Since 2012

June - July 2024 | Vol. XI Issue 09

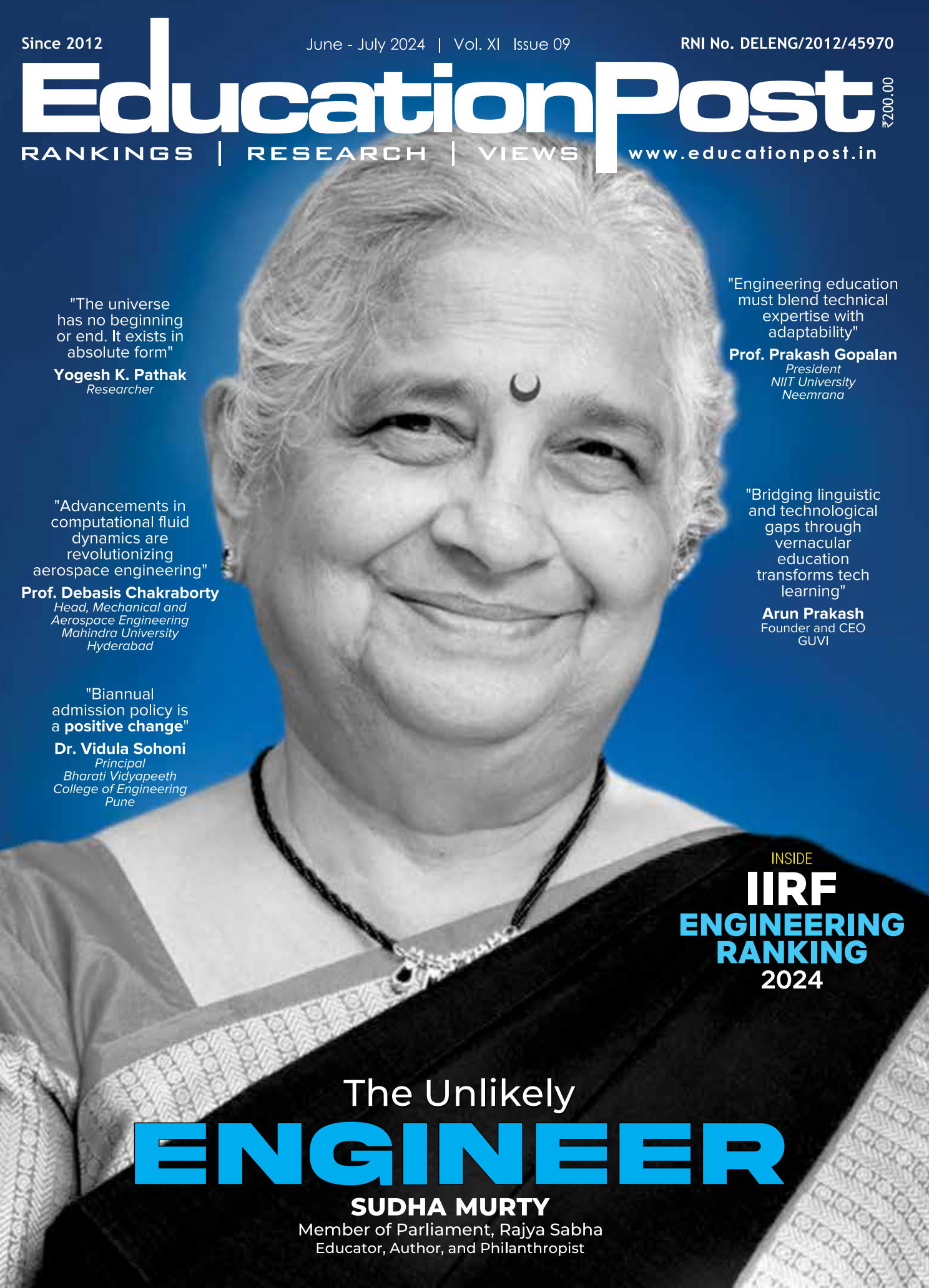
RNI No. DELENG/2012/45970

EducationPost

₹200.00

RANKINGS | RESEARCH | VIEWS

www.educationpost.in



"The universe has no beginning or end. It exists in absolute form"

Yogesh K. Pathak
Researcher

"Engineering education must blend technical expertise with adaptability"

Prof. Prakash Gopalan
President
NIIT University
Neemrana

"Advancements in computational fluid dynamics are revolutionizing aerospace engineering"

Prof. Debasis Chakraborty
Head, Mechanical and Aerospace Engineering
Mahindra University
Hyderabad

"Bridging linguistic and technological gaps through vernacular education transforms tech learning"

Arun Prakash
Founder and CEO
GUVI

"Biannual admission policy is a **positive change**"

Dr. Vidula Sohoni
Principal
Bharati Vidyapeeth College of Engineering
Pune

The Unlikely ENGINEER

SUDHA MURTY
Member of Parliament, Rajya Sabha
Educator, Author, and Philanthropist

STUDY ABROAD
INDIA'S DILEMMA

Too many Indian students are choosing to study overseas these days. And the trend is rattling India.

The concern was evident from Prime Minister Narendra Modi's recent Independence Day address. "We want to build such an education system in India that youngsters do not need to go abroad. In fact, we would want foreign students to come here and study," he said.

India is aiming to have at least 5 lakh international students studying in the country by 2047. Currently, the figure stands at 47,000, with most of the foreign students coming from South Asian countries like Bangladesh, Afghanistan and Nepal.

On the other hand, over 13 lakh Indian students are studying abroad in 2024, a large number of them for medical education.

"Every year, around 25,000 youths move to other nations for medical education. Some students move to such countries (China, the Philippines, Kazakhstan Georgia, Kyrgyzstan, Poland), which makes me worry a lot. So, we have decided that in the next five years, 75,000 new seats will be created in medical colleges in India," Modi said in his speech at the Red Fort in New Delhi.

"Even today, children, mostly belonging to the middle class, are going abroad for medical education. The spend lakhs and crores on medical education abroad," he said.

"We have expanded the health infrastructure by sanctioning an increase in the number of hospitals. We have also announced an increase in the number of MBBS seats in medical colleges so that out children can fulfil their dream of serving the nation as doctors," the PM added.

But experts are of the opinion that it is not the quality of education in India that makes Indian students want to study abroad.

"I feel lack of quality education is not the main reason why Indians study overseas. Some aspiring for top brands or those aiming at research at ranked universities are always there. The majority if students use overseas education as a pathway to work and settle overseas. So, what India needs to work on is to create more and more jobs and employment opportunities suiting all disciplines," Ravi Lochan Singh, managing director of Global Reach, was quoted as saying in The Pie website.

India's former health secretary Sujatha Rao warned the Indian government against any "knee-jerk responses."

"Even AIIMS-like institutions are struggling to get their posts filled and have good faculty. So, opening colleges or increasing seats without the accompanying infrastructure and budgets could be counterproductive," she told The Print.

"What is urgently needed is a more clear and nuanced strategy for addressing the issue of shortages of HR in the medical system. No knee-jerk responses," Rao said.

Rohit Wadhwaney
Managing Editor
rohit@theeducationpost.in
rohit.wadhwaney@gmail.com

EducationPost
RANKINGS | RESEARCH | VIEWS www.theeducationpost.in

Vol. XI Issue 09 | June - July 2024

EDITOR-IN-CHIEF
Shiv S. Sharma

MANAGING EDITOR
Rohit Wadhwaney

SENIOR CORRESPONDENT
Fatima Zohra Hasan, Prabhav Anand

CORRESPONDENT
Masoom Khare, Pragya Kumari

ART & GRAPHICS
Brij Mohan Singh

PHOTO
S.P. Singh

HEAD OF MARKETING
Ravi Kumar R.V. (South) +91-9972529721
Rakesh Bhat (West) +91-7303132697

BUSINESS STRATEGIES, PROJECT ALLIANCES & EVENTS
Ankita Yadav (North & East)
+91-9871823833

DATA & RESEARCH
Maction Consulting

IT SUPPORT
Ajay Kumar Singh, Kailash C. Bhakta, Varsha Kushwaha, Ramdeo Kumar, Sabir, Dushyant Singh, Shadab

ADMIN. & CIRCULATION
Md. Azharuddin Ansari
+91-9312332433

SAT SUKRIT MEDIA PVT. LTD.
Registered Office
Flat No. 103, UGF, Plot No. G-84, Sector-7,
Dwarka, New Delhi-110077 Phone: 011-25086952

Editorial & Marketing Office
B-212, 2nd Floor, Ansal Chambers-1 (Above SBI Bank)
Bhikaji Cama Place, New Delhi-110066.
Phone: +91-11-45604578

Advertisement / Circulation / Subscription Enquiries
B-212, 2nd Floor, Ansal Chambers-1 (Above SBI Bank)
Bhikaji Cama Place, New Delhi-110066.
Phone: +91-11-45604578, 9312332433, 9818539997
E-mail: shiv@theeducationpost.in

Advisory Support
FWA
FEDERATION FOR WORLD ACADEMICS
www.fwainternational.org

Write Back
letter@theeducationpost.in

Printed and Published by Shiv Shankar Sharma on behalf of SAT SUKRIT MEDIA PVT. LTD.
Printed at All Time Offset Printers, F-406, Sector-63, Noida-201301
and
published from Flat No. 103, UGF, Plot No. G-84, Sector-7, Dwarka, New Delhi-110077

CONSULTING EDITORS

CONTENTS

ICICI Bank

TAKE A LEAP

TOWARDS YOUR DREAMS

Tie up with premium institutes

Seamless remittance to international institutes

Flexible repayment options

Loan of up to ₹ 2 crore

Save Income Tax under section 80E on interest paid

0.5% TCS (Tax Collected at Source) on remittance through Education Loan

To know more,
SMS <ELOAN> to <5676766>
or **SCAN THE QR CODE**

T&Cs.

ICICI Bank

CAMPUS POWER
For a bright future

Scan the QR code OR Visit www.icicibank.com/campus-power

For more information, please contact our Branch Executive.

Terms & Conditions of ICICI Bank and third parties apply. | ICICI Bank is not responsible for third party products, goods, services, and offers.

MAVERICK MURTY

THE STORY OF A WOMAN WHO DEFIED ALL ODDS TO BECOME AN 'ENGINEER IN A MAN'S WORLD'

From her younger days, Sudha Murty has broken gender barriers and helped pave the way for women in the field of STEM. Apart from being the first female engineer to be hired at TATA Engineering and Locomotive Company (TELCO), her extensive philanthropic initiatives and literary works are an inspiration for today's generation as well.

Fatima Zohra Hasan
Sr. Correspondent, Education Post

Calling **Sudha Murty,** 'a woman of steel' is a close enough descriptor of what she's made of — immense strength, unbeatable resilience and indestructible courage — as those are the traits which allowed her to tread on the path where only men had the right to walk.

Murty, who dons several hats including that of an educator, author, philanthropist, and now Rajya Sabha MP, started her string of successes by enrolling into an engineering college.

Born on August 19, 1950, Murty hailed from a traditional background, where pursuing engineering as a woman was met with skepticism. Murty's father was a professor of obstetrics and gynecology at Karnataka Medical College at Hubli, and her mother was a schoolteacher before she got married.

She finished her pre-university exams with excellent marks and expressed her desire to pursue engineering. Engineering had always fascinated her as she believed she would be able to utilize her design skills. Despite belonging to educated parents, the immediate reaction of her conservative south Indian Brahmin family was that of shock, as engineering was seen as an all-male domain, and girls thinking to pursue such a profession was considered taboo. But, Murty remained undeterred and went on to excel academically, earning a gold medal for her outstanding performance in engineering.

In a podcast with the founder of Myntra and Cult, Mukesh Bansal, Murty recalled that at 17 years when she applied for engineering, it was unheard of in her town.

Recalling those days, Murty said, there were no toilets for women in her college, likely because they never imagined a woman to pursue and complete engineering and so never thought of putting up toilets.

"I was the only girl in my university in my class. They did not build toilets. I said it does not matter. I will not drink water from 7 am-12 pm.

Then I would walk back home, use the restroom, have lunch and then would be in the lab from 2 pm to 5 pm," she said.

Before enrolling in college, she had other challenges at hand in her community and family. Her grandmother dissuaded her from pursuing engineering, with some even thinking that there was something wrong with her brain. She said that women were "extremely good at cooking but not adventurous."

"They were very traditional people. People thought there was something wrong with my brain. How can a girl do engineering? Everybody had their own reasoning," she recalled.

Murty also said that many at the time tried to talk her out of it because women with engineering degrees were unlikely to find a good husband.

"My grandmother said you should not do engineering because nobody will marry you in our community, in our area. My mother said you should become a mathematics professor so that you can manage your house as well as your career. Everybody had a different idea," she said.

Even her college didn't believe how a woman would complete a degree in engineering, Murty said.

Recalling her college days, Murty said that in her four years of pursuing the engineering degree, she did not take any leaves. "I never took one day off in four years because I didn't want to ask for notes from anybody. Then I thought if I didn't put 100 per cent, nobody would put any per cent in me. I have to work very hard. So, the great philosophy in life is that if I want something, I should work for it. I should not depend on anyone," she said.

In her book 'Three Thousand Stitches', there's a chapter called 'How to Beat Boys' where she recounts the hurdles she faced being the only girl student at BVB College of Engineering and Technology.

"They would throw paper aeroplanes at my back. Unfolding the papers, I would find comments such as, 'A woman's place is in the kitchen or medical science, or as a professor, definitely not in an engineering college'," she had said in one of her interviews.

In the book, she also shares a detailed account of being the center of attraction in college. When exam results were announced in the college, all eyes were on her and everyone knew her marks before she did. In fact, she says that her marks were displayed on a notice board for everyone to see. Although she had no privacy, beating all the boys at their own game made her feel good, she says in the book.

Despite her challenges, Murty said her father supported her. "My father said come what may, I will support you as long as you are legally and ethically right," she said.

She completed her BEng degree in Electrical and Electronics Engineering from Basappa Veerapa Bhoomaraddi College of Engineering and Technology in Hubli, Karnataka (now KLE Technological University)

and her MEng in Computer Science from the Indian Institute of Science.

After completing her master's degree, Sudha Murty started preparing for her Doctorate of Philosophy abroad. However, fate had something else planned for her. Known to take challenges head-on, Murty saw an advertisement from TELCO (now Tata Motors) for an opening, but with a disclaimer that read, "Female candidates need not apply." She was offended by the advertisement and decided to write a letter to JRD Tata. Surprisingly, JRD Tata replied after ten days and she was invited for an interview with her trip sponsored by Tata.

She went on to become the first female engineer to be hired at Tata Engineering and Locomotive Company (TELCO) in Pune, which is where she met her husband Narayan Murthy — co-founder of Infosys — whom she married in 1978 while still working at TELCO.

Murty said she believes that the world belongs to someone who aspires to get what they want and so she did exactly that.

"I also understood something at a very young age — maybe 19 or 20 — which later became my mantra and I realized was a great philosophy – 'You want to do anything in life? You are all alone, and you must do it all alone. If you want to do bad in life, you are responsible. You have bad habits, you are responsible. Good things? You are responsible.' Later on in life, I realized it is the essence of Bhagavad Gita. You are your best friend and your worst enemy," she said.

Murty's entrepreneurial skills are another facet of her exemplary personality. In 1982, when her husband began Infosys, she supported him with monetary help. A visionary herself, Murty had saved some funds for emergencies which she gave to her husband to start the business. It was her initial support and encouragement that helped him get the company to where it is today.

A girl brought up in a middle-class family in Hubli, Karnataka, Murty, never gave up on her dreams. Besides being the first woman in India to study Mechanical Engineering, she went on to establish India's renowned IT services company Infosys with her husband Narayana Murthy.

Murty, who is in her 70th decade of her life, has become a youth icon and shares several anecdotes from her life on TV and social media which are inspiring in more ways than one. Her honest, humble and motivating takes on life have garnered her quite a following from the youth.

Sudha Murty is a trailblazer in her own right. A prolific author, Murty's skill of story-telling can be credited to her mother who asked her to write essays of 25 lines daily or she wouldn't get dinner. She has written several children's books and has made significant contributions to Kannada and English literature. Her book "How I Taught My Grandmother to Read" has sold over 1 lakh copies.

Last year, her works were showcased as an animated series on Netflix, — Story Time with Sudha Amma— featuring 52 stories penned by Murty which includes Grandma's Bag of Stories, Grandparents' Bag of Stories, and The Magic Drum among others.

The series is available in six languages– Hindi, English, Marathi, Kannada, Tamil, and Telugu, with each episode 11 minutes long. The show was also streamed on Murty Media's YouTube channel.

Besides being honored with the Sahitya Akademi Bal Sahitya Puraskar, she has also received Padma Shri (2006), and the Padma Bhushan (2023). This year, she was nominated to the Rajya Sabha by President Droupadi Murmu.

Through her philanthropic works at Infosys Foundation, Murty has built over 2,300 houses for people affected by floods, more than 16,000 toilets and over 60,000 school libraries in rural India. She has also launched initiatives like "The Mahila Samakhya Program" for women's education and empowerment in rural areas, especially those who belong to socially and economically marginalized communities.

ADVANCEMENTS IN COMPUTATIONAL FLUID DYNAMICS ARE REVOLUTIONIZING AEROSPACE ENGINEERING

Prof. Debasis Chakraborty, Head of Mechanical and Aerospace Engineering at Hyderabad's Mahindra University talks to Education Post's **Prabhav Anand** about the significance of integrating theoretical knowledge with practical applications in aerospace education. Prof. Chakraborty highlights the challenges of high-speed flows and combustion in missile design and the evolving role of computational fluid dynamics (CFD) in aerospace engineering. "Understanding and predicting complex physico-chemical processes in high-speed flows is crucial," he noted.

Q Given your experience with launch vehicles and missile design, what do you consider the most challenging aspect of working with high-speed flows and combustion?

As per my experience in launch vehicles and missile design, I find the most challenging aspect of working with high-speed flows and combustion is to understand the fundamental aspects of complex physico-chemico process involved in theses flows and achieve capabilities to predict the flow features accurately in the design environment. Rocket and missile motions in the atmosphere encounters very high speed flows including hypersonic (vehicles moves more than five times speed of sound) which involve complex interactions of aerodynamics, structural and thermal problems simultaneously. Development of a numerical framework for the design optimization in theses extreme conditions is a formidable challenge.

Combustion is another challenging problem in aerospace propulsion design. Different physical and chemical processes are at play for solid and liquid propellants. Fluid flow and chemical kinetics interact very strongly in high speed flows and very little is known about the accurate modelling of turbulence chemistry interaction. Moreover, the interaction between fuel injection, mixing, ignition, and combustion in high-speed environments poses significant challenges for the aerospace propulsion designers. Any instability or inefficiency in combustion can lead to performance degradation or mission failure. Therefore, designing propulsion systems that can reliably operate under these conditions while maximizing thrust and efficiency is paramount.

Furthermore, integrating advanced computational fluid dynamics (CFD) simulations and experimental validation becomes crucial in predicting and optimizing flow dynamics and combustion processes. Continuous research and development efforts are essential to overcoming these challenges and pushing the boundaries of high-speed propulsion technology.

Q With advancements in computational fluid dynamics (CFD), how do you see its role evolving in the future of aerospace engineering?

With advancements in computational fluid dynamics (CFD), its role in aerospace engineering is poised for significant evolution. The advent of powerful computers and advanced numerical algorithms has revolutionized aerodynamic and propulsion design globally. In India, aircraft, launch vehicle, and missile designers increasingly rely on CFD techniques to accurately predict aerodynamic and propulsion parameters during the design phase. While experimental testing remains essential, CFD has reduced dependency on such tests and emerged as a crucial tool in aerospace vehicle design.

Looking ahead, CFD is expected to further enhance its capabilities in simulating complex flow phenomena and optimizing designs with higher fidelity. This includes improving accuracy in predicting aerodynamic forces, heat transfer rates, combustion characteristics, and structural interactions. The ability to simulate and analyze these aspects in a virtual environment allows for iterative design improvements and faster development cycles.

Moreover, CFD's role will likely expand into new frontiers such as hypersonic flight, space exploration, and unmanned aerial systems (UAS), where understanding and controlling fluid dynamics at extreme conditions is paramount. Continued advancements in CFD methodologies and computational power will undoubtedly shape the future of aerospace engineering, driving innovation and efficiency in vehicle design and performance optimization.

Q How does Mahindra University integrate theoretical knowledge with practical applications in your teaching, especially in courses like Aerodynamics and Flight Mechanics?

Mahindra University integrates theoretical knowledge with practical applications seamlessly in courses like Aerodynamics and Flight Mechanics, ensuring students receive a comprehensive education in Aerospace Engineering. The university leverages its conducive academic environment and faculty expertise, many of whom have substantial R&D backgrounds in leading aerospace organizations. Faculty members actively teach core subjects such as Aerodynamics, Propulsion, and Structures, vital to aerospace engineering, while the institution's state-of-the-art computing facilities and experimental setups, including wind tunnels, enhance practical learning experiences.

IN DEPTH **INTERVIEW**

Recognizing the growing demand and opportunities in aerospace engineering in India, Mahindra University will launch an undergraduate program in Aerospace Engineering starting in the fall of 2024. The curriculum has been meticulously designed in collaboration with experts from academia, research institutions, and the aerospace industry to meet industry standards and academic rigor. This initiative underscores the University's commitment to preparing students with both theoretical insights and hands-on skills essential for thriving careers in aerospace engineering.

Q What advice would you give to students aspiring to specialize in Aerospace Engineering, particularly in the areas of high-speed flows and propulsion?

For students aspiring to specialize in Aerospace Engineering, particularly in high-speed flows and propulsion, I would offer several key pieces of advice. Firstly, grasp the fundamentals of fluid mechanics and thermodynamics thoroughly, as these form the backbone of understanding high-speed flows and propulsion systems. Courses focusing on aerodynamics, compressible flow, combustion and propulsion systems will be crucial in building this foundational knowledge.

Secondly, develop strong skills in computational fluid dynamics (CFD) and numerical methods. Given the increasing reliance on simulation and modeling in aerospace design, proficiency in CFD software and an understanding of numerical algorithms will be highly advantageous.

Additionally, seek practical experience through internships, projects, or research opportunities. Hands-on experience with wind tunnels, experimental setups, or real-world projects related to propulsion and high-speed aerodynamics will provide invaluable insights and skills.

And also stay updated with advancements in aerospace technology and research as well as follow industry trends, attend conferences, and engage with experts in the field to understand the latest developments and challenges.

Lastly, cultivate a strong network within the aerospace community. Networking with professionals, researchers, and alumni can open doors to internships, job opportunities, and collaborations that can further enhance your career prospects in aerospace engineering.

Q What are the current trends and future directions in aerospace propulsion that students should be aware of?

Trends in the field of aerospace propulsion are dynamic and are evolving towards cleaner and more efficient systems. There is a notable shift towards hybrid-electric and all-electric propulsion technologies for aircraft. These advancements aim to significantly decrease emissions, enhance operational cost-effectiveness, and reduce noise levels during flights.

Moreover, emerging technologies like electric propulsion, along with developments in space tourism and satellite constellations, are poised to revolutionize the aerospace industry. These innovations promise to enable new missions, create commercial opportunities, and offer new services that were previously unimaginable. They also have the potential to democratize access to space, drive economic growth, and address global challenges such as climate change and bridging the digital divide.

For students aspiring to enter the field of aerospace propulsion, staying abreast of these trends and actively participating in related research and development will be crucial. Developing skills in electric propulsion systems, understanding the principles of hybrid technologies, and exploring applications in space tourism and satellite communications will position them at the forefront of the future aerospace industry.

Q With the increasing importance of sustainable and efficient technologies, how is the field of Aerospace Engineering addressing these challenges, and what role do you see for emerging engineers in this context?

The field of Aerospace Engineering is actively addressing the challenges of sustainability and efficiency by focusing on the development of innovative technologies. There is a growing emphasis on sustainable aviation fuels, electric propulsion systems, and lightweight materials that reduce environmental impact without compromising performance. Aerospace engineers are at the forefront of these advancements, applying principles of aerodynamics, propulsion, and materials science to design greener and more efficient aircraft and spacecraft.

Emerging engineers play a crucial role in this context by bringing fresh perspectives and innovative solutions to the table. They are tasked with integrating sustainable practices into aerospace design, manufacturing, and operations. For instance, they can contribute by researching and developing new propulsion technologies that minimize carbon emissions, optimizing aerodynamic designs for fuel efficiency, and exploring novel materials for lightweight structures.

Moreover, emerging engineers have the opportunity to influence policy and industry standards towards sustainability. By advocating for greener practices and technologies, they can contribute to a more environmentally responsible aerospace sector. Ultimately, their contributions will be instrumental in shaping the future of aerospace engineering towards sustainability and efficiency in the face of global challenges like climate change. EP

LNCT VIDHYAPEETH
INDORE
www.Lnctvu.ac.in

LNCT GROUP 31 YRS

LNCT GROUP OF COLLEGES
"WORKING TOWARDS BEING THE BEST"

EDUCATION I EXCELLENCE I EMPOWERMENT

DEFINING TRAITS

- INDUSTRY EMBEDDED CURRICULUM
- EMINENT AND EXPERIENCED FACULTIES
- LEADERSHIP EXPLORER
- GUIDANCE FROM MENTORS
- INTERNSHIP MANDATORY
- MoU WITH MANY FOREIGN UNIVERSITIES
- CAREER GUIDANCE & HOLISTIC DEVELOPMENT PROCESS
- VALUE ADDED COURSES

COURSES OFFERED

MEDICAL SCIENCE I NURSING I PARAMEDICAL I AGRICULTURE I LAW I PHARMACY I BUSINESS MANAGEMENT I COMPUTER SCIENCES & APPLICATION I ENGINEERING I HOSPITAL MANAGEMENT I JOURNALISM & MASS COMMUNICATION

ADMISSION OPEN THROUGH LNCTCET

MOST PROMISING UNIVERSITY IN CENTRAL INDIA BY NEWS 18

& Design Your Degree

7440777999/666
LNCT Campus, Kanadiya, Indore, M.P.

SCAN

LNCT UNIVERSITY
BHOPAL
www.lnctu.ac.in

Great Careers Start Here...

Are You an LNCTian?

Courses Offered

- ENGINEERING
- AGRICULTURE
- LAW
- MANAGEMENT & COMMERCE
- COMPUTER APPLICATION
- AYURVEDA
- JOURNALISM AND MASS COMMUNICATION
- HOTEL MANAGEMENT
- PARAMEDICAL SCIENCE
- NURSING
- PHARMACY
- PHYSICAL EDUCATION
- HOSPITAL MANAGEMENT
- RESEARCH
- MEDICAL SCIENCE
- Ph.D

Join
LNCT University
Be a part of the global network.

nirf NATIONAL INSTITUTIONAL RANKING FRAMEWORK
Ranking of Indian Universities - 2023
Ministry of Education Government of India

TOP Ranked University

BY Education Post Magazine
in **IIRF University Ranking 2023**

Top Ranked Colleges of LNCTU
By **OPEN Magazine Best Colleges** - 2023

LNCTU Campus- J.K. Town, Sarvadharam, Kolar Road, Bhopal
7440777222, 7440777111, 7440777666

TO ME **AI** IS **'AUGMENTED INTELLIGENCE'**

IT IMPROVES WORK SPEED AND QUALITY

From his beginnings as a mechanical engineer after graduating from the Massachusetts Institute of Technology in the US to transitioning into sales and marketing, and eventually moving into academia, **Dr Simon Mak**, Vice-Chancellor of Maharashtra's Universal AI University (UAIU), has continuously embraced new challenges and opportunities. In this interview with Education Post's **Pragya Chaudhary,** he shares his unique career journey and perspectives on AI's impact on engineering, emphasizing the importance of "Augmented Intelligence." saying, "AI helps people perform their work faster and with higher quality."

Q Please share a bit about your journey?

I'm now in my third career – from engineer to entrepreneur to academics. After completing my BTech from the Massachusetts Institute of Technology (MIT), I started as a mechanical engineer in manufacturing and product design. Wanting to try something new, I transitioned into sales and marketing, beginning as a sales engineer and eventually becoming vice president of sales and marketing while earning an MBA in finance.

My career then took a turn towards academia, where I now work as a professor and administrator, holding a PhD in Applied Science Systems Engineering. During my sales tenure, I moved from Fortune 500 companies to a Silicon Valley startup that went Initial public offering (IPO), and then to other startups, including my own dot com venture.

Although my initial plan was to rise to vice president of engineering in a large tech company, I have always embraced new challenges and opportunities, leading to an unconventional yet enriching career path. This non-traditional journey has provided me with diverse career and life experiences beyond my imagination. For instance, I never envisioned becoming the vice-chancellor for a startup university in India, but here I am!

Q How did you transition from engineering to the fascinating world of AI research and leadership?

My journey into AI started at MIT, where I took a computer science course using the LISP programming language, an early tool for AI. Although I didn't fully grasp the technology then, it sparked my interest in recursive thinking and logic, which I applied in engineering as "Natural Intelligence."

My significant shift towards AI came at Mercury Interactive, a Silicon Valley startup specializing in client/server software testing. Here, I relearned programming to automate regression testing, simulating the actions of a software quality engineer. This experience solidified my understanding of AI, or what I prefer to call "Augmented Intelligence," emphasizing its role in improving work speed and quality.

At Universal AI University, I leverage my background in distributed computing and blockchain to research Small Language Models (SLMs) and enhance AI quality. In my leadership role, I support faculty, staff, and students in tackling both current and emerging challenges using AI, aiming to drive impactful research that benefits society.

Q Universal AI is at the forefront of cutting-edge technologies. Could you elaborate on how AI is revolutionizing traditional engineering disciplines? Are there any specific breakthroughs or applications that excite you?

My answer applies to both hardware engineering and software engineering. In general, a large portion of an engineer's time is spent on design. For new engineers, there is a significant learning curve of all previous designs that worked and didn't work, inside the company and in the marketplace. This is where I believe AI can make a substantial contribution. The ability to prompt an AI bot for design recommendations based on all previous designs in engineering textbooks, in the company design database, and in the public domain will provide a tremendous time-saving value to engineers. In software engineering this is already beginning to happen due to the easily programmable nature of software. In hardware engineering this is much more difficult and as a mechanical engineer I see these AI solutions as game changers for the design of physical objects and products we see and experience in the world, from mobile phone designs to large-scale commercial buildings.

Q As we bridge the gap between academia and industry, what skills do you believe engineering graduates should prioritize to thrive in an AI-driven landscape?

Again, if an engineer views AI as Augmented Intelligence, then this sets the mindset of using AI to help people do their jobs better and quicker. To do this, engineers need to better understand the voice of the customer. This is where design thinking education comes into play. However, you must balance the voice of the customer with the "innovators dilemma" which is that customers often only have incremental needed not disruptive needs. To prepare students for this dilemma, we also need education in creativity and play. At UAIU we plan to educate our students in design thinking, creativity, and yes play.

Q Talking about ethics, AI systems can have biases, and engineering decisions impact society. What role do engineers play in ensuring fairness and transparency?

Questions of ethics in engineering are easy and difficult to discuss. The easy discussion is to make sure your work product does no harm. Then we dive into a discussion of intentional harm or unintentional harm, which now becomes more difficult to discuss. You then layer in the discussion of legal versus ethical versus moral and now the discussion becomes much more difficult. So engineers need to have an understanding of the broader context and implications of their work, and to not just pursue cool technology without regard to the societal impact of the technology. This is why I'm a big advocate of multi-disciplinary education, especially for engineers

since the products of engineering (and AI) can be used to help or hurt society. I'm also a big advocate of engineers pursuing policy careers to help policymakers better understand the societal implications of their decisions. At UAIU, we want all our students to have a multi-disciplinary education so that our students can become better global citizens contributing to society.

Q The buzzword these days is "explainable AI." How can engineers strike a balance between creating powerful, complex models and ensuring they remain interpretable?

I like the idea behind "explainable AI", to develop tools to better validate the quality of AI results. I previously mentioned the quality of AI results as a major challenge in AI. However, if you discover low quality in your AI results, what's next? Can you "fix" the code easily? This is another topic I learned when I worked at Mercury Interactive, the existence of "spaghetti code." What this means is that there is software that is nearly impossible to update and understand due to poor programming standards, comments, and documentation. In the haste to beat competition to the market, shortcuts in software documentation are quite common. Then you add software updates by several developers and poor version control you have spaghetti codes. Yes the software works but it hasn't been updated in years due to the complex nature of debugging the software. You see this example in airline reservation and seating systems that still use old mainframe code and essentially haven't changed in decades. This is one of my concerns of AI, trying to debug the source of error (or bias) but the code (or algorithm) has become so complex that making changes is very difficult.

Q What's your take on the age-old debate — should engineers specialize deeply in one area or maintain a broader skill set?

As an entrepreneurship professor, I'm biased. I believe everyone should develop deep expertise in a core domain, complemented by entrepreneurship courses and mindset. For engineers, this is especially important because many good ideas and inventions cannot help society if they remain inside the engineering notebook or lab. We are creating a culture of innovation and entrepreneurship to encourage and assist our students, faculty, and staff to pursue commercializing their inventions.

Q What's your favorite engineering-related book or resource that you'd recommend to aspiring engineers and AI enthusiasts?

My favorite engineering-related books are from my PhD in Systems Engineering program. The first is a book on Design of Experiments. Many engineers think engineering is deterministic but in the real-world it is probabilistic and dynamic. So engineers have to understand creating experiments on your engineering designs to determine the optimal design. The second book is on linear programming — to better understand how to optimize a specific design parameter given several diverse factors. Finally, I also believe in lifelong learning and the best way to learn a subject is to try to teach it — so here I recommend a book called Teaching to Change Lives.

Q If you could give one piece of advice to our young readers who dream of shaping the future through engineering and AI, what would it be?

I have two pieces of advice for your young readers:

Pursue your calling, not your passion — find a problem domain that really resonates with you and then work to provide engineering solutions to problems in that area. For example, maybe you really resonate with physically handicapped children and sense a calling to help them. Then pursue engineering work that helps you follow this calling, even if you're not passionate about it at first.

If you follow my first advice, then you will quickly discover that working as an employee for someone else may take you away from your calling. Then I suggest you then pursue the entrepreneurship startup path. If you pursue this path, then THINK BIG, BUT START SMALL, and get some QUICK WINS. EP

ENGINEERING EDUCATION MUST BLEND **TECHNICAL EXPERTISE WITH ADAPTABILITY**

Prof. Prakash Gopalan, President of Neemrana's NIIT University tells Education Post's **Prabhav Anand**, about the future of engineering education amidst rapid technological advancements. Emphasizing AI, IoT, and sustainability, Prof. Gopalan highlights the imperative of preparing students for an innovative and adaptable future. His insights offer a compelling vision for global engineering education.

Q With the rapid advancements in technology, how do you see the future of engineering education evolving over the next decade?

Over the next decade, we can expect a stronger integration of AI, IoT, and quantum computing into curricula. Education will become more interdisciplinary, with personalized learning paths and enhanced industry collaboration. Emphasis on sustainability and ethics will ensure graduates are equipped to address global challenges responsibly. By fostering innovation and continuous learning, engineering education will prepare students to excel in a rapidly evolving technological landscape.

Q What role do you think experiential learning and hands-on projects play in preparing engineering students for real-world challenges?

Experiential learning and hands-on projects are vital for preparing engineering students for real-world challenges. Practical learning through projects, workshops, internships, and collaborative assignments allows students to apply theoretical knowledge in real-world scenarios. This approach helps develop critical problem-solving skills and a deeper understanding of digital tools and technologies. By engaging in practical experiences, students gain the skills and confidence needed to tackle complex challenges, making them more effective and adaptable engineers in the professional world.

Q In the context of sustainability and environmental responsibility, what innovations in engineering education are crucial for future engineers?

At NIIT University, we believe that innovations in engineering education are essential for fostering sustainability and environmental responsibility among future engineers. Our curriculum integrates sustainable practices, focusing on renewable energy, waste management, and eco-friendly design. We emphasize experiential learning through projects, workshops, and industry collaborations, allowing students to develop practical solutions to environmental challenges. Additionally, our campus itself is a living laboratory for sustainability, providing students with real-world experiences in green building practices and sustainable living. This holistic approach ensures that our graduates are equipped to lead and innovate in a sustainable future.

Q Given your extensive experience, what are the key skills and attributes that today's engineering graduates need to succeed in a competitive global market?

Today's engineering graduates need a blend of technical expertise and soft skills to excel in a competitive global market. Apart from their technical expertise in areas like AI and IoT, they must also excel in critical thinking, problem-solving, and effective communication.

Adaptability to rapid technological advancements and global market dynamics is crucial. Soft skills such as teamwork, creativity, and ethical decision-making are equally vital for innovation and sustainable development. Cultural sensitivity and a commitment to lifelong learning round out their abilities, preparing them to navigate and lead in diverse and evolving professional environments effectively.

Q How can engineering institutions balance traditional teaching methods with the incorporation of emerging technologies like AI, IoT, and blockchain into their curricula?

Engineering institutions can balance traditional teaching methods with emerging technologies by integrating them thoughtfully into their curricula. They can include AI, IoT, and blockchain, ensuring they reflect current industry trends. Practical application through hands-on projects and industry collaborations enhances learning. Furthermore, fostering a culture of innovation and research encourages students to explore these technologies creatively. This balanced approach ensures graduates are equipped with both foundational knowledge and cutting-edge skills, preparing them for the upcoming challenges of the industry.

Q How can engineering education address the gender disparity in the field and encourage more diversity and inclusion?

At NIIT University, we actively address gender disparity in engineering education through comprehensive strategies outlined in our Gender Champions guidelines. These initiatives focus on creating an inclusive environment through targeted outreach, mentorship programs, and inclusive curriculum development. By fostering a supportive community and providing leadership opportunities, we aim to empower female students in STEM fields. Our commitment extends to advocating for gender equality in education and beyond, ensuring that all students have equal access to resources and opportunities. Through these efforts, we strive to cultivate a diverse and empowered workforce that reflects the richness of perspectives and talents in engineering.

Q The UGC has recently introduced a policy of biannual admissions. How do you think this will impact engineering education and student dynamics in universities?

The UGC's introduction of biannual admissions is set to significantly benefit engineering education and student dynamics in Indian universities. With admissions offered in both July-August and January-February, students now have the flexibility to enrol based on their readiness, addressing a common issue faced by students who miss the initial admission window due to delayed board results, health issues, or personal reasons.

This flexibility will keep student motivated and accelerates their academic progress. For universities, it means better resource management and increased opportunities for campus recruitment, aligning with industry needs. Moreover, aligning with global standards enhances international collaborations and student exchanges, enhancing the overall competitiveness of Indian engineering education on a global scale.

Q What advice would you give to engineering students about staying adaptable and continuously learning in an ever-changing technological landscape?

My advice to engineering students is to prioritize adaptability and continuous learning in today's rapidly evolving technological landscape. Embrace a mindset that values lifelong learning, as staying current with emerging technologies is crucial. Seek opportunities to gain practical experience alongside theoretical knowledge, whether through internships, projects, or hands-on workshops.

At NIIT University, we emphasize the importance of evolving educational offerings to match industry demands. We blend theoretical knowledge with hands-on applications to build practical skills. Students should stay curious and proactive in exploring new developments and trends in their fields. Networking with professionals and participating in industry events can also provide valuable insights and connections. By remaining flexible and committed to expanding your skill set, you'll be well-prepared to navigate and succeed in the dynamic world of engineering and technology. EP

ALIGNING EDUCATION WITH INDUSTRY ENSURES GRADUATES ARE READY FOR IMPACTFUL CAREERS

Dr. Rajeev Tiwari, Dean of the School of Computer Science and Engineering at the Institute of Integrated Learning in Management (IILM) University underscores the vital integration of academia and industry, emphasizing the preparation of students for real-world applications in an interview with Education Post's **Pragya Chaudhary**.

Please take us through your journey in the field of Computer Science and Engineering, and what inspired you to pursue this path?

Computer Science and Engineering (CSE) has been a challenging field since its inception during my early years as a B.Tech CSE student in 2000. As a young engineer, I was driven by a strong desire to create innovative solutions that could improve community life. CSE has continuously evolved with dynamic tools and technologies, significantly impacting business and daily life.

My M.Tech. in CSE from Kurukshetra University in 2006 marked a pivotal time, witnessing advancements like video calls amidst transitioning networks from 3G to 4G. During my Ph.D. at Thapar University in 2011, I focused on enhancing wireless network service quality.

Over the years, from traditional languages like Cobol and Pascal to modern ones like Python and Go, CSE has facilitated transformative solutions such as e-banking and UPI, enriching lives and keeping me engaged in current and future technological advancements.

How do you facilitate the seamless integration of academia and industry at IILM University, and why is this integration crucial for engineering students?

At IILM University, we prioritize aligning classroom teachings with industry demands to ensure our graduates are industry-ready. Our curricula, co-developed by academia and industry leaders like IBM, Infosys, and AWS, incorporate real-world skills and terminology.

Regular industry feedback shapes our experiential learning approach, allowing students to learn by doing in well-equipped labs. Our School of Computer Science and Engineering (SCSE) offers specialized programs in Machine Learning and Data Science, Computing and Security, and Applications, tailored to meet industry needs and prepare students for impactful careers.

Given your research interests in Fog and IoT, Sensor Networks, and Next Gen AI & ML, what do you see as the most promising emerging technologies in these fields?

Next-generation networks like Edge/Fog computing, Cloud Computing, and 6G networks will continue to be pivotal in advancing technological capabilities. Technologies enabling mobile app-based solutions, business trend forecasting through Data Science, and predictive insights using Machine Learning are set to dominate the next 7 to 10 years. Advancements in Generative AI and Quantum Computing also hold immense promise for the future of CSE.

You have a significant number of SCI journals and Scopus-indexed publications. How do you balance your research with your teaching responsibilities, and what advice do you have for aspiring researchers?

Balancing research with teaching requires a passion for staying at the forefront of technological advancements. It involves dedicating time to deep research, experimentation, and regular reading of recent papers. Aspiring researchers should cultivate curiosity, continually question, innovate, and integrate research into their professional lives to remain relevant in the ever-evolving field of technology.

Q Tell us about some of the government-funded projects you are working on, particularly in the fields of Cloud, Healthcare, and Precision Agriculture.

I have initiated projects aimed at addressing societal challenges through technology. These include "Community Covid Resilience," leveraging technology for health, hygiene, and empowerment during the pandemic. Projects in Precision Agriculture involve IoT sensors for soil monitoring and mobile-based alerts for farmers. Additionally, I have explored Deep Learning applications for personalized dietary recommendations based on health data like EEG signals.

Q With your expertise in NAAC accreditations and NBA, how do these accreditations impact the quality of education provided at IILM University?

NAAC accredits the institution, while NBA accredits programs, ensuring adherence to high educational standards. At IILM, these accreditations drive continuous improvement in curriculum, teaching methodologies, and infrastructure alignment with industry benchmarks. They also enhance research opportunities through government funding, fostering a robust educational ecosystem.

Q What are your thoughts on the recent biannual admission policy introduced by the UGC, and how do you think it will impact the engineering education landscape?

The UGC's biannual admission policy is a progressive step towards enhancing flexibility and accessibility in higher education. While it aligns with global practices, it poses challenges such as scheduling adjustments, increased administrative workload, and maintaining teaching quality. However, it promises improved resource utilization, better facilities, and expanded opportunities for engineering aspirants, thereby strengthening the engineering education landscape.

Q What advice would you give to high school students considering a career in engineering? What skills should they focus on developing?

High school students aspiring for a career in engineering should excel in math and science, foundational to engineering principles. They should nurture teamwork skills, essential for collaborative project work. Exploring various branches of Computer Science Engineering and staying updated on technological advancements through workshops and courses are crucial. Soft skills like communication are equally vital for sharing ideas effectively in the engineering field, ensuring a successful career trajectory. EP

BIANNUAL ADMISSION POLICY IS A 'POSITIVE CHANGE'

Dr. Vidula Sohoni, Principal of Pune's Bharati Vidyapeeth College of Engineering shares her journey and vision for the institution, while stressing on the importance of global collaboration. "Global collaboration is essential for enhancing the standards of our institute." She discusses the college's initiatives to align with industry advancements, support student mental health, promote diversity, and achieve strategic goals to transform it into a world-class institution dedicated to social transformation through dynamic education in an interview with Education Post's **Prabhav Anand.**

Q You have had an illustrious career in academia and administration. Could you share with our readers a bit about your background, your journey in the field of engineering education, and what motivated you to take on the role of Principal at Bharati Vidyapeeth's College of Engineering?

I graduated from Government College of Engineering, Pune, in 1983, where I was the gold medalist and rank holder at Pune University. After working in the industry for four years, I felt a strong pull towards contributing to education. This led me to transition into academia, where I upgraded my qualifications by completing a PhD. I joined Bharati Vidyapeeth College of Engineering and served as the Head of the Department for 20 years.

Over the years, as an Assistant Professor, Professor, and Head of the Department, I identified many areas for improvement and positive changes in our educational system. My motivation to become Principal was driven by the desire to implement these changes and contribute significantly to the betterment of our students. This role has provided me with the opportunity to lead and make a meaningful impact on the education and overall development of our students.

Q Engineering education is continually evolving to keep pace with industry advancements. How does the institution ensure that its curriculum remains relevant and aligned with the latest industry standards and technological trends?

Our college, as a constituent unit of a deemed university, has the flexibility to update our curriculum as needed. We leverage this advantage to stay current with industry and technological changes. We gather feedback from industry experts, alumni, and employers and incorporate it into our curriculum updates. Industry professionals are also members of our Board of Studies and actively participate in our educational activities, ensuring our curriculum remains industry-relevant.

We ensure that our students are proficient in the necessary software for their technical subjects, eliminating the need for external training. Our curriculum includes industry-required software, so students are well-prepared upon graduation. Additionally, we have made in-plant and industrial training integral parts of our curriculum, giving students practical insights and experience before they enter the job market.

We also offer skill development and vocational courses, along with unique industry-taught courses. These courses are partially taught by our faculty and partially by industry professionals, allowing students to learn directly from experts and interact with industry leaders. This approach not only keeps our curriculum aligned with industry advancements but also enhances our students' employability, reflected in our strong placement records.

Q The University Grants Commission (UGC) recently introduced a biannual admission policy to enhance the flexibility and inclusivity of higher education. How do you perceive this change impacting engineering colleges?

The biannual admission policy is a positive change, aligning with global practices where admissions are offered in two semesters, spring and fall. However, for our institute, being a deemed university, we need to obtain the necessary permissions to implement this policy. Moreover, it's crucial to ensure we have sufficient faculty and infrastructure to support these biannual programs.

Another consideration is the industry's recruitment schedule. Companies typically have a defined period for placements, and a biannual admission policy would require them to adjust their hiring cycles accordingly. Simply teaching and producing engineers isn't enough; we also need to ensure they are placed in suitable jobs. Therefore, the industry's capacity to accommodate biannual graduates must increase in tandem with this policy.

Q The mental health of students, especially in rigorous programs like engineering, is a growing concern. What measures and support systems does your institution have in place to address the mental health and well-being of its students?

We have a robust support system for our students that addresses their mental, academic, and financial health. Our mentor-mentee system assigns a Guardian Faculty Member (GFM) to each class, who acts as a local guardian for the students. The GFM monitors their academic performance and is available for students to discuss any issues freely.

If a student faces psychological issues, the GFM refers them to our appointed counselor. The counselor provides professional help to address and resolve these issues. For financial problems, we have a dedicated cell that assists students in finding and applying for scholarships and loans.

Our mentor-mentee system ensures comprehensive support for students, covering academic, psychological, and financial aspects, thereby taking due care of their mental health and overall well-being.

Q With the advent of digital learning platforms and AI-driven educational tools, how is Bharati Vidyapeeth incorporating technology to enhance the learning experience for engineering students?

Our institute has established several MOUs with various industries. These collaborations enable industry experts to deliver lectures and provide hands-on training for our students. We conduct workshops and training programs where students gain practical skills relevant to their fields. For example, we have an MOU with CDAC, and 24 of our students recently completed their training there.

Industries also conduct workshops, site visits, and training sessions at our campus, ensuring our students are well-versed in the latest technologies. It is mandatory for each department to conduct at least one student training program per semester, ensuring continuous exposure to industry advancements. This approach keeps our students updated with the latest technological trends and enhances their learning experience.

Q Engineering fields have historically been male-dominated. What initiatives have you undertaken to promote diversity and inclusion within its engineering programs?

I acknowledge that engineering has traditionally been male-dominated, but the scenario is gradually changing. When I became an engineer 30 years ago, there were very few female students. Today, we see an increasing number of female students, especially in computer-related branches, with over 20% female students on our campus.

To promote diversity and inclusion, we have established a separate Women's Cell that conducts various programs focusing on security, advancement, and education for female students. We organize training sessions and invite women entrepreneurs, police officers, and legal professionals to mentor our students. We also take necessary security measures on campus, such as installing CCTVs and adequate lighting, to ensure our female students feel safe. These efforts have contributed to a steady increase in the number of women enrolling in our programs.

While some engineering disciplines like civil and mechanical engineering still pose challenges due to their demanding work environments, emerging fields like computer science and AI offer more conducive working conditions for women. This shift allows women to pursue successful careers while maintaining a balance between their professional and personal lives.

Q Global collaboration can significantly enhance the quality of education and research. Could you discuss any partnerships or collaborative efforts with international institutions that your college is involved in?

Global collaboration is essential for enhancing the standards of our institute. We prioritize establishing exchange programs with international universities for both students and faculty. Our college has several notable international MOUs. For instance, we have partnered with North Carolina A&T State University and Tokushima University in Japan. Under these MOUs, our students have completed semesters and PhD programs abroad.

We have also hosted international conferences, inviting keynote speakers and chairpersons from global universities, providing significant exposure for our students and faculty. Recently, we signed MOUs with Kanto Gakuin University in Yokohama, Japan, and Universidad Tecnológica Metropolitana in Chile. These agreements facilitate faculty exchange programs, enabling our faculty members to complete their PhD work and present papers abroad. One of our faculty members even delivered a keynote address at Kanto Gakuin University.

Additionally, our students can engage in research projects with these international universities, gaining valuable technological insights and global exposure through these collaborations.

Q What are the primary goals and strategic visions for Bharati Vidyapeeth's College of Engineering? How do you plan to position the college to meet the challenges and opportunities of the future engineering landscape?

The vision of Bharati Vidyapeeth's College of Engineering is to be a world-class institute for social transformation through dynamic education. To achieve this, we have set several strategic goals. One key objective is to organize faculty development programs in collaboration with industry to enhance our faculty's skills. We also focus on identifying socially and economically relevant areas in emerging technologies, enabling our faculty to conduct interdisciplinary research with various organizations.

Our institute collaborates with the medical college, hospital, homeopathic college, and dental college within our university. This allows our faculty to engage in interdisciplinary research, particularly in areas like artificial intelligence and robotics in healthcare. Additionally, we aim to strengthen our collaboration with industry and research organizations. For example, we work with Central Water and Power Research Station, DRDO, and ARAI. Our students benefit from these collaborations by engaging in project work with companies like Tech Mahindra.

We also provide training and consultancy services, promoting interdisciplinary research among our faculty. Our goal is to transform our institution into a research-focused entity with strong industry ties, ensuring our students receive the latest technological knowledge. This approach enhances their employability and prepares them for higher education. I'm proud to say that our placement rate has been consistently around 90% over the past three years, earning us awards for best engineering college for placement and outstanding institute in engineering education. EP

Arun Prakash

BRIDGING LINGUISTIC AND TECHNOLOGICAL GAPS THROUGH VERNACULAR EDUCATION TRANSFORMS TECH LEARNING

In an enlightening conversation **Arun Prakash,** Founder and CEO of GUVI, an Ed-Tech platform, explored how bridging linguistic and technological gaps through vernacular education transforms tech learning with Education Post's **Prabhav Anand**. GUVI's innovative coding courses in multiple Indian languages highlight the importance of experiential learning and industry collaboration, showcasing a vision of inclusivity and empowerment in tech education.

GUVI

Q Can you share the story behind founding GUVI, and what inspired you to create an ed-tech platform focused on vernacular languages? Additionally, how did your personal experiences shape GUVI's mission and vision?

The story of GUVI is closely associated with my own story, which began in a tight-knit town near Madurai in Tamil Nadu. I completed my entire scholastic journey near Madurai itself. For a long time, linguistic barriers were defining obstacles for the youth in the state. Time did little to overcome this challenge, which I witnessed firsthand during a short visit to my alma mater, a tier-2 engineering college in Madurai.

The most prevalent challenges the students faced included minimal industry skills and technology exposure. It was far from being a separate issue, as my experience of being associated with the tech industry showed me the scenario was similar on the national scale, across Indian tier-2 and tier-3 cities. This led me to address this challenge personally with a simple yet profound idea: bridging the technological and industry skills gap through social media. Mrs. Sri Devi, my late wife, and some associates extended their unconditional assistance, quickly expanding our reach to over INR 10 lakhs, with the majority of our users based in the USA and the UK. The underlying problem became clearer, and our subsequent actions led us to establish GUVI.

We approached Mr. Ashok Jhunjhunwala at IIT Madras to become incubated by the university in 2014. Both my wife and I were employed at PayPal at the time. With the initiation of GUVI, we adopted a two-pronged approach — my wife resigned to launch the company and furnish it with a corporate outlook, while I continued in my role to provide funding. Planning, originality and hard work bore fruits soon enough, and we were able to scale GUVI successfully to its present status.

Q GUVI offers coding courses in multiple Indian languages. How do you ensure the quality and consistency of content across different languages, and what challenges did you face while developing these courses in vernacular languages?

The differentiating factors between GUVI and its peers are our state-of-the-art quality and unwavering consistency that make up our core concerns. Additionally, a significant challenge we face when extending our services to a new vernacular language is the linguistic complexity. To address these challenges, we have established an internal audit team, who are tasked with translating and maintaining scholastic and informational accuracy. Additionally, we employ the expertise of seasoned industry luminaries from various sectors who validate concerns like content accuracy and integrate trending industry skills within the curricula to ensure a multipronged approach to maintain unsurpassed quality.

Q How do you select industry mentors for your startup, and what role do they play in shaping the curriculum? Can you also share some success stories of learners who have benefited from these mentor-led courses?

We maintain a stark belief in capabilities rather than conventional degrees. This is replicated in our approach to this challenge as well, as we employ seasoned industry professionals with years of experience in technology. They may not have been associated with academics, but offer years of invaluable insights from working firsthand in the industry in core segments like Data Science, Machine Learning, etc. These experts are a critical part of our strategy to offer premier industry experience to our learners. These subject matter experts focus on mentoring our young learners through customized learning strategies and industry knowledge. This unique strategy has helped GUVI to reach more than 30 lakh students since 2014.

For example, we had Pratyaksh, a former learner from our Zen Classes. He joined us during his engineering degree and wanted to become a Full-Stack Development professional. This was

during the pandemic, and at that time, conventional education came to a standstill all around the world. Here, we provided him with a platform to learn valuable technologies and, after his course, several job opportunities. He is presently working as an Associate Software Engineer at a prominent firm named JusPay. Our Zen Class program is led by highly experienced mentors who are directly part of the larger tech industry, and like Pratyaksh, numerous young learners have been able to productively learn from them.

Q CodeKata is a unique feature of GUVI. How does it enhance learners' coding skills, and what sets it apart from other coding practice platforms? Additionally, how do you ensure that CodeKata problems remain relevant and challenging for learners?

GUVI integrates advanced features into our curricula, with CodeKata being a key highlight. It is a coding practice platform that offers students an opportunity to practice coding through IDE software. It has been designed by several IT & software industry veterans to host coding challenges provided by industry leaders like Microsoft, Walmart, Samsung and others. The learners' progress in CodeKata is closely monitored by our internal team members. Profiles of students who deliver exceptional output are recommended by our team to top companies seeking to hire outstanding talents for their respective workforce. Codekata's effectiveness has also garnered widespread recognition from Indian and global companies. Its quality is also closely monitored by an internal developer team periodically to maintain its challenge and ensure it demonstrates the best industry practices.

Q What are the expansion plans beyond India? Are there plans to offer courses in other regional languages, and how do you envision GUVI's role in bridging the digital divide and promoting tech education in underserved areas?**

In addition to urban India, our vernacular approach has received widespread acclamation in tier-2 and tier-3 cities. GUVI's courses presently benefit young students belonging to numerous linguistic communities from at least 18 Indian states and UTs. This paradigm-shifting response has led us to explore expansion plans for several other linguistic communities in India andabroad. Our team has identified key markets across Africa, the Middle East, Southeast Asia and South America — where the mutual factor is the prevalence of technological gaps based on discursive barriers. We are currently in the developing stage to strategically roll out innovative modules in these markets expeditiously.

Q The startup has a strong community of learners. How do you foster engagement and interaction among learners, and are there any plans for meetups, hackathons, or collaborative projects?

Proactive engagement is critical to ensure favourable outcomes in tech education. For learners from tier-2 and tier-3 Indian cities, opportunities to interact with industry professionals are severely limited. To address this challenge, we have adopted a bifurcated strategy, the first of which entails deploying a dedicated community management team. This team of experts fosters a meaningful and interactive engagement with our learners, including both alumni and prospective students. We have also identified the critical requirement of Indian women to join the workforce, which has led our team of experts to initiate an extensive outreach program targeting prospective female learners through campus engagement and digital programs. This team conducts periodic events, both online and offline. For example, it organized an upskilling event - 'AI-for-Women' for free during International Women's Week in 2023, where more than 30,000 women became beneficiaries. Productive collaborations like hackathons are also explored frequently, with the help of premier educational institutions such as IIT-M, IIT-A and Anna University.

The second approach can be described as more of a personal engagement. I have decided to continue my skills in the social media domain that led us to establish GUVI, and through this, I focus on offering my tech experience to prospective learners through informative videos. This also helps me to identify students' dynamics, and new technological education gaps while ensuring an interactive engagement with millions of students domestically and abroad. EP

Yogesh Kumar Pathak

THE UNIVERSE HAS NO BEGINNING OR END

IT EXISTS IN ABSOLUTE FORM

In the world of astrophysics, groundbreaking theories often emerge, challenging our understanding of the cosmos. One such revolutionary concept is presented by ***Yogesh Kumar Pathak,*** *a research scholar whose research,* ***"The Absolute Theory of the Universe,"*** *promises to reshape our perception of the universe's fundamental nature. With a BTech and a PG Diploma, Pathak has driven deep into the mysteries of the cosmos, offering a theory that starkly contrasts conventional beliefs.*

Pathak's theory draws an analogy to calm water disturbed by a stone, creating temporary ripples that eventually settle back into stillness. He posits that the universe operates similarly, with a base, time-independent state occasionally disrupted by incidents like the "big collision" and "big bang," leading to the creation of a time-dependent universe. This disturbance, he argues, is not perpetual but temporary, with the universe eventually returning to its original, stable state.

In this interview with ***Education Post****, Pathak discusses his journey, the inspirations behind his research, and the intricate details of his Absolute Theory. He passionately defends his theory, asserting its superiority over existing concepts and emphasizing the need for a correct understanding of the universe.*

Q What inspired you to choose theoretical physics as a career?

I have always had a deep interest in understanding and analyzing complex phenomena. From the very beginning, my fascination has been with comprehending and investigating such subjects, and physics has always been my favorite subject. I read extensively about cosmology and often found that there were many unanswered questions. This incomplete knowledge motivated me to delve deeper into cosmology and eventually led me to pursue research in this field. My research journey has spanned over ten years, and today, I can say that my work is complete and comprehensive.

Q How did you develop the "Absolute Theory of the Universe?" Where did it all begin?

My journey began with my readings and studies on cosmology. I always felt that existing theories were somewhat incomplete. This sense of incompletion sparked my curiosity to understand the actual reasons behind everything. For instance, while studying the Big Bang theory, I didn't refute it but felt that it didn't explain what preceded the Big Bang. These gaps in understanding drove me to research further, and this led me to develop the "Absolute Theory of the Universe." Today, I can confidently state that my research is one hundred percent accurate according to my findings, and I believe it presents a complete theory.

Q If I tell you that I know nothing about this topic, how would you explain your theory in simple terms to me or to the readers?

Okay, let me give you an overview of my research in simple language. This research is based on a logical framework. Imagine a calm body of water, and when we throw a stone into it, it creates disturbances. Similarly, the universe can be divided into two types: the Absolute Universe, which is time-independent, and the Time-Dependent Universe.

When the water is calm, it represents the Absolute Universe, where there is no resistance of time, meaning no changes occur. However, when we throw a stone and create disturbances, it symbolizes the Time-Dependent Universe, where time causes changes. The universe we live in is the Time-Dependent Universe. There's also a hybrid universe that exists within the time-independent root universe.

Q How do you address criticism from other scientists regarding your theory?

I welcome criticism because it is an opportunity to validate my research. My theory is entirely based on logic. To explain further, the universe is continuous and infinite. Zero and infinity are relative concepts and can never be absolute. For example, if I say there is a book here and zero books elsewhere, zero is relative to the presence of the book. Therefore, it is impossible to have an absolute state of nothingness in the universe. Everything is relative, and the universe continues endlessly.

I can explain this concept to anyone, demonstrating how zero and infinity are always relative and never absolute. Thus, my theory holds that the universe is continuous, which aligns with the logical framework I've developed.

Q In your theory, you mention the Big Bang theory, which you don't refute. Can you explain the significance of the Big Bang or the Big Collision in your theory for our audience?

The events of the Big Collision and the Big Bang are natural processes. Scientists have described the Big Bang as a massive explosion, but they haven't been able to explain what caused it. If the Big Bang is naturally possible, then there must have been some force or pressure causing it.

My research suggests that when the universe

was trying to reach a stable state, multiple Big Collisions occurred. These collisions are natural and explainable processes. To elaborate, if we consider the smallest possible size of the universe, it would be a point without any energy, force, or pressure. The universe inherently tends to be spherical, much like a drop of water.

Initially, the universe was a point without any energy, force, or vibration. However, due to its spherical property, multiple points combined, creating extreme pressure around them, eventually leading to an explosion. This explosion can be compared to a balloon bursting when overinflated. When these events occurred everywhere, the universe tried to stabilize, leading to the Big Collision. The Big Collision created a gap, and this gap caused further pressure, leading to the Big Bang.

The creation of time is linked to this explosion. When the Big Collision occurred, mass converted into energy, and after the Big Bang, this energy propagated at the speed of light. Time is dependent on the energy produced during these events. By understanding the energy involved in these collisions, we can define time based on the speed of light.

Q You mentioned that you have practically proved your "Time Machine Theory." How did you achieve this?

I would prefer to discuss this in detail later because there are secondary aspects involved. For now, I want to highlight that my Absolute Theory of the Universe is, in my opinion, 100% accurate, and this is what I aim to develop further.

Q Have you proposed any experiments or observations to validate your theory?

Yes, that's why I wanted to speak to the media—to have an opportunity to practically prove my theory. Mathematically, I have proven it, and the time equation I defined can be considered an observable universal action. If a theory has a correct mathematical expression, it means the idea behind it is correct. However, until it is practically proven, it cannot be considered complete.

For example, the Bose particle discovered in Geneva had a specific time for which it was produced. When I applied the experimental values to my equations, the exact same values emerged, matching the observed time. I have observed similar results in multiple cases, confirming my belief that my theory is correct. The rest will become clear as more practical validations are conducted.

Q Is there any particular scientist or thinker you look up to or want to collaborate with in your work?

This interest has always been mine. My inspiration comes from researchers who study the Big Bang theory and various other theories. I respect all of them and consider their work valuable.

Q What is your next step in your research journey?

My next step is to practically validate my theory. I want to bring this theory into the public domain, especially to receive support for proving it practically. I hope this will advance the understanding of the world we live in. If we can gain accurate knowledge about our universe, it will be immensely beneficial.

Q How do you maintain a balance between work and personal life, which is a common challenge for every scientist?

Management is an essential part of a good life. How well you manage your life depends on your management skills. My point is that you should give as much importance to your personal life and family members as you do to your profession. Both aspects are very important for living a good life.

Q What advice would you give to a young scientist or anyone looking to build a career in theoretical physics?

My advice is to give your best in whatever you do. Whether it's research, sports, or any field you want to excel in, give your hundred percent. This is a life formula for success: strive to achieve your best, and you will achieve it. EP

RESEARCH OF YOGESH PATHAK

Article Title:

The absolute theory of universe

Abstract

A calm water like base universe or you can say time independent universe. Where we throw a stone in calm water it's creates disturbance and also a gap. This disturbance like new universe or time dependent universe. That will be for certain time after this certain time the calm water regain their stability and it will be again in calm position.

Like above example, same situation happens in universe. According to me this is the real concept of universe and I strongly oppose other nonsense thought about the universe and faithfully say that it is only the truth about universe.

This is theoretical concept of universe in brief.

Introduction

This is my long time research about complete universe and I strongly says that this is the right concept about the universe because according to me there is nothing truth beyond this concept.

I generally see that there are many misconceptions about the universe that is so irritating for us and also force to more nonsense think about this.

But here I have tried to give you the right concept about the universe with my long time research because it is necessary that where you exist. You should know about that.

Methods

To understand this theory in general words you need to know some general things such as the numbers zero and infinite. That's mean there is beginning point and end point but the truth is, both numbers actually don't exist means there is neither beginning point nor end point in the universe. it's only our misunderstanding about the real universe that it begins or end because these numbers are only relative numbers that's mean, if I say there is nothing (zero) it means there is nothing with respect to something.

And here something is in existence.

And where beginning point and end point don't exist there is only result and stable state exist means only result can performs that will be in stable condition.

For example suppose you have a mobile when you click on a mobile, you see only the result not the process or mechanism which are happening in background after click.

Likewise universe works. There is every things are in the absolute forms where time doesn't exist. It doesn't show the mechanism/ intermediate process because it doesn't have beginning or end.

If I write in number then it will be 1(one) number that is present everywhere in absolute form where time doesn't exist. Yes you read right word that there doesn't exist any time because their existence are only in the absolute form of the universe and it cannot vary. There is every things like Motion, rotation, energy, mass, elements, atoms, matter in absolute form (where time effect is zero) every things except time.

Now if there is unfortunately any incident occurs like collision. Because collision is the only possibility in the universe and after the collision time is produced. That is miracle of universe.

That is the beginning of another Universe where time exists. According to researcher, the universe began by the incident of "big bang" but twist is here that the first incident was the "big collision" between heavy masses. When they collide then they creates the gap in the universe and after this collision the "big bang" happened. After "big collision" and "big bang" time produces. This time value will be the time of base universe or absolute universe to regain their stability or absolute condition from unstable state. it is because of "big collision then big bang" disturbance in the base universe / absolute universe.

The produced after big collision and big bang a new universe forms there. And time of the new created universe depends on how much time was created after the big collision and the big bang when time will end the created universe merge with base universe/ absolute universe. According to me these are the true concept about the universe.

Discussion

Universe is defined as a continuous space in every direction. There does neither beginning nor end and every point are itself beginning and end. It can neither create nor destroy.

There is a fundamental principal of universe is that "space always want to shrink in smallest possible size".

There are two category of universe.

1. Time independent universe.

2. Time dependent universe.

Time independent universe or absolute universe

This is base universe and time independent or parent universe. It is continuous and stable and absolute means there is no time exists.

Every things are pre exist nothing is created and destroyed only it can covert from one form to another form by random incident. Everywhere is beginning and end? This shows completeness of universe. If I denote this, in number there is only existence of one everywhere. It can neither be zero nor infinite.

Time dependent universe-

This universe is spread over the base universe also can say that baby universe or hybrid universe which is created by random incidents in the base universe. This is time dependent universe. It has beginning and end means it has limit and not continuous. All things varying means it can be create or destroy. If i denote it in number it can be zero, one and infinite.

For example

A calm water is like base (time independent) universe and any how there is any disturbance occurs that disturbance will spread over the calm water and it will be for certain time that denotes as time dependent universe.

Our universe which is initiated from the big collision between masses not from big bang. Big bang happens after this big collision. These two incidents are consecutive incident and complete process.

Suppose I have a space where everything is pre exist. Means atoms, molecules, elements, matter, energy.... etc but not time.

According to the concept of universe a big collision and big bang occurs it releases energy E in pure form and in mass form suppose it is Em. And it spread over the base universe in volume V.

Then the time will directly proportional to the increased or produced total energy by the big collision and big bang of volume V.

Increased total energy = after collision total energy (at time t=T) of volume V- previous total energy (at time t = 0) of volume V.

And total energy after collision of volume at time T is ET.

And total energy of volume V before collision at time zero= E0.

Now increased energy of volume V at time T is

Ei.

Then Ei = ET - E0.

If collision occurs then,

Ei= Epure+Em.

Then Epure + Em = ET - E0.

According to the proportionality

T is proportional to release energy in collision.

Means T = Kt (Epure+Em).....1

Where Kt is time constant.

$T=Kt(m1c^2+m2c^2)$.....2

$T=Kt(2mc^2)$ if m1=m2.....3

To find maximum value of time let's multiply 1 and 2,

$T^2=Kt^2(E1+E2)(m1+m2)c^2$

$T=\pm Kt\times root((E1+E2)^2)$.....in terms of energy.

$T=\pm Kt\times(E1+E2)$.....4

$T=\pm Kt\times(c^2)root((m1+m2)^2)$...in term of mass.

$T=\pm Kt\times(c^2)(m1+m2)$.....5

To find the value of Kt (time constant), first we have to understand the time concept means you can define the time anywhere. Time can be defined as magnitude of time taken to complete a work done or time taken by the light energy covered a certain path for unit meter.

Means $3\times10\square$m/sec is speed of light that represent in 1 second it covers the $3\times10\square$meter. Now if we want to calculate it for 1 meter it will be $1/(3\times10\square)$ second. Hence if a light energy moves 1 meter it defines the $1/(3\times10\square)$ second.

We know that Kt = T/Epure

=(time created by unit amount of energy)

$Kt=1/(3\times10\square)$ second per unit of energy of light

Now put this value of time constant Kt. we get the value of total created time after big collision and big bang.

In terms of energy,

$T=\pm(1/3\times10\square)(E1+E2)$

$T=\pm(3.3\times10\square\square)(E)$ where E1=E2=2E.....6

In terms of mass,

$T=\pm(1/3\times10\square)(m1+m2)(c^2)$

$T=\pm(3\times10\square)(m1+m2)$

$T=\pm(3\times10\square)(2m)$ where m1=m2=2m.....7

Above both 6 and 7 are the equations to find total time T of universe produces by after big collision and big bang in terms of mass and energy form and m1 and m2 mass also represent that both colliding mass. The time value will in both positive and negative value of time.

Conclusion

That means when heavy masses that are in absolute form in base/ absolute universe collide with each other. Then there is produces time that can be found out by above equation 6 and 7. And after big collision there's also creates a gap in base/ absolute universe which is like, when a balloon is air filling after some time it will be burst due to high pressure of its surroundings likewise when gap creates after big collision due to high pressure of its surrounding the big bang occurs that spread over the base/ universe and make it unstable. The time consumed by the base/absolute universe to become stable will be equal to the produced time by the big collision and big bang incident.

References - Big Bang theory and self study.

Animal Studies - No

Funding - As per requirement.

Conflicts of Interests - No conflicts

Data availability - No

INDIA FOREVER IN EMPLOYMENT CRISIS

Prabhav Anand

India has experienced a significant issue of low employment creation, maintaining an approximate 2% growth rate for most of the last two decades. This is alarmingly insufficient and must be increased to 4-5% to adequately absorb the surplus labor expected in the near future. Education Post's Prabhav Anand delves into the intricate dynamics of unemployment and underemployment in India, tracing its historical context, current trends, and future projections.

Since gaining independence in 1947, India has struggled with unemployment and underemployment. Traditionally, India has been an agrarian, labor-surplus economy with minimal capital stock, resulting in low industrial productivity and a largely unremunerative agricultural sector dependent on monsoon rains.

Key metrics like the Labor Force Participation Rate (LFPR) and the unemployment rate serve as indicators of the job market's health. The LFPR represents the percentage of the working-age population either employed or actively seeking employment, indicative of the labor force's potential size.

The India Employment Report 2024, a collaborative effort by the Institute for Human Development and the International Labour Organisation (ILO), highlights notable changes in the country's workforce. The working population saw an increase from 61percent in 2011 to 64 percent in 2021, with projections indicating a rise to 65 percent by 2036. Despite this growth, the involvement of youth in economic activities dropped to 37 percent in 2022. To ensure long-term job growth and national prosperity, ongoing attention and strategic policy interventions are essential.

Conversely, the unemployment rate measures the percentage of individuals actively seeking but unable to find employment. These metrics, however, can be imprecise due to varying definitions of "working" and "seeking" work, potentially leading to disguised unemployment or underemployment being overlooked.

Between 1972 and 1987, National Sample Survey (NSS) employment reports using a weekly status definition of unemployment—where an individual is considered unemployed if no economic activity was performed in the previous week—indicated an unemployment rate of 4-5 percent, with urban unemployment higher than rural.

The LFPR remained stable at about 58 percent of people aged 15-59 in 1983 and 1993, dropped slightly to 56 percent in 1999-2000, and then further to 50 and 55 percent in 2019 and 2022, respectively.

Post-Liberalization Period

Despite employment generation being a priority in both pre- and post-liberalization periods, over 90 percent of India's workforce remains without tenure, primarily in the informal sector. Less than 20 percent have regular wage or salaried positions.

The liberalization in 1991, which allowed partial privatization of state-owned enterprises and foreign direct investment (FDI) in manufacturing, did create some demand for factory labor, albeit mostly on a contractual basis in special economic zones (SEZs) with poor working conditions and minimal job creation for displaced farmers.

Mining during this era provided some informal jobs under adverse conditions, often leading to land acquisition disputes that persist today. Ancillary services like transport improved from the 1980s, but overall industrialization and economic growth in the 1990s did not significantly displace labor.

FDI brought more capital-intensive production, reducing unemployment rates to under 3 percent by the late 1990s before increasing to 3-4 percent in the early 2000s and spiking to 5.8 percent in 2019, then settling to under 4 percent in 2022.

IT Boom and Its Impact

The early 2000s saw a services boom, particularly in information technology (IT) and IT-enabled services (ITES). Companies like Infosys, Tata Consultancy Services, and Wipro hired thousands of engineering graduates, fueling the growth of tech hubs in Bengaluru, Hyderabad, and Pune.

However, the tech boom only weakly enhanced labor, even as supporting industries like logistics, hospitality, construction, and private education expanded rapidly. From 2003 to 2010, India's GDP growth was impressive, averaging above 7.8 percent in seven out of eight years. Yet, labor productivity

increased proportionally with per capita output since 1990, limiting the impact of output growth on employment.

NSS data reveals a low job growth rate of just above 2 percent from 2000 to 2012, a trend that persisted for most of the past two decades. If this rate is not boosted to 4-5 percent, India will struggle to absorb its surplus labor, given the current labor force growth rate of 1.69 percent annually.

A significant challenge is the rising youth unemployment rate, which threatens India's demographic dividend. According to the ILO's India Employment Report 2024, youth (15-29 years old) unemployment increased from 5.6 percent in 2000 to 6.2 percent in 2012, then nearly tripled to 18 percent in 2019, before dropping to around 15.1 percent in 2020.

In 2022, the LFPR for young men was 61.2 percent, almost three times higher than for young women at 21.7 percent, with similar gender gaps in rural and urban areas. The youth unemployment rate also rises with education level, highest among graduates and higher among women than men.

From 2000 to 2022, the educated youth unemployment rate increased significantly, with unemployment among youth who completed secondary education or higher at 18.4 percent in 2022. Graduates faced a nine times higher unemployment rate. Youth account for almost 83 percent of the unemployed workforce, with the share of young individuals with secondary or higher education nearly doubling from 35.2 percent in 2000 to 65.7 percent in 2022.

Despite the overall low and stable (open) unemployment rate, significant underemployment persists, where individuals are willing and able to work additional hours. Underemployment rose from 8.1 percent in 2012 to 9.1 percent in 2019 before declining to 7.5 percent in 2022.

Globally, fewer young people are hired as fewer are needed for administration and governance compared to a decade ago. Increased workplace automation, including AI, has raised the marginal productivity of semi-skilled and skilled workers, requiring a smaller workforce to perform similar operations.

This structural unemployment impacts the economy as overqualified workers take jobs below their education level, reducing opportunities for less educated individuals. Although the youth can potentially benefit from emerging technologies, significant upskilling is necessary for viable employment in the future.

Jobless growth over the last two decades has contributed to rising inequality. A recent article co-authored by Thomas Piketty estimates the income and wealth share of the top 1 percent of the population at 22.6 and 40.1 percent, respectively, in 2022-23. Without redistributing income and wealth, upskilling may remain a distant dream for middle-class job seekers.

The uneven deployment of automation and AI has the potential to displace labor in numerous sectors. In manufacturing, high-tech export-oriented industries like automobiles and telecom are more likely to adopt advanced automation, reducing the need for human supervision and lowering transportation, logistics, and warehousing costs.

Services particularly finance, software development, and ITES, are vulnerable to automation due to repetitive tasks that can be augmented by machine learning algorithms. A 2018 ILO report on emergent technologies in India identified 640,000 low-skilled service jobs in the IT sector at risk from automation, with only 160,000 mid to high-skilled positions created.

New organizations in the "aggregator", "gig", or "platform" economy, such as Uber, Ola, Zomato, Swiggy, and Urban Company, have created jobs by connecting service providers to clients. A Boston Consulting Group and Dell Foundation report projected 24 million jobs in this sector in the long term. However, gig economy jobs are typically casual and unstable, lacking benefits like health insurance, retirement plans, and unemployment benefits, making workers vulnerable to financial instability.

Traditional industries like textiles, apparel, leather, and footwear are less likely to adopt automation in a labor-surplus economy like India, where capital investments are not cost-effective. Agriculture, despite some mechanization, remains labor-intensive due to low yield, small holdings, and rain dependency. Emerging agricultural startups may bring more mechanization, but widespread adoption of automation or AI in this sector is unlikely.

Climate change poses a significant concern for future labor forces. The G20 sustainability group reported that hazardous workplace environments reduced global human productivity between 2000 and 2015, with China, Brazil, and India being the most affected.

Projected temperature increases by 2030 could exacerbate heat stress, reducing work hours in G20 countries and India by 1.9 percent and 5.2 percent, respectively. Agricultural workers and those in emerging economies are particularly vulnerable.

Historical Data

If you are wondering about the unemployment rate last ten years or 15 years, we have the data in a tidy little chart:

Year	Unemployment Rate (percent)
2024	9.2 (June 2024)
2023	8.003
2022	7.33
2021	5.98
2020	8.00
2019	5.27
2018	5.33
2017	5.36
2016	5.42
2015	5.44
2014	5.44
2013	5.42
2012	5.41
2011	5.43
2010	5.55
2009	5.54
2008	5.41

Source: CMIE

India must consider:

Tackling Inequality: Deep-rooted inequality needs to be addressed urgently. The emergence of dollar billionaires is not enough to create the effective demand required for mass production and employment. Redistributive policies are essential to stimulate demand and reduce unemployment and inequality.

Education and Upskilling: Overhauling the education system is crucial. Significant disparities exist at all education levels between rich and poor, and urban and rural sectors. Elite institutions alone cannot meet the needs of a globalized economy. Comprehensive reskilling and upskilling programs are needed to prepare individuals for future job markets.

Safety Nets and Universal Basic Income: The march towards higher automation and lower effective demand risks creating a "useless class" of structurally unemployable individuals. Universal basic income schemes should be considered to provide a safety net and ensure functioning markets for goods and services in the future.

Sustainable Technologies: Rapid adoption of carbon-displacing sustainable technologies is essential to combat climate change. These technologies can help reduce hazardous work environments and protect the health of poorer workers, mitigating financial strains on healthcare systems.

Calculating India's Current Unemployment Rate

Understanding the unemployment rate in India is crucial for gauging the country's economic health. This percentage-based indicator fluctuates with the state of the economy. During recessions or economic downturns, job availability declines, leading to a rise in unemployment. Conversely, during periods of economic expansion and prosperity, the abundance of job opportunities typically causes the unemployment rate to drop.

The unemployment rate is calculated using the following formula:

Unemployment Rate = Number of Unemployed Persons/Civilian Labor Force

or,

Unemployment Rate = Number of Unemployed Persons/Number of Employed Persons + Number of Unemployed Persons

To be considered unemployed, individuals must fulfil specific criteria:

- They must be at least 16 years old.
- They must be available and willing to work full-time within the last four weeks.
- They must be actively seeking employment during this period.

Exceptions include individuals who are temporarily laid off but are actively looking to return to their previous positions.

India's employment scenario is at a critical juncture. The persistent low employment growth, rising youth unemployment, structural challenges posed by automation, and climate change's impact necessitate a comprehensive and multifaceted approach to policy-making. Addressing inequality, overhauling the education system, implementing safety nets, and adopting sustainable technologies are essential steps to ensure a more stable and prosperous future for India's labor force.

NEET PAPER LEAK SCANDAL HAS LEFT INDIA'S MEDICAL ASPIRANTS SHAKEN, POSSIBLY FOR A LONG TIME TO COME

Prabhav Anand

In the competitive world of India's medical entrance examinations, the National Eligibility-cum-Entrance Test (NEET) holds unparalleled importance for aspiring doctors. However, the integrity of this crucial assessment recently came under scrutiny after allegations of the paper leak, sending shockwaves through the aspirant community and triggering a series of legal and ethical debates.

What began as whispers on social media platforms quickly escalated into a full-fledged controversy days before the scheduled NEET examination. Rumors of leaked question papers circulated widely, fueled by screenshots and purported insider information shared among anxious students. For many, already burdened by months of rigorous preparation and high stakes, the revelation of a potential leak shattered their confidence and intensified pre-existing stress levels.

The National Testing Agency (NTA), tasked with overseeing the NEET examinations, initially dismissed the allegations, citing stringent security measures in place. However, as evidence mounted and public outcry grew, the agency was compelled to launch an investigation, acknowledging the gravity of the situation. This incident not only raised serious concerns about the fairness and transparency of India's examination processes but also highlighted the profound impact on the mental well-being of students.

Amidst mounting pressure, various petitions were filed across high courts, seeking judicial intervention to ensure accountability and restore public trust. The Supreme Court of India, recognizing the urgency of the matter, intervened decisively to oversee proceedings, emphasizing the need for ethical standards and fair play in conducting national-level examinations.

It all began with whispers on social media platforms and student forums. Rumors of a potential NEET paper leak started circulating just days before the scheduled examination date. Students, already under immense pressure from rigorous preparation, found themselves grappling with uncertainty and anxiety. Many took to Twitter and WhatsApp groups to share screenshots and purportedly leaked question papers, amplifying the unease among the aspirant community.

After the NEET paper leak allegations, the National Testing Agency (NTA) was thrust into the spotlight, facing immense scrutiny and pressure from various quarters. Initially, the NTA attempted to downplay the severity of the situation, asserting that their security protocols were foolproof and dismissing the leaked documents as fraudulent.

However, as the uproar intensified, the agency swiftly pivoted to damage control mode, launching an internal investigation to ascertain the veracity of the claims. The NTA's officials held multiple press conferences, assuring the public of their commitment to a fair and transparent inquiry. They also sought the assistance of cybersecurity experts to trace the origins of the leak and to bolster their digital defenses against future breaches.

Simultaneously, student organizations, parents, and educational advocacy groups mobilized to demand accountability and justice. Protests erupted in several cities, with students voicing their frustration and concerns about the fairness of the examination process. Petitions were rapidly filed in high courts across the country, seeking judicial intervention to either cancel the tainted examination or hold a re-examination to ensure a level playing field.

Prominent education reform advocates and public figures lent their voices to the cause, calling for systemic reforms and greater transparency in the conduct of national-level examinations. The Supreme Court's intervention provided a glimmer of hope, as the judiciary took a proactive stance in addressing the crisis, directing the NTA to furnish detailed reports and outlining measures to ensure the integrity of future exams.

For thousands of students, the NEET examination represents not just a test of academic prowess but a gateway to their future careers in medicine. The revelation of a potential paper leak exacerbated existing stress levels, leading to sleepless nights, heightened anxiety, and a sense of injustice among the aspirant community. Many students

voiced concerns over the fairness of the examination process and the implications for their future prospects.

Psychologists and educators highlighted the profound impact of such incidents on young minds already navigating the pressures of academic competition.

Mr. Gaurav Tyagi, Founder of Career Xpert, told Education Post, "Students' confidence in the exam system and mental health are harmed by the NEET paper leak. It creates fear, discouragement, and doubt about how equitable the outcomes are. Such events could discourage students who have spent years preparing for the NEET exam with a great deal of time and money.

"Strong security measures must be put in place to stop leaks in the future. This covers the use of biometric verification at exam centers, stringent invigilation, and encrypted question paper transfers. The authorities should also thoroughly investigate the backgrounds of all those involved in the examination procedure."

He further added, "More protection can be added by establishing a safe online exam delivery platform with AI-based fraud detection and real-time monitoring. It is imperative to maintain transparency in addressing and rapidly resolving such concerns to rebuild students' trust in the system."

As the controversy gained traction, several petitions were filed in various high courts across the country, seeking transparency and accountability in the conduct of NEET examinations. The Supreme Court of India, cognizant of the gravity of the situation, intervened to streamline the legal proceedings and ensure a swift resolution.

In a landmark hearing, Chief Justice Ramesh Kumar issued directives to the NTA to submit a detailed report on the alleged paper leak and the steps taken to mitigate its impact. The apex court emphasized the need for fair play and adherence to ethical standards in conducting national-level examinations, underscoring the importance of maintaining public trust in the integrity of such processes.

Amid mounting pressure, the NTA found itself at the center of scrutiny over its handling of the crisis. Critics accused the agency of initially downplaying the severity of the issue and failing to preemptively address vulnerabilities in the examination security protocols. Calls for accountability grew louder as stakeholders demanded transparency and stringent measures to prevent future breaches.

In a bid to restore credibility, the NTA issued statements assuring students and parents of a thorough investigation into the alleged leak. However, skepticism persisted regarding the adequacy of the agency's response and its ability to safeguard the sanctity of national-level examinations in the future.

The NEET paper leak scandal sparked a broader discourse on the efficacy of India's examination systems and the need for comprehensive reforms. Education experts and policymakers called for enhanced security measures, including the adoption of advanced technologies to deter potential breaches and ensure a level playing field for all aspirants.

Dr. Rajesh Singh, a prominent education reform advocate, emphasized the urgency of systemic reforms.

"Incidents like the NEET paper leak shows the vulnerabilities in our examination infrastructure. We must prioritize technological upgrades and procedural reforms to uphold the integrity of competitive examinations," he said.

Dr Abhinav Nikunj, a medical superintendent at the Fortiz Hospital in Palamu, said, "The psychological effect on students cannot be emphasized enough here. Months, perhaps years of hard work has all gone to waste just like that. For most people taking the NEET UG examination, everything either falls into place or goes up in smoke forever. The uncertainty over whether they will need to sit again for the same exam is adding onto an already existing anxiety and mental burden amongst participants engaged in one of India's toughest competitions."

"The National Testing Agency, established as a self-sustaining body responsible for conducting entrance examinations, faces severe criticism for its failure to secure the NEET UG 2024. As a self-sustaining entity, the NTA is expected to operate efficiently and independently. However, the paper leak incident has exposed significant lapses in their security measures and overall examination management," he said.

"The NTA's inability to prevent the leak has sparked debates about its effectiveness and transparency. Critics argue that being self-sustaining should not come at the cost of compromising the integrity of the examination process. The primary responsibility of the NTA is to ensure a fair and transparent examination environment, which appears to have been grossly neglected in this instance."

As the dust settles on this NEET Paper leak controversy, there are a lot of profound lessons emerge for India's education ecosystem. The incident serves as a stark reminder of the critical need for robust safeguards, ethical governance, and proactive measures to protect the interests of students and uphold the sanctity of merit-based examinations.

Moving forward, stakeholders must collaborate to implement stringent security protocols, enhance transparency, and prioritize the mental well-being of students amidst the pressures of competitive examinations. The NEET paper leak saga, while disruptive and distressing, offers an opportunity for introspection and reform to build a more resilient and equitable education system for future generations.

MALNAD COLLEGE OF ENGINEERING

Nestled in the serene district of Hassan, where the ancient temples of ***Belur, Halebidu***, and ***Shravanabelagola*** stand as testaments to Karnataka's rich heritage lies the **Malnad College of Engineering (MCE), l**ocated midway between Bengaluru and Mangaluru on NH-75. Hassan enjoys an annual rainfall of about 900 mm, contributing to its lush green surroundings. This temperate climate provides a perfect backdrop for students to immerse themselves in their studies and extracurricular activities. Hassan city is well known as poor man's ooty. Hassan is also home to the Master Control Facility for INSAT Satellites, highlighting its importance in India's space endeavors. The synergy between the historical, cultural, and scientific significance of the district and MCE's educational environment creates a unique and enriching experience for students. ***Established in 1960***, MCE is more than just an educational institution; it is a symbol of visionary leadership and community spirit. Initially affiliated to ***University of Mysore,*** then to ***Visvesvaraya Technological University, Belagavi*** in 1998 and in the year 2007, MCE earned ***Autonomous Institution status***. Presently, MCE is offering nine UG and four PG programs with state of the art facilities. The institute currently has all its eligible programs accredited by the NBA and has secured an 'A' grade from NAAC.

Everything has a past, a present and a FUTURE. So does MCE

Year 1960……. The year it all began. It was the concerned citizens of Hassan, Coorg and Chikkamagalur districts who realised the need for a cluster of Educational Institutions in the 'Malenadu' region. Thus formed was a committee under the Chairmanship of the then Divisional Commissioner Shri Shafi Darashaw and Shri Chandappa Patel, the then Deputy Commissioner as Convener and then Hassan district social reformers. MCE was formally opened on the 1st of September 1960 by the then Chief Minister Shri B D Jatti, under the chairmanship of Shri Annarao Ganamukhi , the then Deputy Commissioner, Hassan. In their vision was the Malnad College of Engineering (MCE), which was to be constructed in 41.28 acres of land on the then northern outskirts of Hassan city as a joint venture of The Government of India, the then Government of Mysore under Malnad Technical Education Society (MTES®) Hassan. The institute has articulated the vision statement as inspirational and forward-thinking, providing a clear and compelling direction for the organization and the vision is:

To be an institute of excellence in engineering education and research, producing socially responsible professionals.

As a mark of *Silver Jubilee Celebrations* of MCE, a Silver Jubilee Hall was built and now it is being utilized as modern Indoor Shuttle Badminton facility and also the college is endowed with state of the art sports facilities. A temple of Lord Ganesh was built with distinctive hypostyle roof structure inside the campus and unique centre, ***"Divya Chaitanya"***, the brainchild of present Chairman Sri. Ashok Haranahalli, is a newly constructed facility for Yoga and Meditation. An auditorium of 1500 capacity is being used for various cultural events of the college. The institute utilizes renewable energy sources with roof top solar power generation of 125 KvA in the campus. Further, rainwater harvesting system is installed for all the building in the campus.

Education

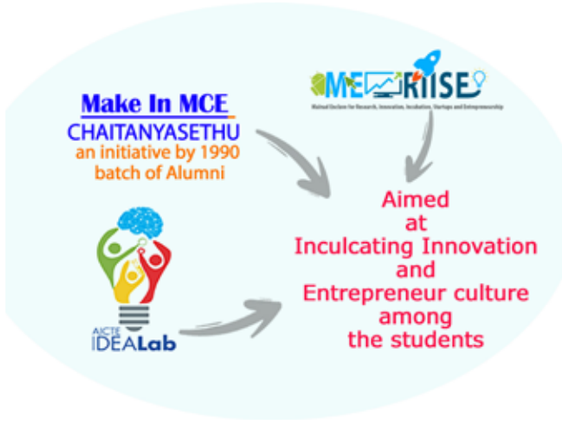
MCE fosters a "learn how to learn" culture and motivates students with the tagline, "Enjoy the process of learning at Malnad College of Engineering". The institute is dedicated to offer top-notch education with highly committed faculty, state-of-the-art lab facilities and the ambiance that supports student growth and societal impact. It also ensures that its curriculum evolves in tandem with technological advancements to keep students at the forefront for industry developments.

International Collaborations at MCE….

MCE has collaborations and MoUs with several foreign universities and industries. The most recent MoUs include partnerships with Western Sydney University and Federation University, Australia, along with various industries. These partnerships enhance the institution's global connect, offering students with international exposure and foster collaborative research and development opportunities.

Research and Innovation at MCE….

The research centers at MCE annually produce over 20 Ph.D. scholars. It has a strong presence in the NIRF rankings under the band of 101-150 for ***NIRF Innovation*** during the year 2022-23. MCE houses the ***AICTE-IDEA*** Lab, awarded as the best Mentor Institute and Host Institute. The ***DST-FIST Lab, BOSCH Rexroth Lab*** facilities and funding from ***DST***, ***VGST***, AICTE, SERB and ***KSCST*** further strengthened its research capabilities. The institute offers Junior Research Assistant positions for the young budding engineers and a ***Centre for Research & Consultancy*** to enhanced research activities and consultancy services. The institute has received about Rs. 27 Crores funding support from Technical Education Quality Improvement Programme (TEQIP Phase I, II and III). Further, MCE was listed among the top 200 engineering education institutes across India to produce higher quality and more employable engineers.



Extracurricular Activities at MCE..

MCE offers a wide range of extracurricular activities that contribute to the holistic development of students. These activities include sports, cultural events, and technical clubs, etc., providing students with opportunities to explore their interests and talents beyond academics. MCE was the first college to start *Physical Education* (PE) as a credit course, emphasizing the importance of physical fitness and sports. The 'Divya Chaitanya' initiative focuses on improving mental health through yoga and meditation, helping students achieve mental clarity and overall well-being. This initiative has resulted in students excelling in various domains, including winning medals at zonal, state, and national levels.

The college hosts around twelve clubs under technical, cultural, and social categories, includes Eco Club, Leo Club, Literary club, Rotaract club, DevOps Club, IUCEEE,Science association, *SoUL*, The Technical club,SAE collegiate club, NSS, Scouts and Guides and Cultural team. The SAE (Society of Automotive Engineers) Collegiate Club students participate in national activities, which are funded by alumni, and have been awarded for best design in structural and electric vehicle (EV) design simulations. At MCE, extracurricular activities play a vital role in nurturing well-rounded individuals who are prepared to contribute positively to society.

Alumni of MCE..

With a strong alumni base of more than twenty-five thousand since its inception, they feel and treat MCE as their second home. The mantra of MCE Alumni, "Contribute time, money, or expertise; giving back is an opportunity," reflects their commitment to support the institution and its current students. MCE boasts a robust alumni network that holds yearly alumni meets within India and across the globe. One significant initiative by the alumni is ***"Chaitanyasethu***," which helps students meet and transfer knowledge through lecture programs, project expos, and education on advancements in technology. As part of *Chaitanyasethu*, the ***"Make in MCE"*** initiative serves as a bridge between alumni and students, supporting projects through funding and mentoring. This initiative focuses on innovation, research and start-ups. Additionally, alumni organize business events to bridge gaps between alumni entrepreneurs and MCE's budding engineers.

AICTE, NBA, NAAC, NEW AGE INNOVATION NETWORK, विज्ञान एवं प्रौद्योगिकी विभाग DEPARTMENT OF SCIENCE & TECHNOLOGY, INSTITUTION'S INNOVATION COUNCIL, STARTUP KARNATAKA, K-tech INNOVATION HUB

Apart from exchanging their expertise, many alumni have initiated scholarships to help underprivileged students pursue their education. An Alumni Tower, estimated of Rs. 12 crores is being built in the campus with their contribution.

Scholarships and Support at MCE

Students receive support through scholarships from Institution, MTES, *'M' Foundations*, individual alumni, and faculty. Additionally, MCE supports start-ups and incubation centers, fostering an environment of innovation and entrepreneurship through Make in MCE, AICTE-IDEA lab and MERIISE. This comprehensive support system helps students pursue their educational goals and encourages the development of new ventures and research initiatives.

Training and Placement at MCE....

The Training and Placement (T&P) Cell at MCE is instrumental in bridging academia with industry. The students are trained for soft and life skills, ensuring they are well-prepared to meet industry demands. MCE offers career orientation training that equips students with the skills necessary for a successful career in the corporate world. T&P also provide necessary Pre-Placement Training from experts from various industries/ corporate, training, senior students and Alumni. This training addresses different dimensions of individual development, helping students become well-rounded professionals. Prominent recruiters visit our campus include BEL, Mercedes Benz, Robert Bosch, Samsung, Infosys, TCS, TDPS, Wipro, Deloitte, Dish Network, Zscaler, and more, with the highest CTC reaching 22 LPA.

In addition to these activities, it involves in mentoring students for opportunities in higher education, entrepreneurship and internship in coordination with incubation centre: ME-RIISE, MAKE in MCE, AICTE-IDEA lab and by Alumni. The Cell celebrates student successes, such as high placement rates, and hosts events like annual "Best Project of the Year" competition.

Malnad College of Engineering is indeed a beacon of educational excellence, innovation, and community spirit. It continues to build on its rich legacy while looking forward to a future of even greater achievements and contributions to society. With its focus on holistic development, robust support systems, and commitment to fostering innovation and social responsibility, MCE stands out as a leading institution dedicated to shaping the next generation of engineers and professionals.

BV(DU)COEP

INSTITUTE OF ENRICHED PATH TOWARDS A BRIGHT CAREER

Bharati Vidyapeeth (Deemed to be University) College of Engineering, Pune established in 1983, is a constituent unit of BV University which is accredited A+ grade by NAAC. This is the dream institute of Founder Hon'ble Dr. Patangrao Kadam. It has been transformed into a premier institute under the leadership of Hon'ble Dr. Vishwajeet Kadam, Secretary of Bharati Vidyapeeth, Pro Vice-Chancellor of Bharati Vidyapeeth Deemed University and Hon'ble Dr. Shivajirao Kadam, Chancellor of Bharati Vidyapeeth Deemed University.

ACCOLADES:

- Ranked 131st by NIRF in 2022
- Ranked 31st by Times Engineering Institutes Ranking Survey – 2024
- Ranked 18th by India Today Top Engineering (Pvt.) College in 2024
- Ranked 20th by Dataquest Top 100 T-Schools (overall): government and private sector, 15th rank in Top T-Schools in India 2024 (Private) & 3rd rank in West Zone in 2024
- Identified as a parent institute for Sir Ramanujan Fellowship in 2022

BVUCOE, Pune offers 11 graduate, 08 PG and Doctoral programmes in 08 disciplines. Few programmes are accredited by NBA in three cycles.

The library of the institute contains more than 74,218 books, 20,228 titles, 46 international journals subscriptions. Digital library of institute is with 54,686 number of journals in e-form. 75 faculty members have Ph.D. qualifications. Faculty members were deputed regularly to International Universities, Institutions of national importance for qualification improvement. A team of faculty members with a fine blend of experience and youth adds value to the teaching learning process.

SDM College of Engineering & Technology

DHARWAD

An Institute with Difference

An Autonomous Institute approved by AICTE, New Delhi & Affiliated to VTU Belagavi

Dr. D. Veerendra Heggade
President, SDMES Ujire

Ranked as one of the Premier Engineering Colleges in the country by most of the reputed ranking agencies

UG Programs accredited by **NBA** | Accredited by **NAAC** *with* **A** Grade | **No.1** Ranked Institution in North Karnataka region as per Education World magazine April-23 | **No.1** Ranked Institution **CAREER 360** April-2023 **AAAA** Excellent Ranking India's Best Engineering College in South Zone | In all India survey conducted by Times Engineering Institute Ranking survey 2022, the college has excelled with **10th Rank** in Southern Region

Phenomenal PLACEMENT RECORDS with top notch recruiters

Excellent Placement Out of 600 Intake — More than **700 OFFERS** for 2022-23 batch in

A new milestone in the history of SDM CET — **1200+ OFFERS** for 2021-22 batch BE Students

Highest Package for Current Batch 2023
DSRP Machine Software Developer job with a German company Mühlbauer GmbH & Co. KG *with* a package of ₹ **41** LPA.

PROGRAMS OFFERED

UNDER GRADUATE PROGRAMS

- B.E in Civil Engineering
- B.E in Mechanical Engineering
- B.E in Electrical & Electronics Engineering
- B.E in Electronics & Communication Engineering
- B.E in Computer Science & Engineering
- B.E in Chemical Engineering
- B.E in Information Science & Engineering
- B.E in Artificial Intelligence & Machine Learning

POST GRADUATE PROGRAMS

- M.Tech. in Digital Electronics
- M.Tech. in Computer Aided Design of Structures
- M.Tech. in Computer Science & Engineering
- M.Tech. in Power System Engineering
- M.Tech. in Electric Vehicle Technology
- Master of Business Administration (MBA)

CET CODE : E034 | COMEDK CODE : E117

PGCET CODE : B277 (MBA) | T864 (M.Tech)

RESEARCH CENTERS (Ph.D.)

All 11 Departments are recognized as research centers to offer Ph.D. Program under VTU.

SALIENT FEATURES

- State of the art infrastructure with Highly qualified, experienced and motivating faculty with Ph.D.
- Excellent placement track records.
- Fee concession of Rs10000 per year for all meritorious students with KCET rank below 5000
- Excellent hostel and dining facilities for 1500+ (900+ boys and 600 girls)
- Bus facilities for students from all important places in Hubbali and Dharwad
- Funded projects with a total sanction of Rs. 5 crores
- Multisports Complex with amenities of international standards

OUR MAJOR RECRUITERS

Infosys, Microsoft, hp, Dell, wipro, ORACLE, informatica, Continental, Cognizant, IBM, BLUE STAR, Dalmia Bharat, ACC, intel, accenture, Mercedes-Benz, TATA, Tech Mahindra, NOKIA, BOSCH, TATA, amazon, SONY, CoreEL Technologies, SLK SOFTWARE, IGATE, NTT DATA, Mphasis, LARSEN & TOUBRO, TATA HITACHI, KPIT, Mindtree, SAMSUNG, HCL Comnet LTD., IndianOil-Adani Gas Pvt. Ltd., and many more....

Shri Dharmasthala Manjunatheshwara College of Engineering & Technology

Dharwad-580 002, Karnataka | www.sdmcet.ac.in

The Principal,
SDM College of Engineering & Technology,
Dhavalagiri, Dharwad-580 002.
Ph : 0836-2447465, 2448327
Email : principal@sdmcet.ac.in

The Secretary,
SDM Educational Society,
Dhavalanagar, Sattur, Dharwad-580 009.
Ph : 0836-2464699
Email : sdmesro@gmail.com

For ADMISSIONS
Contact : **9611637191**
or visit : **www.sdmcet.ac.in**

> **A "Center of Excellence in Embedded Systems" is established in the Institute with Educational kits like ARM development boards from ARM University Program and PSoC kits by Cypress Semiconductors. Recently in association with C-DAC Pune the institute has been registered on the online portal of NASSCOM as a SPOKE to conduct online courses like Augmented Reliability (AR), Virtual Reliability (VR) along with Artificial Intelligence (AI).**

Faculty members regularly publish research papers. 1706 publications in standard journals, 1367 publications in journals listed in standard database such as Scopus, Web of Science, 1570 citations in last five years indicate transformation as a research institute. The Institute has 19 patents granted & 51 patents have been published in the last five years.

The institute has collaboration with international universities such as Kanto Gakuin University- Yokohama, JAPAN, Metropolitan University of Technology – Santiago, Chile and with industries such as TCS, SKF India Ltd. can join.

A **"Center of Excellence in Embedded Systems"** is established in the Institute with Educational kits like ARM development boards from ARM University Program and PSoC kits by Cypress Semiconductors. Recently in association with C-DAC Pune the institute has been registered on the online portal of NASSCOM as a SPOKE to conduct online courses like Augmented Reliability (AR), Virtual Reliability (VR) along with Artificial Intelligence (AI).

Industry oriented curriculum and meaningful interaction with industry makes students employable. The well-known software giant TCS and BV(DU)COE Pune came together to start a new programme B.Tech. (Computer Science and Business System). This programme is greatly successful with 100% placement. Curriculum based on NEP-2020 is implemented from June 2023, introducing various skill-based courses, value added courses. The system of academic Bank of Credit is already in existence. Industry internship of 60 days is an integrated part of the course structure and gives students industry outlook. Courses such as Quantitative Techniques, Communication and Value Engineering prepare students to face the selection process of companies. Employment Enhancement training programme, Company specific training programmes, training on aptitude tests by professionals increased the placements. More than 140 Companies such as TCS, L&T, Amazon, Birla soft, Cognizant, Infosys, Tech Mahindra, Honda, Schneider, Kirloskar, Hitachi, H.P., Volkswagen, Accenture, Capgemini, IBM visit regularly for the placement and select our students, leading to more than 90% overall placement.

For more details visit: https://www.bvuniversity.edu.in/coepune/

Contact: admissions@bvucoep.edu.in

IIRF-2024 | BEST ENGINEERING COLLEGES (GOVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
						Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
1	IIT Bombay - Indian Institute of Technology	Mumbai	Maharashtra	1		132.85	134.56	130.28	131.56	134.64	126.14	125.71	923.52
2	IIT Madras - Indian Institute of Technology	Chennai	Tamil Nadu	1		129.28	134.28	129.28	134.71	134.14	125.71	125.71	918.99
3	IIT Delhi - Indian Institute of Technology	Delhi	Delhi	1		131.85	135.54	129.71	131.42	128.57	121.57	120.85	916.11
4	IIT Kharagpur - Indian Institute of Technology	Kharagpur	West Bengal	1		129.14	132.92	129.14	133.56	132.85	122.99	122.57	912.45
5	IIT Kanpur - Indian Institute of Technology	Kanpur	Uttar Pradesh	1		128.85	132.91	129.99	131.42	132.14	123.42	122.85	910.51
6	IIT Guwahati - Indian Institute of Technology	Guwahati	Assam	1		131.42	125.82	128.71	135.85	137.25	124.42	119.71	909.44
7	IIT Roorkee - Indian Institute of Technology	Roorkee	Uttarakhand	1		129.28	130.69	127.71	133.99	126.49	122.85	127.14	905.88
8	IIT BHU - Indian Institute of Technology (BHU)	Varanasi	Uttar Pradesh	2		129.71	128.74	126.71	129.42	128.71	128.71	131.28	901.45
9	IIT Hyderabad - Indian Institute of Technology	Hyderabad	Telangana	1		128.28	133.14	126.39	123.14	127.42	131.54	125.85	896.94
10	HBTU-Harcourt Butler Technical University	Kanpur	Uttar Pradesh	3		128.57	127.14	128.57	128.85	121.42	126.85	126.28	893.24
11	IIT Indore - Indian Institute of Technology	Indore	Madhya Pradesh	1		127.14	134.11	127.14	122.57	124.28	122.85	122.85	890.85
12	IIT Ropar - Indian Institute of Technology	Ropar	Punjab	1		129.99	131.14	125.25	122.85	122.85	125.71	119.99	888.48
13	Institute of Chemical Technology	Mumbai	Maharashtra	2		128.57	128.57	128.57	121.42	124.28	124.28	124.28	886.36
14	Indian Institute of Space Science and Technology (IISST)	Thiruvananthapuram	Kerala	1		127.14	125.71	127.14	126.57	124.42	124.28	125.71	884.15
15	Central Institute of Plastic Engineering & Technology	Ahmedabad	Gujarat	1		125.71	127.14	124.14	124.28	127.14	125.85	127.14	879.42
16	IIT Mandi - Indian Institute of Technology	Mandi	Himachal Pradesh	1		126.85	124.28	127.14	121.42	119.99	127.54	127.14	874.94
17	IIT Gandhinagar - Indian Institute of Technology	Gandhinagar	Gujarat	2		121.42	125.71	126.85	124.85	122.85	125.71	128.28	872.66
18	NSUT-Netaji Subhas University of Technology	New Delhi	Delhi	2		119	124.28	124.57	127.14	124.28	128.57	127.14	867.49

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (GOVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
						Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
19	COEP - College of Engineering	Pune	Maharashtra	3		118.28	122.85	125.71	123.99	128.57	125.71	125.42	862.36
20	Anna University	Chennai	Tamil Nadu	2		121.42	124.28	123.99	119.99	120.14	122.99	128.28	858.21
21	Delhi Technological University	Delhi	Delhi	3		120.57	123.14	124.14	117.14	124.42	127.14	124.28	854.53
22	Jadavpur University - Faculty of Engineering and Technology	KolKata	West Bengal	2		119.71	127.14	123.99	118.57	114.28	118.85	119.71	851.02
23	ABV Indian Institute of Information Technology & Management	Gwalior	Madhya Pradesh	2		119.71	122.85	124.07	112.85	125.85	123.28	121.42	845.73
24	MNNIT - Motilal Nehru National Institute of Technology	Allahabad	Uttar Pradesh	4		115.71	119.99	125.71	119.99	123.14	121.42	119.99	842.9
25	Indian Institute of Technology (IIT-ISM)	Dhanbad	Jharkhand	1		120.28	123.21	122.85	112.85	117.14	119.99	118.57	839.09
26	Indian Institute of Information Technology	Allahabad	Uttar Pradesh	5		122.57	121.48	124.07	109.71	118.85	117.14	112.85	836.27
27	NIT Calicut- National Institute of Technology	Calicut	Kerala	2		121.42	117.25	122.85	115.14	117.14	118.57	114.28	832.75
28	IIEST-Indian Institute of Engineering Science & Technology	Shibpur-Howrah	West Bengal	3		117.14	119.99	122.85	117.14	118.57	112.85	114.28	830.46
29	NIT - National Institute of Technology	Tiruchirappalli	Tamil Nadu	3		119.71	117.42	121.71	114.28	118.57	117.14	115.71	828.02
30	NIT Delhi- National Institute of Technology	Delhi	Delhi	4		119.99	115.71	119.99	117.14	118.28	115.71	116.85	826.44
31	Indian Institute of Information Technology Design & Manufacturing	Jabalpur	Madhya Pradesh	3		122.85	120.71	121.42	107.14	114.28	114.28	112.85	825.36
32	NITK Surathkal - National Institute of Technology	Surathkal	Karnataka	1		119.71	119.99	117.14	112.85	117.14	117.14	118.57	823.98
33	National Institute of Food Technology Entrepreneurship and Management (NIFTEM)	Sonipat	Haryana	1		118.57	121.42	119.99	111.42	116.28	112.99	112.85	822.8
34	Indian Institute of Technology	Jodhpur	Rajasthan	1		122.28	120.85	118.99	108.28	113.57	113.71	111.42	821.59
35	NIT Hamirpur- National Institute of Technology	Hamirpur	Himachal Pradesh	2		117.14	117.14	121.42	112.92	114.28	115.71	122.71	820.5

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (GOVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
						Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
35	Defence Institute of Advanced Technology	Pune	Maharashtra	4		122.85	118.57	116.49	112.85	112.85	112.85	112.28	820.5
36	VNIT - Visvesvaraya National Institute of Technology	Nagpur	Maharashtra	5		119.14	117.14	122.48	102.85	125.71	116.42	119.99	818.5
36	Indian Institute of Information Technology Design & Manufacturing	Kancheepuram	Tamil Nadu	4		111.42	111.24	121.02	123.14	117.92	127.28	117.14	818.5
37	Zakir Husain College of Engineering and Technology, AMU	Aligarh	Uttar Pradesh	6		119.21	120.49	122.82	105.49	112.14	112.85	113.38	817.41
38	G. B. Pant University of Agriculture and Technology (College of Technology)	Pantnagar	Uttarakhand	2		118.92	120.21	122.57	103.21	115.71	113.14	115.99	816.01
38	Indian Institute of Technology	Bhubaneswar	Odisha	1		118.57	121.14	119.99	109.49	111.42	109.99	111.42	816.02
39	Central Institute of Plastic Engineering & Technology	Bhubaneswar	Odisha	2		116.78	117.35	122.92	106.07	118.78	115.71	112.85	813.62
39	Dr. B. R. Ambedkar National Institute of Technology	Jalandhar	Punjab	2		117.14	120.17	122.42	104.63	114.42	116.82	109.78	813.62
40	Rajiv Gandhi Institute of Petroleum Technology	Raibareli	Uttar Pradesh	7		118.42	115.71	123.71	102.28	117.14	115.71	121.28	812
41	Jamia Millia Islamia	New Delhi	Delhi	5		116.85	119.99	118.57	105.42	115.85	115.71	115.71	810.31
42	Central Institute of Plastic Engineering & Technology	Lucknow	Uttar Pradesh	8		117.14	119.71	118.28	105.71	115.71	113.42	112.85	808.46
43	National Institute of Technology	Rourkela	Odisha	3		119.99	117.14	113.14	111.42	111.42	112.85	113.57	806.76
44	College of Engineering	Thiruvananthapuram	Kerala	3		114.28	112.85	117.28	117.14	118.57	109.99	111.42	804.86
45	University of Delhi	Delhi	Delhi	6		119.21	117.35	115.71	102.49	118.28	115.85	113.99	803.48
46	G. B. Pant Engineering College	Pauri	Uttarakhand	3		116.78	117.14	113.71	109.99	113.99	114.28	112.64	802.06
47	Guru Gobind Singh Indraprastha University	New Delhi	Delhi	7		117.14	114.28	115.71	107.14	115.78	113.14	116.95	799.26
48	National Institute of Technology	Warangal	Telangana	2		115.71	115.14	113.71	111.42	112.85	112.42	114.14	797.96

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (GOVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
						Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
48	Maulana Azad National Institute of Technology	Bhopal	Madhya Pradesh	4		119.07	117.14	109.99	106.57	117.14	113.79	112.64	797.96
49	Indian Institute of Information Technology, Design & Manufacturing	Kurnool	Andhra Pradesh	1		115.71	114.57	114.28	111.71	113.99	111.57	108.35	796.8
50	National Institute of Technology	Durgapur	West Bengal	4		114.28	117.14	116.28	105.71	114.57	112.85	109.99	795.3
50	University School of Chemical Technology	New Delhi	Delhi	8		112	110.25	119.85	114.14	113.18	112.85	110.28	795.3
51	Indian Institute of Technology	Patna	Bihar	1		114.28	117.14	113.14	108.57	112.28	112.85	112.85	793.98
51	BIT Sindri, Department of Higher Technical Education	Dhanbad	Jharkhand	2		114.28	111.42	117.14	114.28	106.57	112.85	109.99	793.98
52	National Power Training Institute-Northern Region	New Delhi	Delhi	9		114.28	113.42	114.28	111.42	112.85	111.42	109.71	792.06
53	National Institute of Technology	Jamshedpur	Jharkhand	3		115.71	118.57	111.85	105.71	111.42	109.99	109.99	790.96
54	National Power Training Institute	Durgapur	West Bengal	5		117.14	114.28	113.28	104.28	112.85	111.42	111.42	788.76
55	JNTU College of Engineering	Hyderabad	Telangana	3		113.14	113.28	114.28	108.57	111.42	112.85	111.42	786.9
56	National Institute of Technology	Kurukshetra	Haryana	2		114.28	108.57	115.71	110.85	110.57	112.42	111.14	785.6
57	Malaviya National Institute of Technology	Jaipur	Rajasthan	2		108.21	111.64	113.57	115.14	113.71	112.85	111.42	784.03
58	Visvesvaraya Technological University	Belgaum	Karnataka	2		112.85	112.42	112.85	109.64	111.42	109.99	109.99	782.78
59	Indian Institute of Technology, Tirupati	Yerpedu	Andhra Pradesh	2		114.28	108.57	111.54	112.28	111.42	111.42	109.99	781.14
60	National Institute of Foundry & Forge Technology	Ranchi	Jharkhand	4		113.85	113.71	111.42	105.71	110.42	109.99	112.85	780.07
60	Indraprastha Institute of Information Technology	New Delhi	Delhi	10		111.42	111.42	111.42	111.42	112.87	109.99	111.42	780.07
61	National Institute of Technology	Srinagar	Uttarakhand	4		114.28	113.14	108.57	109.99	109.99	108.57	105.71	778.2
61	University College of Engineering Osmania University	Hyderabad	Telangana	4		114.28	114.21	107.14	111.28	110.28	107.32	102.85	778.2

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (GOVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
						Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
62	Jorhat Engineering College	Jorhat	Assam	2		103.92	109.92	117.14	112.85	113.99	112.85	112.85	777.01
62	Rajiv Gandhi Institute of Technology	Kottayam	Kerala	4		109.99	108.57	112.85	111.42	115.21	111.42	111.42	777.02
63	National Institute of Technology	Srinagar	Jammu and Kashmir	1		108.57	107.71	109.99	114.28	115.47	115.71	114.28	775.42
64	National Institute of Technology	Raipur	Chhatisgarh	1		102.78	105.71	117.77	117.42	113.42	113.28	110.57	774.18
64	College of Agricultural Engineering and Technology- Punjab Agricultural University	Ludhiana	Punjab	3		100.92	107.21	117.59	122.64	106.92	108.97	109.99	774.18
65	Sardar Vallabhbhai National Institute of Technology	Surat	Gujarat	3		104.21	106.21	117.57	114.71	115.99	107.28	109.85	772.38
65	Panjab University	Chandigarh	Punjab	4		105.99	106.14	115.71	114.28	111.85	111.42	111.68	772.38
66	Dr. APJ Abdul Kalam Institute of Technology	Tanakpur	Uttarakhand	5		105.71	103.71	117.27	115.35	111.42	108.99	112.64	770.66
67	National Institute of Technology	Arunachal Pradesh	Arunachal Pradesh	1		108.57	107.07	114.57	115.71	111.71	97.57	100	769.07
68	Rajkiya Engineering College	Sonbhadra	Uttar Pradesh	9		107.14	108.85	108.57	114.21	112.85	111.42	102.85	766.42
69	National Institute of Technology	Silchar	Assam	3		103.35	108.57	113.57	112.85	103.85	112.99	117.17	765.26
70	University School of Information & Communication Technology (GGSIPU)	New Delhi	Delhi	11		104.28	102.92	113.71	116.21	106.99	114.57	114.35	763.74
71	National Institute of Science & Technology	Berhampur	Odisha	4		104.28	107.14	113.99	113.42	108.57	107.14	104.28	762.14
72	National Institute of Technology	Goa	Goa	1		111.42	109.99	108.57	106.78	102.07	104.28	108.64	759.87
73	Mizoram University - School of Engineering and Technology	Aizawl	Mizoram	1		110.28	109.99	107.14	108.57	107.14	98.57	101.42	756.14
73	National Instituute of Technology	Tadepalligudem	Andhra Pradesh	3		108.57	100	114.28	105.71	113.14	112.71	111.42	756.14
74	National Institute of Technology	Patna	Bihar	2		104.28	105.71	109.71	110.71	109.99	108.57	107.97	753.04

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (GOVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
						Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
75	College of Engineering	Bhubaneswar	Odisha	5		108.57	96.11	112.19	113.14	103.71	112.85	109.99	751.12
76	Orissa School of Mining Engineering	Kendujhar	Odisha	6		104.28	104.28	111.71	104.28	111.42	111.42	112.85	749.26
77	College of Engineering & Technology	Bhubaneswar	Odisha	7		98.57	107.07	110.78	111.42	108.57	109.99	108.57	747.95
78	Govt. College of Engineering	Kannur	Kerala	5		99.28	106.41	110.85	111.14	108.28	108.57	102.57	745.48
79	Govt. College of Technology	Coimbatore	Tamil Nadu	5		99.42	104.97	110.31	112.57	107.71	108.71	102.24	744.13
80	Government Model Engineering College	Kochi	Kerala	6		97.21	104.71	110.21	107.14	121.42	108.71	108.57	741.9
81	National Power Training Institute	Nagpur	Maharashtra	6		98.57	106.99	108.85	109.99	105.14	107.42	104.85	739.64
82	University Institute of Chemical Technology, North Maharashtra University	Jalgaon	Maharashtra	7		99.35	106.35	109.68	104.92	108.42	104.42	111.09	737.2
83	University College of Engineering, Punjab Technical University	Patiala	Punjab	5		101.64	103.57	109.57	98.92	117.57	107.71	109.14	734.76
84	JNTU College of Engineering	Kakinada	Andhra Pradesh	4		100.21	97.92	109.42	107.49	115.14	111.57	107.71	733.7
85	University School of Bio-Technology (GGSIPU)	New Delhi	Delhi	12		98.92	103.64	109.42	100.64	117.28	108.42	107.92	731.97
86	Institute of Engineering & Technology	Lucknow	Uttar Pradesh	10		98.78	100.45	109.42	103.21	115.11	113.07	101.92	729.09
87	Government Engineering College Palakkad	Palakkad	Kerala	7		100	100	109.42	105.71	107.42	105.71	105.71	727.6
88	National Institute of Technology	Meghalaya	Meghalaya	1		101.64	94.78	109.42	102.57	114.28	111.57	112.21	726.23
89	Bengal Engineering and Science University	Shibpur	West Bengal	6		101.42	89.35	108.85	118.92	98.28	109.21	103.35	724.87
89	National Institute of Technology	Nagaland	Nagaland	1		100.92	100.71	108.42	104.57	111.42	99.54	98.57	724.87
90	University College of Engineering BIT Campus, Anna University	Tiruchirappalli	Tamil Nadu	6		99.64	97.57	108.28	107.78	115.42	95.71	99.42	722.09
91	National Institute of Technology	Manipur	Manipur	1		98.57	107.99	107.97	102.07	100	94.28	95.07	719.73

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (GOVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
						Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
91	Sant Longowal Institute of Engineering and Technology	Sangrur	Punjab	6		108.07	98.57	107.88	97.14	101.14	101.42	98.57	719.72
92	Mahatma Gandhi Institute of Technology	Hyderabad	Telangana	5		102.21	97.14	107.91	96.92	112.92	109.97	104.81	718.58
93	Rajasthan Technical University - University College of Engineering	Kota	Rajasthan	3		98.78	99.57	107.41	98.57	106.99	109.42	111.49	716.55
94	Indian Institute of Carpet Technology	Bhadohi	Uttar Pradesh	11		100	101.84	107.57	100.64	109.85	92.42	98	715.26
95	National Institute of Technology	Agartala	Tripura	1		95.71	97.42	107.42	101.78	109.85	113.14	104.28	712.88
96	Madan Mohan Malaviya University of Technology	Gorakhpur	Uttar Pradesh	12		97.14	96.85	105.99	103.14	104.42	111.57	105.24	710.96
96	Government College of Engineering, GCoE - Amravati	Amravati	Maharashtra	8		100	101.88	100	101.71	104.14	102.85	110.07	710.96
97	University Department of Chemical Technology, Sant Gadge Baba Amravati University	Amravati	Maharashtra	9		101.42	98.57	104.28	100	104.14	102.85	100	709.39
97	Assam University - Triguna Sen School of Technology	Silchar	Assam	4		101.71	99.42	104.28	101.42	100	99.35	100	709.39
98	National Institute of Technology	Mizoram	Mizoram	2		104.28	98	106.64	94	95.57	107.42	101.42	707.59
98	JIET School of Engineering and Technology for Girls	Jodhpur	Rajasthan	4		102.85	94.77	106.48	100	101.11	104.14	98.28	707.6
99	National Institute of Technology	Sikkim	Sikkim	1		101.42	100.57	104.28	95.71	101.42	104.28	97.14	705.84
99	JNTU University College of Engineering	Vizianagaram	Andhra Pradesh	5		100.99	101.21	105.99	100	99.11	90	94.85	705.84
100	University Institute of Engineering and Technology, Kurukshetra University	Kurukshetra	Haryana	3		102.85	91.42	106.55	95.42	111.28	109.71	97.78	704.29
100	National Institute of Technology	Puducherry	Puducherry	1		100.87	99.57	101.71	95.71	109.85	104.28	98.57	704.3
101	Pondicherry Engineering College	Pondicherry	Puducherry	2		103.35	96.11	106.42	93.14	101.14	101.42	101.42	702.02
102	Indira Gandhi Institute of Technology	New Delhi	Delhi	13		98.85	94.28	106.21	100.92	102.28	98.57	102.85	700.37

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (GOVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
						Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
102	JNTU College of Engineering	Anantpur	Andhra Pradesh	6		98.57	91.02	105.71	99.92	109.57	109.99	99.35	700.37
103	Haldia Institute of Technology	Haldia	West Bengal	7		101.42	100.28	103.71	96.42	102.71	88.57	92.21	698.11
104	Indira Gandhi Institute of Technology	Sarang	Odisha	8		99.85	97.14	97.28	99.71	104.28	105.71	102.85	696.49
105	Tezpur University - School of Engineering	Sonitpur	Assam	5		90.21	98.71	105.28	98.57	109.71	107.25	92.21	692.87
105	Central Food Technological Research Institute	Mysuru	Karnataka	3		103.35	86.34	105.14	102.85	99.28	100	93.02	692.87
106	Jodhpur National University	Jaipur	Rajasthan	5		101.42	88.57	104.57	98.57	101.42	100.14	100	690.23
107	Institute of Engineering & Management, IEM	Kolkata	West Bengal	8		100.28	87.57	105.05	96.35	111.14	101.71	91.92	687.97
107	Ambedkar Institute of Advance Communication Technologies & Research	New Delhi	Delhi	14		101.71	95.71	105.28	93.14	99.14	90	89.64	687.97
108	Thanthai Periyar Govt. Institute of Technology	Vellore	Tamil Nadu	7		100	100.28	101.42	91.42	97.14	93.57	92.85	686.11
109	Govt. Engineering College, Barton Hill	Thiruvananthapuram	Kerala	8		99.21	99.57	102.85	94.28	95.42	86.57	86.14	683.43
110	University Science Instrumentation Centre, University of Kalyani	Nadia	West Bengal	9		97.14	98.57	97.71	97.14	97.71	98.14	91.42	682.07
111	University institute of Chemical Engineering and Technology	Chandigarh	Punjab	7		95.92	97.14	102.85	95.14	100	86.71	94.28	679.77
112	Guru Jambheshwar University of Science and Technology - Dept of Computer Science and Engineering	Hisar	Haryana	4		97.85	94.71	100	97.14	92.71	98.57	89.07	677.6
112	Pandit Deendayal Petroleum University	Gandhinagar	Gujarat	4		101.42	91.85	100.28	90.82	101.14	94.57	100	677.59
113	Uttar Pradesh Textile Technology Institute	Kanpur	Uttar Pradesh	13		97.14	96.14	98.85	95.71	92.57	95.71	95.71	675.89
114	Govt. College of Engineering and Ceramic Technology	Kolkata	West Bengal	10		98.57	96.42	101.85	97.14	90.28	82.42	84.28	674.73
115	Rajasthan College of Engineering For Women	Jaipur	Rajasthan	6		92.85	97.92	100	95.71	95.57	93.14	95.71	673.43

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (GOVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
						Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
115	University Institute of Engineering and Technology, maharshi Dayananda University	Rohtak	Haryana	5		95.71	95.71	99.14	94.85	94.71	95.17	97.14	673.43
116	Faculty of Technology and Engineering, The Maharaja Sayajirao University of Baroda	Vadodara	Gujarat	5		98.57	100	97.14	92.85	90.28	87.14	87.14	671.31
117	North Eastern Regional Institute of Science & Technology	Itanagar	Arunachal Pradesh	2		97.71	96.07	100.34	90.07	91.42	91.71	91.42	668.66
118	JNTU Hyderabad , University College of Engineering, Science & Technology	Karimnagar	Telangana	6		94.28	93.42	96.85	96.28	96.85	94.28	94.57	665.97
119	College of Agricultural Engineering and Technology- CCS Haryana Agricultural University	Hisar	Haryana	6		91.42	96.2	99.71	91.42	91.42	98	99.71	663.99
120	Dr. Baba Saheb Ambedkar Technological University	Raigad	Maharashtra	10		94.28	92.85	99.14	93.71	90	94.28	97.14	662.59
121	Vishwakarma Govt. Engineering College	Chand Kheda	Gujarat	6		95.71	90	98.64	92.21	91.11	92.85	100	658.85
122	The National Institute of Engineering	Bengaluru	Karnataka	4		91.5	91.4	98.57	92.85	93.85	95.71	97.71	656.49
123	Indira Gandhi Engineering College	Sagar	Madhya Pradesh	5		94.28	90	95.71	94.28	91.57	96.28	94.85	655.04
124	University College of Engineering	Tindivanam	Tamil Nadu	8		93.64	94.28	95.71	91.42	95.71	87.14	88.57	653.59
125	College of Technology and Engineering, Maharana Pratap University of Agriculture and Technology	Udaipur	Rajasthan	7		92.85	92.85	98	90	92.28	91.42	90	652.09
126	University College of Engineering	Villupuram	Tamil Nadu	9		90.5	91.42	97.85	91.42	95.28	90.85	92.85	649.46
127	West Bengal University of Technology	KolKata	West Bengal	11		95.71	94.28	95.71	87.14	87.14	87.14	87.42	647.45
128	Dr. Bhimrao Ambedkar Engineering College of Information Technology	Banda	Uttar Pradesh	14		94.28	88.57	97.42	90.35	92.28	88	89.07	645.81
129	JNTUA College of Engineering	Cuddapah	Andhra Pradesh	7		92.78	88.85	94.57	95.71	89.42	85.71	87.42	643.29
130	University College of Engineering	Arni	Tamil Nadu	10		90.78	90.4	95.42	94.28	92.71	82.85	82.85	640.93
131	Govt. College of Engineering and Research	Pune	Maharashtra	11		91.42	87.42	96.92	91.42	90.85	88.57	90	639.63

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (GOVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
						Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
132	Mysuru Royal Institute of Technology	Mysuru	Karnataka	5		88.57	87.57	96.57	91.42	95.28	90	91.42	637.72
133	West Bengal University of Animal and Fishery Sciences	Kolkata	West Bengal	12		93.14	89.57	96.92	86	87	87.14	86	635.74
134	Sree Venkateswara University College of Engineering	Tirupati	Andhra Pradesh	8		90	86	94.57	91.78	99.42	85.57	85.28	633.77
135	Govt. College of Engineering Textile Technology	Kolkata	West Bengal	13		92.78	86.41	96.85	88.57	86.57	85.14	85.71	632.11
136	L. D. College of Engineering	Ahmedabad	Gujarat	7		90.78	86	96.92	91.78	88.14	80	84.28	630.24
137	College of Engineering (University Department, Anna University)	Chennai	Tamil Nadu	11		88	86.42	97	88.85	92.25	85.71	89	628.57
138	Ch. Devi Lal Memorial Govt. Engineering College	Sirsa	Haryana	7		89.81	86.07	96.5	91.71	90	78.57	79.5	627.01
139	Govt. College of Engineering and Textile Technology	Berhampore	West Bengal	14		91.27	86.57	96.71	90.28	84.28	75.57	82	625.46
140	Gurukula Kangri Vishwavidyalaya (Faculty of Engineering)	Haridwar	Uttarakhand	6		90.65	86.05	96.84	91.14	84.85	76.42	77.64	624.26
141	Maharaja Institute of Technology	Thandavapura	Karnataka	6		93.35	84.7	94.28	88.57	86.71	78.57	81.42	622.94
142	Kamla Nehru Institute of Technology	Sultanpur	Uttar Pradesh	15		92.68	84.68	94	88.57	88.14	76.71	83.42	621.87
143	Mahatma Jyoti Rao Phule University	Jaipur	Rajasthan	8		92.85	84.71	93.42	89.14	87.71	76.57	79.1	620.6
144	Guru Nanak Dev University - Faculty of Engineering	Amritsar	Punjab	8		90.71	84.74	92.85	91.71	85.85	78	79.1	618.99
145	Dibrugarh University - Institute of Engineering & Technology	Dibrugarh	Assam	6		91.42	84.68	93.71	88.57	88.14	75.28	78.71	617.44
146	Mahatma Gandhi Mission's Jawaharlal Nehru Engineering College	Aurangabad	Maharashtra	12		88.57	87.57	92.42	87.14	91	75.71	81.21	615.86
147	Institute of Mass Communication and Media Technology, Kurukshetra University	Kurukshetra	Haryana	8		88.57	84.74	94.28	86.57	92.85	76.35	79.07	614
148	Kalyani Govt. Engineering College	Nadia	West Bengal	15		88.57	84.71	91.42	89.14	88.85	75.28	84.78	612.21

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (GOVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
						Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
149	Institute of Engineering & Technology, MJP Rohilkhand University	Bareilly	Uttar Pradesh	16		91.42	84.68	88.57	88.57	86.5	78	80.5	611.07
150	Deenbandhu Chhoturam University of Science and Technology	Murthal	Haryana	9		88.57	87.14	87.57	88.57	87.42	78.57	81.42	609.61
151	Shri Guru Govind Singhji Institute of Engineering and Technology	Vishnupuri	Maharashtra	13		87.14	81.42	90	92.85	90	75.28	87.64	608.53
152	Rajeev Gandhi Memorial College of Engineering and Technology	Kurnool	Andhra Pradesh	9		87.14	84.71	88.71	90.28	88.57	78.57	77.67	606.62
153	Maulana Abul Kalam Azad University of Technology	Nadia	West Bengal	16		90.5	83.21	87.14	88.57	85.42	77.14	81.85	604.74
154	University College of Engineering	Kariavattom	Kerala	9		87.42	84.98	86.57	90.85	86	75.71	79.1	603.14
155	Manyawar Kansi Ram Engineering College of Information Technology	Ambedkar Nagar	Uttar Pradesh	17		90	84.68	88.57	81.42	85.14	80.71	83.57	601.51
156	Mahatma Gandhi Mission's College of Engineering and Technology	Mumbai	Maharashtra	14		87.71	84.28	87.14	87.14	87.14	76.54	80	600.08
157	USTM, University of Science & Technology Meghalaya	Ri- Bhoi	Meghalaya	2		86.57	84.62	88.57	86.42	85.14	75.71	80.57	598.67
158	Dr.Ram Manohar Lohia Awadh University - Institute of Engineering Technology	Faizabad	Uttar Pradesh	18		87.14	84.28	85.71	88.57	84.28	75.14	80.5	596.97
159	Jalpaiguri Govt. Engineering College	Jalpaiguri	West Bengal	17		86.42	80	85.71	88.57	90	78.57	87.64	595.41
160	University Institute of Technology	Burdwan	West Bengal	18		87.42	81.85	85.71	85.42	89.28	77.14	84.28	594.32
160	Rajiv Gandhi University - Faculty of Engineering and Technology	Papumpare	Arunachal Pradesh	3		86.85	82.85	82.85	88.57	87.81	80	81.42	594.32

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (PVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK	ZONE	ZONE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
								Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
1	Birla Institute of Technology and Science (BITS Pilani)	Pilani	Rajasthan	1	North	1		126.42	120.57	122.99	125.42	124.71	128.57	127.28	**870.25**
2	Thapar Institute of Engineering & Technology	Patiala	Punjab	1	North	2		120.99	123.14	122.42	128.42	127.14	128.55	127.11	**868.99**
3	International Institute of Information Technology (Hyderabad)	Hyderabad	Telangana	1	South	1		119.99	127.71	121.42	122.97	126.51	129.85	128.55	**867.10**
4	Dhirubhai Ambani Institute of Information and Communication Technology, DA-IICT	Gandhinagar	Gujarat	1	West	1		123.57	114.57	120.85	129.84	131.45	132.84	134.12	**865.47**
5	Vellore Institute of Technology	Vellore	Tamil Nadu	1	South	2		121.42	114.57	120.42	131.26	131.39	132.66	132.81	**862.51**
6	Manipal Academy of Higher Education	Manipal	Karnataka	1	South	3		120.14	119.14	120.57	126.71	128.42	131.42	131.41	**859.79**
7	RV College of Engineering	Bengaluru	Karnataka	2	South	4		123.57	122.85	120.71	118.28	122.69	129.99	128.57	**857.24**
8	Birla Institute of Technology (Mesra)	Mesra	Jharkhand	1	East	1		120.14	123.14	120.99	118.57	122.71	132.49	130.71	**854.32**
9	BMS College of Engineering	Bengaluru	Karnataka	3	South	5		123.85	125.99	120.57	113.99	120.99	129.14	116.42	**852.67**
9	Bharati Vidyapeeth (Deemed to be University) College of Engineering	Pune	Maharashtra	1	West	2		114.28	126.28	120.42	125.71	121.07	131.39	119.65	**852.65**
10	International Institute of Information Technology (Bengaluru)	Bengaluru	Karnataka	4	South	6		116.42	119.99	120.71	124.28	121.71	131.42	131.56	**848.94**
11	PSG College of Technology	Coimbatore	Tamil Nadu	2	South	7		122.14	117.42	120.57	118.57	122.71	129.85	130.28	**847.05**
12	PEC University of Technology	Chandigarh	Punjab	2	North	3		117.57	120.57	120.42	119.99	118.71	131.15	130.71	**844.41**
13	Amrita Vishwa Vidyapeetham	Coimbatore	Tamil Nadu	3	South	8		122.14	120.28	120.57	113.99	124.42	121.41	123.57	**841.42**
13	SRM Institute of Science & Technology	Chennai	Tamil Nadu	3	South	8		119.57	119.14	120.42	113.85	123.09	132.56	132.14	**841.41**
14	KJ Somaiya College of Engineering	Mumbai	Maharashtra	2	West	3		122.14	117.14	120.28	119.71	115.99	122.71	116.99	**837.56**
14	Dayananda Sagar College of Engineering	Bengaluru	Karnataka	5	South	9		116.85	121.99	120.14	115.14	118.57	127.28	130.71	**837.54**

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (PVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK	ZONE	ZONE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
								Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
15	Malnad College of Engineering	Hassan	Karnataka	6	South	10		120.99	115.99	119.99	113.57	117.28	132.71	130.71	**834.84**
15	Ramaiah Institute of Technology	Bengaluru	Karnataka	6	South	10		117.07	117.71	119.44	117.99	117.57	130.14	132.14	**834.83**
16	Krishna Institute of Engineering and Technology (KIET)	Ghaziabad	Uttar Pradesh	1	North	4		122.14	117.42	119.42	114.85	115.99	122.57	126.42	**833.60**
17	Dayananda Sagar University	Bengaluru	Karnataka	7	South	11		120.71	116.99	119.41	112.57	115.42	128.42	130.71	**831.18**
17	Faculty of Engineering, Bharath Institute of Higher Education and Research (BIHER)	Chennai	Tamil Nadu	4	South	11		117.14	120.57	119.41	110.85	118.42	131.28	130.24	**831.18**
18	Coimbatore Institute of Technology	Coimbatore	Tamil Nadu	5	South	12		113.57	121.42	119.99	111.28	119.99	131.28	129.28	**828.33**
18	TKM College of Engineering	Kollam	Kerala	1	South	12		117.28	119.14	119.85	110.71	118.57	129.99	127.14	**828.33**
19	ICFAI Tech Hyderabad	Hyderabad	Telangana	2	South	13		115.28	117.99	119.58	113.17	116.67	132.71	128.85	**826.44**
20	K.S.Rangasamy College of Technology	Namakkal	Tamil Nadu	6	South	14		114.99	112.71	119.58	116.11	121.37	134.14	132.14	**825.15**
21	Shiv Nadar University	Dadri	Uttar Pradesh	2	North	5		116.14	117.85	119.44	107.57	121.42	132.56	130.32	**823.48**
21	Mahindra University	Hyderabad	Telangana	3	South	15		116.71	118.14	119.02	108.54	118.28	131.31	130.56	**823.46**
22	JSS Science and Technology University	Mysuru	Karnataka	8	South	16		116.28	117.99	119.02	108.28	117.28	130.89	130.04	**821.40**
23	Kalinga Institute of Industrial Technology (KIIT)	Bhubaneswar	Odisha	1	East	2		113.85	118.99	119.01	109.57	115.57	129.85	132.05	**819.66**
23	B.N.M Institute of Technology	Bengaluru	Karnataka	9	South	17		116.28	120.28	118.99	105.38	112.99	131.28	130.54	**819.63**
24	Kamaraj College of Engineering and Technology	Madurai	Tamil Nadu	7	South	18		114.99	118.85	119.44	106.28	114.17	129.74	130.71	**816.94**
24	PES Instituite of Technology, Bangalore South Campus (Formerly PES School of Engineering)	Bengaluru	Karnataka	10	South	18		119.28	113.99	119.29	107.82	111.57	129.46	130.78	**816.92**

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (PVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK	ZONE	ZONE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
								Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
25	Bharatiya Vidya Bhavans Sardar Patel Institute of Technology	Mumbai	Maharashtra	3	West	4		116.28	115.99	119.15	106.84	113.78	131.28	128.85	**814.90**
25	Ramrao Adik Institute of Technology, D Y Patil Deemed to be University	Navi Mumbai	Maharashtra	3	West	4		126.57	107.35	119.15	108.28	111.57	119.85	129.48	**814.88**
26	G. Pulla Reddy Engineering College (Autonomous)	Kurnool	Andhra Pradesh	1	South	19		117.85	118.42	118.58	103.99	108.51	128.54	129.28	**813.48**
27	Siddaganga Institute of Technology	Tumkur	Karnataka	11	South	20		116.42	114.85	118.64	106.57	114.42	130.42	129.16	**812.38**
28	Bharati Vidyapeeth College of Engineering	Navi Mumbai	Maharashtra	4	West	5		115.99	117.71	118.65	104.57	108.71	131.28	127.85	**810.89**
29	Muffakham Jah College of Engineering and Technology	Hyderabad	Telangana	4	South	21		112.14	116.28	118.68	111.14	112.99	125.57	126.57	**809.41**
30	Sathyabama Institute of Science and Technology	Chennai	Tamil Nadu	8	South	22		116.57	115.14	118.57	101.21	115.67	129.14	129.28	**806.68**
31	Institute of Technology, Nirma University	Ahmedabad	Gujarat	2	West	6		113.85	117.99	118.57	101.14	112.99	128.05	127.55	**804.19**
31	Dr. DY Patil Institute of Technology	Pune	Maharashtra	5	West	6		113.99	117.64	118.29	101.71	112.57	126.99	129.85	**804.17**
32	G.H. Raisoni College of Engineering	Nagpur	Maharashtra	6	West	7		107.71	116.64	117.99	111.35	111.28	127.57	128.25	**802.29**
32	Maharaja Agrasen Institute of Technology	Delhi	Delhi	1	North	6		115.14	115.07	117.89	102.57	110.94	128.42	129.44	**802.28**
33	Periyar Maniammai Institute of Science & Technology	Thanjavur	Tamil Nadu	9	South	23		109.42	111.64	117.75	113.42	113.85	126.99	127.94	**800.52**
34	Thiagarajar College of Engineering	Madurai	Tamil Nadu	10	South	24		112.71	115.14	117.58	103.99	114.42	125.57	126.99	**799.39**
34	Lakshmi Narain College of Technology & Science (LNCT)	Bhopal	Madhya Pradesh	1	Central	1		113.71	113.07	117.45	105.08	111.35	128.42	129.45	**799.38**
35	B.S. Abdur Rahman Crescent Institute of Science and Technology	Chennai	Tamil Nadu	11	South	25		108.57	106.49	117.29	117.12	116.71	129.85	130.85	**798.34**
36	Shanmugha Arts Science Technology & Research Academy, SASTRA	Thanjavur	Tamil Nadu	12	South	26		113.71	117.35	117.28	99.31	113.39	124.27	126.57	**797.31**

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (PVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK	ZONE	ZONE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
								Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
37	Maharaja Surajmal Institute of Technology	Delhi	Delhi	2	North	7		112.28	114.21	115.87	103.78	115.71	128.42	126.57	**796.30**
37	M Kumarasamy College of Engineering	Karur	Tamil Nadu	13	South	27		112.42	107.85	115.85	113.35	114.17	125.54	127.07	**796.29**
38	Vidyavardhaka College of Engineering	Mysuru	Karnataka	12	South	28		106.42	118.85	115.44	107.85	110.14	125.99	127.18	**794.27**
39	RMK Engineering College	Kavaraipettai	Tamil Nadu	14	South	29		109.71	106.49	115.15	113.99	115.28	128.18	128.39	**791.45**
40	Amity University	Noida	Uttar Pradesh	3	North	8		114.14	113.14	115.21	102.42	103.98	126.99	126.42	**788.84**
41	Christ University	Bengaluru	Karnataka	13	South	30		108.71	113.64	114.87	105.78	110.14	126.99	123.71	**786.27**
42	Bennett University	Greater Noida	Uttar Pradesh	4	North	9		112.14	108.85	114.57	106.85	108.71	125.28	126.71	**784.93**
43	Parul Institute of Engineering and Technology , Parul University	Vadodara	Gujarat	3	West	8		106.99	110.85	114.49	105.42	115.28	128.42	126.42	**782.03**
43	ITM University	Gwalior	Madhya Pradesh	2	Central	2		109.42	114.49	114.44	101.14	108.71	126.99	123.88	**782.01**
44	PSNA College of Engineering & Technology	Dindigul	Tamil Nadu	15	South	31		111.42	106.49	114.45	108.28	112.99	120.71	123.57	**780.94**
45	Vel Tech Rangarajan Dr. Sagunthala R & D Institute of Science and Technology	Chennai	Tamil Nadu	16	South	32		104.57	109.07	114.48	112.85	111.28	124.14	123.71	**779.50**
46	BITS Pilani (Hyderabad Campus)	Hyderabad	Telangana	5	South	33		107.14	111.42	114.44	111.42	111.57	114.28	112.28	**778.49**
46	O P Jindal University	Raigarh	Chhattisgarh	1	Central	3		106.99	101.14	114.42	115.17	115.85	126.28	128.27	**778.46**
47	Alliance University	Bengaluru	**Karnataka**	14	South	34		109.71	103.92	114.29	108.07	114.14	124.85	126.28	**776.69**
47	Meenakshi College of Engineering (MCE)	Chennai	Tamil Nadu	17	South	34		103.14	107.07	114.01	114.21	112.71	123.95	127.58	**776.68**
48	Chitkara University Institute of Engineering & Technology	Rajpura	Punjab	3	North	10		101.28	106.35	113.99	118.21	107.28	124.42	126.57	**774.46**

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (PVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK	ZONE	ZONE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
								Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
49	Bharti Vidhyapeeth College of Engineering	Delhi	Delhi	3	North	11		105.71	102.78	113.72	113.78	111.57	125.57	123.28	**772.41**
49	College of Engineering Roorkee, COER	Roorkee	Uttarakhand	1	North	11		104.57	105.35	113.72	111.78	114.14	122.71	124.21	**772.39**
50	IMS Engineering College	Ghaziabad	Uttar Pradesh	5	North	12		103.71	103.21	113.59	112.35	112.71	127.85	125.92	**770.09**
51	D. Y. Patil College of Engineering and Technology	Kolhapur	Maharashtra	7	West	9		105.14	105.07	113.38	109.71	106.88	124.85	126.57	**767.97**
52	Channabasaveshwara Institute of Technology	Gubbi	Karnataka	15	South	35		109.42	103.07	113.37	109.71	110.14	114.14	117.99	**766.76**
52	Jamia Hamdard University	New Delhi	Delhi	4	North	13		102.85	107.14	113.01	109.28	114.42	117.02	126.77	**766.75**
53	NMIMS University (Mukesh Patel School of Technology Management and Engineering)	Mumbai	Maharashtra	8	West	10		103.85	100.78	112.85	113.71	114.14	122.71	124.02	**765.17**
54	Chandigarh University (University Institute of Engineering)	Mohali	Punjab	4	North	14		105.14	102.42	111.59	111.89	112.67	122.71	123.84	**765.17**
55	Shri Ram Murti Smarak College of Engineering And Technology, Bareilly	Bareilly	Uttar Pradesh	6	North	15		102.85	109.78	111.58	108.14	108.71	118.42	122.28	**763.99**
55	Navrachana University	Vadodara	Gujarat	4	West	11		102.99	102.78	110.59	113.12	116.64	122.28	123.92	**763.97**
56	Vidya Jyothi Institute of Technology	Hyderabad	Telangana	6	South	36		104.28	100.21	110.29	113.99	108.71	126.71	126.57	**761.50**
57	SDM College of Engineering and Technology	Dharwad	Karnataka	16	South	37		109.42	102.92	110.17	110.28	112.99	106.28	113.21	**759.50**
57	Padmabhooshan Vasantraodada Patil Institute of Technology	Sangli	Maharashtra	9	West	12		103.71	112.64	109.67	106.85	105.07	114.57	112.49	**759.48**
58	Shri Sant Gajanan Maharaj College of Engineering	Shegaon	Maharashtra	10	West	13		103.71	101.64	109.45	109.97	113.28	123.99	122.28	**756.67**
58	Aarupadai Veedu Institute of Technology, Vinayaka Mission University	Paiyanoor	Tamil Nadu	18	South	38		103.71	102.78	107.72	112.42	114.28	119.14	119.65	**756.65**
59	Hyderabad Institute of Technology and Management	Hyderabad	Telangana	7	South	39		106.57	96.21	107.02	113.14	112.99	123.71	125.42	**754.10**

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (PVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK	ZONE	ZONE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
								Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
60	St. Joseph College of Engineering	Chennai	Tamil Nadu	19	South	40		108.85	95.64	106.59	112.57	108.71	121.99	123.71	**752.48**
61	Sri Indu College of Engineering & Technology	Hyderabad	Telangana	8	South	41		104.85	104.49	106.31	104.07	114.14	122.14	121.99	**751.13**
61	BML Munjal University	Gurugram	Haryana	1	North	16		107.71	98.74	106.31	108.84	102.99	126.99	128.39	**751.11**
62	Gandhi Institute of Technology and Management (GITAM)	Vishakhapatnam	Andhra Pradesh	2	South	42		97.85	104.71	105.88	112.57	113.85	122.42	120.99	**748.91**
63	Sanjivani College of Engineering	Kopargaon	Maharashtra	11	West	14		100.99	103.07	106.17	109.71	111.57	121.57	120.99	**747.18**
63	DY Patil College of Engineering, Akurdi	Pune	Maharashtra	11	West	14		102.28	98.78	105.87	111.14	110.14	126.85	126.84	**747.18**
64	Arulmigu Meenakshi Amman College of Engineering	Kanchipuram	Tamil Nadu	20	South	43		98.14	102.64	105.31	111.14	112.14	123.71	125.28	**744.60**
65	Maharishi Markandeshwar University	Mullana	Haryana	2	North	17		102.42	104.07	104.88	107.35	105.85	118.42	121.35	**742.50**
66	Shri Vishnu Engineering College for Women	Bhimavaram	Andhra Pradesh	3	South	44		99.42	104.64	104.85	106.85	104.42	124.14	123.71	**740.06**
66	Kumaraguru College of Technology	Coimbatore	Tamil Nadu	21	South	44		98	104.64	104.74	110.07	106.85	120.14	120.92	**740.06**
67	Galgotias College of Engineering and Technology	Greater Noida	Uttar Pradesh	7	North	18		102.42	97.35	104.49	105.71	111.85	125.57	126.99	**737.18**
67	Brainware University	Kolkata	West Bengal	1	East	3		101.28	110.21	104.45	98.28	100.82	117.99	125.57	**737.18**
68	Ajay Kumar Garg Engineering College	Ghaziabad	Uttar Pradesh	8	North	19		100.71	102.35	104.44	101.42	112.42	124.14	123.85	**735.62**
69	Sri Muthukumaran Institute of Technology	Chennai	Tamil Nadu	22	South	45		98.14	103.07	104.31	109.28	100.71	121.42	118.14	**733.09**
69	Presidency University (School of Engineering)	Bengaluru	Karnataka	17	South	45		99.57	98.78	103.88	108.42	106.37	123.71	125.57	**733.09**
70	Velalar College of Engineering and Technology	Erode	Tamil Nadu	23	South	46		99.42	103.07	103.87	108.28	100.14	112.71	120.85	**730.26**
71	Lovely Professional University	Jalandhar	Punjab	5	North	20		102.14	95.64	103.85	103.99	111.57	121.28	122.21	**727.84**

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (PVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK	ZONE	ZONE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
								Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
71	Pimpri Chinchwad College of Engineering	Akurdi	Maharashtra	12	West	15		104.38	102.82	102.95	98.78	103.65	116.98	120.01	**727.83**
71	R. C. Patel Institute of Technology	Shirpur	Maharashtra	12	West	15		105.28	101.31	103.85	97.14	103.71	117.88	120.07	**727.82**
72	NIIT University	Neemrana	Rajasthan	2	North	21		102.14	104.45	103.82	100	100.14	113.28	118.14	**726.52**
73	Bhilai Institute of Technology	Durg	Chhattisgarh	2	Central	4		103.85	97.31	103.71	102.85	102.42	112.71	123.85	**724.12**
74	Jain University	Bengaluru	Karnataka	18	South	47		100.71	88.74	103.57	112.38	112.85	116.99	120.99	**722.89**
74	ICFAI University (Jaipur)	Jaipur	Rajasthan	3	North	22		105.28	101.92	103.57	96.85	104.42	108.57	114.42	**722.88**
75	IES College of Technology	Bhopal	Madhya Pradesh	3	Central	5		102.42	94.5	103.45	102.57	104.28	122.71	119.85	**720.67**
75	SRM University	Sonipat	Haryana	3	North	23		99.57	98.74	103.42	95.42	113.14	125.65	124.17	**720.65**
76	Institute of Aeronautical Engineering	Hyderabad	Telangana	9	South	48		99.42	100.21	102.49	102.57	102.99	112.71	119.42	**718.14**
76	Symbiosis International University	Pune	Maharashtra	13	West	16		102.42	98.74	102.45	99.71	112.85	111.28	106.71	**718.13**
77	CV Raman College of Engineering	Bhubaneswar	Odisha	2	East	4		99.28	101.59	101.92	99.71	104.42	114.14	113.85	**715.58**
77	Dr. N. G. P. Institute of Technology	Chennai	Tamil Nadu	24	South	49		96.42	105.59	101.94	93.45	112.99	115.99	117.71	**715.57**
78	Acharya Institute of Technology	Bengaluru	Karnataka	19	South	50		98	100.21	101.78	101.14	102.99	114.14	116.57	**712.84**
78	PE Society's Modern College of Engineering	Pune	Maharashtra	14	West	17		97.42	105.88	101.64	96.71	105.71	107.28	113.85	**712.84**
79	ICFAI University (Dehradun)	Dehradun	Uttarakhand	2	North	24		106.99	95.5	101.59	91.14	112.71	111.71	112.28	**711.08**
79	ADAMAS University (School of Engineering and Technology)	Kolkata	West Bengal	2	East	5		97.85	97.31	101.59	101.25	112.35	112.57	113.42	**711.06**
80	Sikkim Manipal Institute of Technology	Sikkim	Sikkim	1	North-East	1		101.28	97.31	101.57	96.85	104.71	114.14	112.99	**708.34**
80	Oriental University	Indore	Madhya Pradesh	4	Central	6		98.14	100.17	101.49	98.28	105.99	111.28	112.42	**708.33**

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (PVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK	ZONE	ZONE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
								Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
81	Hindustan Institute of Technology and Science	Chennai	Tamil Nadu	25	South	51		98	99.64	101.28	97.57	111.28	109.14	110.42	**707.25**
81	Manav Rachna University	Faridabad	Haryana	4	North	25		92.71	97.31	101.14	103.99	112.35	115.57	116.74	**707.23**
82	Erode Sengunthar Engineering College (Autonomous)	Erode	Tamil Nadu	26	South	52		103.85	98.74	101.07	91.14	98.71	115.57	113.85	**705.26**
83	B V Raju Institute of Technology	Narsapur	Telangana	10	South	53		94.85	91.6	101.14	106.85	103.14	119.14	118.14	**702.81**
83	Don Bosco Institute of Technology,	Bengaluru	Karnataka	20	South	53		97.85	92.6	101.28	101.05	116.01	109.14	110.99	**702.79**
84	University of Petroleum and Energy Studies (UPES)	Dehradun	Uttarakhand	3	North	26		99.57	95.88	101.02	99.71	100.14	108.12	109.85	**700.25**
85	Graphic Era	Dehradun	Uttarakhand	4	North	27		100.99	99.02	101.01	94	98.35	106.99	107.92	**698.78**
85	MIT Academy of Engineering	Alandi	Maharashtra	15	West	18		99.57	91.6	100.92	101.14	106.31	108.45	111.25	**698.77**
86	Koneru Lakshmaiah Education Foundation University (K L College of Engineering)	Vaddeswaram	Andhra Pradesh	4	South	54		102.42	93.02	100.95	96.04	97.28	109.85	112.42	**696.23**
87	Jaypee Institute of Information Technology (Main Campus)	Noida	Uttar Pradesh	9	North	28		95	90.17	100.97	105.42	104.42	111.99	112.42	**694.94**
88	Integral University	Lucknow	Uttar Pradesh	10	North	29		89.57	98.74	100.78	102.57	104.28	110.14	109.57	**693.71**
89	LNM Institute of Information Technology	Jaipur	Rajasthan	4	North	30		95.57	90.88	100.74	100.71	104.14	111.57	113.57	**691.07**
90	Bapuji Institute of Engineering and Technology	Davangere	Karnataka	21	South	55		103.14	96.74	100.49	86.85	98.42	105.57	108.42	**689.22**
91	Kongu Engineering College	Perundurai	Tamil Nadu	27	South	56		92.71	93.5	100.35	99.71	102.99	110.57	112.57	**687.31**
92	G D Goenka University	Gurugram	Haryana	5	North	31		94.28	94.3	100.25	92.85	105.85	110.48	113.64	**684.54**
93	Mody University of Science and Technology (SET)	Lakshmangarh	Rajasthan	5	North	32		93.85	94.28	100.39	97.42	97.28	104.85	109.85	**681.82**
94	Karnatak Law Society's Gogte Institute of Technology (KLS)	Belgaum	Karnataka	22	South	57		94	94.3	100.24	92.85	105.99	105.71	105.05	**679.70**

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (PVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK	ZONE	ZONE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
								Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
94	Vikrant University	Gwalior	Madhya Pradesh	5	Central	7		98.71	91.6	100.21	93	97.28	107.42	103.78	**679.69**
95	G Pullaiah College of Engineering and Technology	Kurnool	Andhra Pradesh	5	South	58		100.42	90.02	100.17	92.71	97.28	101.84	103.62	**677.36**
95	Amity University (Jaipur)	Jaipur	Rajasthan	6	North	33		91.28	91.74	100.35	99.27	97.28	106.99	112.45	**677.34**
96	Amity School of Engineering and Technology, Ranchi	Ranchi	Jharkhand	2	East	6		88.85	99.44	100.15	89.71	97.28	110.57	111.92	**674.82**
96	Lakshmi Narain College of Technology Excellence (LNCTE)	Bhopal	Madhya Pradesh	6	Central	8		92.42	91.88	100	95.42	99.77	108.71	106.91	**674.79**
97	MVN University	Palwal	Haryana	6	North	34		92.85	92.58	99.64	92.57	104.42	104.28	104.91	**672.55**
97	BMS Institute of Technology	Bengaluru	Karnataka	23	South	59		94.42	88.72	99.68	95.22	101.28	106.28	107.68	**672.55**
98	KU College of Engineering and Technology	Warangal	Telangana	11	South	60		95.14	94.92	98.92	89.71	93	104.42	108.28	**671.01**
99	Birla Institute of Technology (Patna)	Patna	Bihar	1	East	7		94.71	92.6	98.74	89.71	95.85	106.99	107.42	**668.68**
99	Lords Institute of Engineering and Technology	Hyderabad	Telangana	12	South	61		90.85	90.21	98.64	96.28	99.25	107.57	109.42	**668.67**
100	CMR Engineering College	Hyderabad	Telangana	13	South	62		95.14	95.44	98.44	86.85	94.98	103.85	105.42	**667.65**
101	Amity School of Engineering & Technology, Patna	Patna	Bihar	2	East	8		99.71	87.3	98.21	92.57	88.71	105.09	101.48	**665.62**
101	Amity School of Engineering and Technology, Kolkata	Kolkata	West Bengal	3	East	9		91.14	100.29	98	88.78	92.71	99.45	100	**665.61**
102	B.G.S Institute of Technology, Adichuchangiri University	B.G. Nagara	Karnataka	24	South	63		90.14	92.85	97.78	96.42	100.14	98.07	99.21	**664.10**
102	Jeppiaar Institute of Technology	Chennai	Tamil Nadu	28	South	63		91.71	97.15	97.35	91.31	92.31	99.75	101.14	**664.08**
103	Thangavelu Engineering College	Chennai	Tamil Nadu	29	South	64		90.28	96.87	97.21	89.71	91.28	104.17	103.99	**661.29**
104	Ravindra College of Engineering for Women	Kurnool	Andhra Pradesh	6	South	65		88.85	92.58	97.21	95.08	97.28	101.75	101.14	**659.81**

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (PVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK	ZONE	ZONE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
								Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
105	Ramachandra College of Engineering	Eluru	Andhra Pradesh	7	South	66		91.14	91.3	96.5	95.42	90.14	104.14	101.64	**658.72**
106	Ramco Institute of Technology	Rajapalayam	Tamil Nadu	30	South	67		96.28	90.15	95.35	89.71	90.42	101.84	99.71	**655.83**
107	University of Engineering and Management	Kolkata	West Bengal	4	East	10		89.14	90.15	95.5	91.14	102.99	102.85	102.57	**653.12**
108	Heritage Institute of Technology	KolKata	West Bengal	5	East	11		90.28	95.87	95.35	88.28	88.71	99.24	98.28	**650.52**
109	MLR Institute of Technology	Dundigal	Telangana	14	South	68		89.71	98.58	94.5	86.85	91.28	95.25	94	**649.23**
110	Tulsiramji Gaikwad - Patil College of Engineering and Technology	Nagpur	Maharashtra	16	West	19		89.71	97.01	94.35	88.28	90.42	93.57	96.71	**647.94**
111	Dhole Patil College of Engineering	Pune	Maharashtra	17	West	20		91.14	91.15	93.92	89.71	91.85	96.91	99.71	**645.36**
112	Nutan Maharashtra Institute of Engineering	Pune	Maharashtra	18	West	21		88.57	90.31	93.5	92.28	92.85	99.57	99.42	**643.73**
112	Vikrant Institute of Technology and Management, Indore	Indore	Madhya Pradesh	7	Central	9		91.14	90.01	93.5	90.47	91.18	97.34	99.6	**643.72**
113	Sangam University	Bhilwara	Rajasthan	7	North	35		88.42	90.45	93.21	91.14	91.57	98.71	100.99	**641.40**
114	Chaitanya Bharathi Institute of Technology	Hyderabad	Telangana	15	South	69		89.57	89.74	93.07	89.71	90.14	99.21	98.1	**639.02**
115	The Oxford College of Engineering	Bengaluru	Karnataka	25	South	70		88.14	90.45	93.07	89.71	90.28	98.62	98.14	**637.56**
116	Bannari Amman Institute of Technology	Sathyamangalam	Tamil Nadu	31	South	71		88.28	90.3	92.92	86.55	90.42	103.42	98.14	**635.68**
117	Dharmsinh Desai University - Faculty of Technology	Nadiad	Gujarat	5	West	22		89.71	90.44	92.72	88.71	90.14	94.14	88.28	**633.79**
118	Vivekananda College of Engineering and Technology	Puttur	Karnataka	26	South	72		88.42	90.17	92.64	90.85	88.71	90.32	92.42	**632.50**
119	Sri Krishna College of Engineering and Technology	Coimbatore	Tamil Nadu	32	South	73		88.57	90.17	92.5	88.57	90	90.94	90.55	**630.18**
119	Shri Rawatpura Sarkar University (SRU)	Raipur	Chhattisgarh	3	Central	10		89.14	92.28	92.35	85.74	90.21	90.45	88.57	**630.18**

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (PVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK	ZONE	ZONE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
								Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
120	MES College of Engineering	Kuttipuram	Kerala	2	South	74		92.71	87.3	92.07	88.28	89.85	84.14	86.85	627.82
121	Mepco Schlenk Engineering College	Sivakasi	Tamil Nadu	33	South	75		87.85	89.78	92.07	88.28	89.07	88.57	88.85	625.52
122	Sri Venkateswara College of Engineering	Kanchipuram	Tamil Nadu	34	South	76		89.71	92.44	91.71	81.14	88.71	88	88.28	623.16
123	Sri Sivasubramaniya Nadar College of Engineering	Kanchipuram	Tamil Nadu	35	South	77		90	88.72	91.71	85.42	89.85	82.85	86.85	621.02
124	CVR College of Engineering	Hyderabad	Telangana	16	South	78		89.57	88.44	91.57	88.28	89.21	78.42	78.28	618.49
125	Vignan's Foundation For Science Technology and Research	Guntur	Andhra Pradesh	8	South	79		90	90.01	91.52	87.14	88.71	72.37	78.28	617.42
126	GM Institute of Technology	Davangere	Karnataka	27	South	80		88.71	89.72	91.5	88.28	85.85	75.57	78.28	616.08
126	Yeshwantrao Chavan College of Engineering	Nagpur	Maharashtra	19	West	23		89.71	88.72	91.35	88.28	87.71	74	77.58	616.08
127	Sardar Patel College of Engineering	Mumbai	Maharashtra	20	West	24		88.28	89.87	91.28	82.57	88.71	82.85	84	614.54
127	Anil Neerukonda Institute of Technology and Science	Vishakhapatnam	Andhra Pradesh	9	South	81		88	89.74	91.28	82.54	88.64	83.74	85.28	614.53
128	Ballari Institute of Technology and Management	Bellary	Karnataka	28	South	82		88.71	89.87	90.71	85.42	87.28	75.92	79.71	613.05
129	M S Engineering College, Bangalore	Bengaluru	Karnataka	29	South	83		88.57	88.3	90.64	85	90	78.42	78.28	611.76
130	Dr. Ambedkar Institute of Technology	Bengaluru	Karnataka	30	South	84		90.28	90.3	90.64	82.11	84.42	75.57	78.28	610.36
131	Rizvi College of Engineering	Bandra	Maharashtra	21	West	25		88.78	88.72	90.64	85.64	84.71	73.14	75.68	608.01
132	BK Birla Institute of Engineering and Technology	Pilani	Rajasthan	8	North	36		89.85	88.57	90.28	83.57	84.42	73.27	74.14	606.08
133	Chandigarh College of Engineering and Technology	Chandigarh	Punjab	6	North	37		88.28	88.72	90.28	83.71	84.94	72.85	76.85	604.69
134	Bipin Tripathi Kumaon Institute of Technology (Formerly Kumaon Engineering College)	Dwarahat	Uttarakhand	5	North	38		87	88.74	90.28	83.71	84.42	74.14	75.28	602.40

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (PVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK	ZONE	ZONE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
								Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
135	Vivekananda Institute of Technology	Bengaluru	Karnataka	31	South	85		89.28	88.57	90.21	81	84.14	71.85	73	**600.91**
136	Maeer's MIT College	Bengaluru	Karnataka	32	South	86		88.71	89.72	90.21	79.85	79.82	72.71	72.14	**598.38**
137	Thadomal Shahani Engineering College	Mumbai	Maharashtra	22	West	26		89.42	90.15	90.17	77.14	79	72.71	73.28	**596.86**
138	Noida Institute of Engineering and Technology (NIET)	Greater Noida	Uttar Pradesh	11	North	39		90.14	89.3	89.85	76.71	77.57	72.71	73.78	**595.23**
139	Rajalakshmi Engineering College	Chennai	Tamil Nadu	36	South	87		88.28	89.87	89.85	75.57	76.42	74.14	77.57	**592.73**
140	Maturi Venkata Subba Rao Engineering College	Hyderabad	Telangana	17	South	88		88.64	84.15	89.57	78.42	79.64	76.38	77.08	**589.91**
141	K.S.R Institute for Engineering and Technology	Tiruchengode.	Tamil Nadu	37	South	89		92.28	78.78	89.14	78.28	78.71	77	78	**587.05**
142	Guru Nanak Institute of Technology	Secunderabad	Telangana	18	South	90		90.14	88.44	89	72.42	73.91	72.91	74	**585.96**
143	MAEER's MIT College of Railway Engineering and Research	Barshi	Maharashtra	23	West	27		89.71	89.72	89	72.71	71.44	70.31	71.92	**584.68**
144	Bhagwant University	Ajmer	Rajasthan	9	North	40		90.14	88.44	88.85	72.21	72.92	69	68.71	**581.90**
145	Atharva College of Engineering	Malad	Maharashtra	24	West	28		88.14	88.72	88.85	71.45	73	70.71	71.78	**579.70**
146	Karunya Institute of Technology and Sciences	Coimbatore	Tamil Nadu	38	South	91		88	83.28	88.85	74.57	75.57	72.07	73.85	**577.19**
147	Francis Xavier Engineering College	Tirunelveli	Tamil Nadu	39	South	92		88.57	84.71	88.85	73	74.14	68.71	70.71	**575.49**
148	Dr. Mahalingam College of Engineering & Technology	Pollachi	Tamil Nadu	40	South	93		90	86	89.57	69.85	71.14	65.43	66.14	**573.00**
148	KCG College of Technology	Karapakkam	Tamil Nadu	40	South	93		88.57	87.57	89.42	70.14	68.57	65.75	69.57	**573.00**
149	Aditya Engineering College	Surampalem	Andhra Pradesh	10	South	94		90	89.14	89.28	68.34	63.18	64.63	63.85	**570.76**
150	Birla Vishvakarma Mahavidyalaya	Anand	Gujarat	6	West	29		88.57	90.42	89.14	64.43	66.35	65.08	66.57	**567.99**

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (PVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK	ZONE	ZONE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
								Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
151	Sri Sairam Engineering College	Kanchipuram	Tamil Nadu	41	South	95		90	91.71	89	62.85	61.14	62.35	62.85	**565.56**
152	KJ Somaiya Institute of Engineering and Information Technology	Mumbai	Maharashtra	25	West	30		88.57	94.28	89	60.85	61.14	60.67	60	**563.23**
153	Dr. Ambedkar Institute of Technology For Divyangjan	Kanpur	Uttar Pradesh	12	North	41		85.71	83.28	88.57	68.71	69.04	69.37	68.88	**560.26**
154	NITTE Meenakshi Institute of Technology	Bengaluru	Karnataka	33	South	96		89.71	91.3	87.71	61.28	60.41	59.85	61.14	**558.89**
154	Swami Keshvanand Institute of Technology, Management and Gramothan	Jaipur	Rajasthan	10	North	42		88.71	91.58	87.71	60	64.77	60.2	62.85	**558.88**
155	G Narayanamma Institute of Technology and Science (For Women)	Hyderabad	Telangana	19	South	97		88.71	90.14	87.85	58.43	63.85	61.28	68.28	**556.51**
156	CGC College of Engineering, Landran Campus	Mohali	Punjab	7	North	43		87.42	87.14	88.85	59.85	65.55	67.57	60	**553.99**
157	Gayatri Vidya Parishad College of Engineering	Vishakhapatnam	Andhra Pradesh	11	South	98		83	93	84.21	59.85	70.85	65.57	64	**551.94**
158	Shanmuganathan Engineering College	Arasampatti	Tamil Nadu	42	South	99		87.42	85.71	89	60.28	61.28	61.95	63.75	**549.10**
159	KL University (Koneru Lakshmaiah Education Foundation)	Vijaywada	Andhra Pradesh	12	South	100		88.71	85.87	89.14	58.08	59.04	65.57	58.28	**547.97**
160	Sri Krishna College of Technology	Coimbatore	Tamil Nadu	43	South	101		87.4	87.28	87.14	59.85	57.57	61.85	60.83	**545.68**
161	Hindusthan Institute of Technology	Coimbatore	Tamil Nadu	44	South	102		88.14	87.14	84.42	58.64	60.97	60.14	62.43	**542.85**
162	Arya College of Engineering	Jaipur	Rajasthan	11	North	44		88.28	90.14	84.42	57.17	57.31	57.3	58.28	**541.82**
163	Geethanjali College of Engineering And Technology	Hyderabad	Telangana	20	South	103		87.57	85.71	88.57	58.28	57.5	57.14	57.14	**540.63**
163	Phaltan Education Society's College of Engineering	Phaltan	Maharashtra	26	West	31		87.42	90	84.42	57.45	57.71	57.57	57.57	**540.61**

*Page 6

*Page 6

IIRF-2024 | BEST ENGINEERING COLLEGES (PVT.)

ALL INDIA RANK* (Based on Survey, Perception & Secondary Research)	NAME OF INSTITUTES	CITY	STATE	STATE RANK	ZONE	ZONE RANK		Weighted Score out of 1000 (Distributed across 7 Dimensions)							WEIGHTED INDEX (OUT OF 1000)
								Placement Performance (PP)	Teaching Learning Resources & Pedagogy (TLRP)	Research (RS)	Industry Income and Integration (III)	Placement Strategies & Support (PSS)	Future Orientation (FO)	External Perception & International Outlook (EPIO)	
164	B N College of Engineering & Technology, Lucknow	Lucknow	Uttar Pradesh	13	North	45		87	87.28	83.4	59.85	59.01	58.48	61.4	**539.22**
165	DMI College of Engineering	Chennai	Tamil Nadu	45	South	104		88.82	82.84	87.71	57.55	58.71	58.13	59.97	**538.05**
165	Excel Engineering College (Autonomous)	Komarapalayam	Tamil Nadu	45	South	104		87.14	85.85	87.31	57.77	57.57	57.54	57.43	**538.04**
166	Rameshwaram Institute of Technology & Management	Lucknow	Uttar Pradesh	14	North	46		83	88.14	83.57	61.43	60.14	60	58.57	**536.32**
167	Sriram Engineering College	Chennai	Tamil Nadu	46	South	105		83.14	85.85	83.71	60.43	61.28	62.85	61.43	**534.61**
167	Shah & Anchor Kutchhi Engineering College, Mumbai	Mumbai	Maharashtra	27	West	32		83.28	82.85	83.85	62	64.43	61.5	66.14	**534.59**
168	CT University , Ludhiana	Ludhiana	Punjab	8	North	47		88.28	83.01	86	57.57	57.47	57.45	57.33	**533.39**
169	Sagar Institute of Science Technology & Research (SISTec-R)	Bhopal	Madhya Pradesh	8	Central	11		83.14	88.72	83.57	58.57	58.57	58.28	57.33	**532.23**
170	Hindusthan College of Engineering and Technology	Coimbatore	Tamil Nadu	47	South	106		85.71	85.85	83.42	57.28	57.48	60.78	57.54	**530.97**
171	Vardhaman College of Engineering	Rangareddy	Telangana	21	South	107		85.71	83.02	83.28	59.71	59	59.85	58.57	**529.95**
171	Vasantdada Patil Pratishthan's College of Engineering & Visual Arts	Mumbai	Maharashtra	28	West	33		88.28	82	83.71	57.53	58	59.85	57.68	**529.94**
172	Institute of Information and Communication Technology	Ahmedabad	Gujarat	7	West	34		83.71	81.92	84.28	60.85	59.14	60.28	60.28	**528.38**
172	Rajshree Institute of Management and Technology	Bareilly	Uttar Pradesh	15	North	48		81.68	80.57	83.85	62.57	63.71	62.57	63.34	**528.38**
173	Arulmigu Kalasalingam College of Engineering	Virudhnagar	Tamil Nadu	48	South	108		85.71	80	83.71	59.57	60	60.35	60.43	**526.93**
173	KIT Kanpur	Kanpur	Uttar Pradesh	16	North	49		82.85	82.57	84.14	58.57	61.43	61.43	61.43	**526.93**
173	Sanskrithi School of Engineering	Puttaparthi	Andhra Pradesh	13	South	108		84.28	81.42	82.71	60.14	61.57	60	61.43	**526.91**

*Page 6

*Page 6

ALL INDIA RANK*	PRIVATE INSTITUTES GOOD FOR EMPLOYABILITY	CITY	STATE	STATE RANK	ZONE	ZONE RANK
1	Vellore Institute of Technology	Vellore	Tamil Nadu	1	South	1
2	Birla Institute of Technology and Science (BITS Pilani)	Pilani	Rajasthan	1	North	1
3	Dhirubhai Ambani Institute of Information and Communication Technology	Gandhinagar	Gujarat	1	West	1
4	Thapar Institute of Engineering & Technology	Patiala	Punjab	1	North	2
5	RV College of Engineering	Bangalore	Karnataka	1	South	2
6	BMS College of Engineering	Bangalore	Karnataka	2	South	3
7	Birla Institute of Technology	Mesra	Jharkhand	1	East	1
8	ICFAI Tech Hyderabad	Hyderabad	Telangana	1	South	4
9	SRM Institute of Science & Technology	Chennai	Tamil Nadu	2	South	5
10	International Institute of Information Technology	Hyderabad	Telangana	2	South	6
11	Manipal Academy of Higher Education	Manipal	Karnataka	3	South	7
12	Amrita Vishwa Vidyapeetham University	Coimbatore	Tamil Nadu	3	South	8
13	PEC University of Technology	Chandigarh	Punjab	2	North	3
14	Bharati Vidyapeeth (Deemed to be University), College of Engineering	Pune	Maharashtra	1	West	2
15	Dayananda Sagar College of Engineering	Bangalore	Karnataka	4	South	9
16	KJ Somaiya College of Engineering	Mumbai	Maharashtra	2	West	3
17	Ramaiah Institute of Technology	Bangalore	Karnataka	5	South	10
18	Krishna Institute of Engineering and Technology (KIET)	Ghaziabad	Uttar Pradesh	1	North	4
19	Maharaja Agrasen Institute of Technology	Delhi	Delhi	1	North	5
20	JSS Science and Technology University	Mysuru	Karnataka	6	South	11
21	Faculty of Engineering, Bharath Institute of Higher Education and Research (BIHER)	Chennai	Tamil Nadu	4	South	12
22	Kalinga Institute of Industrial Technology (KIIT)	Bhubaneswar	Odisha	1	East	2
23	LNCT University	Bhopal	Madhya Pradesh	1	Central	1
24	Mahindra University	Hyderabad	Telangana	3	South	13
25	Maharaja Surajmal Institute of Technology	Delhi	Delhi	2	North	6

*Page 6

ALL INDIA RANK*	PRIVATE INSTITUTES GOOD FOR EMPLOYABILITY	CITY	STATE	STATE RANK	ZONE	ZONE RANK
26	Malnad College of Engineering	Hassan	Karnataka	7	South	14
27	PSG College of Technology	Coimbatore	Tamil Nadu	5	South	15
28	Siddaganga Institute of Technology	Tumkur	Karnataka	8	South	16
29	Shiv Nadar University (SNU)	Dadri	Uttar Pradesh	2	North	7
30	Institute of Technology, Nirma University	Ahmedabad	Gujarat	2	West	4
31	Coimbatore Institute of Technology	Coimbatore	Tamil Nadu	6	South	17
32	PSNA College of Engineering & Technology	Dindigul	Tamil Nadu	7	South	18
33	Amity University	Noida	Uttar Pradesh	3	North	8
34	Bennett University	Greater Noida	Uttar Pradesh	4	North	9
35	COER University	Roorkee	Uttarakhand	1	North	10
36	Dayananda Sagar University	Bangalore	Karnataka	9	South	19
37	Chitkara University Institute of Engineering & Technology	Rajpura	Punjab	3	North	11
38	Bharatiya Vidya Bhavans Sardar Patel Institute of Technology	Mumbai	Maharashtra	3	West	5
39	Sathyabama Institute of Science and Technology	Chennai	Tamil Nadu	8	South	20
40	B.N.M Institute of Technology	Bengaluru	Karnataka	10	South	21
41	Thiagarajar College of Engineering	Madurai	Tamil Nadu	9	South	22
42	G.H. Raisoni College of Engineering	Nagpur	Maharashtra	4	West	6
43	Chandigarh University (University Institute of Engineering)	Mohali	Punjab	4	North	12
44	Brainware University	Kolkata	West Bengal	1	East	3
45	NMIMS University (Mukesh Patel School of Technology Management and Engineering)	Mumbai	Maharashtra	5	West	7
46	ADAMAS University (School of Engineering and Technology)	Kolkata	West Bengal	2	East	4
47	Bharti Vidhyapeeth College of Engineering	Delhi	Delhi	3	North	13
48	Christ University	Bangalore	Karnataka	11	South	23
49	K.S.Rangasamy College of Technology	Namakkal	Tamil Nadu	10	South	24
50	Kamaraj College of Engineering and Technology	Madurai	Tamil Nadu	11	South	25

*Page 6

ALL INDIA RANK*	PRIVATE INSTITUTES GOOD IN PHD ENROLLEMENT	CITY	STATE	STATE RANK	ZONE	ZONE RANK
1	Vellore Institute of Technology	Vellore	Tamil Nadu	1	South	1
2	Amrita Vishwa Vidyapeetham	Coimbatore	Tamil Nadu	2	South	2
3	Birla Institute of Technology and Science (BITS Pilani)	Pilani	Rajasthan	1	North	1
4	SRM Institute of Science & Technology	Chennai	Tamil Nadu	3	South	3
5	Thapar Institute of Engineering & Technology	Patiala	Punjab	1	North	2
6	Dhirubhai Ambani Institute of Information and Communication Technology	Gandhinagar	Gujarat	1	West	1
7	PSNA College of Engineering & Technology	Dindigul	Tamil Nadu	4	South	4
8	Manipal Academy of Higher Education	Manipal	Karnataka	1	South	5
9	Bharati Vidyapeeth (Deemed to be University), College of Engineering	Pune	Maharashtra	1	West	2
10	Faculty of Engineering, Bharath Institute of Higher Education and Research (BIHER)	Chennai	Tamil Nadu	5	South	6
11	PEC University of Technology	Chandigarh	Punjab	2	North	3
12	PSG College of Technology	Coimbatore	Tamil Nadu	6	South	7
13	Birla Institute of Technology	Mesra	Jharkhand	1	East	1
14	Amity University	Noida	Uttar Pradesh	1	North	4
15	Dayananda Sagar University	Bangalore	Karnataka	2	South	8
16	Shiv Nadar University (SNU)	Dadri	Uttar Pradesh	2	North	5
17	ICFAI Tech Hyderabad	Hyderabad	Telangana	1	South	9
18	JSS Science and Technology University	Mysuru	Karnataka	3	South	10
19	Bennett University	Greater Noida	Uttar Pradesh	3	North	6
20	Kalinga Institute of Industrial Technology - KIIT	Bhubaneswar	Odisha	1	East	2
21	Chitkara University Institute of Engineering & Technology	Rajpura	Punjab	3	North	7
22	B.S. Abdur Rahman Crescent Institute of Science and Technology	Chennai	Tamil Nadu	7	South	11
23	Sathyabama Institute of Science and Technology	Chennai	Tamil Nadu	8	South	12
24	Institute of Technology, Nirma University	Ahmedabad	Gujarat	2	West	3
25	Jamia Hamdard	New Delhi	Delhi	1	North	8

*Page 6

ALL INDIA RANK*	NAME OF INSTITUTES	CITY	STATE/UT
1	Atal Bihari Vajpayee Indian Institute of Information Technology and Management	Gwalior	Madhya Pradesh
2	Indian Institute of Information Technology, Allahabad	Allahabad	Uttar Pradesh
3	Indian Institute of Information Technology, Design and Manufacturing, Jabalpur	Jabalpur	Madhya Pradesh
4	Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram	Kancheepuram	Tamil Nadu
5	Indian Institute of Information Technology, Guwahati	Guwahati	Assam
6	Indian Institute of Information Technology, Tiruchirappalli	Tiruchirappalli	Tamil Nadu
7	Indian Institute of Information Technology, Design and Manufacturing, Kurnool	Kurnool	Andhra Pradesh
8	Indian Institute of Information Technology, Vadodara	Vadodara	Gujarat
9	Indian Institute of Information Technology, Lucknow	Lucknow	Uttar Pradesh
10	Indian Institute of Information Technology, Kota	Kota	Rajasthan
11	Indian Institute of Information Technology, Dharwad	Dharwad	Karnataka
12	Indian Institute of Information Technology, Sri City	Sri City	Andhra Pradesh
13	Indian Institute of Information Technology, Bhopal	Bhopal	Madhya Pradesh
14	Indian Institute of Information Technology, Una	Una	Himachal Pradesh
15	Indian Institute of Information Technology, Sonepat	Sonepat	Haryana
16	Indian Institute of Information Technology, Kalyani	Kalyani	West Bengal
17	Indian Institute of Information Technology, Kottayam	Kottayam	Kerala
18	Indian Institute of Information Technology, Ranchi	Ranchi	Jharkhand
19	Indian Institute of Information Technology, Nagpur	Nagpur	Maharashtra
20	Indian Institute of Information Technology, Pune	Pune	Maharashtra
21	Indian Institute of Information Technology, Manipur	Manipur	Manipur
22	Indian Institute of Information Technology, Raichur	Raichur	Karnataka
23	Indian Institute of Information Technology, Surat	Surat	Gujarat
24	Indian Institute of Information Technology, Bhagalpur	Bhagalpur	Bihar
25	Indian Institute of Information Technology, Agartala	Agartala	Tripura

*Page 6

MATHEMATICS CHALLENGE

CMT - SERIES PROBLEMS - by GANIT MATH (गणित मठ)

CMT-2020/ 56 :

For $x>1$, $y>2$, $m\neq 0$, and, $a\neq b\neq c$,

$$If\ x+1\div\left[x+1\div\left\{x+1\div\left(x+1\div\overline{x+\frac{1}{x}}\right)\right\}\right]=\frac{1189}{360};$$

$$y-1\div\left[y-1\div\left\{y-1\div\left(y-1\div\overline{y-\frac{1}{y}}\right)\right\}\right]=\frac{2911}{780};$$

$$\frac{z}{2}=\frac{1}{1+m^{(a-b)}+m^{(c-b)}}+\frac{1}{1+m^{(b-a)}+m^{(c-a)}}+\frac{1}{1+m^{(a-c)}+m^{(b-c)}};$$

$$px+qy+rz=rx+py+qz=147;$$

$$qx+ry+pz=165;$$

then,

$$\frac{p^3(q-r)+q^3(r-p)+r^3(p-q)}{p^2q-p^2r+q^2r-q^2p+r^2p-r^2q}=?$$

CMT-2020/ 57 :

For $xy>0$ and $(uv)\in R^+$; if

$m=u^7+v^7$, and, $n=x^{12}+y^{16}+x^{20}+y^{24}+\ldots+x^{132}$, where,

$$u^{16}v^{16}+6u^8v^8-7=4\left\{\left(u^4v^4+1\right)^2-4\right\};$$

$$(u-v)^2-6(u+v)+13=0;$$

$$x^{16}+y^{-16}+4\left(x^8+y^{-8}+1\right)=2\left(x^8y^{-8}+4x^4y^{-4}+2\right);$$

and, $x^{81}+y^{81}=\sqrt{2}$; then,

$$\frac{3m+n^5+n^4+n^3+n^2+1}{n^{15}+n^{14}+n^{13}+n^{12}+4m-842}=?$$

- composed by -
Teachers' Teacher , Maths Wizard

श्री श्री 1008 गणित गुरु गणितानन्द जी महाराज
संस्थापक - गणित मठ

... must practise from

MENTAL MATHS
Work Book of Algebra
Volume - 0001A
for
Speed and accuracy

If $x^2+y^2=\alpha$ *and* $xy=\beta$, *then find the value of* : $x^{16}+y^{16}$, $x^{15}+y^{15}$, *and*, $x^{12}+y^{12}$ *in terms of* α *and* β *in the simplest form.*

...a part of Ganitanand-Facts
http://www.ganitmath.in/Books.aspx

ANSWERS : CMT-2020/54: 280 ; CMT-2020/55: $\frac{1}{51}$

Answers will be published in the next issue . You can ask any queries and send your solution to
Email : ganitmath.india@gmail.com , M: +91 8826337312 , Website : www.ganitmath.in

SCHOOL OF ENGINEERING

PhD: CSE • ECE

MTech CSE: AI & ML

MTech: Robotics & Industrial Automation

BTech CSE:
AI & ML • Data Science • AI & Robotics • Cyber Security

BTech: CSE • ME • EE

Diploma: CSE • EE • ME • CE • RA





500+ PAN-INDIA RECRUITERS

Capgemini, wipro, TATA, Cognizant, pwc, Infosys, IBM, Adobe, Deloitte., VIPS, RELIANCE Communications, Khadims, ADITYA BIRLA GROUP, Bandhan Bank, Genpact, amazon.in, DA MILANO, Nestle, future group

Contact 91471 48631
398, Ramkrishnapur Road, near Jagadighata Market, Barasat, Kolkata - 700125
/brainwareuniversitykolkata | www.brainwareuniversity.ac.in