

Department of

**INFORMATION
TECHNOLOGY**

**TECH
TALKS**

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DEPARTMENT OF INFORMATION TECHNOLOGY

COLLEGE VISION & MISSION STATEMENT

VISION

"To become an Internationally Renowned Institution in Technical Education, Research and Development by Transforming the Students into Competent Professionals with Leadership Skills and Ethical Values."

MISSION

- Providing the Best Resources and Infrastructure.
- Creating Learner-Centric Environment and Continuous Learning.
- Promoting Effective Links with Intellectuals and Industries.
- Enriching Employability and Entrepreneurial Skills.
- Adapting to Changes for Sustainable Development.

DEPARTMENT VISION & MISSION STATEMENT

VISION

- To produce competent IT professionals, researchers and Entrepreneurs with moral values in the field of Information Technology.

MISSION

- Enrich the students' programming and computing skills through best teaching learning processes, laboratory practices and through project based learning.
- Inculcate real world challenges, emerging technologies and endeavour the students to become entrepreneurs or make them employable.
- Inculcating moral and ethical values to serve the society and focus on students' overall development.

PROGRAM OUTCOMES (POs)

Engineering Graduates will be able to:

PO1: Engineering Knowledge: Apply knowledge of mathematics, natural science, computing, engineering fundamentals and an engineering specialization as specified in WK1 to WK4 respectively to develop to the solution of complex engineering problems.

PO2: Problem Analysis: Identify, formulate, review research literature and analyze complex engineering problems reaching substantiated conclusions with consideration for sustainable development. (WK1 to WK4).

PO3: Design/Development of Solutions: Design creative solutions for complex engineering problems and design/develop systems/components/processes to meet identified needs with consideration for the public health and safety, whole-life cost, net zero carbon, culture, society and environment as required. (WK5).

PO4: Conduct Investigations of Complex Problems: Conduct investigations of complex engineering problems using research-based knowledge including design of experiments, modelling, analysis & interpretation of data to provide valid conclusions. (WK8).

PO5: Engineering Tool Usage: Create, select and apply appropriate techniques, resources and modern engineering & IT tools, including prediction and modelling recognizing their limitations to solve complex engineering problems. (WK2 and WK6)

PO6: The Engineer and The World: Analyze and evaluate societal and environmental aspects while solving complex engineering problems for its impact on sustainability with reference to economy, health, safety, legal framework, culture and environment. (WK1, WK5, and WK7).

PO8: Individual and Collaborative Team work: Function effectively as an individual, and as a member or leader in diverse/multi-disciplinary teams.

PO9: Communication: Communicate effectively and inclusively within the engineering community and society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations considering cultural, language, and learning differences

PO10: Project Management and Finance: Apply knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, and to manage projects and in multidisciplinary environments.

PO11: Life-Long Learning: Recognize the need for, and have the preparation and ability for i) independent and life-long learning ii) adaptability to new and emerging technologies and iii) critical thinking in the broadest context of technological change. (WK8).

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- **PEO I:** Graduates shall become IT professionals with specialization in Software Engineering, Networking, Data Mining and Cloud computing.
- **PEO II:** Graduates shall build IT solutions through analysis, design and development of software and firmware solutions for real-world problems and social issues.
- **PEO III:** Graduates shall have professional ethics, team spirit, life-long learning, good oral and written communication skills and adopt corporate culture, core values and leadership skills.

PROGRAM SPECIFIC OUTCOMES (PSOs)

- **PSO1:** Professional skills: Students shall understand, analyze and develop IT applications in the field of Data Mining/Analytics, Cloud Computing, Networking etc., to meet the requirements of industry and society.
- **PSO2:** Competency: Students shall qualify at the State, National and International level competitive examination for employment, higher studies and research.



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AI-Driven Manufacturing and Industry 5.0

Artificial Intelligence is no longer treated as an experimental or optional technology; it has become core digital infrastructure, similar to electricity or cloud computing. Enterprises are moving beyond chatbots and image generation into agentic AI systems that can plan, decide, and execute tasks across departments with minimal human intervention. AI is now embedded deeply into finance, healthcare diagnostics, supply-chain optimization, cybersecurity threat detection, and government services. The biggest shift is not intelligence itself, but trust, governance, and control—companies are investing heavily in AI audit trails, explainability layers, and regulation-ready architectures. The winners in 2026 are not those who “use AI,” but those who re-architect their entire workflows around AI-first thinking.



Lidiya R K IV/IT

Artificial Intelligence Becomes Core Infrastructure

Artificial Intelligence is no longer an experimental layer on top of software — it is rapidly becoming core digital infrastructure, comparable to electricity, cloud computing, and the internet itself. This shift is reshaping how companies build products, governments deliver services, and engineers design systems. Unlike previous technological waves that enhanced efficiency, AI fundamentally alters how decisions are made inside digital systems. Traditional software follows predefined rules written explicitly by engineers. AI systems, in contrast, learn patterns from data and generate probabilistic outputs. This transition replaces static logic with adaptive reasoning, enabling systems to evolve based on context rather than rigid programming.



Monisha B IV/IT

Robotics and Physical AI Go Mainstream

Robotics in 2026 is no longer limited to factory arms; it has moved into logistics, healthcare, retail, agriculture, and personal assistance. The major breakthrough is the integration of AI models with physical systems—often called Physical AI. Robots can now perceive environments, adapt to unpredictable situations, and learn from human feedback. Humanoid robots are still expensive and limited, but task-specific robots are scaling fast. The economic impact is massive: robotics is solving labor shortages but also forcing societies to rethink job reskilling at scale. Ignoring robotics literacy in 2026 is equivalent to ignoring computer literacy in the 1990s.



Dharani E IV/IT

Semiconductor Race and National Chip Sovereignty

In a semiconductors are officially recognized as strategic national assets, not mere commercial products. Governments worldwide are investing billions to reduce dependence on a few global chip suppliers. India's expanded semiconductor missions focus on domestic fabrication, chip design talent, and supply-chain resilience. The demand for AI accelerators, GPUs, and specialized chips has outpaced supply, making chip shortages a geopolitical risk. This race is no longer about who makes the smallest transistor, but who controls secure, scalable, and geopolitically stable chip ecosystems. Countries that fail to invest now risk long-term technological dependency.



Aarthee U K IV/IT

Cybersecurity in the Age of AI Attacks

Cybersecurity in 2026 has entered a completely asymmetric war. Attackers now use AI not as a tool, but as a force multiplier. Phishing campaigns are AI-generated at scale, perfectly personalized using leaked data, social media footprints, and behavioral patterns. Deepfake audio and video fraud has moved from novelty to daily operational risk—executives' voices are cloned, video calls are faked, and approval chains are bypassed in minutes. Automated vulnerability discovery powered by AI can scan thousands of systems faster than human security teams can even respond, while adaptive malware learns from failed attacks and mutates in real time. Traditional, rule-based cybersecurity systems are collapsing under this pressure. Static firewalls, signature-based antivirus, and manual security audits cannot keep up with AI-driven threats that evolve hourly.



Logeshwaran V IV/IT

Tech, Geopolitics, and Digital Nationalism

Technology in 2026 is no longer a neutral or borderless force; it is directly entangled with geopolitics, national security, and state power. Governments across the world are tightening control over software origin, data sovereignty, cloud infrastructure, and AI deployment, treating digital systems the same way they treat defense, energy, and transportation. Regulations now demand clarity on where software is written, who maintains it, where data is stored, and how algorithms make decisions. Sectors like automotive, telecom, fintech, healthcare, and critical infrastructure are under extreme scrutiny because they directly affect citizens and national stability. Modern vehicles are essentially computers on wheels, telecom networks carry sensitive national data, and AI systems influence financial decisions and public opinion.



Levin R IV/IT

AI in Education and Workforce Transformation

Education systems in 2026 are undergoing forced transformation. AI tutors, adaptive learning platforms, and skill-based assessment tools are redefining how people learn. Degrees alone are losing value compared to verifiable skills and project portfolios. At the same time, AI is disrupting entry-level jobs, increasing pressure on students to specialize earlier. The uncomfortable reality: those who do not adapt to AI-assisted learning fall behind rapidly. Education is no longer front-loaded in life; it has become continuous and unavoidable. The value of education is shifting away from credentials toward capability. Degrees still matter, but they are no longer sufficient. Employers in 2026 increasingly prioritize verifiable skills, real-world projects, portfolios, and problem-solving ability over academic scores. A student who can demonstrate applied competence using tools, systems, and workflows is often more employable than a degree-holder with no execution proof.



Vasundara S III/IT

Data Storage, Memory, and Infrastructure Limits

The AI boom has exposed a hard truth in 2026: data infrastructure is the bottleneck. Massive AI models require enormous amounts of memory, storage, and energy. Hard drives now exceed tens of terabytes, and data centers are expanding aggressively, but energy efficiency remains a serious challenge. Memory shortages and rising costs have directly impacted cloud pricing. This has forced companies to optimize models, reduce redundancy, and rethink “collect everything” data strategies. In short: data is abundant, but usable, affordable data infrastructure is not. Storage technology has advanced, with hard drives now exceeding tens of terabytes and solid-state storage becoming faster and more specialized. However, capacity alone does not solve the problem. This has turned energy efficiency into a strategic advantage, not just a cost-saving measure.



Dharshini S III/IT

Infrastructure-Aware AI Model

Design

AI development in 2026 is fundamentally shaped by infrastructure-aware design, where limitations in compute, memory, bandwidth, and energy are considered from the very beginning of model development. The earlier approach of blindly scaling model size—adding more parameters, more data, and more compute—has proven economically unsustainable and operationally inefficient. Organizations have learned that bigger models do not automatically translate into better outcomes, especially when deployment costs and latency constraints are factored in. As a result, there is a strong shift toward efficient AI architectures. Techniques such as model compression reduce unnecessary parameters, while knowledge distillation transfers intelligence from large “teacher” models into smaller, faster “student” models that retain most of the performance at a fraction of the cost.



Bharathraj R III/IT

Economic Impact on Cloud and AI

Access

Rising infrastructure costs in 2026 have fundamentally reshaped cloud pricing and access to AI capabilities. AI services are no longer priced simply by compute time or storage volume; they are increasingly tied to resource intensity, including GPU class, memory bandwidth, energy consumption, cooling overhead, and network usage. Training large models or running high-volume inference now incurs costs that scale non-linearly, making AI development an expensive, ongoing operational commitment rather than a one-time investment in this pricing reality has had a chilling effect on experimentation and innovation, particularly among startups, students, and smaller research teams. The ability to freely experiment, iterate, and fail—which once fueled rapid innovation—is now constrained by budget limits.



Sweetha S II/IT

TECH TIPS

AI Is Infrastructure, Not a Tool

AI in 2026 is no longer something you “try out”; it is infrastructure like electricity or the internet. It matters because people who treat AI as a side tool will always be slower than those who build workflows around it.



Abubakkar Siddiq A IV/IT

Fundamentals Beat Frameworks

Programming languages and frameworks will keep changing, but fundamentals stay brutally relevant. This matters because weak fundamentals force you to depend on tutorials and trends instead of reasoning.



Kanish P A IV/IT

Security Is a Design Decision

Security cannot be added later without pain and cost. This matters because one serious vulnerability can erase months of engineering work and trust. Security works by assuming failure and designing systems that limit damage.



Archana U K IV/IT

Cloud Skills Are Survival Skills

Cloud is no longer optional in 2026; it is the default execution environment. This matters because companies don't hire people who can't deploy, scale, and monitor real systems. Cloud works by abstracting hardware while charging you for every bad decision you make.



Santhosh Kumar M III/IT

Career Growth Requires Ownership

Waiting for recognition is a passive strategy that usually fails. This matters because opportunities go to visible and reliable problem-solvers. Career growth works by consistently delivering results and making those results visible. The action is to treat your career like a product and review its direction every six months.



Anushuya R III/IT

Version Control Is Professional Hygiene

Git mistakes are still destroying teams in 2026. This matters because poor version control leads to lost work, broken releases, and blame games. Version control works by making change history explicit and reversible. The action is to stop using Git like a file backup and start using meaningful commits with clear intent.



Roshni A III/IT

Performance Is a Feature

Slow systems are broken systems, even if they “work.” This matters because users silently leave instead of complaining. Performance works by eliminating unnecessary computation, I/O, and network calls. The action is to profile before optimizing and fix the biggest bottleneck first, not the easiest one.



Eswari L R IV/IT

Learn One OS Deeply

Surface-level OS knowledge limits you faster than you think. This matters because performance, networking, and security all depend on the operating system. Operating systems work by managing processes, memory, and I/O under constraints.



Kanishka N III/IT



Learn to Say No to Bad Tech

Not every new tool deserves adoption. This matters because unnecessary complexity compounds over time. Tech choices work best when they reduce cognitive load, not increase it. The action is to reject tools that don't clearly outperform what you already use



Srinithi G III/IT

Ethics Will Matter More Than Speed

Fast systems that harm users will not survive. This matters because regulation, trust, and reputation now move faster than code. Ethical tech works by minimizing harm and maximizing transparency. The action is to question who benefits and who pays the cost of your system.



Fasheeha R II/IT

Debugging Is a Thinking Skill

Good debuggers think, bad debuggers guess. This matters because guessing wastes time and creates new bugs. Debugging works by forming hypotheses and testing them systematically. The action is to stop random changes and write down what you expect to happen before testing.

Abstractions Are Double-Edged



Sandhiya J II/IT

Abstractions Are Double-Edged

Abstractions simplify until they hide critical details. This matters because hidden complexity explodes during failure. Abstractions work only when you understand what they conceal. The action is to learn what happens underneath every abstraction you rely on.



Dhanushya S II/IT

என் வாழ்க்கை

அன்பிற்கு எல்லையாய் அன்னை
அரவனைத்து வளர்க்கின்றாள்
என்னை அறிவிற்குச் சிகரமாய்த்
தத்தை - அவர் அறிவுரையால்
சீரானது என் சிந்தை..!

கல்வியைக் கற்பிக்கும்
ஆசிரியர்கள் பொறிக்கப்பட
வேண்டியவர்கள் கலைகளைக்
கற்பிக்கும் குருமார்கள்
கலைமகளின் உருவாய்த்
தோன்றியவர்கள்..!

எப்போதும் சூழ்ந்து இருக்கும்
சுற்றம் எப்பிறப்பிலும் கிடைக்காத
பாச பந்தம் எங்கும்
நிறைந்திருக்கும் நண்பர் கூட்டம்
எங்கு தேடினாலும் கிடைக்காத
பூத்தோட்டம்..!

அன்பான தாய் தந்தை அழகான
குடும்பம் அறிவார்ந்த குருமார்கள்
அரவணைக்கும் உறவினர்கள்

எத்துளை அழகான வாழ்க்கை !
எத்தனை பிறப்பிலும் கிடைக்காத
பேறு பேருக்கும் நன்றிகள் நூறு..!



Sham S III/IT

பட்டம் அல்ல... பண்பு

கல்வி - ஒளியின் பாதை
அறியாமை என்னும் இருளை
அகற்றும் ஒளியே கல்வி,
மனதில் மறைந்த திறமைகளை
மலரச் செய்யும் விதையே கல்வி.

புத்தகம் மட்டும் அல்ல கல்வி,
பண்பும் பண்பாடும் அதில் அடங்கி,
எழுத்தோடு சேர்ந்து நம் வாழ்க்கையை
எழுதிக் காட்டும் கலையே கல்வி.

கேள்வி கேட்க கற்றுத் தரும்,
பதில் தேட வழி காட்டும்,
சிந்திக்கச் சொல்லும் ஒவ்வொரு பாடமும்
மனிதனை மனிதனாக்கும்.
ஏழை-பணக்காரன் என்ற
வேறுபாடில்லை,
கல்வி அனைவருக்கும் பொதுவானது,
உழைப்புடன் சேர்ந்த அறிவு
உயரத்தை நிச்சயம் தரும்.

தோல்வி வந்தால் தளரச் சொல்லாது,
மீண்டும் முயலச் சொல்லும்,
வீழ்ந்த இடத்திலேயே
எழுந்து நிற்கப் பழக்குவிக்கும்.
ஒரு வீட்டை அல்ல,
ஒரு சமூகத்தையே உயர்த்தும்,
தலைமுறைகளை மாற்றும் சக்தி
கல்விக் கே மட்டும் உண்டு.

பெண்ணுக்கு கல்வி - முன்னேற்றம்,
ஆணுக்கு கல்வி - பொறுப்பு,
அனைவருக்கும் கல்வி -
நாட்டின் வளர்ச்சி.

எழுதக் கற்ற கையால்
உலகத்தை மாற்ற முடியும்,
படிக்கக் கற்ற கண்களால்
எதிர்காலத்தை காண முடியும்.
அதனால் கல்வியை நேசி,
அறிவை ஆயுதமாக்கு,
நல்ல மனிதனாக மாறி
நல்ல சமுதாயத்தை உருவாக்கு.

கல்வி என்பது பட்டம் அல்ல,
பண்புடன் வாழ கற்றுக் கொள்வதே
உண்மையான கல்வி



Anushuya R III/IT

**Success is built in silent
hours,
Not in noise or empty talk.
Those who walk when no
one watches
Are the ones who reach the
top.**



Rayeesa Iffath K II/IT

**சிரமங்கள் தடையல்ல,
அவை திசை காட்டும்
அடையாளம்,
நின்றுவிடாத முயற்சியே
முன்னேறும் பாதையின்
உண்மையான தோழன்.**



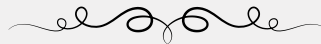
Sarath Kumar S II/IT

**மரம் நிழல் தரும்,
ஆறு வழி கற்றுத் தரும்,
மலை உறுதி சொல்லும்,
இயற்கை வாழ கற்றுத்
தரும்!**



Yuvakarthayanee S III/IT

**நாளை என்பது கனவு அல்ல,
இன்றைய செயல்களின்
நிழல்,
இன்று விதைத்த ஒவ்வொரு
முடிவும்
எதிர்காலத்தை உருவாக்கும்
விதை.**



Thiruvikram S III/IT

PHOTOGRAPHY



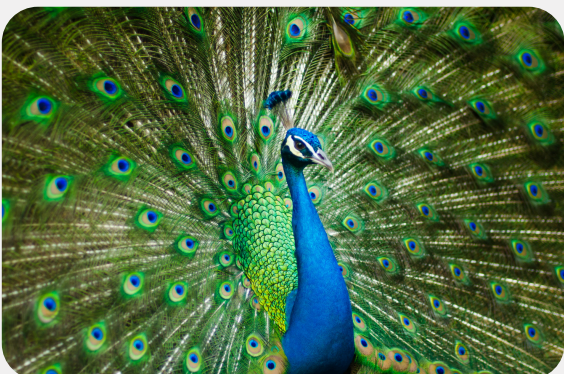
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Sanjay S IV/IT



Kishore S III/IT



Pooja R III/IT



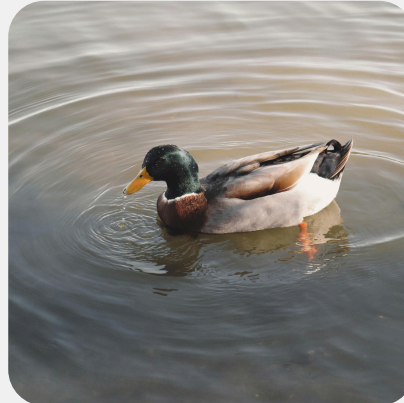
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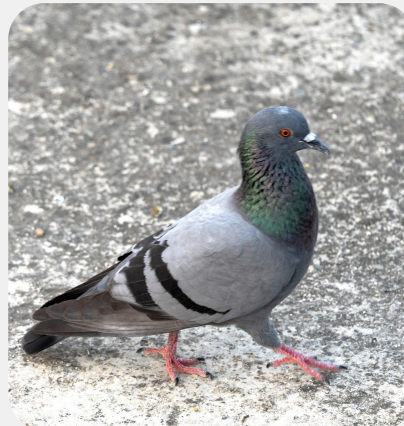
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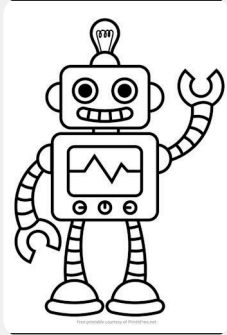
Sandhiya J II/IT



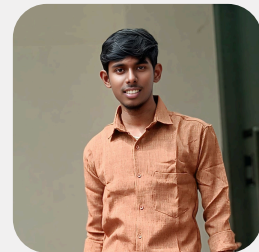
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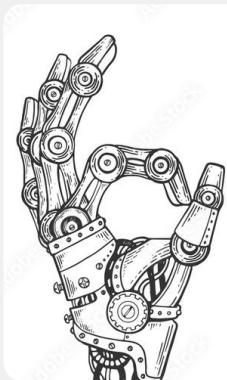
ART WORK



Manikandan P A III/IT



Kishore S III/IT

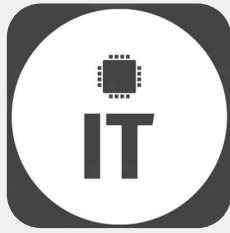


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Nithya R III/IT

LOGO DESIGN



Harsath S II/IT



Gokul T III/IT



Pooja R IV/IT



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2026

“If you don’t understand the constraints, you don’t understand the problem.”

-Elon Musk