

ITS ALL HERE EVERY DREAM, EVERY GOAL.

Crafting Tomorrow's
Techno- Health &
Clinical Engineers



# FACULTY OF ENGINEERING AND TECHNOLOGY

A constituent unit of DMIHER (DU)













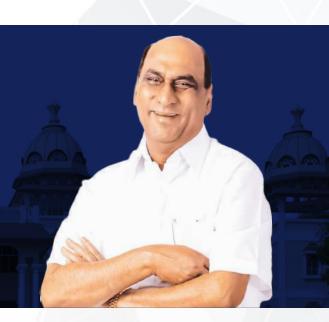


### **ABOUT UNIVERSITY**

DMIHER is a multdisciplinary university located in Sawangi Meghe, Wardha, which is 80 kms from Nagpur, and offers a very conducive environment for high-quality education. Driven by the purpose of Learn and Lead, the university believes in inspiring the students for a meaningful, impactful future where they contribute to the society through professional accomplishment.

# Our Hon'ble Chancellor's Message

"At DMIHER we have a strong focus on Developing well-balanced professionals capable of dealing with the challenges of a fast-changing world. Students are gently, but constantly encouraged to reach higher, to learn and lead"



# UNIVERSITY HIGHLIGHTS



Category-I Deemed to be University under UGC for Categorization of Universities for Grant of Graded Autonomy Regulations 2018



'A++' Accreditation (Fourth Cycle) by 'NAAC' in 2023



Ranked 42<sup>nd</sup> among universities in India by NIRF 2024



15 constituent colleges



Competency and outcomebased Education in all academic programs



50+ collaborations with top institutions across the globe



Research with 10,000+ publications in last 3 years and 97 patents



1250+ copyrights reserved



Faculties with Global University Pedigree





# **ABOUT FEAT**

- The Faculty of Engineering and Technology (FEAT) at Datta Meghe Institute of Higher Education & Research (Deemed-to-be University) is a pioneering institution dedicated to student-centric learning and research excellence. Specializing in Techno-health/Clinical Engineering, FEAT stands at the intersection of technology and healthcare, integrating Aldriven healthcare solutions, biomedical engineering, and medical technology to bridge the gap between engineering and medicine.
- FEAT offers five cutting-edge undergraduate programs in Artificial Intelligence and Data Science, Artificial Intelligence and Machine Learning, Computer Science and Design, Computer Science and Medical Engineering, and Computer Science and Engineering and two postgraduate programs M.Tech in Artificial Intelligence & Data Science and M.Tech in Biomedical Engineering to equip students with expertise in emerging fields.
- Our Ph.D. programs span Computer Science and Engineering (Artificial Intelligence & Data Science), Electronics Engineering (Biomedical Engineering), Computer Science and Information Technology (AIML, Digital Image Processing, Sensor and IoT, Intelligence Mobility, Security, UAV Technology), Electronics and Telecommunication (Wireless Communication, Sensor and IoT, UAV Technology), Basic Sciences and Humanities (Physics, Chemistry, Mathematics) and Clinical Engineering, providing interdisciplinary skills in AI, IoT, cybersecurity, and health informatics. FEAT empowers students with transformative education, fostering careers in software, healthcare, and biotechnology.

## **KEY OFFICIALS**



Prof. (Dr.) K.T.V. Reddy



Dr. (Mrs.) Utkarsha Pacharaney

DEAN - ACADEMICS

### WHY CHOOSE FEAT?

### » Expert Faculty & Global Exposure

Courses taught by IIT, NIT, and top medical faculty with global exposure and cutting-edge research.

### » Interdisciplinary Curriculum

Programs integrating Engineering, Digital Health, and Clinical Engineering for future healthcare innovation.

### » Hands-on Learning Facilities

Access to SEL & Simulation Centre for advanced technical courses, AI projects, and IoT in healthcare.

### » Internships & Global Exchange

Internships at ISRO, IITs, VNIT, Med-Tech firms, and international exchange at UC Berkeley, University of Sydney, etc.

### » World-Class Infrastructure

High-tech labs, 1:1 computer ratio, and 1500+ bedded teaching hospital for real-time patient data research.

### » Cutting-Edge Research & Training

Training in Al Healthcare, Telemedicine, Wearables, and research funded by DST-TIDE, ICMR, DRDO, etc.

### » Professional Networks & Industry Clubs

Professional memberships in IEEE, IETE, CSI, ISTE, IE (I), and industry clubs like GDG, C4GT, GeeksforGeeks.

### » Research Excellence & Publications

Faculty-led DST-TIDE, DRDO, ICMR projects published in Q1–Q3 journals like Springer Nature, IEEE, etc.

### STATE OF THE ART LABORATORIES



Cyber Security Lab



IBM Lab



Advanced **Programming Lab** 



**Data Science** Lab



Big Data



Intel Unnati lab



**Machine Learning** Lab



Al Lab



**Project Based** Learning Lab



Research Lab



Advance AR-VR Labs



Virtual Learning Labs



Lab



Multimedia Lab



Data Networking Lab



E-Yantra in Collaboration With IIT Bombay



**Bio Informatics** Lab



**Biomedical** Instrumentation Lab



Medical Imaging Lab



Robotics Lab

### **COURSES OFFERED BY FEAT**

### **BACHELOR OF TECHNOLOGY**

### **ELIGIBILITY**

- Candidate must have passed 10+2 examination with Physics / Mathematics / Chemistry / Computer Science / Electronics / Information
  Technology / Biology / Informatics Practices / Biotechnology / Technical Vocational subject / Computer Science & Engineering /
  Engineering Graphics / Business Studies / Entrepreneurship (Any of the three) and obtained atleast 45% marks (at least 40% marks, in
  case of Candidates belonging to Reserved Category of Maharashtra State only) in the above subjects taken together.
- Should have qualified any one entrance examination out of DMIHER-CET/MHT-CET/JEE (Mains)/CUET/Other state examination.

## **SPECIALIZATIONS**

# B.Tech. in ARTIFICIAL INTELLIGENCE & DATA SCIENCE

INTAKE: 60

### ABOUT THE COURSE

**B.Tech -** Artificial Intelligence & Data Science program is a new emerging concept that is the most sought-after technology in the I.T. Industry and in all kinds of core Industries. This course is designed to create a dynamic career in the field of Data Science and Artificial Intelligence. Our Curriculum enables the graduate to become an expert in these two complementary disciplines that organizations seek globally.

### WHY CHOOSE AIDS?

- Strong foundation in AI, machine learning, and data-driven decision-making, AI tools.
- Hands-on experience with big data technologies and real-world datasets.
- Industry collaboration for AI-driven research and development.
- Subjects covered during the program include Medical data Security and Privacy, Human Computer Interactions, Cybersecurity,
   Data Visualization, Data Interface for Sustainable Healthcare System, etc.

# B.Tech. in ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

INTAKE: 60

#### **ABOUT THE COURSE**

**B.Tech** Artificial Intelligence & Machine Learning is a program focused on equipping students with the theoretical and practical knowledge required to design, develop, and implement AI systems and ML algorithms.

They can pursue roles such as Data Scientists, Machine Learning Engineers, Al Researchers, Software Developers, and Business Intelligence Analysts. Industries like Healthcare, Finance, Automotive, E-Commerce, and Technology heavily seek Al and ML expertise.

#### WHY CHOOSE AIML?

- Focus on cutting-edge Al, Data Science, Machine Learning and deep learning techniques like neural networks, natural language processing (NLP), and computer vision.
- Collaboration with tech giants and research labs for innovative ML solutions.
- Subjects covered during the program includes E-Monitoring for healthcare, Statistical Foundation and Machine Learning,
   Predictive Analytics, Big Data & IoT in Healthcare, AI in Clinical Applications, etc.

### INTAKE: 60

#### **ABOUT THE COURSE**

B.Tech in Computer Science and Design is an interdisciplinary program that combines core Computer Science education with elements of design thinking and user experience. It equips students with skills in Programming, Software Development, Data Structures, Algorithms, and System Design while also emphasizing the importance of Human-Centered Design, Visual Aesthetics, and Interaction Design.

### WHY CHOOSE CSD?

- Unique blend of computer science and UI/UX design principles.
- Specialization in human-computer interaction (HCI) and front-end technologies.
- Strong career prospects in game development, web design, Block Chain, Cyber Security and interactive systems.
- Opportunities in AR/VR, multimedia, and digital product development.
- Subjects covered during the program includes Cybersecurity, AI Applications in Medical Imaging, IOT for Healthcare, NLP for Health Related Text, Management of Information in Healthcare, etc.

# B.Tech. in COMPUTER SCIENCE & MEDICAL ENGINEERING

INTAKE: 60

### **ABOUT THE COURSE**

**B.Tech in Computer Science & Medical Engineering** is an interdisciplinary program that merges principles of computer science with medical and healthcare applications. Students in this program learn to develop and apply software, algorithms, and computational techniques to solve problems in medical research, diagnostics, treatment, and healthcare management.

### WHY CHOOSE CSME?

- Interdisciplinary Curriculum Integrating Healthcare and Technology enabling students to develop cutting-edge solutions for healthcare challenges such as medical imaging, diagnostics, and healthcare data analytics.
- Industry-Oriented Skill Development with Research Focus on hospitals and healthcare tech companies, preparing them for real-world applications in medical technology and computational healthcare. Career prospects in healthcare and IT industries.
- Subjects covered during the program includes Human Anatomy and Physiology, Biomaterials and Tissue Engineering, Medical Imaging, Health Informatics, Internet of Things, AI for Neurology, etc. Industry-Oriented Skill Development with Research Focus on hospitals and healthcare tech companies, preparing them for real-world applications in medical technology and computational healthcare.
- Equipped with advanced labs for AI in healthcare, biomedical signal processing, and medical device development, the department fosters innovation and practical learning to create impactful solutions for the medical field.
- Graduates are well-prepared for careers in HealthTech, AI-based diagnostics, medical robotics, bioinformatics, and pharmaceutical technology.
- Career prospects in healthcare and IT industries.

# B.Tech. in COMPUTER SCIENCE & ENGINEERING

INTAKE: 60

### ABOUT THE COURSE

**B.Tech in Computer Science & Engineering** is an undergraduate program focused on the theoretical foundations and practical applications of computer science. The curriculum typically includes subjects like programming, algorithms, data structures, computer networks, software engineering, database management, artificial intelligence, and machine learning.

### WHY CHOOSE CSE?

- Core computer science fundamentals with exposure to advanced technologies.
- Versatile career opportunities in software development, cyber security, data analytics and cloud computing.
- Subjects covered during the program includes Cybersecurity, Game Designing, Computer Vision in Medicine, Biomedical Informatics, Microrobots and Nanorobots for Healthcare Practices, etc.

# M.Tech. in ARTIFICIAL INTELLIGENCE

INTAKE: 12

#### **ELIGIBILITY**

- The candidates must have obtained at least 50% marks at degree level (45% marks in the case of candidates belonging to the reserved category of Maharashtra State only) in the qualifying examination.
- Candidates must have passed a Bachelor's Degree in CSE/CT/IT/AIDS/AIML/ETC/ETRX ENGG.OR Equivalent branches.

### **ABOUT THE COURSE**

M.Tech - Artificial Intelligence & Data Science is an advanced and emerging specialization that addresses the growing demand for intelligent systems and data-driven solutions across industries. This program is meticulously designed to deepen expertise and develop research-oriented skills in the fields of Artificial Intelligence and Data Science. Our curriculum empowers postgraduates to become industry-ready professionals and innovators, capable of solving complex real-world problems using Al and data-driven technologies that are transforming the global digital landscape.

### WHY CHOOSE ARTIFICIAL INTELLIGENCE AND DATA SCIENCE?

- The program prepares experts to apply scientific methodologies from statistics, cognitive science, and computing to analyze structured and unstructured data for developing advanced systems.
- Students gain cross-disciplinary skills in machine learning, data science, cognitive science, human machine interactions, unlocking career opportunities in software, healthcare, e-commerce, climatology, and many more.

# M.Tech. in BIOMEDICAL ENGINEERING

**INTAKE: 12** 

### **ELIGIBILITY**

- The candidates must have obtained at least 50% marks at degree level (45% marks in the case of candidates belonging to the reserved category of Maharashtra State only) in the qualifying examination.
- Candidate must have passed a Bachelor's Degree in ETC / ETRX / ELECTRICAL / INSTRUMENTATION / BIOMEDICAL ENGG / BIOMEDICAL INSTRUMENTATION OR Equivalent branches.

### **ABOUT THE COURSE**

**M.Tech - Biomedical Engineering** combines engineering with medical sciences to develop innovative healthcare solutions, preparing students for advanced roles in research, healthcare, and biomedical industries.

#### WHY CHOOSE BIOMEDICAL ENGINEERING?

- Designed to introduce students to advancements in biological sciences and bio-technology for enhancing healthcare, medicine, and human life.
- Engineers and researchers develop medical devices and design procedures for efficient diagnosis, treatment, and disease management.
- The program integrates computer technology, core engineering, nanotechnology, bioscience, and bioengineering to drive innovation.
- Students gain cross-disciplinary skills in AI and genetics, expanding career opportunities in healthcare and related fields.







# MEMORANDUMS OF UNDERSTANDING (MOUS) – EXPANDING GLOBAL & NATIONAL COLLABORATIONS

At the Faculty of Engineering and Technology, DMIHER, Wardha. we collaborate with leading academic institutions and industry pioneers which enhance research, innovation, and experiential learning opportunities for students.

### **National MoUs**

12 national-level MoUs with Eminent institutions and organizations, including:



**MGIRI** 



VNIT



**IBM** 



Intel



Lenskart



Sports Science India



**InFED** 



**DEEP FACTS** 



**NEXT LEAP** 



**LEMON IDEAS** 

### **International MoUs**

Strengthening global outreach FEAT has signed 10 international MoUs with top universities across the world:



University of Nevada, USA



University of Wollongong, Australia



University of Sydney, Australia



Yeshiva University, USA



Kazan State University, Russia



University of Deusto, Spain



University of St Mark and St John, UK

# **VARIOUS CLUBS of FEAT**

**Artistry Troop Club** 

**Rhythmic Crew Club** 

Lensation Club

Literary Club

**Spring Field Club** 

Social Welfare & Organ Donation Club

Tech Warriors Club



IEEE CLUB

**CSI CLUB** 

**IETE CLUB** 

**ISTE CLUB** 

**GDG CLUB** 

C4GT CLUB

GeeksforGeeks

IdeaOrbit club



### A PERSPECTIVE THAT REPRESENTS EXCELLENCE

## » MR. AAHASH KAMBLE (B.Tech. - AIDS)



I, Aahash Kamble, am proud to be part of the Artificial Intelligence and Data Science Department at the Faculty of Engineering and Technology. This college imparts knowledge, teaches us life skills, and makes us socially responsible citizens. This college possesses experienced and talented faculty, good classrooms, laboratories, and a library. The relationship between faculties and students is cordial, allowing me to excel in my area of interest.

### » MS. RUCHIKA VAIDYA (B.Tech. - AIML)



It was a great experience studying at the Faculty of Engineering and Technology (FEAT), and it is a memory to cherish for a lifetime. My experience at FEAT has involved learning and grooming. The mentors at FEAT help us enhance our academic and interpersonal skills; I'm also thankful for the training and placement cells for providing a platform to improve our abilities and the opportunity to showcase them. Overall, it was a great experience at FEAT. In the last, I say, "THE World is here at the Faculty of Engineering and Technology.

# Eminent Alumni

## » MS. SNEHA PATLE (M.Tech. - AIML)



The M.Tech in Artificial Intelligence and Data Science (AIDS) program has been a transformative journey, offering a perfect balance of theory and hands-on learning. With expert faculty, industry collaborations, and cutting-edge labs, I gained deep knowledge in AI, machine learning, and big data analytics. The program provided opportunities for research, real-world projects, and industry exposure, enhancing my problem-solving skills. It helped me publish research papers and secure a rewarding job in the tech industry. I highly recommend this program to anyone passionate about AI and looking for a future-ready career in data science.

## » MR. MANGESH BUDHE (M.Tech. - AIML)



BDS, FICOI (USA), DISOI, FISOI Joint Secretary of Indian society of oral implantologists

I am Mangesh Budhe, a Biomedical Engineering postgraduate from the Faculty of Engineering and Technology. I excelled in merging engineering and medical science, with expertise in biomaterials, medical imaging, biomechanics, and bioinstrumentation. Through various projects and internships, I demonstrated strong analytical, creative, and problem-solving skills, along with effective communication and professionalism. I sincerely thank HoD BME Dr. Rajendra Rewatkar and Dean Dr. KTV Reddy for their invaluable support and guidance. I highly recommend this program to anyone passionate about Bio-medical Engineering.

# **Career Acceleration Opportunities at FEAT**

FEAT ensures strong career opportunities. Here are some top recruiters:











































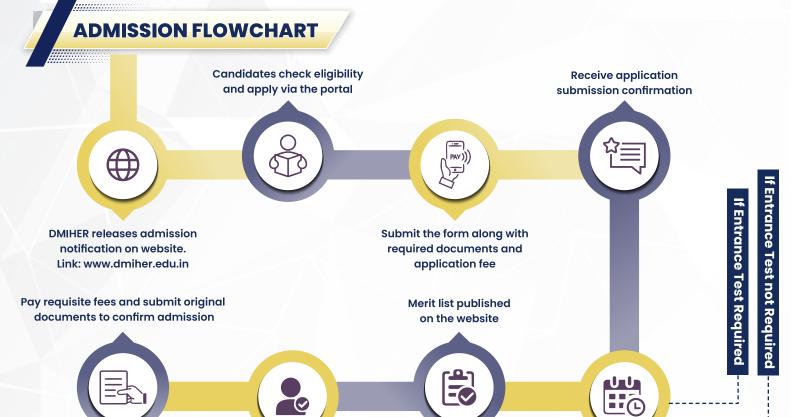




Candidate appears for

**DMIHER - CET** as per the schedule





**Shortlisted candidates** 

are informed



Scan to Apply!



**CONTACT US:** 

**Admission Cell** 

**8888040999** 

**Admission Counselor** 

**8262987437/8237840421** 

O DMIHER, Main Campus, Sawangi (Meghe), Wardha 442001

