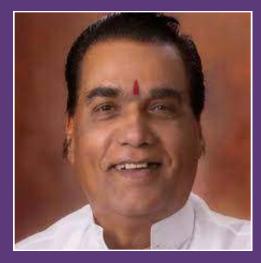
# PHD Admissions

# MIT GROUP OF INSTITUTIONS



Hon. Dr. Vishwanath Karad, Founder President, MIT Group of Institutions

The MIT Group of institutions has been the pioneer in the field of education and has created world class institutions across Maharashtra and across India. MIT group believes Research is the backbone of any educational institute a good teacher should also be a good researcher and to increase the research index of faculty members and the MIT group of institutions, the organization has taken many steps to motivate its staff and students to do research in niche areas which would be helpful for the society Nationally and Internationally as research and its applications knows no border. This brochure published by the office of Dean (R&C) is an informative document about research being conducted in various research areas at MITADT University and would be a handy document for aspirants seeking admission at MITADT University.

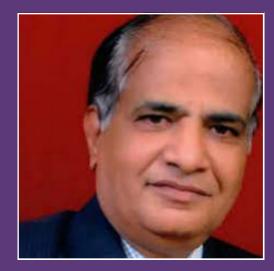
# MIT ART, DESIGN & TECHNOLOGY UNIVERSITY, PUNE



Hon. Dr. Mangesh Karad, Executive President & Vice Chancellor, MIT Art, Design and Technology University, Pune

The MIT Art, Design and Technology University is a new Generation University which is poised to become a Research and Innovation drive University and in a very short span of time it has achieved many mile stones and many more to cross. The faculty at MITADT University is recruited based on its strong Research and Innovation Profile. Accordingly, MITADT University has best of the Research Infrastructure and Research Supervisors in the streams of Arts, Design and Technology. This document gives all the necessary information to aspirants seeking admission for Ph.D. program at MIT-ADT University, Pune.

# MIT ART, DESIGN & TECHNOLOGY UNIVERSITY, PUNE



Dr. Kishore Ravande,
Dean (Research and Consultancy)

The office of Dean (Research and Consultancy) is mandated to look after the Research and Consultancy activities across the MIT Art, Design and Technology University institutes. The first Ph.D. batch was admitted in January 2017 and the first three Research Scholars were awarded Ph.D. degree during the 2021 Convocation. I am confident even more Research Scholars would be awarded the prestigious Doctor of Philosophy degree during the 2022 Convocation. This has been possible because MIT ADT Ph.D. program has very clear guidelines and timelines for completion of their Ph.D. and same is circulated to all research scholars on the day of induction to the Ph.D. program. We want to ensure timely completion of Ph.D. degree of all enrolled research scholars without compromising on the quality of research, publications and research ethics like plagiarism. I sincerely hope this handbook will be very useful for the aspirants looking forward for joining the Ph.D. program at MIT Art, Design and Technology University.

PROGRAMMES

SCHOOL OF ENGINEERING

SCHOOL OF BIOENGINEERING SCIENCES AND RESEARCH

FOOD TECHNOLOGY

INSTITUTE OF DESIGN

MANAGEMENT STUDIES

BROADCAST & JOURNALISM

SCHOOL OF FINE AND APPLIED ART

SCHOOL OF ARCHITECTURE

MIT SCHOOL OF EDUCATION AND RESEARCH (MIT-SOER)

VEDIC SCIENCES

MIT Arts, Design and Technology University offers Ph.D. Programmes in following streams, all the programmes offered carry research in niche areas.

#### **ARTS**

- 1. MIT School of Fine Arts (MIT-SoFA).
- 2. MIT School of Drama (MIT-SoD).
- 3. MIT School of Education and Research (MIT-SoER).
- 4. MIT International School of Broadcasting & Journalism (MIT-ISBJ)
- 5. MIT School of Vedic Sciences and Psychology (MIT-SVS).

#### DESIGN

1. MIT Institute of Design (MIT-IoD)

#### **TECHNOLOGY**

- 1. MIT School of Engineering
  [Aerospace Engineering, Applied
  Sciences and Humanities (Maths,
  Physics and Chemistry), Computer
  Science and Engineering, Civil
  Engineering, Electronics and
  Communication, Information &
  Technology, Mechanical
  Engineering].
- 2. MIT School of Bioengineering Sciences and Research (MIT-SBSR)
- 3. MIT School of Food Technology (MIT-SFT).
- 4. MIT School of Architecture (MIT-SoA).

#### **MANAGEMENT**

1. MIT-College of Management (MITCOM)

The MIT ADT University offers Ph.D. programs in the field of Art, Deign and Technology and has commenced Ph.D. program from the academic year 2017-18. This Ph.D. program provides rigorous, foremost, inter-disciplinary coaching in numerous disciplines to equip students with the power to conduct up-to-date analysis of international stature. The aim of the program is to assist Industry executives and the budding Researchers to explore analysis primarily based careers at each levels as Researcher and Managerial Role in public/private sector organizations

Contact Us: Office of the Research and Consultancy Cell, Dean (R&C) & Principal MIT School of Engineering, MIT ADT University Rajbaugh Campus, Loni, Kalbhor, Pune-412201

Email: dean.rac@mituniversity.edu.in | Mobile: 9689609051

# SCHOOL OF ENGINEERING

The Computer Science and Engineering/ Information technology expert faculty conduct research/projects in following thrust areas

Artificial Intelligence and analytics High performance and computing Image Processing, Machine Learning, Internet of Things, Deep Learning, AI in Medicine, Robotics and Automation Security, Predictive maintenance.

The Electronics and Communication Engineering expert faculty conduct research/projects in following thrust areas

Robotic Systems, Embedded System Design, Biometrics, Digital Image Processing and Digital Signal Processing

The Civil Engineering expert faculty conducts research/projects in following thrust areas Concrete Technology, Environmental Engineering, Structural Engineering & Artificial Intelligence, Earthquake Engineering Transportation Engineering Geotechnical engineering Construction Management

The faculty of Mechanical Engineering expert faculty conducts research/projects in following thrust areas: Electric Vehicles, Robotics and Automation, Composite Materials, Solar Energy, Hydrogen fuel and fuel cell, Refrigeration, Fracture Mechanics and Crack detection

### **ELIGIBILITY**

The Eligibility for seeking admission in Ph.D. at MIT School of Engineering in its various departments (ASH, AE, CSE, CED, ECE, IT, ME) is as follows:

Masters degree in Engineering/Technology from recognised university/college from India with more than 55% in their master's degree (for Open Category students) and 50% or more than 50% (for reserved category students).

For Applied Science and Humanities: Masters degree in Science/Mathematics from recognised university/college from India with more than 55% in their master's degree (for Open Category students) and 50% or more than 50% (for reserved category students).

## **THRUST AREAS**

#### **Civil Engineering**

- Concrete Technology
- Environmental Engineering
- Structural Engineering & Artificial Intelligence
- Earthquake Engineering
- Transportation Engineering
- · Geotechnical engineering
- Construction Management

# Electronics and Communication Engineering

- Robotic Systems
- Embedded System Design
- Biometrics
- Digital Image Processing
- Digital Signal Processing

# Applied Science and Humanities

· Graph Theory Mathematics

# Computer Science and Engineering Information Technology

- Artificial Intelligence and analystics
- High performance and computing
- Image Processing
- Machine Learning
- Internet of Things
- Deep Learning
- Al in Medicine
- Robotics and Automation
- Security
- Predictive maintenance

#### **Mechanical Engineering**

- Electric Vehicles
- Robotics and Automation
- Composite Materials
- Solar Energy
- Hydrogen fuel and fuel cell
- Refrigeration
- Fracture Mechanics and Crack detection



Dr. Satish B Patil

CIVIL ENGINEERING



Dr. Sudarshan Sanap



Dr. Virendra K. Bhojwani



Dr. Sachin S. Pawar



Dr. Bhumeshwar Kunjilal Patle



Dr. Sandeep G. Thorat



Dr. Mathew Karvinkoppa

# **MECHANICAL ENGINEERING**



Dr. Shalini Garg



Dr. Krishna Kumar



Dr. Ruma Saha



Dr. Jayashri Nalkar





Dr. Manoj Patowary



Dr. Monika Vishnoi



Dr. Ramya C.



Dr. Vinayak A. Dhumale

# APPLIED SCIENCE AND HUMANITIES DEPARTMENT



Dr. Bhavik Kodrani



Dr. H. R. Bhapkar



Dr. Rahul Vilasrao Kadu

# SCHOOL OF BIOENGINEERING SCIENCES AND RESEARCH

The School of Bio Engineering Sciences and Research conduct research in following thrust areas

**Biotechnology** (Synthetic Biology, Genetic Engineering, Genomics, Proteomics, Waste management),

**Thrust area: Bioinformatics** (Drug design, protein, Artificial intelligence and Machine learning, Voice image processing)

**Biomedical Signal Processing** (Biosensors, Lab on Chip, Nanomaterial's Artificial organs, Robotics, Implants, prosthesis)

## **ELIGIBILITY**

The required minimum qualification for admission to a Ph.D Program shall normally be a two years Master's/M.Phil/ M. Tech / M.E./M.S/ M.B.B.S./BDS Degree from any accredited Indian or Foreign University in the relevant field. She/he must have obtained either a minimum of 60% marks or Equivalent Grade at all academic.

2. Foreign/ NRI applicants /Applicants with a Masters' degree from a foreign university must apply with an equivalence certificate of AIU along with the Online Application Form.

**Exemption from Written Examination:** Candidates who have cleared an All India Examination or NET of UGC / CSIR / ICAR (ASRB) / GPAT / ICMR / GATE/ BINC in the last 2 years or MPhil completed shall be exempted from the written part of the selection process. However, they will be required to appear for the Personal Interview.

### **THRUST AREAS**

- **Biotechnology:** (Synthetic Biology, Genetic Engineering, Geonomics, Proteomics, Waste Management)
- **Bioinformatics:** (Drug design, protien, artificial intelligence and Machine learning, Voice image
- Biomedical Signal Processing: (Biosesnsors, Lab on Chip, Nanomaterials Artificial organs



Dr. Kedar R.N



Dr. Preetam Bala



Dr. Aruna Sivaram



Dr. Chandrakant K. Tagad



Dr. K.V. Swamy



Dr. Madhumita Tarai



Dr. Madhura Chandrashekar



Dr. Nayana Atul Patil



Dr. Neeraj Omprakash Maheshwari



Dr. Pranav Pathak

# FOOD TECHNOLOGY

MIT College of Food & Technology is one of the constituent faculties of MIT Art, Design and Technology University, Pune. The institute has emerged as a center of excellence in education, research and outreach activities in the discipline of food science and technology

**Thrust areas of research:** Food Process Technology, Food Process Engineering, Food Safety and Quality

### **ELIGIBILITY**

Eligibility Criteria spectrum of Agro base industry sponsored Ph. D. Tech. (Food Technology)

- 1. Graduation (B. Tech./B.Sc., B. Voc.- Food Science / Food Technology / Food Process Engineering (Essential)
- 2. Post-graduation/PG diploma (M.Tech/M.Sc.- Food Science / Food Technology / Food Process Engineering (Desirable).
- 3. Regular Employee of Agro base industry (National Industry Player)
- 4. Industry Experience:
- a) 5+ Y. Production Manager cadre supported by 2-3 yrs. of f floating experience for candidates having PG degree from discipline of Food Science and Technology.
- b) 10+ Y. of experience for UG degree from discipline of Food Science and Technology.
- 5. Sponsorship tuition fees: Rs. 2,00,000 (2 lakhs only/annual)
- 6. NET/SET/PET exemption (Non-academic status)

## **THRUST AREAS**

**Process and product development –** Smart Nutrition- GI and GI load, gluten free, Lactose intolerant and multi grain.

- · Food driven smart health
- Immunity boosting product development
- Antoxidant

**Raw Food and product supply chain management** – Farm to Fork linkage stabilization.

• MIT CFT VAP as a prerequisite to supply chain management.

#### Food Product equipment design and commercialization

- Untapped food raw material processing equipment
- Custard apple, dragon fruit, pomegranate purple
- Energy, time & human resource minimising equipments
- Resin, dried figs



Prof. (Dr.) Vasant N. Pawar



Prof. (Dr.) Anupama N. Devkatte



Dr. Yogita V. Chavan



Dr. Amit A. Kulthe



Dr. Vaibhav S. Patil

# INSTITUTE OF DESIGN

MIT Institute of Design has been dedicated to redefining the way people perceive designing. Our ultimate goal is to introduce this institute on global platform as the premium institute for design learning & education. MIT Institute of Design is in top 10 design institutes of the country

#### MIT IoD works in following Thrust areas:

Product design and development, Engineering Design Design for sustainability, System Design, Visua communication, Inclusive Design User Experience Design Service Design Ergonomics (including Occupational health and safety), Design Management, Design creativity and innovation studies.

#### **ELIGIBILITY**

- M.Des / M. Arch degree or M.Tech/ ME Degree in a relevant area, with at least CPI 6.0 out of 10 or at least 60 % marks.
- Two-year Masters in Management (or MBA or equivalent) with at least CPI 6.0 out of 10 or at least 60% marks, with relevant studies in Design field, and Bachelor's degree in any discipline.
- Four-year Undergraduate Diploma in Design (NID or equivalent), with postgraduate qualification in relevant area with at least CPI 6.0 out of 10 or at least 60% marks.
- A two-year Post-Graduate Diploma in Design and relevant areas (NID/CEPT or equivalent) with first class at Bachelor's level.
- MFA/MVA(2-year professional programme) in a relevant area with at least CPI 7.0 out of 10 or at least 70% marks.
- Master of Computer Application(MCA) degree, with at least CPI 6.0 out of 10 or at least 60% marks.
- Relaxation for SC/ST/PwD Candidates: Eligibility criteria will be relaxed by 5% marks or 0.5 CPI for SC/ST/PwD applicants.

### THRUST AREAS

- Product design and development
- Engineering Design
- Design for sustainability
- System Design
- Visual communication (including visual culture)
- Inclusive Design
- User Experience Design (including Interface
- Service Design
- Ergonomics (including Occupational health and
- Design Management
- Design creativity and innovation studies



Prof. Dr. Anant M. Chakradeo



Dr. Dandeswar Bisoyi



Dr. Wricha Mishra



Dr. Nachiket K Thakur

# MANAGEMENT **STUDIES**

MIT College of Management (MITCOM) imparts crucial skills in leadership and entrepreneurship through management education.

MIT COM works in the Thrust areas: Strategy Management, Information technology Management, Human Resource Management, Marketing, Finance

## **ELIGIBILITY**

Any candidate who has a valid master's degree as prescribed by UGC in Management or allied subjects and have successfully completed with at least 55 % marks will be eligible for admission to the Ph.D. programme at MIT College of Management relaxation of 5% of marks, from 55% to 50%, or an equivalent relaxation of grade for those belonging to SC/ST/OBC(non-creamy layer) /differently-abled and other categories of candidates as per the decision of the Commission from time to time.

or

Candidate with exceptional abilities having passed graduation in relevant discipline with 60% of marks in degree examination with at least 15 years professional experience after graduation in the related field, . However their eligibility is subject to the approval of the Dean of Management.

## THRUST AREAS

#### **Strategy Management**

- Innovation
- Technology Management
- Competitiveness and Business Excellence
- Corporate Governance
- Global Inclusiveness
- Sustainability in Business

#### • IT services and Management • IT enabled User experience

Management

• Role of Information technology in Enterprise

Information technology

#### **Design Thinking**

- Data Science and Analytics
- Internet of Things (IoT)
- Virtualization and Autonomic Computing

- Consumer buving behavior
- Customer loyalty

Marketing

- Market segmentation
- Marketing for SME's

#### **Human Resource** Management

- Competency Mapping
- Psychometric Profiling
- Employee engagement and retention
- HR Analytics
- Leadership

#### **Finance**

- · Financial Markets, Regulation and Policy
- · Banking, Financial Services and Inclusion
- Forensic Accounting
- Corporate restructuring



Dr. Vivek Singh



Dr. Chhabi Sinha Chavan



Dr. Suresh B. Pathare



Dr. Ajim Shaikh



Dr. Rahul Z. More



Dr. Rupa Hiremath



Dr. Preeti Nilesh Surkutwar



Dr. Dipak S.Vakrani

# BROADCAST & JOURNALISM

MIT International School of Broadcasting and Journalism (ISBJ) is focused on becoming a leader in media education and training. At MIT ISBJ, the training is firmly rooted in the MIT ethos, with a judicious blend of tradition and modernity

**Thrust areas of research:** Digital media/New Media Journalism, Advertisement and Public Relation

# **ELIGIBILITY**

Masters degree in Mass Communication/ Media Studies/ Journalism / Communication studies/ Media Management from recognised university/college from India with more than 55% in their master's degree (for Open Category students) and 50% or more than 50% (for reserved category students). PET is exempted for the UGC NET/SET Candidates.

## **THRUST AREAS**

Digital Media/ New Media, Journalism, Advertising and Public relation

# SCHOOL OF FINE & APPLIED ART

MIT School Of Fine Arts & Applied Art (MIT SFA), works towards shaping the future of talented & creative artists, sculptors and illustrators. MIT SFA has developed state-of-the-art infrastructure well-equipped labs and advanced learning studios.

**Thrust areas of research:** Applied Arts and Fine Arts Illustration, Animation, Typography, Advertising and media, Sign and symbols, Color Branding, Way finding for fine arts, Portraiture, Printmaking, Indian Painting Color and composition Indian artists, Contemporary-painting Iconography.

## **ELIGIBILITY**

Masters degree in Fine arts/ visual Arts/ Allied Field like Graphic Design / MBA with Advertising / media / subjects with min 55% PET is exempted for UGC NET/ SET candidates.

## **THRUST AREAS**

- Applied Arts and Fine Arts
- Illustration
- Animation
- Typography
- · Advertising and media
- Sign and symbols
- Colour
- Branding
- Way finding

- For fine arts
- Portraiture
- Printmaking
- Indian Painting
- Colour and composition
- Indian artists
- Contemporary-painting
- Iconography



Prof. Dr. Milind M Dhobley

# SCHOOL OF ARCHITECTURE (SoA)

MIT School of Architecture (MIT SOA) is an institute that blends innovative engineering tactics with the traditional, and is one of our most special qualities. We train our students to carve a niche by coming up with out-of-the-box ideas.

# **ELIGIBILITY**

Candidate should have: Bachelor's Degree in Architecture or equivalent and Master's degree in architecture/allied specialization or equivalent from any recognized institution. Bachelors Degree in architecture or equivalent in first class with ten years experience in teaching/research/professional practice.



Dr. Ashwini Pethe

# MIT-SCHOOL OF EDUCATION AND RESEARCH (MIT-SOER)

**Thrust Area of SOER:** Language across Curriculum Educational Management and Leadership Advanced Approaches to Educational Evaluation & Assessment, Curriculum Development & Curriculum Transaction Foundations & Principles of Education Inclusive & Special education Technology and Innovations in Education

### **ELIGIBILITY**

- Ph.D. in Education (Interdisciplinary) Eligibility: The below mentioned candidates are eligible to seek admission to the Ph.D. programme in Education (Interdisciplinary):
- 1. Candidates for admission to the Ph.D. programme in Education (Interdisciplinary) shall have a Master's degree from any discipline or a professional degree declared equivalent to the Master's degree by the corresponding statutory regulatory body, with at least 55% marks in aggregate or its equivalent grade 'B' in the UGC 7-point scale (or an equivalent grade in a point scale wherever grading system is followed) or an equivalent degree from a foreign Educational Institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions.
- 2. A relaxation of 5% of marks or an equivalent relaxation of grade for those belonging to SC/ST/OBC (non-creamy layer)/Differently Abled and other categories of candidates as

- per the decision of the Commission from time to time, or for those who had obtained their Master's degree prior to 19th September, 1991.
- 3. Candidates who have cleared the M.Phil. in Education with at least 55% marks in aggregate or its equivalent grade 'B' in the UGC 7-point scale (or an equivalent grade in a point scale wherever grading system is followed) and successfully completing the M.Phil. Degree in Education shall be eligible to for taking admission to Ph. D. Degree in Education without doing Ph.D. course work. The rules of admission will be same as that of normal candidates i.e. they shall appear for Ph.D. entrance test and interview for getting admission to Ph.D. program in Education.
- 4. Candidate possessing a Degree considered equivalent to M.Phil. Degree of an Indian Institution, from a Foreign Educational Institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country for the purpose of assessing, accrediting or ucation.

# MIT-SCHOOL OF EDUCATION AND RESEARCH (MIT-SOER)

**Thrust Area of SOER:** Language across Curriculum Educational Management and Leadership Advanced Approaches to Educational Evaluation & Assessment, Curriculum Development & Curriculum Transaction Foundations & Principles of Education Inclusive & Special education Technology and Innovations in Education

### **ELIGIBILITY**

assuring quality and standards of educational institutions, shall be eligible for admission to Ph.D. programme in Education (Interdisciplinary).

5. For interdisciplinary research in Education, candidates holding a Master's degree from any faculty are eligible to apply for admission. Examples of Master's degree include: ME, M. Tech., M. Sc., MCA, MA, M. Com., MFA, MJMC, MSW, MBA, MD, MS, DNB, MDS, M.Pharm., PharmD, MBBS/ BAMS plus 2 yr. PG Diploma, MS by Research, MPhil and M.Ed. Candidate should have a proven good academic record.

#### Thematic areas

Applications are specifically encouraged under the following themes for the 2021 admissions cycle:

- Teacher Education and professional development
- Inclusive Education
- Innovative Pedagogies in STEAM
- Equity and Social Justice in Education
- Education Technology
- Design Based Research in Education
- Education Development and Policy
- Evaluation and Assessment for Holistic Education.
- Constructive Teaching and Learning Pedagogies,
- Technologies for Teacher Support,
- Design Thinking and Blended Learning Design,
- Understanding role of various agencies in education
- Gender and Education,
- History of Ed

# MIT-SCHOOL OF EDUCATION AND RESEARCH (MIT-SOER)

**Thrust Area of SOER:** Language across Curriculum Educational Management and Leadership Advanced Approaches to Educational Evaluation & Assessment, Curriculum Development & Curriculum Transaction Foundations & Principles of Education Inclusive & Special education Technology and Innovations in Education

## **THRUST AREAS**

- Language across Curriculum
- Educational Management and Leadership
- Advanced Approaches to Educational Evaluation & Assessment
- Curriculum Development & Curriculum Transaction
- Foundations & Principles of Education
- Inclusive & Special education
- Technology and Innovations in Education



Dr. Asawari Bhave - Gudipudi



Dr. Priya Singh



Dr. Namrata Anand Kamble



Dr. Neeta Mhavan

## **VEDIC SCIENCES**

At MIT School of Vedic Science students are taught to be physically persistent, intellectually sharp, emotionally balanced, spiritually elevated and socially responsible individuals.

Thrust areas of research: Vedic Science and Psychology.

## **ELIGIBILITY**

OR

55% (for Open Category students) and 50% or more than 50% (for reserved category students) in M.Sc in Vedic Sciences offered by SVS

55% (for Open Category students) and 50% or more than 50% (for reserved category students) in Masters level degree in any discipline and Completion of Masters Certification in Vedic Sciences offered by SVS AND Short Term Research course of 6-9 months at SVS Post approval of application, passing Ph. D Entrance Test (PET) conducted by MIT ADT University. (PET is exempted for the UGC NET/SET Candidates.)



Dr. Anand Godse



Dr. Siva Panuganti



Dr. Sushrutha S



Dr. Anupama Ryali