

## Technocrats Institute of Technology (Excellence), Bhopal

# Newsletter

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## **About Us**

Technocrats Institute of Technology (Excellence) in Bhopal, Madhya Pradesh is a premier educational institution that has been imparting quality and value-based education for the past 16 years. Our vision is to establish ourselves as a center of excellence in engineering education in India, with global standards. Our institute is affiliated with Rajiv Gandhi Proudyogiki Vishwavidyalay, Bhopal for its engineering and management program ensuring that our students receive an education that is recognized nationwide. We are located in Anand Nagar on Raisen Road in Bhopal, which makes us easily accessible and convenient for students from all over central India. Our dedicated faculty and staff ensure that our students receive the best education, and we provide them with state-of-the-art facilities and resources that are essential for their academic and personal growth. We also encourage our students to participate in extracurricular activities and provide them with opportunities to develop their skills and talents. At Technocrats Institute of Technology (Excellence), we are committed to shaping the future of our students by providing them with a world-class education that is grounded in values and ethics.



#### Vision

To become a "Centre of Excellence" for quality education in the field of engineering, research and management so as to produce globally competent and socially responsible professionals, who can contribute to technological and socio-economic development of the nation as a whole and region in particular.

#### Mission

- M.1: To educate students with deep professional knowledge through innovative teaching-learning process and to make them aware of cutting-edge technology so as to become capable of understanding and addressing the issues of society, state and the country.
- M.2: To create in-house facilities for research and innovation to provide solution to the industrial problems.
- M.3: To inculcate right human values and professional ethics, leadership qualities, communication and entrepreneurship skills in students to meet the need of society.

# **Chief Minister Dr. Mohan Yadav Inspires Students**

The Institute was honored to host the esteemed Chief Minister of Madhya Pradesh, Dr. Mohan Yadav, during a memorable visit.

Dr. Yadav's inspiring address left an indelible mark on students and faculty alike, igniting aspirations and motivating all to strive for excellence. His visionary insights and words of wisdom provided invaluable guidance, reinforcing the institution's mission to shape future leaders.



### **International Yoga Day Celebrated**

Technocrats Institute of Technology (Excellence), in collaboration with its NSS Unit, celebrated International Yoga Day with great enthusiasm. The event was graced by a team from Sahaja Yog, who conducted a transformative self-awakening session.

Students and faculty members actively participated, learning and practicing meditation techniques aimed at fostering self-realization and inner peace. The program concluded on an insightful note with a dynamic question-and-answer session, leaving the participants enlightened and inspired.



## LoU with REACHA (IBM SkillsBuild)

Technocrats Institute of Technology (Excellence), Bhopal, has partnered with REACHA, the Country Partner for IBM SkillsBuild, through the signing of a Letter of Understanding (LoU).

This collaboration opens doors for students to access advanced digital learning platforms, helping them develop industry-relevant skills. Participants can earn globally recognized IBM certificates and certified badges, significantly boosting their professional profiles. Additionally, the platform provides valuable opportunities to explore career prospects and connect with potential employers.



## **NSS Day Celebration**

NSS Day was celebrated by the NSS Unit of Technocrats Institute of Technology (Excellence). The NSS team participated in 10 Km Marathon and 1.5 Km conducted at TT Nagar Stadium.

The program was dedicated to AIDS awareness in the society and organized under patronage of NSS Central unit of Barakatullh University for celebrating "NSS Sthapana Diwas " in the gracious presence of Hon'ble Vice Chancellor (BU), Dr. S. K. Jain, Dr. Anant Kumar Saxena, Nodal Officer NSS, BU, Mr. Rahul Singh Parihar, Open Unit Officer, NSS BU and Program Officers from different Universities/Colleges/Institutions.



## NCC Cadets Celebrate 75th NCC Day with Grandeur

In a grand celebration at Motilal Nehru Stadium, the NCC cadets of Technocrats Institute of Technology (Excellence) commemorated the 75th NCC Day on November 25th. The event was graced by the esteemed presence of the Hon'ble Governor of Madhya Pradesh, Shri Mangu Bhai Patel, as the chief guest.

The celebrations featured a spectacular ceremonial parade accompanied by a vibrant band performance. The cadets also enthralled the audience with mesmerizing regional folk dances and an impressive display of warfare tactics, showcasing their dedication and skill.





## NSS Volunteers Spread Voter Awareness through Nukkad Natak

The NSS Volunteers of Technocrats Institute of Technology (Excellence) delivered a compelling Nukkad Natak on voter awareness on 6th November 2023, capturing the attention of the public at a prime location in MP Nagar, Bhopal.

This thought-provoking street play highlighted the significance of voting in shaping a better society. Through powerful performances and impactful messaging, the volunteers inspired the audience to fulfill their civic responsibilities and participate actively in the democratic process.



#### **Christmas Celebrations**

Technocrats Institute of Technology (Excellence), embraced the festive spirit with joyous **Christmas Day celebrations**.

The highlight of the day was the cheerful presence of Santa Clauses, who spread the joy of Christmas, filling the campus with happiness and festive cheer. Their lively antics and heartfelt gestures made the occasion even more memorable for students and staff alike.



## **Department of Computer Science** & Engineering

#### Vision of the Department

To produce technically and ethically competent, socially responsible and innovative Computer Science & Engineering professionals through quality education, who can contribute to techno and socioeconomic development of the nation as a whole and region.

### Mission of the Department

M1: To create an academic ambience for achieving academic excellence by imparting in depth. Domain knowledge to the students through effective teaching learning, conceptual and practical exposure with the latest tools and technologies.

M2: To provide an environment & opportunity for students to utilize their potential and technical skills required for overall development through collaborative and professional development activities.

M3: To inculcate innovative research skills, promote professional ethics & entrepreneurship skills amongst the students to cater to the needs of Society.

#### **Program Educational Objectives (PEOs)**

PEO1: Graduate will become an established professional in the field of Computer Science & Engineering and related fields.

PEO2: Graduates will acquire a well-built foundation to pursue higher studies and research.

PEO3: Graduates will be able to inculcate effective communication skills, teamwork, ethics and leadership skills required to become an innovative and successful entrepreneur.

#### **Program Specific Outcomes (PSOs)**

PSO1: Graduate will develop ability to design and develop computerbased applications of moderate complexity in the areas of database system, web technology and machine learning.

PSO2: Graduates will be able to apply standard software project management practices and methods to deliver quality projects.

PSO3: Graduates will be able to analyze and develop cost effective algorithms for real time engineering/social applications.

#### Session on "Tips to Crack SAP Labs"

A highly insightful session titled "Tips to Crack SAP Labs" was organized on 10 July 2023.. The session was conducted by Prashant, a distinguished alumnus from the 2023 batch and a proud SAP Labs selectee.

With an impressive turnout of over 600 students, the session provided aspiring candidates with invaluable guidance on excelling in SAP Labs campus placements. Prashant shared expert tips on enhancing technical skills, gaining proficiency in SAP technologies, refining soft skills, crafting impactful resumes, and acing interviews.



# **Department of CSE-Artificial Intelligence & Machine Learning**

#### Vision of the Department

To equip students with the skills and knowledge needed to become leaders in AI and ML, fostering innovation in the industry and creating a positive societal impact through advanced technologies.

#### Mission of the Department

M.1: To build a strong foundation in Artificial Intelligence and Machine Learning, empowering students to tackle real-world challenges with innovative solutions.

M.2: To develop resilient professionals by encouraging them to create applications for industry innovation.

M.3: To foster a research-driven mindset in students, inspiring them to develop practical applications that contribute positively to society.

#### **Program Educational Objectives (PEOs)**

PEO1: Apply appropriate theory, practices, and tools of machine intelligence to the specification, design, implementation, maintenance, and evaluation in the workplace or in higher education.

PEO2: Adapt, contribute and innovate new technologies in their computing profession by working in teams to design, implement, and maintain in the key domains of Artificial Intelligence & Machine Learning.

PEO3: Function effectively in the work place as competent Artificial Intelligence & Machine Learning Professionals, Entrepreneurs or Researchers or maintain employment through lifelong learning such as professional conferences, certificate programs or other professional educational activities, ethics, and societal awareness.

#### **Program Specific Outcomes (PSOs)**

PSO1: The ability to understand, analyze, and develop computer programs across diverse areas such as algorithms, system software, multimedia, web design, big data analytics, and networking, enabling the efficient design of complex computer-based systems.

PSO2: The ability to understand the evolution of computing, apply best practices in software project development, and utilize openended programming environments to deliver high-quality solutions that address real-world challenges, drive business success, and meet future demands.

PSO3: The ability to leverage modern programming languages, environments, and platforms to create innovative career opportunities, pursue entrepreneurship, engage in lifelong learning, and foster a passion for advanced studies, while also instilling moral values and ethics to nurture responsible citizenship.

## Two-Day Workshop on IoT Smart Things Technology

The Department of Computer Science and Engineering - AIML successfully organized a two-day workshop on 'IoT Smart Things Technology' for second- and third-year students.

The workshop was led by **Mr. Abhigyanam Giri** from Indeyes Technology, who began the session by introducing the Internet of Things (IoT) as the next revolution of the internet. The sessions explored the rapidly growing machine-to-machine connectivity and its transformative impact across industries.



# Department of Electrical & Electronics Engineering

### Vision of the Department

To impart quality education in various fields of engineering, technology & management and to develop the institute into a center of academic excellence.

#### Mission of the Department

To mold the students into competent technocrats to become professionally skilled, intellectually adept and socially responsible, to contribute to society through quality teaching and providing the conducive learning environment.

### **Program Educational Objectives (PEOs)**

PEO 1: Graduates will become established professionals in the field of Electrical & Electronics Engineering and related fields with sound ethical values.

PEO 2: Graduates will demonstrate all necessary engineering and scientific competence to become an entrepreneur in the field of Electrical & Electronics Engineering and allied fields considering social and environmental issues.

PEO 3: Graduates will possess a solid foundation in the field of Electrical & Electronics Engineering to be applied in their higher studies and research.

#### **Program Specific Outcomes (PSOs)**

PSO 1: Graduates will show ability to analyze, design, and implement electrical machines, power electronics, instrumentation, control systems for the overall electrical power system.

PSO 2: Graduates will show the ability to apply appropriate techniques and modern engineering hardware and software tools in power systems and power electronics in the field of Electrical & Electronics Engineering.

PSO 3: Graduates will show ability to

#### **Expert Lecture on EMI Shielding Techniques**

Department of Electrical and Electronics Engineering empowered electromagnetic interference (EMI) shielding techniques.'

Lecture was delivered by Dr. Ravi Yadav, faculty of Electrical Engineering and Computer Science, Israel Institute of Technology, Haifa Israel.

Around 100 students participated and learned about EMS applications in Defence Research and Execution.



### Industrial visit on at 220KV substation Govindpura

Department of Electrical Engineering, Technocrats Institute of Technology (Excellence), Bhopal, organized an industrial visit on 22 October 2023 at 220KV substation Govindpura.

Mr. S.L Tiwari (Substation Incharge) explained about working of LA, Isolator, CT, PT, Circuit Breaker, Transformer.

Mrs Pushpa Phate (Control Room Incharge) explained about different types of relays, Control & Signal cabling, Bus switching and SCADA networking etc.

34 students from III and V semester participated and got practical exposure in monitoring and control of substation and feeder.



## **Department of Electronics** & Communication Engineering

### Vision of the Department

To become a "center of excellence" in the field of Electronics and Communication Engineering by transforming the students into competent professionals with high ethical values and fulfilling societal needs.

#### Mission of the Department

M.1: To create an academic ambience for achieving academic excellence and producing competent graduates through effective teaching learning process.

M.2: To provide exposure of modern tools and cutting-edge technologies in the field of Electronics and Communication Engineering.

M.3: To develop adequate and appropriate facilities and provide an environment to stimulate multidisciplinary interaction.

M.4: To enhance employability by inculcating problem-solving abilities, team spirit, leadership qualities and professional ethics.

#### **Program Educational Objectives (PEOs)**

PEO 1: Graduates will become established professionals in the field of Electronics and Communication Engineering, software development and other related fields, who are adaptable in any environment and can practice the ethics of their professions, consistent

with a sense of social responsibility.

PEO 2: Graduates will possess all necessary engineering and scientific competence to become an innovative entrepreneur in the fields related to Electronics and Communication Engineering and allied disciplines, with due consideration to social and environmental issues.

PEO 3: Graduates will continue to develop professionally through lifelong learning, higher studies and research expertise in multidisciplinary areas to meet the expectations of their organization and society.

#### **Program Specific Outcomes (PSOs)**

PSO1: Graduates will be able to solve complex engineering problems and propose solution in the field of electronics and signal processing as per industry requirement.

PSO2: Graduates will be able to design and develop solutions for the realistic problems of society using VLSI and embedded systems.

PSO3: Graduates will adapt modern tools and technology to develop wireless communication projects in context of societal need and environment issues.

#### **Alumni Interaction Program**

The Department of Electrical & Electronics organized an engaging Alumni Interaction Program, bringing together current students and distinguished alumni.

The event, attended by second- and third-year students, featured inspiring talks by prominent alumni from the 2019-2023 batch:

- Santosh Kumar Jha, Senior Software Engineer, HCL Software
- Aditi Bisen, Software Engineer, Capgemini
- Abhishek Kumar, SSPL Applications Engineer, DRDO Delhi

The alumni shared their experiences of life after college, offering valuable insights on career preparation, including both technical and non-technical aspects. The session provided a platform for intellectual exchange and strengthened the bond between current students and alumni, reinforcing the institute's dedication to community growth and success.



## **Department of Civil Engineering**

### Vision of the Department

To develop technically competent and socially responsible Civil Engineering professionals with up-to-date knowledge and innovative ideas for contributing in techno and socio-economic development of the country as a whole and region in particular.

#### Mission of the Department

M1: To achieve academic excellence in Civil Engineering by imparting in-depth technical knowledge to the students through conceptual

and practical exposure on latest tools and technologies.

M2: To provide an environment & opportunity for students to grow and bring out their inherent talents for their overall development through collaborative and professional activities and prepare them for lifelong learning in global perspectives.

#### **Program Educational Objectives (PEOs)**

PEO 1: Graduate will become an established professional in the field of Civil Engineering and related fields with proven teamwork and leadership records in their workspace and the society.

PEO 2: Graduate will continue to develop professionally through lifelong learning, higher studies and research expertise in multidisciplinary areas to meet the expectations of their organization and the society.

PEO 3: Graduate will possess all necessary engineering and scientific competence to become an innovative entrepreneur in the fields related

to Civil Engineering and allied disciplines, with due consideration to social and environmental issues.

PEO 4: Graduate will be able to adapt any environment and practice the ethics of their professions, consistent with a sense of social responsibility.

#### **Program Specific Outcomes (PSOs)**

PSO 1: Graduates will be able to apply the knowledge of analysis and design to cater the infrastructural need of the society in Structural, Hydraulic, Transportation and Irrigation related fields.

PSO 2: Graduates will be able to execute quality construction work within the stipulated period of time and resources with due consideration of energy conservation and surrounding ecology.

PSO 3: Graduates will be able to plan and execute civil engineering projects applying relevant codes of practice for materials and techniques.

# Department of Mechanical Engineering

#### Vision of the Department

To become a center of excellence in the field of Mechanical Engineering by enabling students to attain domain knowledge, lifelong learning skills and ethical values to serve the nation.

#### Mission of the Department

M1: To create an academic ambience through competent faculty and encouraging multidisciplinary interaction.

M2: To establish state of the art infrastructure facilities that will pave the dissemination of technical knowledge in the field of Mechanical Engineering.

M3: Exposing students to new tools and technologies of Mechanical Engineering.

M4: Providing an environment to actively participate in enhancing problem solving and leadership qualities and team spirit.

#### **Program Educational Objectives (PEOs)**

PEO 1: Graduates will become an established professional in the field of Mechanical Engineering and related fields with sound ethical values.

PEO 2: Graduates will demonstrate all necessary engineering and scientific competence to become an entrepreneur in the field of Mechanical Engineering and allied fields considering social and environmental issues.

PEO 3: Graduates will possess a solid foundation in the field of Mechanical Engineering to be applied in their higher studies and researches.

#### **Program Specific Outcomes (PSOs)**

PSO1: Graduates will be able to apply knowledge of Mechanical Engineering for analyzing and designing projects in the fields of Thermal, Industrial and Production engineering.

PSO2: - Graduate will design and develop Mechanical Engineering projects concerning environment, energy conservation and safety.

PSO3: Graduates will be able to plan and execute Mechanical Engineering projects applying relevant codes of practice materials and techniques.



Awarded "Best Placement Institute in Central India" by Shri Dr Sukanta Majumdar Ji, Hon'ble Minister of State for Education, Government of India at The EduMeet & Excellence Awards 2024 hosted by ASSOCHAM

### **Program Outcomes**

- PO 1 Engineering Knowledge
- PO 2 Problem Analysis
- PO 3 Design/Development of Solutions
- PO 4 Conduct Investigations of Complex Problems
- PO 5 Modern Tool Usage
- PO 6 The Engineer and Society

- PO 7 Environment and Sustainability
- PO 8 Ethics
- PO 9 Individual and Team Work
- PO 10 Communication
- PO 11 Project Management and Finance
- PO 12 Life-long Learning.

#### Correspondence Address:

#### Director

## **Technocrats Institute of Technology (Excellence)**

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