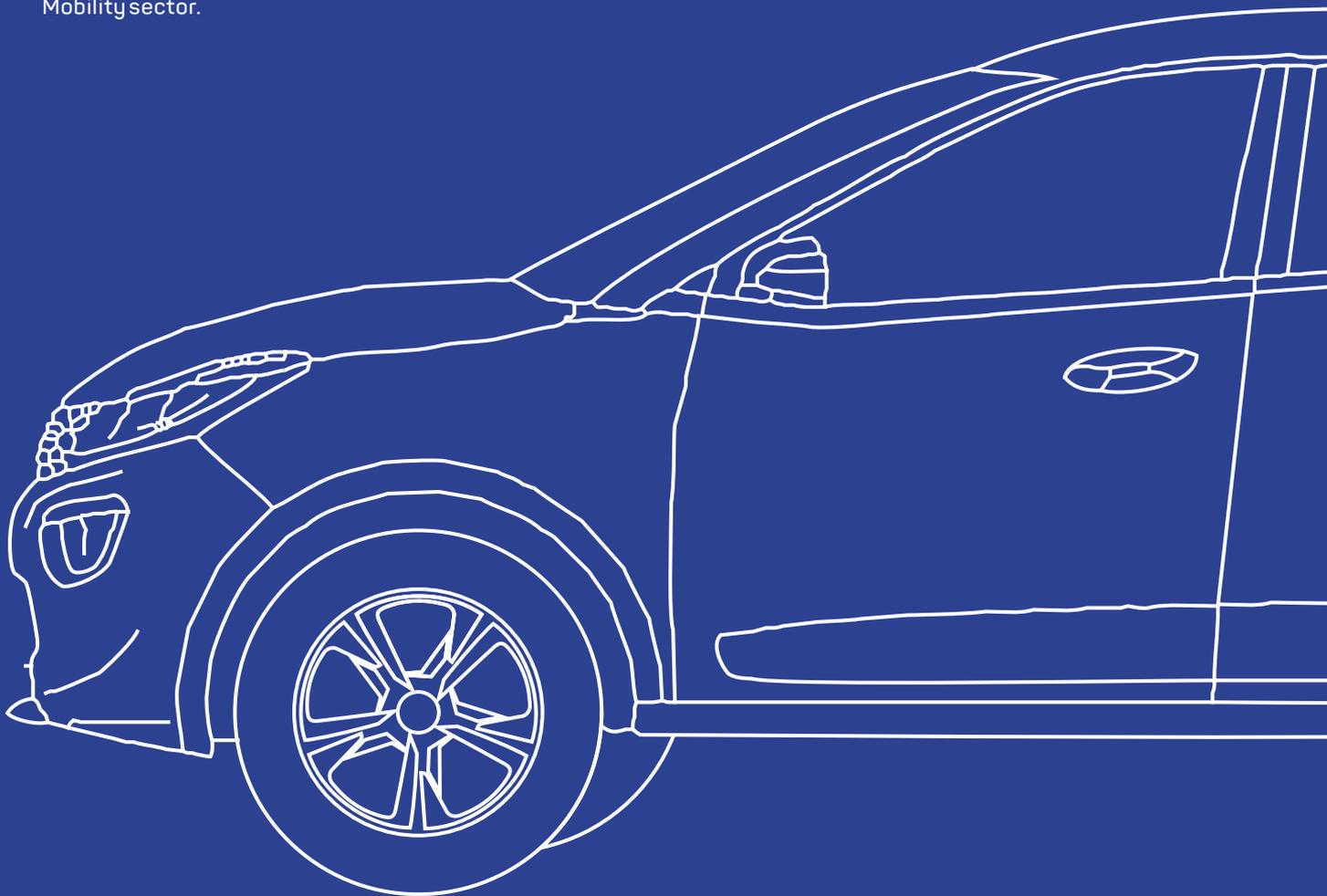
Achievements in Research

The Department has received funds over Rs 2 Crore from DST and ISRO for the following projects:

- 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 by Research in e-Mobility

Electric vehicles can be the next big step in reversing the effects of climate change. With more and more people warming up to the cost-effective mode of transport, The scope of research, development and career opportunities in the sector is bound to grow multifold. The M. Tech by Research in e-Mobility is a specialized program offered by the Department of Electronics and Electrical Engineering which trains students to apply complex systems and address the challenges in the research and development of the e-Mobility sector.

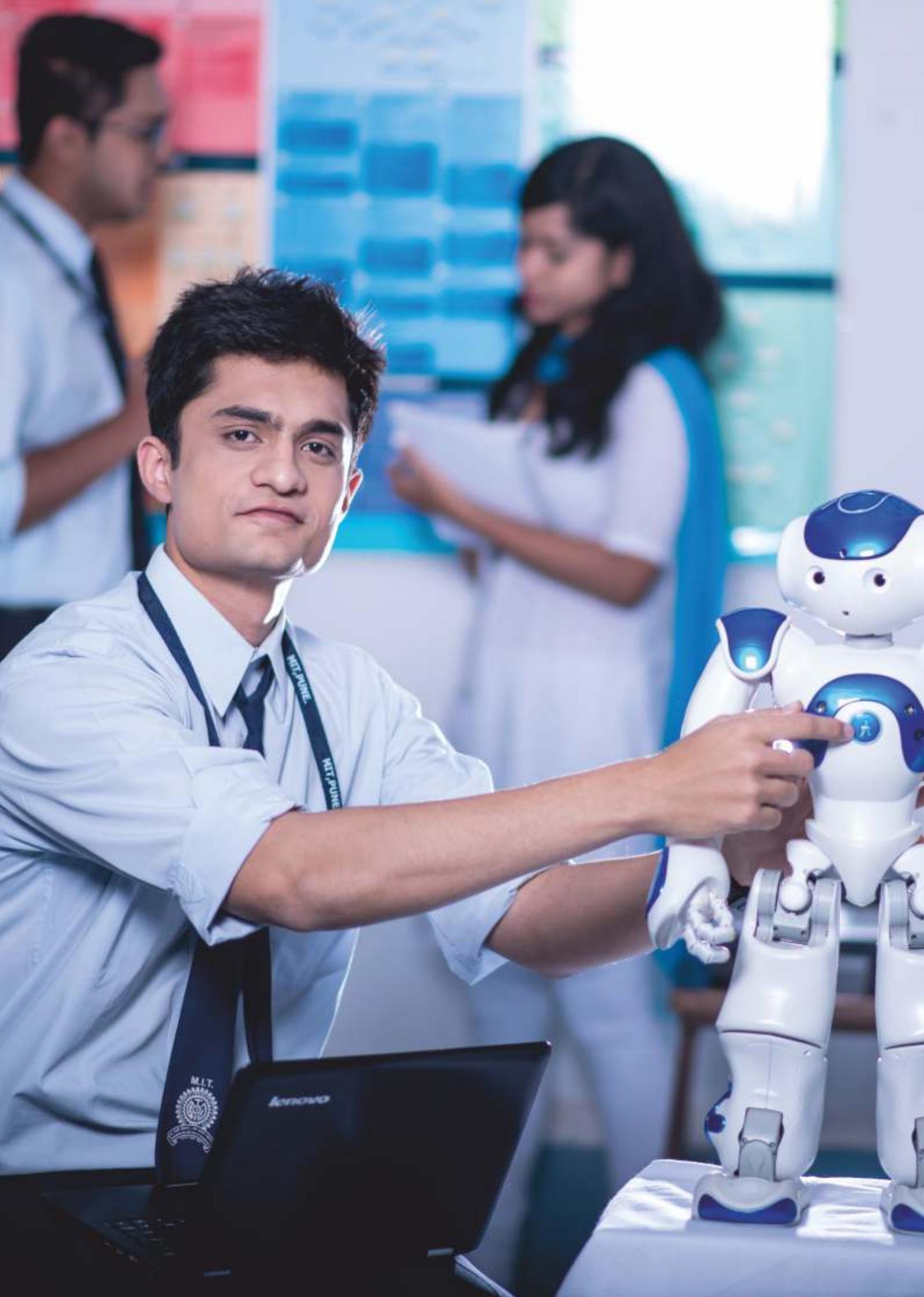


Center of Excellence in AI and ML.

The Department of Electronics and Electrical Engineering has a dedicated Center of Excellence in AI and ML which facilitates and promotes research among our students. The Center has a well-equipped laboratory that consists of facilities like AI, NVIDIA, LIDAR, RoboEX and Dell Poweredge R440 which provide computing support to our students to model, simulate and optimize algorithms to develop a variety of applications like video surveillance, self-driving cars, etc.

The centre also offers an immersive and interactive environment for the development of IoT-based applications. The laboratory is equipped with state-of-art hardware and software platforms required for the design of connected devices and cyber-physical systems.





Department of Computer Engineering and Technology

The field of Computer Engineering and Technology presents an unprecedented demand for innovation, design, development, deployment, usability and presentation. At the Department of Computer Engineering and Technology, a perfect blend of academics, industrial exposure, research opportunities, and a multitude of co-curricular and extracurricular activities hone competence and hands-on skills in budding engineers to meet this demand. The Department also organizes a number of workshops and skill enhancement courses for hands-on experience in software and applications such as Linux, Python, IoT and Data Science.

The department is equipped with more than 27 modern laboratories, including Cloud Computing Laboratory, Web Technology Laboratory, IoT Laboratory, and laboratories pertaining to individual specialization subjects. The Department has multiple MoUS with academic and research partners like NVIDIA, Sigma, Mobiliya, IZealant technologies, C-DAC, and Carenx to name a few. The Department has a Center of Excellence established by MNCs like IBM, AMDOCS, NVIDIA and IEEE Pune section (Affordable Agriculture Technology Laboratory) to prepare students to face the challenges of the industry through hands-on training.

Research Grants

The Department of Computer Engineering and Technology has received grants from AICTE, IEEE, and IBM for setting up laboratories and research projects.

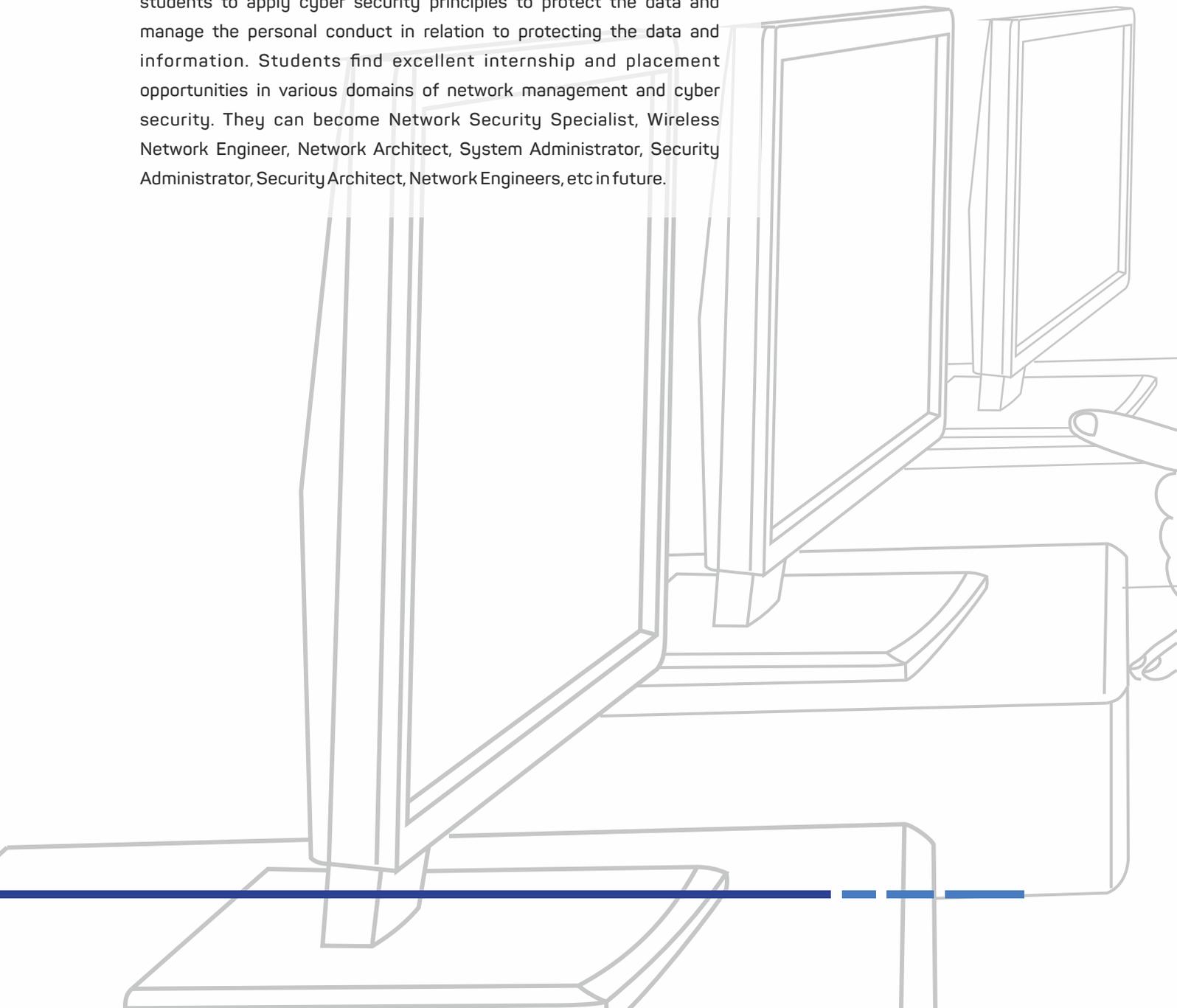
- So far more than 191 companies have offered internship opportunities to our students.
- The Department has received a total grant of INR 12,66,800/- from various governmental agencies like MODROBS, AICTE, etc.
- The Department has received funding worth INR 10 lakhs from IBM for the project "Detection of Pre-dementia". It is an interactive system that performs various cognitive function tests to assess a person's cognitive functions (memory, attention span, speed, language, Visio-spatial, executive function, etc.)
- The Department has received a grant under the IEEE affordable agriculture lab for the project titled "Autonomous Bot for Future Farming" - an agricultural robot capable of fertilizing crops with minimal human intervention and reduced effort.

M.Tech

Computer Science & Engineering

(Network Management and Cyber Security)

M. Tech in Network Management and Cyber Security is an industry relevant program that deals with study of network management, advanced cryptography, network programming, digital forensic analysis, wireless security. The objective of the program is to provide expertise in maintaining the security of wireless networks. Students learn how to actively monitor and defend the network and, furthermore, make fundamental security approaches and methods. This program helps students to apply cyber security principles to protect the data and manage the personal conduct in relation to protecting the data and information. Students find excellent internship and placement opportunities in various domains of network management and cyber security. They can become Network Security Specialist, Wireless Network Engineer, Network Architect, System Administrator, Security Administrator, Security Architect, Network Engineers, etc in future.



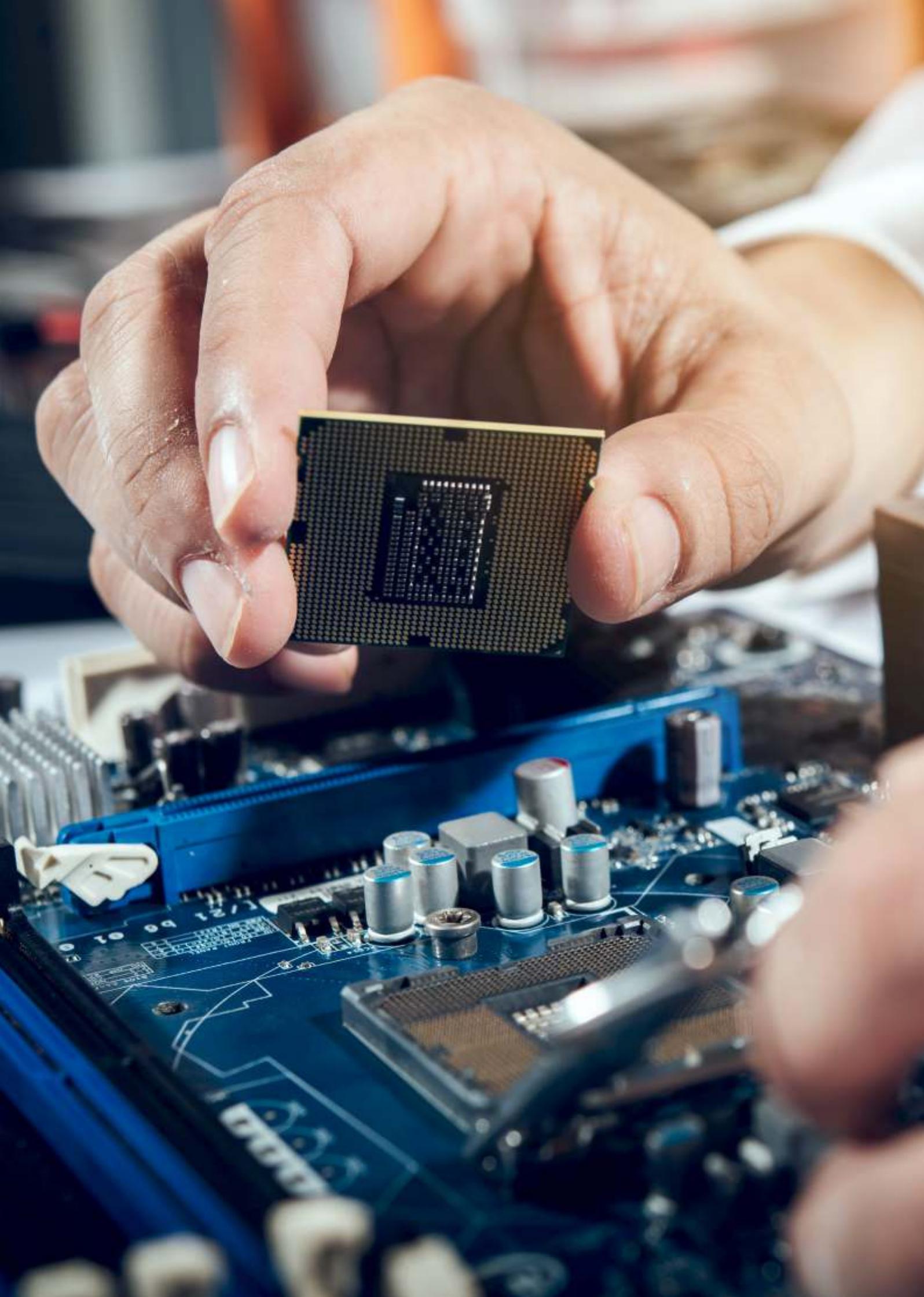


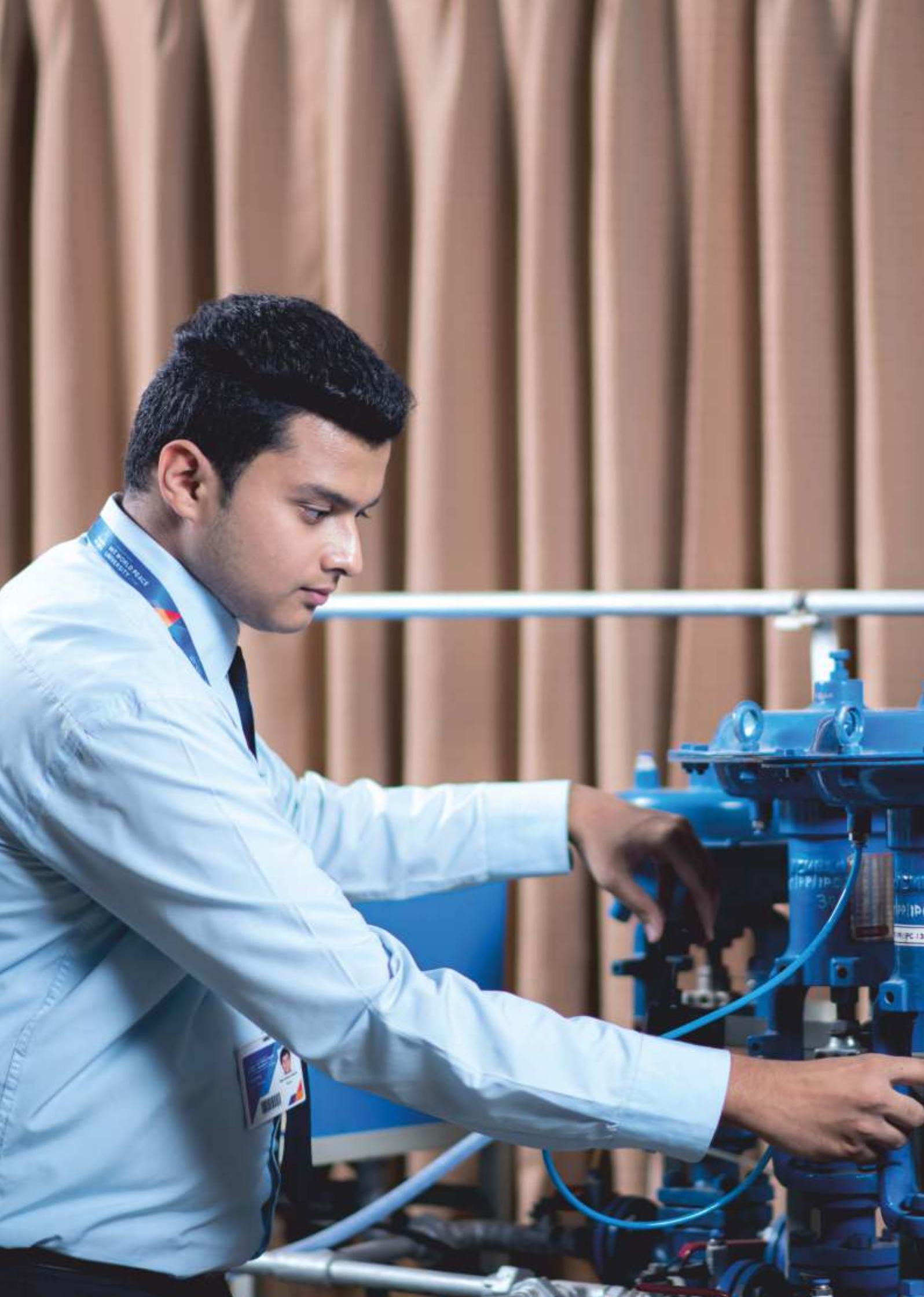
M.Tech

Computer Science & Engineering

(Data Science And Analytics)

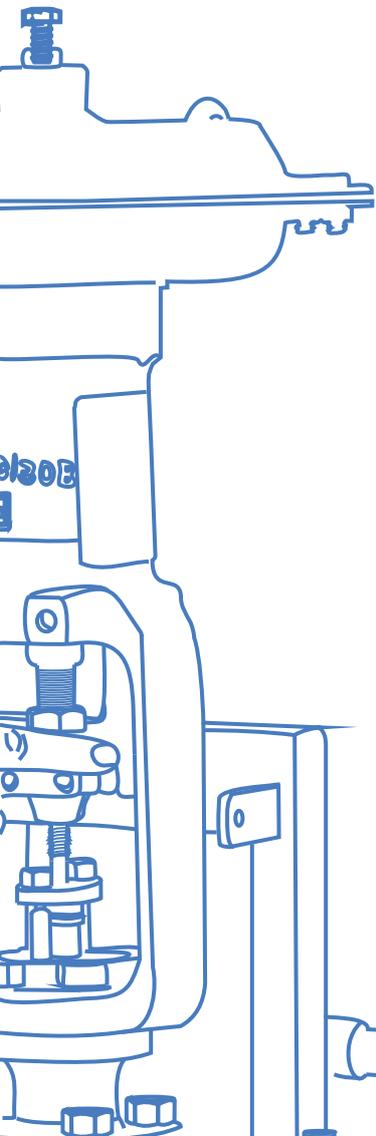
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Department of Petroleum Engineering

The Department of Petroleum Engineering at the School of Engineering and Technology offers specialized B.Tech courses with a curriculum designed by industry experts which acquaint the students with the production and processing of hydrocarbons like natural gas or crude oil. The courses acquaints the students with various disciplines essential in this interdisciplinary field like geophysics, petroleum geology, formation evaluation, drilling, economics, reservoir simulation, reservoir engineering, well engineering, artificial lift systems, etc. The comprehensive programs equip students to become reservoir engineers, drilling engineers, production engineers, and more in the future.



M.Tech Petroleum Engineering

The M.Tech Petroleum Engineering at MIT-WPU focuses on the exploration, drilling, production, and management of subsurface oil and gas resources. The program builds on the knowledge acquired in graduation and trains the students in the design and use of the various principles, tools, and systems to locate, extract, process and refine crude oil and petroleum. The students are trained in the essential drilling and mining systems as well as the various environmental states and 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, John Energy International, to name a few for numerous internships and placement opportunities.





The Subsea Lab

It is estimated that the energy demand in developing nations will rise by 65 percent between 2010 and 2040. Oil will remain the primary global fuel, while natural gas will overtake coal for the second spot. A large country like India needs energy and one of the potential sources is subsea reserves.

Globally, Subsea Oil and Gas development has seen steady growth in the last few decades. This growth is expected to continue. Like with other engineering industries, the availability of skilled resources to manage the growth is a challenge. There is a need for skilled personnel in India to explore the local and international markets

Aker Solutions has embarked on an education initiative with MIT to introduce subsea engineering as a subject and support the development of subsea knowledge and skills.

Subsea Technology consists of advanced systems to extract oil and gas from the depths of the ocean. While a huge repository of these fuels occurs in the seas and oceans, the possibility and risk of human intervention are very high. Hence, advanced mechanisms are employed in the entire process, right from fabrication, logistics, installation, and commission to the supply chain.

Subsea Engineering Laboratory at MIT Pune:

Aker solutions and MIT-WPU have jointly established the Subsea Engineering Laboratory at the Faculty of Engineering. This state-of-the-art prototype demonstrates and conducts deep-water offshore production operations.

Aker Solutions has supported MIT-WPU on this project from concept to completion including the laboratory's design, procurement, fabrication, installations, assembly, and equipment testing. Aker Solutions is also actively involved in the commissioning of the project and its working modules. A combined group of MIT-WPU faculty members, students, and Aker Solutions engineers have conceptualized the laboratory's experiments on well performance and remote operating vehicles.

The Center for Subsea Engineering Research (CSER) serves as an extension to academic knowledge on various domains of petroleum engineering and encourages research, innovation, and entrepreneurship in the various fields of engineering.

The extent of scope and utilization of the Subsea Engineering laboratory facility:

- Demonstration and performance of laboratory experiments of academic importance for UG and PG students of petroleum engineering
- Industrial Safety and Health Engineering (ISHE) and subsea engineering workshops and professional training programs jointly with the industry.
- Subsea engineering awareness programs and walk-in tours for industry professionals, and college and school students.
- Training on drilling and well control simulation facilities and experiments to be performed using a real-time drilling and well control system for delivering hands-on training.

Interdisciplinary Research Opportunities:

The Subsea laboratory facilitates interdisciplinary research in various domains of engineering including

- Vibration Analysis
- Robotics, ROVs in Subsea Engineering
- Fluid Dynamics
- Subsurface Production and Reservoir Engineering
- Surface Production Facilities Engineering
- Underwater Electronics and Fabrication
- Fluid Machineries
- Enhanced Oil Recovery
- Advanced Instrumentation and Process Control
- Flow Assurance
- Drilling and Well Control
- Pipeline Transportation
- Data Science and Analytics



Eligibility

- 50% in the relevant engineering branch from a UGC approved Institution (at least 45 % marks in case of Backward class categories candidates belonging to Maharashtra State only)
- Valid GATE Score / MIT-WPU CET

Internships

Experiential learning is an integral component of learning at MIT-WPU. The students of B.Tech pursue a six-month mandatory internship with renowned companies in their field. This internship aims to provide a platform to integrate classroom knowledge with related practical applications and skills in a professional ecosystem. The students get a chance to access real-world practical learning that instill critical perspectives for rewarding future career pathways.



Placements

The Training and Placement Cell at MIT-WPU plays a crucial role in locating job opportunities for students by inviting reputed firms and industrial establishments for opportunities. MIT-WPU has been successful in maintaining high placement statistics over the years.

The Placement Cell organizes career guidance programmes for all the students. The cell also arranges training programmes like Mock Interviews, Group Discussions, Communication Skills Workshop etc.

Alumni and Students' Testimonials



I choose MIT WPU because it is a well-renowned university with one of the best industrial tie-ups and with 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 in pandemic, it was a great experience of gaining knowledge and practical approach using the online platform.

Akash Pawale, F.Y. M.Tech Thermal Engineering



I am pursuing M.Tech in CAD/CAM/CAE and my interest has been increased in learning after getting admission here at MIT-WPU. The University infrastructure is very good and is well equipped with all the learning facilities, 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, F.Y. M.Tech CAD/CAM/CAE



Technical knowledge of mine is very much improved and 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, meditation which I personally find very useful in day to day life.

Ganesh Makar, F.Y. M.Tech Design Engineering



I am studying M.Tech at School of Mechanical Engineering. The teaching quality is best, teachers are very supportive. The curriculum is much updated, and it includes all the recent trends included. 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 programs and several other academic competitions, surely helped hone our skills and make us job-ready.

Kapilraj Nangare, F.Y. M.Tech CAD/CAM/CAE

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