

TODAY IS INTERNATIONAL
TRANSLATION DAY

BUILDING
BRIDGES
BETWEEN
LANGUAGES
AND CULTURES

In a world where people com-municate across countries, cultures and communities, the ability to understand different languages has become increasingly important. Translation plays a key role in mak-ing information, ideas and knowledge accessi-ble to people who speak different languages.

Translation is more than replacing words from one language with words from another. A good translation considers the meaning, context, tone and cul-tural background of the original message. The same word or expres-sion can have different meanings depending on how and where it is used. Translators therefore need strong language skills as well as an understanding of the subject and culture involved.

For students, learn-ing about translation can strengthen vocabu-lary, reading compre-hension, writing and communication skills. It can also encourage them to appreciate languages beyond their own. Translating a short story, article or conver-sation can help students understand how expres-sions, humour and cul-tural references change from one language to another. Translation is also important in education and access to knowledge. Books, re-search papers, learning resources and digital content can reach wider audiences when they are available in multiple languages. In a multi-lingual country such as India, translation can help connect learners with educational mat-erial across regional and national languages.

Technology is chang-ing the way transla-tion is done. Online dictionaries, translation software and artificial intelligence tools can assist users in under-standing unfamiliar words and sentences. However, automated translation may not always understand con-text, cultural references or subtle differences in meaning. Human judgement remains im-portant, particularly for academic, literary, legal and specialised content. Students interested in languages can explore translation through reading, writing and learning additional languages. They can compare how the same idea is expressed in different languages and practise translat-ing simple passages while preserving their original meaning.

Choosing M.Tech specialisation: Look beyond the next big trend

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Artificial Intelligence, Data Science, Cybersecurity, VLSI and Robotics often dominate these conversations. While understanding industry demand is important, choosing a postgraduate specialisation solely because it is currently popular can be limiting. Technology changes quickly, and the skills in demand today may evolve significantly by the time a student completes an M.Tech.

A more useful question is: What kind of engineer do I want to become, and which specialisation can help me develop that capability?

An M.Tech is more than an additional qualification. It can provide an opportunity to develop deeper technical knowledge, work on complex problems, undertake research and build expertise in a chosen area. The decision, therefore, deserves consideration beyond placement figures and technology trends.

Start with interest,
but assess aptitude

Genuine interest is an important starting point. Students can reflect on the subjects, projects and engineering problems that held their attention during undergraduate study.

However, interest needs to be considered alongside aptitude. A student may be interested in Artificial Intelligence but may not enjoy mathematics, statistics or programming. Another student may discover a stronger inclination towards circuit design, electronics or hardware systems. Others may find greater satisfaction in areas such as

structures, energy or materials. The right specialisation often lies at the intersection of interest, ability and willingness to develop expertise over time.

Academic performance, project work, laboratory experience and conversations with faculty members, alumni and industry professionals can help students assess where their strengths and interests align.

Engineering disciplines are
increasingly connected

Another factor students should consider is the changing relationship between engineering disciplines. The boundaries between computer science, electronics, mechanical, civil and other branches are becoming increasingly interconnected.

AI and machine learning are being applied across healthcare, manufacturing, agriculture, robotics, finance and infrastructure. The growth of connected devices is linking physical systems with digital platforms, while automation is changing processes across manufacturing and logistics.

Developments in the semiconductor sector have also increased attention towards VLSI, chip design, embedded systems and electronic system design. Cybersecurity is becoming relevant across cloud platforms, connected devices and digital services.

At the same time, sustainability is creating engineering applications in renewable energy, electric mobility, smart grids, energy-efficient buildings, sustainable materials and climate-resilient infrastructure.

This makes interdisciplinary capability increasingly relevant. A mechanical engineer with knowledge of robotics and data analytics, for instance, may work across traditional and emerging applications. Similarly, civil engineers can combine their core knowledge with areas such as GIS, digital twins and smart

infrastructure.

The question should therefore extend beyond "Which technology is trending?" to "Which emerging technologies can complement my core engineering knowledge?"

Look beyond the degree title

The name of an M.Tech programme does not tell the entire story. Students should examine the curriculum, faculty expertise, laboratories, research opportunities, industry projects, internships and interdisciplinary work available through a programme.

Postgraduate education also needs to develop the ability to work with real-world problems. Research, experimentation, simulation, computational tools and project-based learning can help students connect theoretical knowledge with practical applications. The growing use of generative AI offers an example. AI tools can assist with coding, documentation and analysis, but engineers still need to understand fundamentals, define problems correctly, verify outputs and make informed technical decisions.

Treat industry
demand as a
signal

Placement
figures and
hiring
trends can

provide useful information, but they should not be the sole basis for choosing a specialisation. Technology markets change with economic conditions, automation and new developments. A field experiencing strong hiring today may look different several years later.

Transferable capabilities can provide a stronger foundation. Analytical thinking, problem-solving, mathematical reasoning, research skills, systems thinking, technical communication and the ability to learn new technologies can remain useful across changing professional environments.

Choose a trajectory, not a trend

There is no single M.Tech specialisation that is suitable for every engineering graduate. The choice depends on individual interests, aptitude, career goals, academic foundation and willingness to continue learning.

Students interested in research may prioritise theoretical depth, laboratories and faculty-led projects. Those planning industry careers may look more closely at internships, application-oriented courses and industry exposure. Students interested in entrepreneurship may benefit from interdisciplinary programmes and opportunities to develop technical ideas into practical solutions. The decision can begin with a few simple questions: What do I enjoy learning? What am I good at? Which engineering problems interest me? How is my discipline changing? Which emerging technologies complement my strengths? And what options will this specialisation leave open in the future?

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Prof Neelima Satyam nominated for Devendra Lal Memorial Medal

The IIT Indore Professor hails from AP and
served as an expert advisor for several disaster
management projects in Telugu states

VRC PHANIHARAN

INTERNATIONALLY recognised geotechnical engineer and Earth scientist Professor Neelima Satyam has been nominated for the Devendra Lal Memorial Medal of the American Geophysical Union (AGU) for her contributions to landslide hazard assessment, geotechnical engineering, seismic microzonation and disaster-resilient infrastructure. Prof Neelima, a professor at the Indian Institute of Technology, Indore, Madhya Pradesh, hails from Chittoor, Andhra Pradesh.

The Devendra Lal Memorial Medal, established in the name of renowned geophysicist Professor Devendra Lal, whose pioneering work established the use of cosmogenic isotopes as tracers in Earth science research, is awarded annually to an early- or mid-career scientist for outstanding research in Earth and space sciences.

Professor Neelima Satyam's research integrates geotechnical engineering, geomorphology, remote sensing, real-time sensing, geospatial analytics and artificial intelligence to improve the understanding, monitoring and prediction of landslides and other geohazards. Her work covers landslide susceptibility mapping, rainfall-threshold analysis, debris-flow characterisation and modelling, hydro-geotechnical assessment and sensor-based early-warning systems. Her research has contributed to the development of operational monitoring and early-warning frameworks in landslide-prone mountainous regions, supporting disaster-management au-

thorities in preparedness and response to rainfall-induced slope failures.

She has also made significant contributions to seismic microzonation and earthquake hazard assessment through high-resolution shear-wave velocity profiling, site-response analysis and geotechnical hazard mapping. These studies have supported hazard-informed infrastructure planning and development.

A major aspect of Prof Neelima's work has been translating scientific research into engineering practice. She has contributed to national technical standards and committees on hill-area development, soil and foundation engineering, roads, tunnels, embankments, drainage, ground improvement, and disaster management.

Prof Neelima's scholarly contributions include more than 140 peer-reviewed publications, patents and international collaborative research projects. She has also played an important role in mentoring researchers, professional training, scientific outreach and capacity building in developing regions.

The nomination recognises her sustained contributions to advancing Earth and geotechnical sciences and translating scientific knowledge into practical approaches for disaster-risk reduction and resilient infrastructure.

The medal recipient receives an engraved medal, lifetime membership of AGU, induction into the AGU College of Fellows, and recognition and an opportunity to present at the AGU annual meeting in the year of the award.



Prof Neelima Satyam

ICMAI organises advanced skill training programme



The Institute of Cost Accountants of India (ICMAI) organised a one-day Advanced Skill Training Programme (ASTP) in Hyderabad to help bridge the gap between academic learning and professional practice.

The programme was organised by the ICMAI Hyderabad Chapter and focused on developing workplace-oriented skills among students and professionals. The training covered areas including communication, analytical thinking,

presentation, problem-solving, corporate etiquette, adaptability and professional confidence.

CMA Chittaranjan Chattopadhyay, President, ICMAI, presented ASTP certificates to participants during the valedictory programme held at the Federation of Telangana Chambers of Commerce and Industry (FTCCI), Lakdikapal.

CMA Dr K.C.H.A.V.S.N. Murthy, Central Council Member, ICMAI; CMA D. Venkata Ram Babu, Chairman, ICMAI Hyderabad Chapter; and CMA

Kirti Gupta, Secretary, ICMAI Hyderabad Chapter, were present at the programme.

According to ICMAI, the Advanced Skill Training Programme is intended to support the transition of newly qualified Cost and Management Accountants (CMAs) from academic learning to professional roles. The programme complements technical and academic knowledge with skills required in workplace settings and business environments.

The training is also linked

with ICMAI's Campus Placement Programme, with an emphasis on helping young CMAs understand workplace expectations and adapt to changing professional requirements.

Speaking at the valedictory programme, CMA Chittaranjan Chattopadhyay said the institute was focusing on preparing CMAs to apply their professional knowledge to practical business situations. "ASTP is an important part of our professional capacity-building efforts, helping

newly qualified members transform knowledge into capability and capability into professional performance," he said. The Hyderabad programme brought together participants for structured training and interaction on professional skills that complement their formal accounting and management education. The initiative forms part of ICMAI's efforts to support the professional development of its students and newly qualified members.