

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



School of Science and
Environmental Studies

Department of Mathematics

A University For Student's
Life Transformation

2023 - 24

- + B.Sc. Applied Statistics and Data Analytics
- + B.Sc. Computational Mathematics and Statistics
- + M.Sc. (Mathematics)
- + M.Sc. (Statistics)
- + Ph.D in Mathematics

REACH US @



MIT-WPU

With a rich legacy of 40 years in fostering world-class academic excellence and over 100,000 alumni across the globe, MIT-WPU is one of the premier centres of higher learning in India that offers over 150 programmes. The programmes are developed by leading Indian and international academics and focus on both theoretical and practical aspects. Students at MIT-WPU benefit from a hands-on learning approach, mentor-mentee relationships, internships and immersion programmes that provide opportunities for real-world learning and personal growth.

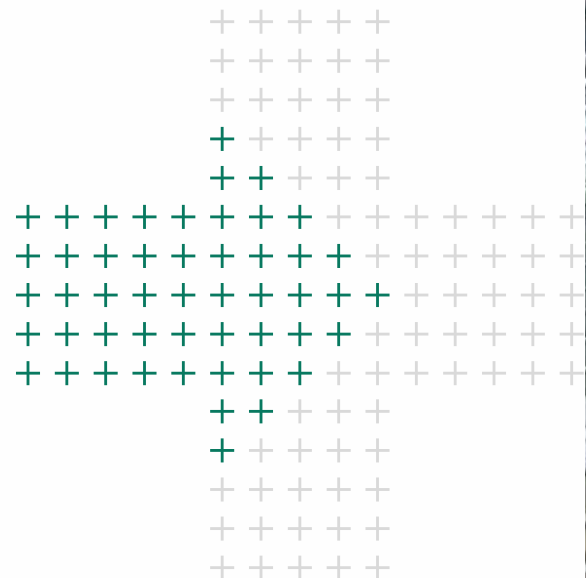
School of Science and Environmental Studies

The MIT-WPU School of Science and Environmental Studies is dedicated to providing students with an excellent education in the natural sciences. The school's Departments of Mathematics and Statistics, Physics, Chemistry, Biology and Environmental Studies offer undergraduate, postgraduate, and doctoral programs designed to provide students with a strong foundation in the fundamental concepts and principles of these disciplines.

The curriculum of the various programmes blends theoretical and practical learning through classroom lectures, guest lectures, laboratory work, projects, and research opportunities. The faculty members are well-known academicians and corporate leaders who bring a wealth of experience and knowledge to the classroom, ensuring world-class standards of teaching and learning.

The school lays a strong emphasis on interdisciplinary and multidisciplinary research and encourages students to explore their areas of interests. They gain hands-on experience and acquire the academic, professional, and research skills required in today's workplaces.

The School of Science and Environmental Studies prepares students for successful careers in their chosen fields and to develop leaders who can drive innovation and growth in the scientific community.





WE LIVE
IN AN ERA OF
SCIENTIFIC
PROGRESS

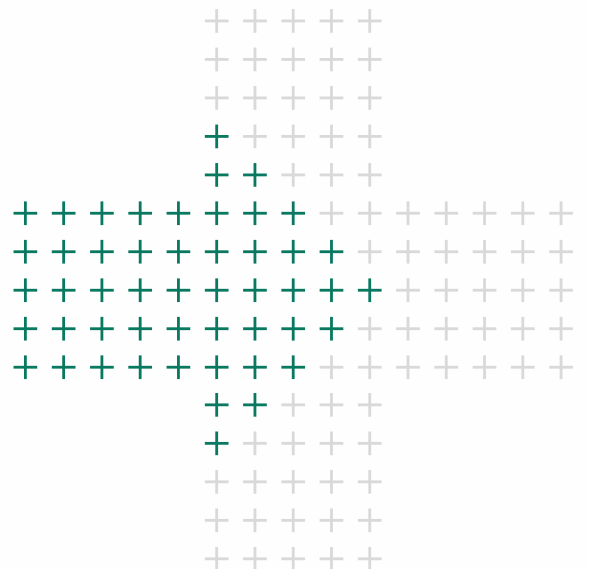
Department of Mathematics

The Department of Mathematics at MIT-WPU is known for its rigorous academic programmes and distinguished faculty. The department offers a variety of undergraduate and graduate degree programs in mathematics and statistics. Students in the department have access to a wide range of courses that cover a variety of mathematical subjects, including algebra, analysis, geometry, topology, and more. The department also has a strong focus on applied mathematics, with course offerings in areas such as mathematical modeling, numerical analysis, and scientific computing.

MIT-WPU

Highlights

- Highly qualified faculty, with a strong track record of research and publication
- Workshops for hands-on experience in software such as R, SAS, Python, HADOOP, SQL, SPSS
- Guest lectures, seminars, and workshops by eminent corporate leaders
- MOOCs, skill enhancement and interdisciplinary courses for holistic development
- Industry and Teaching Internship.
- Dedicated Centre for Industry-Academia Partnerships to support students for internships and job placements.
- MIT Pune Technology Business Incubator (TBI) to support early-stage entrepreneurs, and students through funding, mentoring, and network connection
- Rural, National and International immersion programmes





Academic Partnerships and Collaborations

The School of Science and Environmental Studies at MIT-WPU has partnered with top international universities, demonstrating its commitment for a truly global education. These agreements allow students to participate in student and faculty exchange programmes, summer and winter programmes, research associations, extra credit programmes, and other activities.

The School of Science and Environmental Studies has collaborations with the international universities listed below.

- University of Wisconsin, Wisconsin, USA
- University of Massachusetts, Lowell, USA
- Hochschule Bremerhaven, Kanzleistr, Germany
- Vrije Universiteit, Amsterdam, Netherland
- Flensburg University, Kanzleistr, Germany



**Hochschule
Bremerhaven**






**Associate Dean's
Message**

Prof. Dr. Anup Kale

**School of Science and
Environmental Studies**




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

Science and technology, as a broad field, encompasses a wide range of interdisciplinary domains, including biotechnology, microbiology, physics, photonics, chemistry, polymers, mathematics, statistics, and data science, bioinformatics, tissue engineering. These fields are the backbone of the economic growth of any country. Professionals in science and technology are needed in almost every industry, from government to manufacturing to healthcare.

With recent pandemics and international conflicts, the importance of being self-sufficient in science and technology has become clearer than ever. This is where a science graduate can make a difference in our country's economic growth. The School of Science and Environmental Studies offers 12 undergraduate and postgraduate programmes in Chemistry, Physics, Mathematics & Statistics, Biosciences, and Environmental Studies, along with doctoral programmes in these disciplines. The faculty at the School of Science and Environmental Studies work hard to achieve the mission of imparting innovative skills and value-based quality education through academic excellence and research experience at leading institutions in India and abroad.

Understanding the industry and how to excel in it after earning a degree are critical components of future success. This is where we help our students improve their skills and domain knowledge. By developing their skill sets through our unique teaching and learning process, we make our students highly competitive and ready for the industry. This has resulted in our students being placed in top companies with competitive salaries in all areas of Mathematics, Statistics, Biotechnology, Chemistry, Physics and Environmental Studies. At MIT-WPU, we lay the groundwork for you to grow and expand your understanding and knowledge in your career.

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



B.Sc.

Applied Statistics and Data Analytics

The B.Sc in Applied Statistics and Data Analytics at MIT-WPU focuses on the application of statistical methods and techniques to the analysis and interpretation of data. It combines coursework in statistics and data analytics with hands-on experience analysing real data sets.

Students in this programme learn about statistical concepts such as probability, statistical inference, and regression analysis, as well as methods for data visualisation, machine learning, and data mining. They also learn about statistical software and programming languages such as R or Python, and gain experience using these tools to analyse data.

Graduates of a B.Sc in Applied Statistics and Data Analytics programme are prepared for careers in fields such as market research, data science, business analytics, or public policy analysis, where they apply their skills to solve real-world problems and make data-driven decisions. They are also well-prepared for graduate study in statistics, data science, or related fields.



Duration - 3 years*



Fee - ₹ 75,000 PA

APPLIED STATISTICS AND DATA ANALYTICS



Career Opportunities

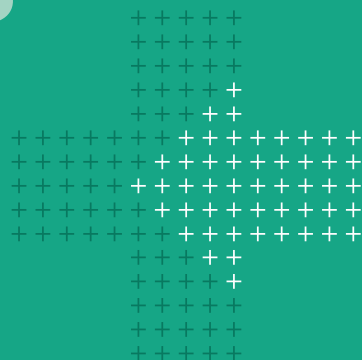
- Statistical Analysts
- Product Analysts
- Financial Analysts
- Business Analysts
- Risk Analysts
- Biostatisticians
- Data Analysts
- Data Scientists
- Decision Scientists
- Statisticians
- Higher studies and researchers
- Statistics Trainers
- Project Assistants [Indian Statistical Institute (ISI)]
- Assistant Audit Officers [Public Service Commission (PSC)]
- Research Officers [Reserve Bank of India (RBI)]



**TRANSFORM
YOUR WORLD...**

*Eligible students who opt for 4th year of Undergraduate programme will be awarded Honours degree as per the New Education Policy

POWERING THE FUTURE



B.Sc.

Computational Mathematics and Statistics

A B.Sc in Computational Mathematics and Statistics at MIT-WPU is a multidisciplinary degree that combines elements of Applied Mathematics, Statistics, and Computer Science. This programme provides students with a strong foundation in a range of mathematical and statistical concepts, as well as programming and software engineering skills. These skills can be applied in fundamental research, software development, and mathematical modeling in real-life simulations.

Graduates of a B.Sc in Computational Mathematics and Statistics programme are trained for careers in data science and artificial intelligence, as these fields often require a combination of strong analytical and technical skills. This degree also provides a good foundation for graduate study in mathematics, statistics, computer science, or related fields.



Duration - 3 years*



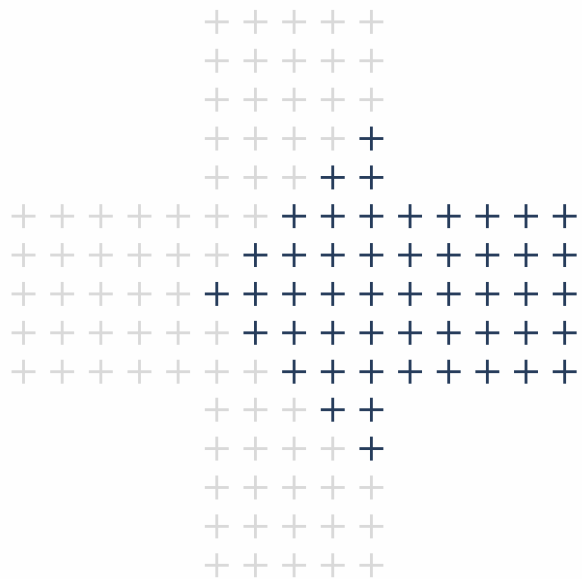
Fee - ₹ 75,000 PA

*Eligible students who opt for 4th year of Undergraduate programme will be awarded Honours degree as per the New Education Policy



Career Opportunities

- Banking Software Managers
- Brokers
- Business Advisors
- Business Analysts
- Data Analysts
- Data Scientists
- Software Analysts
- Software Developers
- Computer Engineers
- Computer Programmers
- Computer Modelling Specialists
- Commodities Traders
- Higher studies and research



M.Sc.

Mathematics

The MSc Mathematics programme at MIT-WPU is a highly applied, multidisciplinary degree that combines elements of pure and applied mathematics, statistics, and computer science. The programme provides students with a strong foundation in mathematical concepts and techniques, as well as the skills and knowledge needed to design and develop software applications.

The programme also prepares students for research roles in academia and industry, and for careers in fundamental research. This involves coursework in topics such as mathematical modeling, data analysis, and programming, as well as hands-on experience working on research projects or internships.



Duration - 2 years

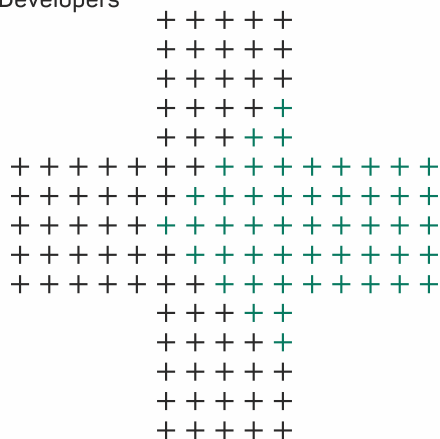


Fee - ₹ 75,000 PA

Career

Opportunities

- Scientists at Government Organisations (like DRDO, ARDE, IITM & ISRO etc.)
- Research Fellows at IITs, IISERs, IIMs etc
- Assistant Professors, Lecturers, and Teachers
- Financial Engineers
- Bank Probationary Officers (PO)
- Data Engineers
- Data Analysts
- Data Scientists
- Investment Risk Analysts
- Front end and Back end Software Developers
- Market Researchers



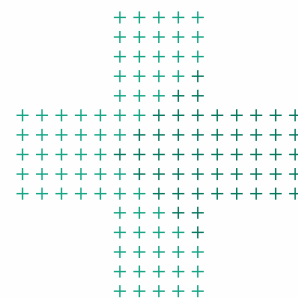


M.Sc.

Statistics

The Master of Science (Statistics) programme at MIT-WPU is a full-time, two-year programme that focuses on the application of statistical tools and techniques to real-world problems. It emphasises on the development of skills in algorithms, design, and problem-solving, as well as a detailed understanding of numerical and graphical data summaries.

The programme also includes topics such as statistical modeling, data analysis, and programming, as well as hands-on experience working on projects or internships that apply these skills to real-world problems. In addition to developing technical skills, the programme focuses on developing relevant soft skills that are needed in the industry, such as communication, teamwork, and project management.



Duration - 2 years



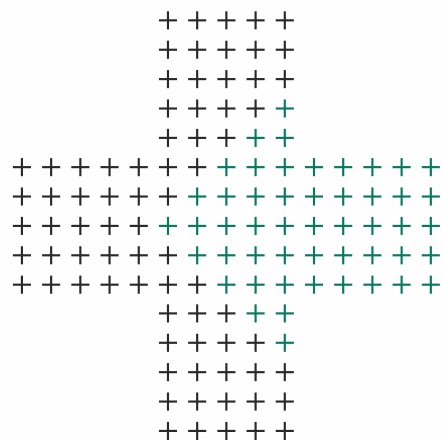
Fee - ₹ 75,000 PA





Career Opportunities

- Statisticians
- Statistical Analysts
- Financial Analysts
- Machine Learning Scientists
- Business Analysts
- Risk Analysts
- Biostatisticians
- Data Analysts
- Data Scientists
- Decision Scientists
- Market Research Analysts





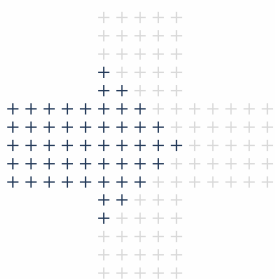
Ph.D Mathematics

The Doctorate in Mathematics at MIT-WPU is a highly research-intensive programme that provides students with excellent facilities and expert guidance to support their research endeavors. The programme has a strong focus on interdisciplinary research and encourages students to pursue innovative and entrepreneurial ideas in their chosen areas of study.

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 PhD project plans, and aims to provide students with a broad base of knowledge and expertise for their future careers.

The faculty at the Department of Mathematics & Statistics at MIT-WPU have a strong track record of research and publication in a variety of areas, including topology, clinical trials, research methodology, graph theory, matroid theory, combinatorics, discrete mathematics, lattice theory, Bayesian inference, quantile regression, and statistical genetics. This diversity of research interests suggests that the Doctorate programme in Mathematics at MIT-WPU may provide students with a wide range of research opportunities and support for their studies.

For more details, please refer to the website.



DOCTOR OF PHILOSOPHY

TESTIMONIALS



Priya Jangid
MSc Mathematics

Being a student of MSc Mathematics, I like the fact that the instructors are very friendly and supportive here. The faculty and management are both very helpful and flexible enough to catch up with students to solve problems. This is the right reason to be here. For me, it has been a wonderful journey from theoretical learning to practicality.



Viraj Sonar
MSc Statistics

All faculties are highly qualified and supportive. The placement process went so smoothly that almost all my classmates are placed for internships as well as for Full-time employment in well-known organisations. My overall experience at MIT-WPU was too joyful and explorative at the same time. It helped me to grow as an individual and helped me to find inner strengths.



Falguni Dharmiks
MSc Statistics

The best thing about the University was the supportive environment, where everyone is focused, helps each other and you are encouraged to succeed as individuals. The teachers and mentors are helpful and helped me to improve my academic and interpersonal skills. My M.Sc. at MIT-WPU brought clarity of thought, knowledge, confidence, courage and conviction in me and my goals.

Students' achievements

S. No.	Name	Competition	Rank	Organizing Committee
1	Sayali Doifode	Debate	1	MIT-WPU, Pune
2	Jigyasa Agarwal	Debate	2	MIT-WPU, Pune
3	Prapti Pradhan	Debate	2	MIT-WPU, Pune
4	Sayali Doifode	Over All Best Speaker		Enthusia, 2020, MIT-WPU, Pune
5	Jigyasa Agarwal		Best Delegate Representative of Mexico	KIIT, Bhubaneswar
6	Prapti Pradhan	SHTRAARTH-Combat of Intellect	1	School of Economics and Commerce, MIT-WPU
7	Sanket K. Yadav	FIT India Cyclothon 2020	Performed excellent & completed 101 kms cyclothon	MIT-WPU, Pune

Certification courses completed by the students

1	Aarya Motiwala	Domestic Data Entry Operator- English	Certification of Completion	NSDC, Skill India, Unifiers Social Ventures Pvt. Ltd.
2	Sanket Yadav	Basics of Geo-computation & Geo-web services.	Certification of Completion (13.5 Hrs)	ISRO, Indian Institute of Remote Sensing, Dehradun.
3	Prapti Pradhan	Introduction to Mathematical Thinking	Certification of Completion	Stanford Online
4	Prapti Pradhan	Statistical Inference & Modeling for High-throughput Experiments	Certification of Completion & Passing	Harvard

ELIGIBILITY



Undergraduate Programmes

- Minimum 55% aggregate score in 10+2/Class 12th or in equivalent examination in science stream, with English subject (at least 50 %marks, in case of Backward class category candidate belonging to Maharashtra State only) Or
- Minimum 55% aggregate score in any Engineering Diploma from Any UGC approved University.
- The selection process for the programmes is based on MIT-WPU CET 2023 & Personal Interaction.

*Note: MIT-WPU retains the right to make changes to any published schedule.

Postgraduate Programmes

- **M.Sc. Mathematics:** Minimum 50% aggregate score in 3/4-year graduation or equivalent from Govt. Approved Institution in Arts / Science stream with Mathematics as a compulsory subject or B.Sc. (C.S.)/ B.Sc. (Statistics) Mathematics as a compulsory subject up-to second year OR B.E./B.Tech. (at least 45% in case of candidates of backward class categories belonging to Maharashtra State only)
- **M.Sc. Statistics:** Minimum 50% aggregate score in 3/4-year graduation or equivalent from Govt. Approved Institution in relevant programme of Science/Arts with Statistics as a specialization (at least 45% in case of candidates of backward class categories belonging to Maharashtra State only)
- The selection process for the programmes is based on MIT-WPU CET Entrance Exam 2023 & Personal Interaction.

*Note: MIT-WPU retains the right to make changes to any published schedule.

Ph.D in Mathematics

Please refer to the website for the latest details

Scholarships

MIT-WPU awards scholarships to its meritorious students based on their academic performance in requisite National/State Level Entrance Exam scores and in the MIT-WPU CET Examination, conducted by MIT-WPU, for the academic year 2023-24. These scholarships are valid for the duration of the programme*.

The categories of Merit Scholarships are:

- Dr. Vishwanath Karad Merit Scholarship
- MIT-WPU Merit Scholarships
- Scholarships to Elite Sports person
- Scholarship Awarded to the wards of MIT-WPU/MAER's staff members and Alumni

*Terms & Conditions apply:

All Scholarships are awarded on a First Come First Serve basis

All Scholarships are awarded as fee adjustments.

To continue the scholarship for the entire duration of the programme,

- a) a minimum level of the academic score has to be maintained at an 8.5 CGPA across all semesters
- b) attendance is to be maintained at a minimum of 80 percent
- c) there should be no disciplinary action against the student.

For more detailed information visit our website:

www.mitwpu.edu.in/Admissions

Department of Mathematics and Statistics

Scholarships 2023-24	Dr. Vishwanath Karad Scholarship (100%)	MIT-WPU Scholarship I (50%)	MIT-WPU Scholarship II (25%)
Name of programme / Specialisation	MIT-WPU CET Percentage		MIT-WPU CET Percentage
B.Sc. Computational Mathematics & Statistics	93 & Above	91 & above	90 & Above
B.Sc. Applied Statistics and Data Analytics			

Department of Mathematics and Statistics

Scholarships 2023-24	Dr. Vishwanath Karad Scholarship (100%)		MIT-WPU Scholarship I (50%)		MIT-WPU Scholarship II (25%)	
Name of programme / Specialisation	Graduation Marks	XII SCORE	Graduation Marks	XII SCORE	Graduation Marks	XII SCORE
M.Sc. Mathematics	90 & Above	85 & Above	86 & Above	81 & Above	84 & Above	79 & Above

Department of Mathematics and Statistics

Scholarships 2023-24	Dr. Vishwanath Karad Scholarship (100%)	MIT-WPU Scholarship I (50%)	MIT-WPU Scholarship II (25%)
Name of programme / Specialisation	MIT-WPU CET Percentage		MIT-WPU CET Percentage
M.Sc. Statistics	93 & Above	91 & above	90 & Above

Internships

Experiential learning is an integral component of learning at MIT-WPU. The students get an opportunity to apply their knowledge through a mandatory 4-6 weeks internship incorporated within their undergraduate and postgraduate degrees. These internships aim 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 who complete their undergraduate and postgraduate programmes by inviting reputed firms and organisations looking for adept professionals. MIT-WPU has been successful in maintaining high placement statistics over the years.

The Placement Cell organises regular career guidance programmes for all students. The cell also arranges training programmes including Mock Interviews, Group Discussions, Communication Skills and multiple workshops.

Top Recruiters



Life at Campus

Rural Immersion Programme

MIT-WPU's rural immersion programme is a unique educational opportunity that helps students understand and address the challenges faced by rural communities. During the programme, students visit a village and learn about the local culture, community, and landscape. They work on various projects, such as optimising irrigation systems, conserving and storing water, recycling waste, and using solar power, to improve the rural environment. This hands-on, real-life learning experience helps students develop critical thinking, problem-solving, and community awareness skills. It also helps them gain a deeper understanding of rural society and how their knowledge can lead to innovative solutions. Through these programmes, students learn how to bridge the gap between urban and rural areas in India.





R.I.D.E.

R.I.D.E is a one-of-its-kind conclave annually conducted and hosted by the Innovation Club of MIT-WPU to expand the horizons of education beyond academics and open the pathway for students towards entrepreneurship. The conclave is meant to expose students to the emerging research, entrepreneurship, design thinking and innovation in various fields. The 5 day conclave witnesses a footfall of over 10,000 students and showcases over 100 start-ups from various sectors including technology, design, healthcare, agri-tech, sustainable energy and retail. More than 50 experts from the venture capital industry address students about the changing face of start-ups, innovations and the evolving market trends to encourage out-of-the-box thinking by simulating a real-world start-up environment.





INDIAN STUDENT PARLIAMENT

**Largest Classroom of India
to evolve Future Political Leadership**



India is the largest democracy in the world and is considered to be amongst the most mature countries in the world. However, if India has to evolve as a highly developed nation, we need politics which focuses on development. To bring in this change, we need to attract youth, who are committed towards politics and are willing to embrace public life with a view to strengthen the democratic fabric of our nation.

To further this cause, with the objective of nation building, the Bharatiya Chhatra Sansad (Indian Students Parliament) was initiated by Rahul V. Karad in 2011, wherein students of the entire country can be sensitized about entering into public life or embracing active politics.

**Established in 2011
Brainchild of Rahul V. Karad
(Executive President - MIT-WPU)**

**Participation of
450 Universities and
over 12,000 students
all over India**

In Association with



Organized By



Bharatiya Chhatra Sansad
Foundation

Supported by



National Teachers' Congress
Foundation





Other Events at MIT-WPU

MIT-WPU is known for its dynamic and engaging academic and extracurricular events, which provide students with numerous opportunities to learn, grow, and get involved in their community. In addition to the well-known events R.I.D.E. and BCS, there are over 100 student-led events that take place at the university throughout the year. These events cover a wide range of interests and topics, from cultural festivals and guest lectures to community service projects and sporting events. By participating in these events, students can gain valuable skills, make new connections, and become more active and engaged members of the MIT-WPU community. Some of the events are as follows:

- Design Xpo
- Aarohan
- Kala Mehfil
- Hackathon
- National Conference on Media and Journalism
- Abhivyakti
- TEXEPHYR
- Tesla
- Techogenesis
- RoboCon
- Science Expo
- Social Leadership Development Program (SLDP)
- 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

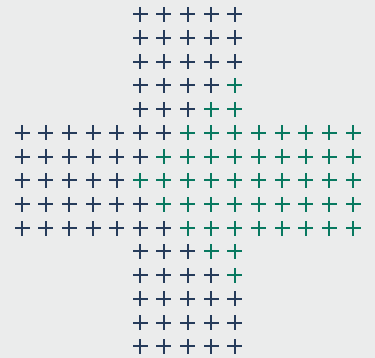
....and many more

The Department celebrated Pi Day wherein Dr Anindya Goswami, IISER Pune, presented a talk on Financial Mathematics & Machine Learning.





Students' Clubs at MIT-WPU



MIT-WPU is home to a diverse and active student community, with a wide range of clubs and organisations catering to a variety of interests and passions. These student-led clubs provide opportunities for students to get involved, make new connections, and develop their leadership skills.

Majorly, there are 5 categories of clubs at MIT-WPU; cultural, social, sports, co-curricular and NCC/NSS clubs which provide students with opportunities to learn about and explore their specific areas of interest.

Some examples of clubs at MIT-WPU include:

- The Innovation Club, which hosts events and workshops related to entrepreneurship and innovation
- The Art and Photography Club, which brings together students with a shared interest in artistic expression
- The Sports Club, which organises sporting events and activities for students to participate in
- The Cultural Club, which celebrates the diversity of the MIT-WPU community and promotes cultural exchange
- Aatman - It is the only Mental Health Club of MIT-WPU, Pune, that is led by the students of the Psychology department.
- Team Dart - Team DART is a motorsports team of MIT World Peace University which annually participates in a competition named Rally Car Design Challenge (RCDC) organized by professional industry sponsors

By joining a club or team, students learn to make the most of their time while engaging their mind and developing their skills, making meaningful contributions to the community at large. These clubs also participate in national and international competitions and have won various awards, ranks and recognition on numerous platforms.





Peace Studies

The mandatory peace studies module at MIT-WPU aims to provide students with a holistic education that integrates various disciplines for their personal development. Through this module, students gain a greater understanding of the interconnectedness and interdependence of mind, matter, spirit, and consciousness. They also learn about the critical spiritual laws that can help them develop a scientific temperament and a spirit of inquiry, as well as a sense of humanism.

In addition, the peace studies module introduces students to various yoga practices that help them develop their information base and cognitive abilities, as well as their critical thinking skills and personality. Upon completing the course, students will have a better understanding of how elevated consciousness can positively impact human behaviour and contribute to a happier, healthier, more peaceful, and empowered world. Overall, the peace studies module aims to equip students with the knowledge and tools they need to become more conscious, compassionate, and responsible global citizens.



