

PURPOSE.
PASSION.
PROGRESS.

KUMARAGURU



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THE **KUMARAGURU COLLECTIVE**

is a diverse community of institutions,
individuals, and initiatives, united by purpose,
driven by passion, and committed to progress
for the nation and the world.



PURPOSE. PASSION. PROGRESS.

THE COLLECTIVE

The Kumaraguru Collective represents the cohesion, collaboration, and coming together of people and ideas within our institution—interwoven with our partners beyond the campus—energised by the possibilities and potential of solutions and innovations that serve the greater good. It is a philosophy as much as it is an ecosystem: rooted in relevance to our region, responsive to the needs of the nation, and reflective of the rhythms of a rapidly transforming world.

Across education, research, innovation, entrepreneurship, sustainability, and community engagement, Kumaraguru brings together diverse disciplines and perspectives. These do not operate in isolation; they synergise into an ecosystem designed to transform individuals and enable development—intellectual, social, cultural, and economic. At its heart, transformation here is not episodic; it is continuous, intentional, and people-centred. It strengthens capability, expands opportunity, and enriches the lives of communities near and far.

Every day, thousands of students and hundreds of faculty and staff anchor this mission. They enable, empower, and enhance the experiences and abilities of our stakeholders. They are builders of knowledge, nurturers of talent, and stewards of an institutional culture that values curiosity, character, and contribution. Their collective energy keeps Kumaraguru vibrant, contemporary, and future-ready.

The world today is navigating complex challenges—climate, health, mobility, equity, technology, and human well-being—while simultaneously striving toward new horizons of progress. This duality demands institutions that not only understand these realities but actively engage with them. At Kumaraguru, we look at the real world as a dynamic learning space—one that invites us to partner, to co-create, and to innovate. Industry, society, and the individual become collaborators in our journey toward meaningful impact.

For 42 years, and through more than 35,000 graduates, Kumaraguru has remained an empowering ecosystem—rooted in values, shaped by people, and animated by the region's entrepreneurial spirit. As we step into a new phase, the Collective aims to deepen our alignment with the social, economic, and cultural milieu of Coimbatore and Western Tamil Nadu. Our region is a living landscape of possibility, and it is here that the next leap of relevance, innovation, and leadership must emerge.

India today needs thousands of wealth creators, job creators, innovators, and intrapreneurs—people who can build within organisations, bridge communities, and design solutions for scale. The Kumaraguru Collective embraces this aspiration with intent. By integrating education with real-world problems, by uniting tradition with technology, and by cultivating minds that can think, act, and care, we strive to nurture a generation equipped to shape a resilient and compassionate future.

The Kumaraguru Collective is our promise—to drive passion with purpose, to progress together.



Shankar Vanavarayar

President, Kumaraguru Institutions

PURPOSE.

KUMARAGURU



The Kumaraguru Collective is built on a simple and enduring idea: education must contribute to the progress of individuals and the advancement of society. This belief shaped the institution's purpose from the beginning and continues to guide its evolution. The commitment is not only to academic instruction, but to Nation Building through Human Excellence, where every learner is prepared to contribute meaningfully to the world around them.

Purpose at Kumaraguru draws from the region's ethos and our founder's philosophy. Coimbatore's culture of enterprise, cooperation, and service forms an important foundation. The institution extends this spirit into its academic, research, and community initiatives. Trusteeship, as articulated by Gandhi, and compassion, as lived by Vallalar, remain central to Kumaraguru's identity. These principles are reflected in policies, programmes, and the everyday experiences of students across the campuses.

As the higher education landscape undergoes significant shifts—driven by industry transformation, new technologies, climate priorities, and global collaboration—Kumaraguru's purpose centres on preparing learners to navigate this complexity with competence and responsibility. The approach integrates knowledge, character, and transformation, ensuring that graduates can move confidently

across domains and contribute to solutions that matter.

The Collective's focus remains consistent: to enable learners to become adaptive, ethical, and future-ready individuals. Purpose is not a statement, but a framework that influences decision-making, academic design, research direction, and student development. It shapes the institution's culture and defines the experience of the learners who become part of it.

Kumaraguru's purpose continues to evolve, aligning with emerging national priorities, technological advancements, and societal needs. Yet the central idea remains the same—education is most meaningful when it transforms individuals and empowers them to contribute to the well-being and progress of society. This is the North Star that guides the institution's journey.

**“NATION
BUILDING
THROUGH
HUMAN
EXCELLENCE”**

**- CORE
INSTITUTIONAL
COMMITMENT**





COIMBATORE

- **2ND LARGEST CITY IN TAMIL NADU**
- **LITERACY RATE: 92.8%**
- **RATED 7TH BEST CITY TO LIVE IN INDIA**
- **RANKED 2ND IN QUALITY OF LIFE**
- **3.23 LAKH MSMEs (2ND HIGHEST IN TN) CONTRIBUTING ₹2 LAKH CRORE GSDP ANNUALLY**
- **HOME TO 55,000+ MSMEs**
- **HOME TO 3,000+ STARTUPS**

Coimbatore, the second largest and one of the fastest-growing cities in Tamil Nadu, South India, stands as a prominent industrial and educational hub. With its entrepreneurial roots tracing back to the late nineteenth century, Coimbatore has evolved into a leading center for industries such as spinning and weaving, pump manufacturing, auto components, precision safety parts, and advanced technology parks. Strategically located in Western Tamil Nadu, Coimbatore offers excellent connectivity via air, road, and rail. Known as one of India's safest cities, it has also grown into a major educational destination, hosting six universities and several nationally acclaimed institutions. Kumaraguru Institutions, situated in Saravanampatti on the northwestern side of Coimbatore, is just a half-hour drive from the city centre.

Tamil Nadu, the second largest state economy in India, contributes significantly to the country's industrial output, accounting for nearly 9% of India's manufacturing GDP. It ranks among the top states in sectors such as automobile manufacturing, electronics, textiles, and renewable energy. Tamil Nadu is also home to over 60+ universities and 500+ engineering colleges, consistently producing a highly skilled talent pool that powers its industrial and research ecosystem.

Nearly 1 in 4 Coimbatore citizens are from across India, creating a multicultural ecosystem. It is a leading hub for education and healthcare serving the nation, while ranking among the top 10 safest cities in India. Historically, it has been a gateway trade route via the Western Ghats.

Coimbatore's entrepreneurial spirit remains a defining aspect of its identity. The city is home to 55,000+ MSMEs, driving engineering, pumps, textiles, and information technology. As one of India's fastest-growing innovation hubs, it hosts over 3,000 startups. Coimbatore contributes nearly 9% of Tamil Nadu's GDP and 0.84% of the nation's GDP.

Philanthropy is deeply ingrained in Coimbatore's social fabric. Ranked among the top five non-metro cities in India for philanthropy, it contributes ₹2,500+ per capita annually. Guided by the ethos of trusteeship—where individual progress is linked to community well-being—the city is home to several colleges, hospitals, NGOs, and trusts shaped by community giving.

TAMIL NADU

- **INDIA'S 2ND LARGEST STATE ECONOMY**
- **CONTRIBUTES - 9% OF INDIA'S MANUFACTURING GDP**
- **60+ UNIVERSITIES & 500+ ENGINEERING COLLEGES**

COME VISIT US!

WE ARE

Kumaraguru Institutions (KI) is a collective of higher education institutions committed to academic quality, innovation, and social responsibility. Established in 1984 by Arutchelvar Dr. N. Mahalingam, KI has grown into an integrated ecosystem offering programmes in engineering, technology, management, liberal arts, science, and agriculture. Over four decades, the institution has built a reputation for purpose-driven education grounded in values, academic rigour, and industry relevance.

The Institution comprises Kumaraguru College of Technology (1984), KCT Business School (2005), Kumaraguru Institute of Agriculture (2014), Kumaraguru College of Liberal Arts and Science (2018), and Kumaraguru School of Business (2022). Together, they operate across three campuses spanning over 280 acres and offer more than 45 undergraduate, postgraduate, and research programmes. A community of 9000+ students and 450+ faculty members forms the core of the academic environment, supported by a global network of 35,000+ alumni across 47 countries.

The institutions hold recognitions such as NAAC A++ accreditation, QS I-Gauge Diamond rating, NBA accreditation for multiple programmes, and 10-year ACBSP accreditation for management education. These recognitions reflect a sustained focus on quality, curriculum design, assessment,

and continuous improvement. The academic ecosystem includes industry-linked laboratories, advanced learning spaces, and research centres that strengthen applied learning and interdisciplinary exploration.

Research and innovation form an important part of the institution's work. Centres such as KC.IRI, KC.AIR, iQube, Garage, and Ré support student and faculty-led projects in areas including e-mobility, defence technology, artificial intelligence, renewable energy, and advanced design. These platforms enable learners to work on real-world challenges, collaborate with industry partners, and develop solutions with practical relevance. The institution's research output includes more than 6400 publications across emerging and foundational domains.

Student development extends beyond academics. More than 50 student-led clubs and forums provide opportunities in arts, literature, technology, leadership, entrepreneurship, sustainability, and national service. Career development and employability are strengthened through dedicated training, placements, internships, and engagements with more than 180 industry partners.

A commitment to social responsibility is integrated into the institution's identity. Programmes such as KARE and Namadhu Pangu engage students in disaster response, rural development, environmental conservation, health, and community work. Sustainability initiatives within the campus, including waste management, biodiversity efforts, and environmental education, reflect the institution's long-term focus on responsible growth.

Global exposure is enabled through the Kumaraguru Global Engagement Office, which partners with universities in the USA, Europe, Africa, Asia, and Australia. These collaborations create pathways for student exchanges, faculty interactions, joint research, and international academic immersion.

Across Our institutions and initiatives, Kumaraguru functions with a clear purpose: to prepare learners to meet the demands of an evolving world. Through academic strength, research and innovation, global orientation, and community engagement, the institution continues to contribute to education and societal progress.

- **FOUNDED: 1984**
- **CAMPUSES: 3**
- **AREA: 280+ ACRES**
- **INSTITUTIONS: 5**
- **STUDENTS: 9000+**
- **FACULTY: 450+ (62% PHD HOLDERS)**
- **ALUMNI: 35,000+ ACROSS 47 COUNTRIES**
- **PROGRAMMES: 45+ UG, PG & RESEARCH**
- **ACCREDITATIONS: NAAC A++, QS I-GAUGE DIAMOND, ACBSP (10-YEAR), NBA**
- **INDUSTRY PARTNERS: 184+**
- **INTERNATIONAL PARTNERSHIPS: 26 UNIVERSITIES IN 14 COUNTRIES**
- **RESEARCH OUTPUT: 6400+ PUBLICATIONS**

WE DO..

Nation Building through Human Excellence

Kumaraguru Institutions approaches nation building through a framework that places human excellence at the centre of education. The focus is on enabling learners and communities to grow through equitable access, meaningful livelihoods, cultural continuity, and sustainable well-being. The four facets of this approach guide the institution's academic, developmental, and societal initiatives.

Education with Equity

Education with Equity is grounded in the belief that access to learning must be inclusive, holistic, and open to all. The institution works to create opportunities for learners from diverse backgrounds by enhancing academic quality, strengthening support systems, and enabling continuity in education. Efforts focus on bridging gaps in access, expanding scholarships, and ensuring that learning spaces remain supportive, enabling, and future-oriented.

Livelihood & Development

Livelihood & Development emphasises skills, agriculture, industry, and entrepreneurship as pathways to empower individuals and communities. Programmes across engineering, management, liberal arts, and agriculture are aligned with this focus, integrating classroom learning with practical exposure, field immersion, and industry engagement. Through research centres, incubation platforms, and skill development initiatives, learners build the capabilities needed to participate confidently in the workforce and contribute to economic growth.

Arts, Culture & Spirituality

Arts, Culture & Spirituality reflects the institution's commitment to preserving creativity and nurturing values rooted in compassion and trusteeship. Cultural initiatives, heritage preservation efforts, and programmes in the performing and visual arts help learners understand the importance of identity, continuity, and collective consciousness. These experiences contribute to personal growth and social harmony, reinforcing the belief that education must address both the intellectual and cultural dimensions of human development.

Wellbeing & Sustainability

Wellbeing & Sustainability focuses on health, social equity, and ecological balance as essential components of a resilient society. The institution's sustainability efforts—spanning biodiversity, water stewardship, renewable energy, and waste management—are integrated into student learning and campus life. Programmes that address physical and mental health, environmental responsibility, and community well-being reflect the commitment to long-term societal resilience.

These four facets together shape Kumaraguru's approach to preparing learners for a rapidly changing world. By grounding education in equity, enabling livelihood pathways, nurturing cultural identity, and promoting sustainability, the institution aims to contribute to broader national development goals.

THE FOUR FACETS

- **EDUCATION WITH EQUITY:** ENABLING HOLISTIC LEARNING, ACCESS, AND OPPORTUNITY FOR ALL.
- **LIVELIHOOD & DEVELOPMENT:** ADVANCING SKILLS, AGRICULTURE, INDUSTRY, & ENTREPRENEURSHIP TO EMPOWER PEOPLE AND COMMUNITIES.
- **ARTS, CULTURE & SPIRITUALITY:** PRESERVING AND FOSTERING CREATIVITY AND NURTURING VALUES ROOTED IN COMPASSION AND TRUSTEESHIP.
- **WELLBEING & SUSTAINABILITY:** PROMOTING HEALTH, SOCIAL EQUITY, AND ECOLOGICAL BALANCE FOR A RESILIENT SOCIETY.

OUR PHILOSOPHY

Growth is never an individual pursuit. Progress becomes meaningful only when it is shared and enriched by the growth of others. Let us see people as fellow members of society and strive to uplift the community through their well-being.

- Padmabhushan Arutchelvar
Dr. N. Mahalingam



This belief forms the core of Kumaraguru Institutions. The philosophy positions education as a shared responsibility, rooted in the idea that individual progress is connected to the progress of society. It reflects the founder's view that knowledge, when applied with empathy and purpose, strengthens communities and supports long-term development.

Guided by Vallalar's compassion and human excellence, and Mahatma Gandhi's ideal of trusteeship, the institution's values are anchored in empathy, realized through stewardship, and dedicated to nation building. These principles appear in how programmes are designed, how learners engage with society, and how the institution aligns itself with broader national priorities.

From this ethos of empathy, trusteeship, and the call to serve society, Kumaraguru Institutions was envisioned as a space where education becomes an instrument of nation building. This vision shapes the institution's academic and community initiatives, creating an environment where learners develop competence, clarity, and a sense of responsibility.

The philosophy also informs the institution's approach to innovation, collaboration, and leadership. It encourages purposeful engagement with industry, communities, and global partners. Across campuses, students participate in initiatives related to sustainability, heritage, health, and social well-being, reflecting the belief that learning must connect with real needs. The principles of compassion,

trusteeship, service, and stewardship continue to guide decision-making, student development, and institutional direction. They form the basis of a learning environment where knowledge is linked with responsibility, and where learners are encouraged to contribute meaningfully to the progress of society.

Sarvodaya — The Guiding Ideal

Sarvodaya, the Gandhian ideal of "upliftment of all," forms an essential part of Kumaraguru's philosophical foundation. It reflects the belief that individual progress must contribute to collective well-being, and that education carries a responsibility toward the advancement of society & the betterment of all.

"THE GREATNESS OF HUMANITY IS NOT IN BEING HUMAN, BUT IN BEING HUMANE."

- MAHATMA GANDHI

Jeevakarunyam

Vallalar's principle of unconditional compassion - the call to relieve suffering and uphold care for all living beings as the highest form of duty.

Sarvodaya

The Gandhian ideal of uplifting all lives — the belief that progress must be shared, inclusive, and rooted in collective well-being.

THE 7 PILLARS OF PURPOSE @ KUMARAGURU

01. Student-Centric Ecosystem

Kumaraguru places the learner at the centre of its ecosystem, enabling students to lead, partner, empower, and transform. Through the Learner-Centric Impact Model, students engage in academic, cultural, governance, and developmental spaces that shape campus life. They lead 58+ clubs and forums, organise 680+ events annually, serve on 45+ committees, and participate in student governance through the Leadership Council. With over 1000 students in RiDE and strong representation in sports, arts, NCC, and community initiatives, learners contribute to shaping outcomes across the institution.

02. Nation Building through RiDE

RiDE—Research, Innovation, Design & Entrepreneurship—is central to Kumaraguru's approach to human excellence. Students work on real challenges through applied research, product development, and enterprise creation. The institution contributes to 250+ funded projects, 500+ publications, and 40+ patents annually, converting ideas into impact. More than 120 student-led startups have been incubated at Forge and beyond, supported by industry collaborations and interdisciplinary problem-solving. Holistic development remains integral as learners acquire technical, creative, and entrepreneurial skills.

03. Social Impact & Sustainability

Social responsibility is woven

into institutional life through KARE, Namadhu Pangu, and sustainability programmes. Students participate in disaster response, rural development, public health, education outreach, and environmental conservation initiatives across the region.

Sustainability efforts such as biodiversity conservation, renewable energy adoption, water management, and waste reduction are integrated into campus operations and student learning. These engagements nurture empathy, leadership, and a sense of responsibility towards community and environment.

04. Holistic Learning & Development

Holistic development is supported through a diverse set of opportunities that extend beyond the classroom. Students participate in arts, sports, cultural festivals, leadership programmes, mentoring circles, and campus forums that enrich personal growth. The institution supports structured student communities in music, dance, theatre, literature, photography, innovation, service, and entrepreneurship. Athletic facilities, fitness programmes, and training support physical development, while academic advising and learning support services help students progress with clarity and confidence.

05. Academic Innovations & Parallel Learning Pathways

Academic design integrates flexibility, interdisciplinarity, and innovation. Students pursue minors and honours across domains, participate in ProtoSem, engage with industry-inspired regulations, and learn through Problem-Based Learning. Centres for applied research, design thinking, and technology exploration support

parallel learning pathways. These innovations enable students to build depth in their chosen fields while acquiring competencies across disciplines, strengthening readiness for emerging careers and advanced study.

06. Physical, Mental & Emotional Wellbeing

Wellbeing is supported through a comprehensive system that addresses physical, mental, and emotional health. The campus provides dedicated counselling services, wellness workshops, fitness facilities, health centres, and safety frameworks. Sports, yoga, and recreational programmes encourage active lifestyles, while mental health support systems ensure students have access to care and guidance. A focus on balance, resilience, and supportive community engagement creates an environment where students can grow with confidence and stability.

07. Global Exposure & Future Readiness

The Global Engagement Office connects learners to international experiences through partnerships with 26+ universities across 14 countries. Students participate in exchanges, internships, study-abroad programmes, immersion courses, and collaborative research. Visiting professors and global masterclasses bring international perspectives to campus. Career readiness is supported through industry certifications, placements, internships, skill development programmes, and exposure to emerging technologies. These experiences prepare learners to navigate global contexts with adaptability and competence.

ACADEMIC

- 45+ programmes
- 450+ faculty (62% PhDs)
- 2 lakh+ library books

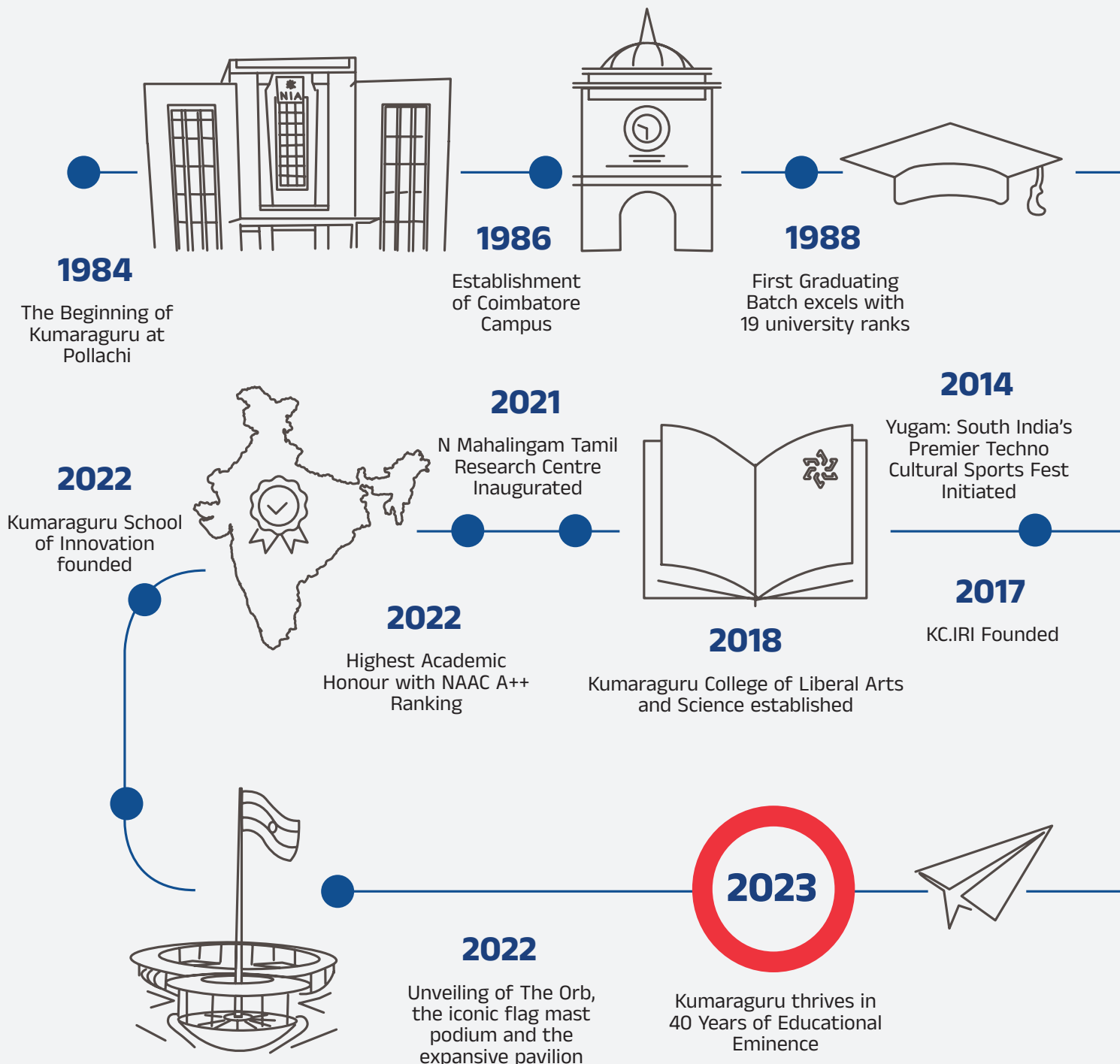
RESEARCH & INNOVATION

- 12 Centres of Excellence
- 190+ labs
- 6400+ publications
- 100+ startups incubated

GLOBAL ENGAGEMENT

- 26+ international partnerships
- 25+ international adjunct faculty
- 75+ NRI/foreign students

TRACING KUMARAGURU'S PATH TO EXCELLENCE.

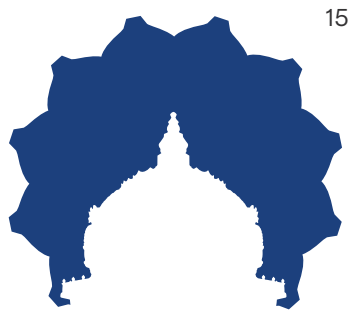


SOCIAL IMPACT

- 150+ community activities annually
- 1.25 Cr Mahatma Gandhi Merit Scholarships
- 10 Million STEP & SEED scholarships each

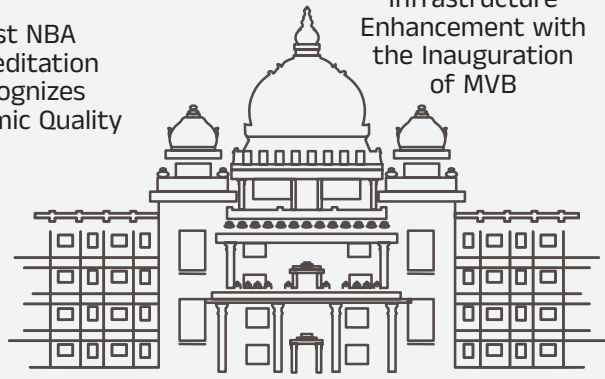
SUSTAINABILITY

- 6000+ trees
- 100+ species on campus
- 1 lakh+ saplings in nursery



2001

First NBA Accreditation Recognizes Academic Quality

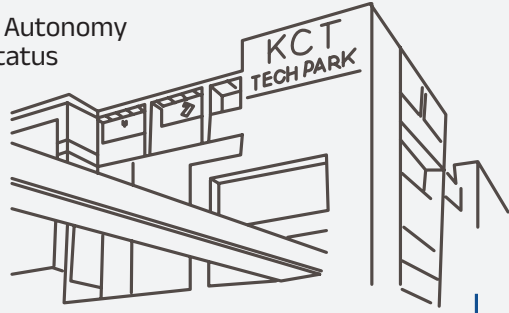


2004

Infrastructure Enhancement with the Inauguration of MVB

2007

Attains Autonomy Status

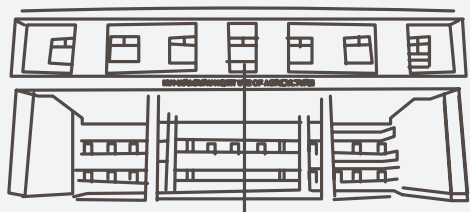


2007

KCT Tech Park Inaugurated

1998

Academics diversify: Introduction of PG programs



2005

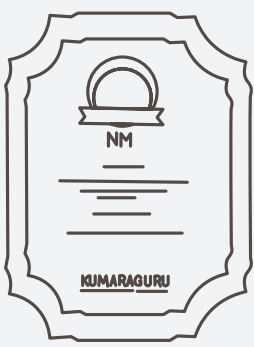
KCT Business School Established

2007

Commencement of Mahatma Gandhi Merit Scholarship

2014

Forge Accelerator Established



2013

NM Awards constituted to recognize excellence

2009

Kumaraguru Celebrates Silver Jubilee

2009

First NAAC Accreditation achieved

In 2024 and 2025, Kumaraguru has set newer benchmarks, earning prestigious national and international accolades including 10-year ACBSP international accreditation, QS – I Gauge Diamond Rating and Platinum-rated Green campus award from IGBC for academic distinction, innovation, and sustainability. Strategic collaborations with leading global universities, organisations, and research bodies including the establishment of KCT-Envitest Product Testing Centre, partnership with Environment Defence Fund to initiate Climate Smart Dairy Entrepreneurship Program have further enriched its educational, entrepreneurial and research landscape, inspiring generations to build a resilient, inclusive, and transformative world.

THE CAMPUSES.

3 Campuses
spanning
280 acres

5
Institutions

25 UG, 20 PG &
15 Research
Programs

450+
Faculty
Members

9000+
Students

35,000+
Alumni in
47 Countries



KUMARAGURU
COLLEGE OF TECHNOLOGY
character is life

Established in 1984 with a visionary approach to providing top-notch technical education, Kumaraguru College of Technology (KCT) Affiliated to Anna University has grown into a prestigious institution recognized on both national and international platforms. KCT has been awarded the QS I-Gauge Diamond Rating in 2024 and holds NAAC accreditation with an A++ ranking, underscoring its commitment to excellence.

KCT offers 14 undergraduate engineering programs, all accredited by the National Board of Accreditation (NBA), in addition to 14 postgraduate programs and 12 research programs. The institution's dedication to academic excellence is reflected in its innovative teaching methods, robust research initiatives, and strategic collaborations with premier institutions and leading industries. These partnerships enhance the curriculum and provide students with practical exposure and opportunities to engage in cutting-edge research.

Affiliated to Anna University

School of Biosciences

Biotechnology

School of Electronic Sciences

Electrical and Electronics Engineering
Electronics and Communication Engineering
Electronics and Instrumentation Engineering

School of Mechanical Sciences & Built Environment Sciences

Aeronautical Engineering
Automobile Engineering
Mechanical Engineering
Mechatronics Engineering
Civil Engineering

School of Innovation

Computer Science and Engineering
Information Technology
Artificial Intelligence and Data Sciences
Masters in Computer Application
MBA (IEV)

School of Textile Sciences

Fashion Technology
Textile Technology

School of Foundational Sciences

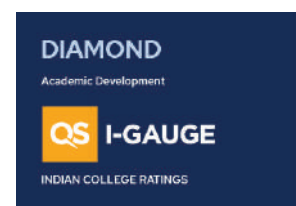
Mathematics | Chemistry | Physics
Languages and Communication



Dr. Ezhilarasi M, Principal, KCT

Dr. Ezhilarasi is a seasoned academic leader with over 30 years of experience. A pioneer of Project-Based Learning (PBL), she is renowned for driving innovation in teaching, curriculum design, and educational research. Her strong foundation in medical imaging, staff development, and learner-centric models integrates technology and research to enrich student outcomes and academic excellence.

Accredited by



NAAC

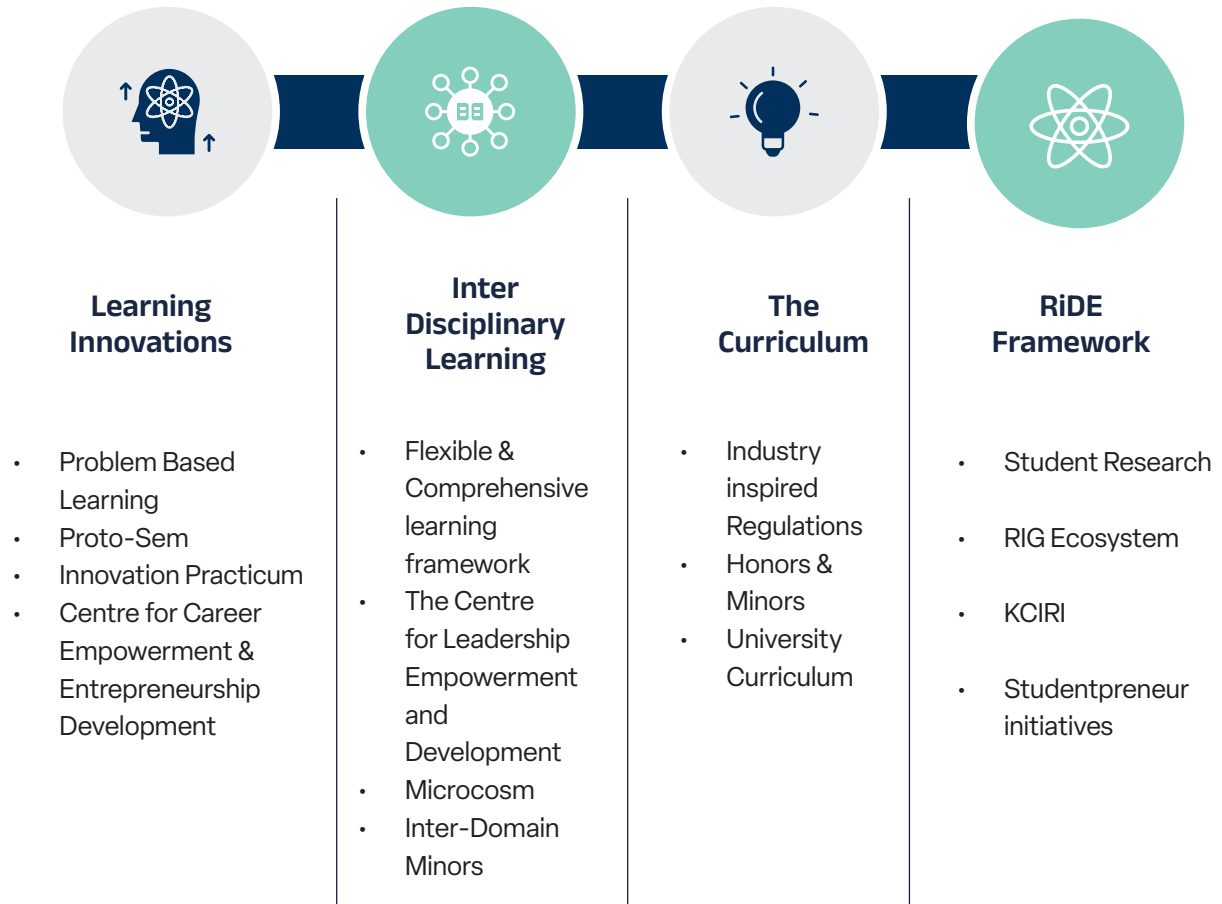
(National Assessment and Accreditation Council)

**GRADE
A++**

kct.ac.in

THE KCT LEARNING FRAMEWORK

It combines research, innovation, interdisciplinary learning, leadership, and industry-driven curriculum, equipping students with real-world skills, global exposure, and career readiness to meet evolving industry and societal demands.



7000+
Students

450+
Academic Staff
(62% PhD Holders)

370+
Support Staff

CUMMULATIVE

6400+
Research
Publications

52
International
Collaborations

10+
Industry
Partnered Labs

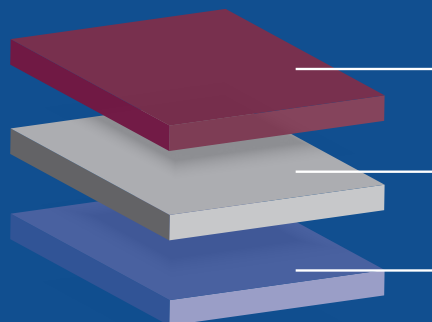
184
Industry
Partners





Kumaraguru College of Liberal Arts and Science (KCLAS) Affiliated to Bharathiar University established in 2018 is rooted in the philosophy of Liberal Arts education, offering a broad-based curriculum for holistic development while providing in-depth understanding in chosen disciplines. Grounded in foundational principles, KCLAS also embraces the fast-changing economy and society, with a vision to become a progressive, research-focused institution that instills a passion for lifelong learning and prepares young people to impact the world.

The education model at KCLAS is an innovative blend of traditional Liberal Arts principles and the futuristic approach outlined in the OECD's Learning Framework 2030. This framework aims to develop a common understanding of the knowledge, skills, attitudes, and values students need in the 21st century while honing their critical thinking, creativity, and intellectual curiosity. KCLAS integrates these strategies and approaches to ensure students receive a comprehensive and future-ready education, preparing them to navigate and contribute to an ever-evolving global landscape



**KCLAS
Advanced
Courses**

**Degree
Curriculum**

**KCLAS Edge
Interdisciplinary
Exposure**

Sandwich Model

The innovative KCLAS Sandwich Program is designed with three layers – the KCLAS Core, KCLAS Edge, and KCLAS Edge+ – each tailored to maximize the academic and personal growth, providing the learners with a comprehensive and holistic education that equips them to tackle the challenges of the modern world.



Dr. Deepesh C, Principal i/c, KCLAS

Dr. Deepesh Chandrasekharan is an academic with 20+ years of experience in teaching, training, and research in English and Linguistics. A Ph.D. in English Language Education, he has worked globally, led the CLIL India Erasmus+ project, participated in IVLP, and published extensively on language, identity, and education policy.

Accredited by

DIAMOND



I-GAUGE

INDIAN ARTS AND SCIENCES COLLEGE RATING

Affiliated to Bharathiar University

School of Economics

BA Economics

School of Psychology

BSc Psychology

School of Languages

BA Tamil (Creative Writing)

PhD Tamil

BSc Sports Science

School of Business

BBA

BBA International Business

PhD in Management

School of Media

BSc Visual Communication

School of Data Science

BSc Data Science

School of Commerce

BCom

BCom PA

PhD in Commerce

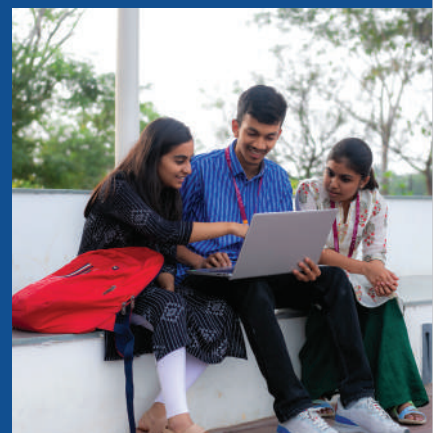
School of Political Science

BA Political Science

MA Political Science

School of Social Work

MSW





KUMARAGURU INSTITUTE OF AGRICULTURE

Kumaraguru Institute of Agriculture (KIA) established in 2014 in Appakudal, Erode campus is a leading institution in agricultural education, combining traditional knowledge with modern technology to prepare the next generation of agricultural leaders. KIA aims to open wide windows to the new world of agriculture by exposing the learners to the latest advancements in agricultural science, including precision farming, biotechnology, and sustainable agricultural practices to enhance and sustain food production, and make agriculture more viable and commercially successful.

KIA nurtures and maintains two farms, the South Farm and the North Farm, which serve as 'open laboratories' for students to observe, experiment, analyse, evaluate and gain skills required for sustainable and profitable farming.

KIA actively engages with the local farming community through extension services and outreach programs, disseminating the latest agricultural knowledge and practices to farmers, and contribute to the overall development of the agricultural sector.

kia.ac.in



Dr. Ravi Kumar Theodore, Principal, KIA

Dr. Ravi Kumar Theodore is a Professor in Agricultural Extension with over 30 years of academic, research, and leadership experience at TNAU and national institutions. He has guided scholars, led research projects, conducted 200+ training programs, and received international fellowships for his contributions to agricultural development.

Affiliated to Tamil Nadu Agricultural University

133 Acres of Farmland with 20 + Agri business Models

Mentored by 45+ nationally and globally renowned scientists

5 Departments with 12 Scientific Laboratories

Herbal Garden with over 100 plants species

MoUs Signed

- Vanam India Foundation
- Cognizant Outreach
- GILES BROOKER Group
- Institute of Forest Genetics & Tree Breeding (IFGTB)

Farmer Connect Pariyur - Farmer Producer Organisation

Kumaraguru Institute of Agriculture along with National Agricultural Cooperative Marketing Federation of India Ltd. (NAFED), has set up a Farmer Producer Organisation in the Gobichettipalayam block of Erode District. This is a women led FPO with women farmers as members who are livestock owners. Pariyur FPO focuses on enhancing the productivity and profitability of 10000+ livestock farmers in Erode district through various services related to Livestock Farming.



Established in 2005, KCT Business School (KCTBS) is a top-ranking B-School in South India, renowned for its blend of academic excellence, entrepreneurial spirit, and social responsibility. KCT.BS has distinguished itself through a holistic approach to education, integrating diverse teaching methods, exposure to current industry trends, robust research initiatives, and a strong commitment to social impact. This comprehensive approach ensures that students are well-prepared to meet the demands of the modern business landscape.

KCT.BS fosters entrepreneurial zeal through its Incubation Center, which supports budding entrepreneurs by providing resources, guidance, and networking opportunities essential for transforming innovative ideas into successful ventures. Social responsibility is a cornerstone of KCT.BS's ethos. Students are actively encouraged to participate in community service and social entrepreneurship projects, helping them understand the broader impact of business decisions on society and the environment.

As one of the premier B-Schools in South India, KCT.BS is dedicated to shaping future business leaders who can drive positive change and contribute to societal betterment.

Master of Business Administration

- Five Specializations (Finance, Marketing, HR, Operations & Analytics)
- Accredited by NBA (National Board of Accreditation)
- Member of ACBSP
- Master of Business Administration – Project Management
- Programme curricula is benchmarked with PMI GAC accredited institution
- Project Management Professional (PMP) & Certified
- Associate in Project Management (CAPM), certifications



MBA

Management with specialization in Marketing, Finance, HR, Operations, Analytics, and Entrepreneurship.

MBA PM

Project Management enabling CAPM certification, through Project Management Institute.

MBA IEV

Innovation and entrepreneurship ventures curated and led by Forge.

MBA LSCM

Logistics & Supply Chain Management powered by CII Institute of Logistics.

MBA ABM

Agri Business Management, Integrating Agriculture, innovation and Business excellence

Accredited by



240+
Students

20
Teaching Staff

03
Support Staff

50+
Research Publications

Affiliated to Anna University

ACADEMIC INFRASTRUCTURE & CAMPUS FACILITIES

Kumaraguru's academic infrastructure fosters deep learning through cutting-edge labs, spacious libraries, smart classrooms, and collaborative spaces. Industry-sponsored centers of excellence and research hubs ensure students gain real-world insights and hands-on exposure, creating a future-ready academic environment.

INDUSTRY SPONSORED LABS

The industry-partnered laboratories with cutting-edge facilities not only augment the academic curriculum but also provide invaluable insights into industry practices and emerging technologies. By fostering symbiotic relationships between academia and industry, these labs serve as Centres of Excellence, empowering students to navigate the complexities of their chosen fields with confidence and proficiency.

- Bosch Centre for Automotive Electronics
- Siemens automation lab
- Yokogawa Centre of Excellence in Distributed Control System (DCS)
- KCT-Fluke Centre of Excellence in Calibration
- KCT – LoRaWAN Academy

- KCT-Keysight Centre for Wireless Technologies
- Salzer Innovation Center (SIC)
- Thick India Innovation Center (ITC)
- KCT-UB Chem Tech NDT Lab KCT-Rieter Lab
- KCT- TI Centre of Excellence on Signal Processing and Embedded Systems



Authorized
Training Center



INSTITUTIONAL LEADERSHIP

Dr. Raghupathy S, Director, Strategic Planning

Dr. Raghupathy S is a seasoned professional with 38 years of global experience in strategic planning, finance, and institutional governance. With leadership roles in academia and industry, he specializes in cross-functional coordination, accreditation, and data-driven decision-making, contributing to institutional excellence through insightful planning, benchmarking, and quality-focused academic strategies.



The 156-acre Kumaraguru campus blends academics, research, sports, wellness, and sustainable living. It features six academic blocks, nine hostels, dining for 3000, and vibrant spaces like East Kore, Namma Café, The Orb, and Namma Plaza. Students engage in research at iQube, Garage, Research Cell, and Mahatma Gandhi Central Library. Wellness is supported by medical and counselling centers, while 23 acres are dedicated to sports and fitness. Eco-spaces like Ahimsa Vanam and Resource Recovery Park reflect mindful co-existence.



RESEARCH, INNOVATION DEVELOPMENT & ENTREPRENEURSHIP

Kumaraguru's RiDE Ecosystem bridges academia and industry, fostering research-driven innovations and creating industry-ready changemakers.

RIDE FOR INDIA

In today's rapidly changing world, Research, Innovation, Design, and Entrepreneurship (RiDE) form the core engine driving India's future. With its vast demographic strength and emerging technological capabilities, India stands poised to harness RiDE for economic growth, global competitiveness, and societal transformation. RiDE enables job creation, technological advancements, and scalable solutions to national and global challenges. As India aspires for self-reliance, climate resilience, and digital transformation,

empowering young minds through cutting-edge research, industry collaborations, and entrepreneurial ecosystems is pivotal to building a resilient, inclusive, and globally relevant innovation economy.

RIDE MODEL & FRAMEWORK

RiDE at Kumaraguru integrates Research, Innovation, Design, and Entrepreneurship into the core of academic and institutional practice, fostering a vibrant ecosystem where students, faculty, and industry collaborate to create impactful solutions. It nurtures critical thinking, problem-solving, and creative exploration, transforming ideas into functional outcomes and market-ready ventures.



Research at Kumaraguru spans diverse domains, addressing real-world challenges through interdisciplinary collaboration.



Innovation is celebrated as a way of life, with students encouraged to think differently and explore uncharted paths.



Design transforms visionary concepts into functional and impactful outcomes, empowering institutions, industries & enhancing societal well-being.

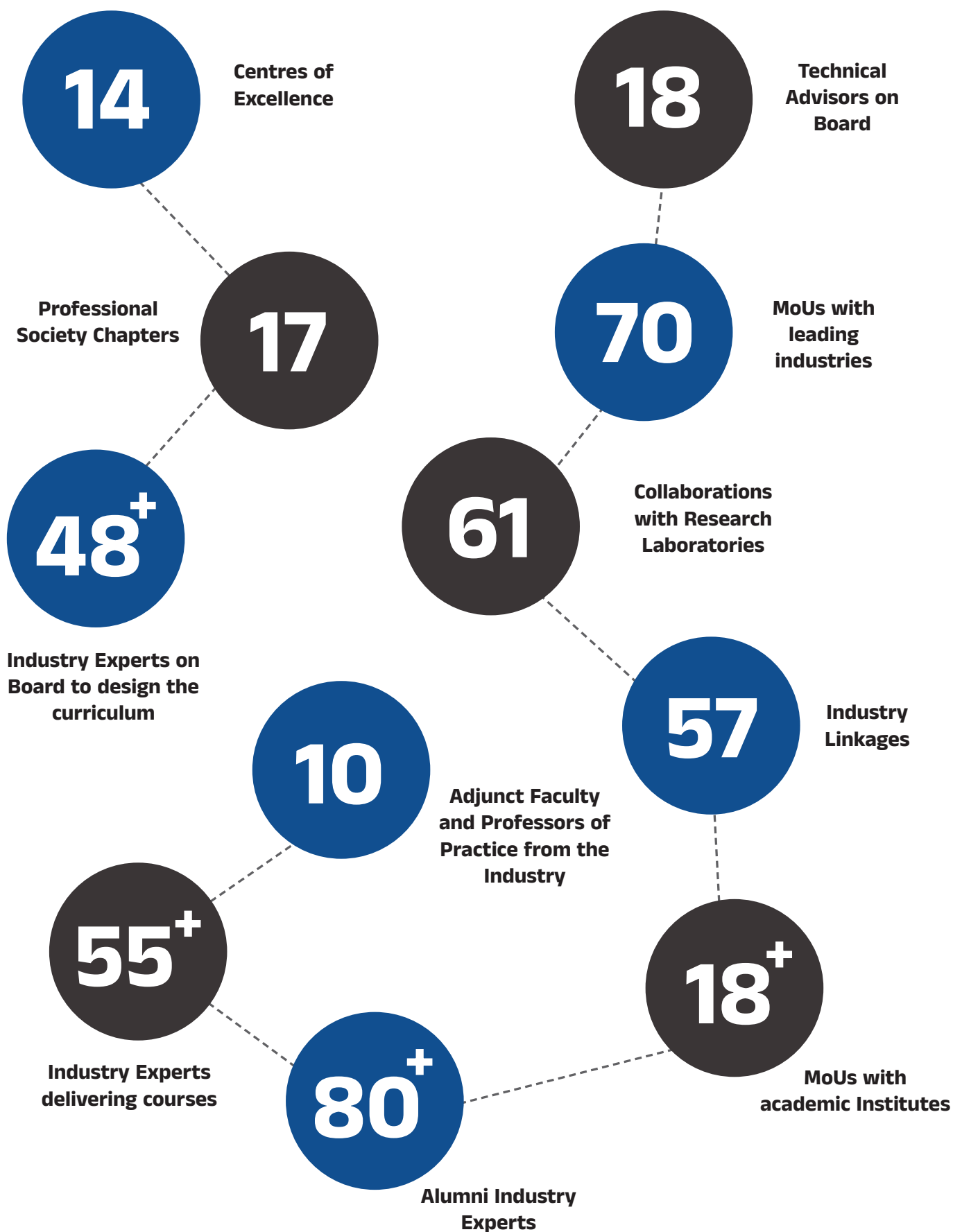


Entrepreneurship culture thrives, with incubated startups gaining support from mentors, industry experts, & resources, ultimately creating market-ready solutions and economic value.

RIDE AT KUMARAGURU: A THRIVING ECOSYSTEM OF POSSIBILITIES

At Kumaraguru Institutions, RiDE is not just a concept but a lived reality, seamlessly woven into the institution's ethos. The ecosystem at Kumaraguru thrives on the synergy of these four pillars, creating an environment where students, faculty, alumni, and industry partners converge to explore, create, and transform, thereby becoming creative thinkers, problem-solvers, and changemakers. With state-of-the-art research centers, innovation hubs, alumni-driven forums, industry partnerships, and incubation cells, Kumaraguru empowers its students and faculty to explore new frontiers and bring impactful ideas to life.





KUMARAGURU **KC.IRI** CENTRE FOR INDUSTRIAL RESEARCH & INNOVATION

KC.IRI, Kumaraguru Centre for Industrial Research and Innovation is a focused Research & Innovation ecosystem in symbiotic collaboration with Industries for the promotion of industry-specific applied research, innovative product development, advanced learning and skill development programmes.

11

Industries
Partnerships

2.56

Crore worth
Defence projects

35

Lakh worth
Industrial Projects

14.6

Lakh worth
programs

Industrial Research Projects

Dedicated Technical team
& Project Management
process for timely
completion of Industry
projects
Supported by faculty,
students
& Industry experts

Innovative Product Development

Autonomous Campus
Utility Vehicle
Autonomous All Terrain
Electric
Vehicle – AATEV
UV Disinfectant BOT

Research & Product Development Centres

Advanced Design - CEAD
Research in Renewable
Energy
Innovation & Product
Development for Defence
E-Mobility Development &
Testing

Advanced Learning Programs

Industry focused Skill
Development Training
Programs to meet Industry
expectations, requirements
and reduce skill gap
through the Competency
Development Centres.

Areas of Expertise

Reverse Engineering,
Structural Analysis and
Simulation
Computational Fluid
Dynamics
Image Processing, AI, ML,
IoT

Training Programs in

Product Design
Engineering
E-Mobility
Advanced CAE
Defence Technology



At KC.IRI, we are creating real-world impact through research-driven projects and innovations. Being part of the vibrant Kumaraguru ecosystem allows us to collaborate deeply—with students, faculty, and industries—to drive solutions that matter.

Dr. Vasantharaj
Director, KC.IRI

kciri.kct.ac.in



KRiA

KUMARAGURU
RESEARCH & INNOVATION
ALLIANCE

Kumaraguru Research and Innovation Alliance – KRIA, a research and innovation alliance between the institutions, enterprises, government, international partners, NGO's and researchers, innovators, intellectuals and students was launched on 21 March 2022. KRIA will be inclined towards creating an impact on the society and innovating for the world. KRIA will have a corpus of 10 Crores over 5 Years for its focus areas. The focus of KRIA will be on Environment, Livelihood, Social Sciences and Engineering & Technology with outcomes cutting across Sustainability, Inclusivity, Digitalization, Commercialization, Automation and Innovation.

Thrust Areas.

Environment
Livelihood
Social Science
Engg & Technology



At Kumaraguru Institutions innovation drives nation-building. Through hands-on engineering and research, students and experts co-develop cutting-edge solutions. This vibrant ecosystem plays a vital role in advancing Atmanibhar Bharath - India's self-reliance - to Vikshit Bharath.

Dr Saravanan D

Director, Quality Assurance,
Kumaraguru Institutions

Student led RiDE Ecosystem

Student research centres of Kumaraguru are innovation zones for the tech enthusiasts to unleash their exploring skills. RiG is the acronym for the three thriving student research forums Ré, iQube and Garage that promote active inter-disciplinary research leading to build an ingenious research ecosystem in the campus.



KCT's Platform for Research and Exploration (Ré) is a start-up initiated and run by the students that offers technical expertise and financial support to many student projects every year. Ré as a team strives to provide engineering solutions to world problems by mentoring, guiding and incubating students' research projects targeted to solutions.



A student-centric inter-disciplinary innovation centre for tech enthusiasts, iQube aims to bring out the explorer and maker within. It further helps tech enthusiasts to convert their innovative ideas into commercially viable and technically challenging prototypes.



The student involved product development research centre for automotive developments, at Garage students design, analyze and fabricate different types of vehicles or parts of a vehicle and compete in various motor sporting events around the globe.

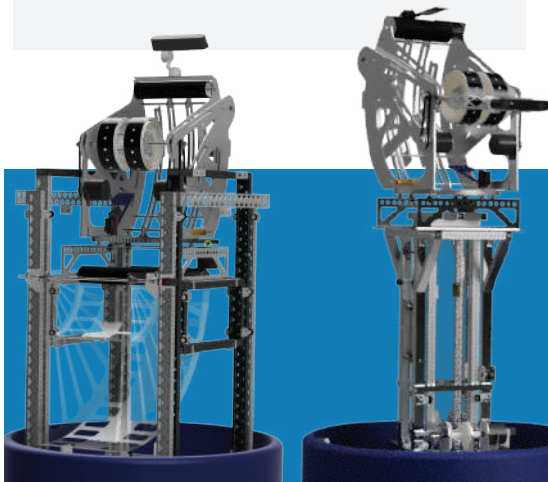


The RiDE journey at Kumaraguru thrives on dynamic exploration and collaboration. Within this innovative hub, students are inspired to delve into research and innovation that solve real-world problems. It's a place where ideas are not only welcomed but actively developed, guided by mentors and an infrastructure that supports experimentation and growth. RiDE empowers our students to think beyond limitations and make lasting impacts.

Mr. Nirosch Kumar H
Head - RiG



Team Sea Sakthi won the **Communication Prize** and secured 6th position in the overall ranking for two years in a row at the Monaco Energy Boat Challenge in **2022 & 2023**



Recent Achievements

Team ReNew cleared the technical inspection at Shell Eco-marathon Qatar 2025, validating safety, design, and engineering, marking a proud presence on the global sustainable mobility stage.

Team Q-Botix achieved an impressive All India Rank 17 in DD Robocon 2025, while securing the 1st position at the South India level, showcasing engineering precision and innovation.

Team Nova, Kumaraguru's student-led cybersecurity venture, clinched the 2nd place in Pentathon 2025 - CTF (Vulnerability Assessment and Penetration Testing), standing out among 20,000+ participants.

Demonstrating excellence in women-led cybersecurity, Team Nova also secured 2nd place in Cyber for Her by DSCI, competing with over 5,000+ women participants across the nation.

Under the prestigious TANCAM initiative, all 3 projects across three distinct categories from Kumaraguru Institutions were recognized with 3rd prize awards, affirming consistent performance across multiple innovation tracks.



As an alumnus and mentor at the Research Forum, I've witnessed how RIDE empowers students to explore beyond textbooks—through research, collaboration, and real-world challenges. It's a vibrant space where curiosity meets purpose, and interdisciplinary thinking shapes the innovators and changemakers of tomorrow.

Mr. Brathikan

Principal Architect, Research & Development



forgeforward.in
+91 94433 54312
info@forgeforward.in

Forge is a partner incubator housed in KCT Tech Park, empowering Government, Industry, and Academia to achieve transformational scale that deftly combine manufacturing excellence with technology leadership to serve as engines of socially inclusive & equitable, environmentally sustainable, and economically scalable growth.

By combining frontier Technology and future-ready Talent, Forge helps partners drive operational excellence outcomes and achieve business growth goals, through collaboration and co-creation with startups at speed and scale via a managed innovation framework in deep-technologies such as artificial intelligence, data science, robotics, power electronics, augmented reality/virtual reality, and IoT.

60+ People	#1 India's Largest Incubator by people	6.2 Million Startups grant
55+ Patents Granted & Filed	2200+ Employment Generated by startup	200+ Products Commercialised
INR 10 Billion+ External Investment Raised by Portfolio Startups		INR 5 Billion+ Revenue Generated in Indian and International Markets



At Forge, we harness the power of Kumaraguru's RIDE ecosystem—a space where research, innovation, design, and entrepreneurship converge. It enables students to turn ideas into impactful, market-ready solutions. By leveraging the vibrant startup ecosystem, we nurture entrepreneurial talent and accelerate ventures that create real change.

Mr. Vish
Co-Founder & CEO, Forge

PROTOSEM

MICROINNOVATORS

ProtoSem, a pioneering 18-week Graduate Innovation Engineer Certification, is reshaping engineering education by placing a strong emphasis on innovation. The program facilitates comprehensive skills development, nurturing an innovation-centric mindset.



384 Innovation Engineers
81 Product Innovations
6.2 Million Startup Grants
85 Industry Experts
40 Field Trials
16 Potential Patents



The Innovation Practicum for Technical Education (IP-TE) is a university-accredited model that fosters transdisciplinary innovation. Through ProtoSem, we build engineering and entrepreneurial talent via faculty-led labs, enabling student teams to co-create deployable innovations with industry, startups, and public sector partners.

Dr. Lakshmi Meera
 VP & CPO, Forge

Forge Technology Initiatives.

Forge's Technology lever propels industrial companies into a future of excellence & transformation, bridging cutting-edge tech's impact with manufacturing & value-chains.

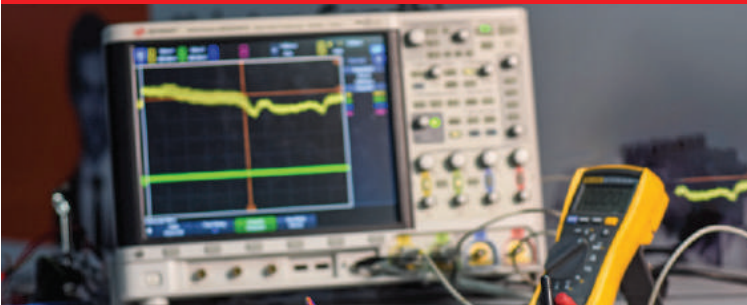
From computing, metaverse and robotics to sensors, AI analytics, and intelligent machines, we bring futuristic technology into the hands of future-ready industrial talent for accelerating technology adoption through innovation in process and product.

Forge.Labs - the aggregate technology infrastructure & resources across the 7 stations we operate in Tamil Nadu, offers tools, resources and expertise to translate innovative ideas into factory-scale industrial-grade solutions faster, better and cheaper.

Additive Manufacturing



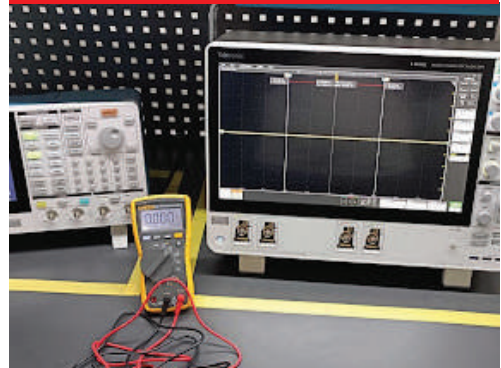
Electronics Rapid Prototyping



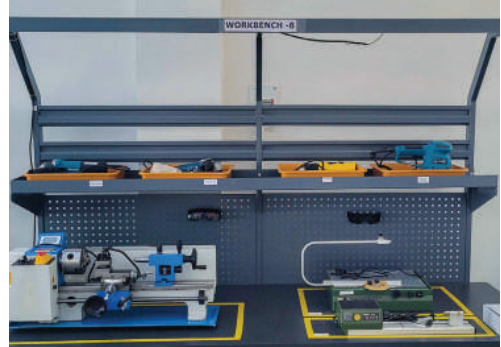
Industrial Robotics & Cobotics



Electronics Design, Test & Verification



Industrial Design and Fabrication



10
Years of
Impact

Product Stage

54

Market Stage

25

Growth Stage

11

Partners.

Academia



Industries

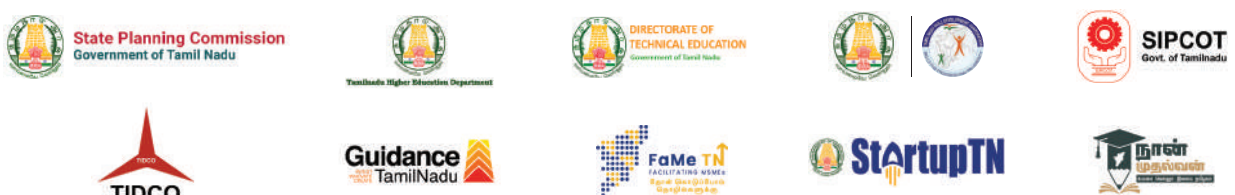


Government

Government of India



Government of Tamil Nadu





Leveraging on Coimbatore becoming one of the preferred destinations of Multinational companies offering IT, ITeS, BPO, BTO and KPO services and with the availability of abundant supply of highly skilled engineering and technology resources, Kumaraguru Tech Park was established in 2008 under the visionary leadership of Arutchelvar Dr.N.Mahalingam. Ford, Forge, Vanenburg, Thoughtworks, Sakthi Financial Services, Byjus, Cresec Datasoft, and ULTRAMAIN among others have setup operations at the Tech Park which has been designed, architected, and engineered to meet global benchmarks for business and IT parks and has been ranked consistently above other alternatives in Coimbatore.

Set in the emerging IT corridor of Coimbatore, K Tech Park offers the advantages of proximity to the urban amenities of a modern city. The added benefit of being in the midst of several arts and engineering educational institutions with easy access to highly skilled resources presents a compelling package to run effective yet lower cost of business operations in Coimbatore.

10
Companies

2500+
professionals

4.18
acres

24/7
service

2.5
Lakh sq.ft





PASSION.

GLOBAL EDUCATION

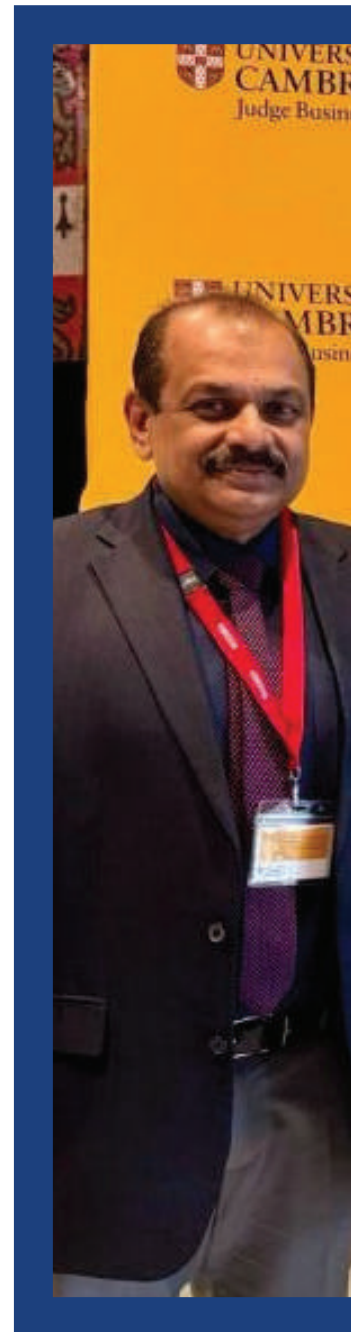
BEYOND BORDERS: REIMAGINING GLOBAL ENGAGEMENT IN HIGHER EDUCATION

I recently revisited Louvain-la-Neuve in Belgium, the university town where I studied three decades ago, this time as part of my professional journey. The quaint, cobblestoned lanes felt both familiar and transformative. I walked past the campus where I once hurried to class, the bakery that still smelled of warm baguette and waffles, and the fountain that had silently witnessed my early dreams. What once felt foreign now felt intimately known—not because the town had changed, but because the meaning of borders had.

Travel has always drawn me, especially to places close to nature: mountains, oceans, rivers, and small towns that invite pause. Every journey has shown me how the world shifts subtly—the scent of the air, the warmth of light, the rhythm of communities. I've learned that beneath our differences lies a shared human essence: the desire to learn, to belong, and to connect. These experiences shaped my career in academia, leading me through diverse roles, new pathways, and moments that helped me discover my *Ikigai*—the point where what I love, what I do well, what the world needs, and what sustains me converge.

Today, as the Director of Global Engagement at Kumaraguru Institutions, I see my personal and professional worlds merge with clarity. My role allows me to draw from my curiosity about cultures, my belief in learning as a universal pursuit, and my purpose of creating opportunities that help young people see the world as their classroom. The landscape of global engagement in higher education is changing faster than ever. The traditional idea of internationalization—defined by physical mobility—is evolving into deeper, more integrated global learning experiences. Universities worldwide are rethinking what it means to be “global,” and at Kumaraguru, we are not just observing these shifts; we are actively shaping them.

The first major shift is **from mobility to multi-locality**. Learning today is no longer bound to physical travel. Students and faculty can engage globally from their own campuses, connected by digital platforms, shared virtual spaces, and interdisciplinary collaboration. Education is becoming “multi-local”—rooted in one's context yet seamlessly connected to global knowledge ecosystems.



At UK Study Mission in University of Cambridge



The second shift is **from exchange to co-creation**. Partnerships now go beyond short-term exchanges or formal agreements. The future lies in co-designed knowledge, collaborative problem-solving, and joint outcomes that matter. This new era values collective intelligence over competition and meaningful collaboration over transactional engagements.

The third shift is **from exclusivity to inclusion**. Global experiences, once accessible only to a privileged few, are now integrated into the learning journey of every student. Technology-enabled classrooms, virtual exchanges, and intercultural collaborations are democratizing global learning, ensuring that every learner participates in the world's diversity.

The fourth shift is **from Western-centric paradigms to Global South leadership**. Academic influence is becoming more balanced. Countries like India are emerging as contributors—not consumers—of global knowledge. Institutions in the Global South are shaping narratives on sustainability, innovation, and equity, offering new frameworks for global thinking.

The fifth and most profound shift is **from internationalization to planetary citizenship**. Education today carries a deeper moral purpose. Beyond careers and competitiveness, global learning emphasizes ethics, empathy, and responsibility toward the planet. Tomorrow's graduates must think globally but act as stewards of a shared world.



At Kumaraguru, we are embracing these shifts with intention. Through the Kumaraguru Global Engagement Office (K-GEO), we view internationalization as a philosophy of purposeful connection—reshaping how students learn, how faculty collaborate, and how our institution contributes globally. We aim to nurture learners who are not merely globally ready but globally relevant. Our partnerships seek transformational impact rather than transactional reach. For us, internationalization is not a chase for visibility but a commitment to creating meaningful value rooted in Coimbatore yet resonating worldwide.

As I reflect on my journey—from walking through the quiet lanes of Louvain-la-Neuve to the vibrant campuses of Kumaraguru—I see a beautiful full circle. What began as curiosity has grown into a purpose: creating spaces where learning transcends borders, technology connects minds, and global engagement becomes a shared path to a better world.



Dr. Vijila Kennedy,
Director, Global Engagement,
Kumaraguru Institutions
vijila@kclas.ac.in

“OUR PARTNERSHIPS SEEK

transformational impact rather than transactional reach.”

THE CHEVENING LENS: LEADERSHIP, NETWORKS, AND IDEAS FOR A REACTING WORLD

In a world changing faster than our ability to define it, leadership is no longer about titles but about the courage to connect dots others cannot yet see. My year as a Chevening Scholar in the UK taught me that global leadership is not a personality trait — it is a practice of perspective. It is shaped by how we observe the world and, more importantly, how we act upon what we see.

When I returned to India, the question I carried back was not what next, but who next. Who will inherit the responsibility of connecting knowledge with experience, technology with empathy, and education with reality? That question became the seed for the REACT Program — **Real-world Engineering and Application through Collaborative** Transformation, a learning model where students, communities, and industries come together to understand, live, and solve real problems from the ground up.

Learning Beyond Borders

Chevening, at its core, is more than a scholarship. It is a test of how one converts exposure into empathy and networks into action. In Edinburgh, surrounded by scholars from over 100 countries, I witnessed hundreds of versions of hope converging. We debated climate justice over coffee, prototyped energy solutions in labs, and discussed ethics in corridors older than many modern nations.

The deepest lesson, however, came from understanding that global challenges have hyperlocal roots. Leadership is the ability to recognize universality within local specificity.



Batch 2023–2024 Chevening scholars during the introductory session held at British High Commissioner Residence in New Delhi.

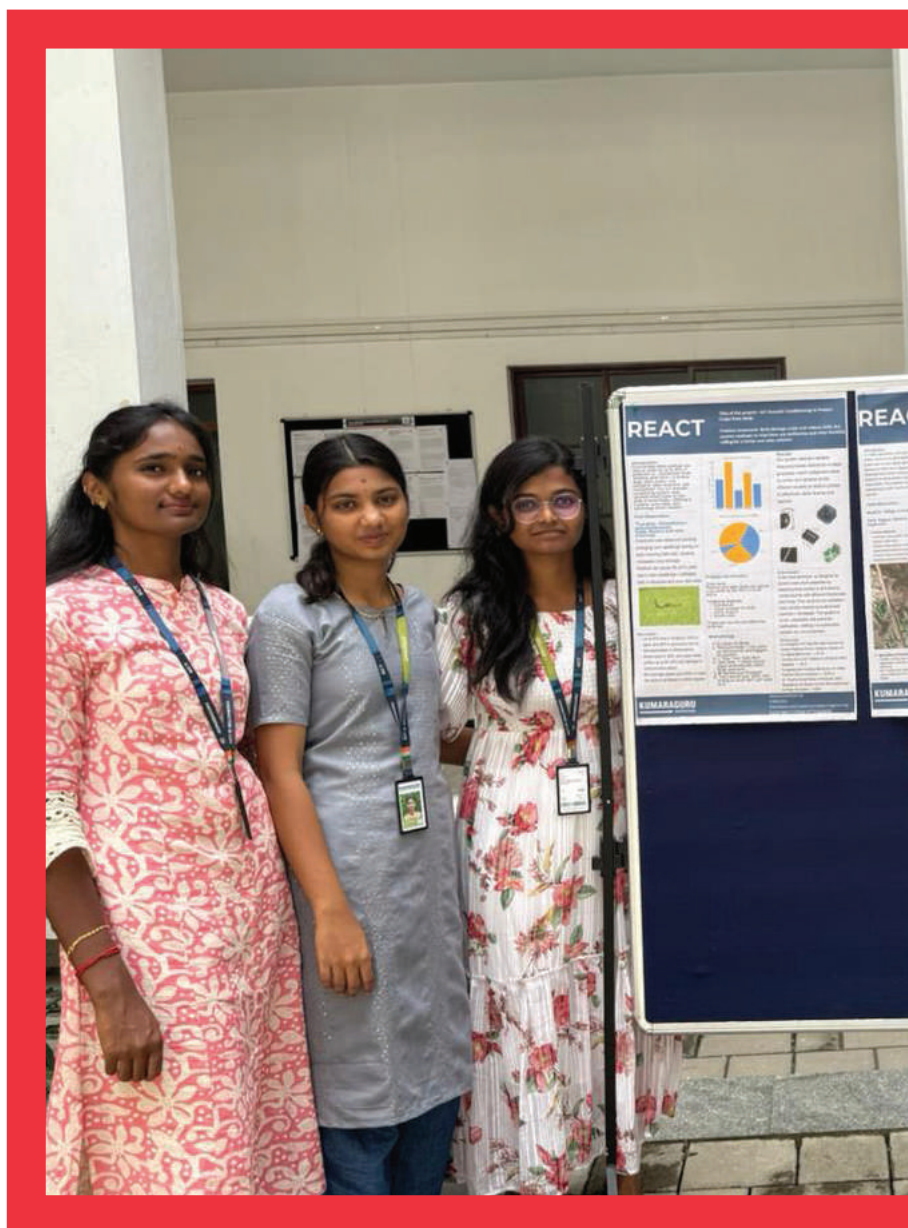
I was also struck by how effortlessly ideas moved in the UK — how classrooms extended into incubators, how research naturally evolved into startups, and how students treated ideas as living possibilities. When you truly understand the lived reality of a problem, the way you define solutions fundamentally changes. Grounded learning transforms students from passive learners into active problem-solvers who possess the confidence to turn everyday insights into enterprises, innovations, or services. When I began designing REACT, I drew directly from this lens. The fellowship model pushes students to enter problems, not study them from a distance. Whether working with a farmer in Erode, a health worker in Coimbatore, or a sanitation worker in Mysuru, fellows are trained to see systems rather than symptoms and co-create solutions with the people most affected.

Leadership in a REACTing World
Post-Chevening, leadership for me is not about being in front of the room but about ensuring the room evolves. Through REACT, we are redefining the role of an academic institution — not as a dispenser of knowledge, but as a platform for field-driven transformation.

Our fellows do not merely “learn innovation”; they live it. Through a 30-day immersion, they identify real pain points, validate them through community interactions, and build evidence-backed prototypes. Each project becomes a negotiation between curiosity and conscience, reaffirming that when education enters the field, it becomes enterprise.

In this way, REACT makes Chevening local. It operationalizes the same triad of leadership, networks, and ideas within the Indian context. It offers students not only exposure but ownership, not just mentoring but participation in governance of their own ideas.

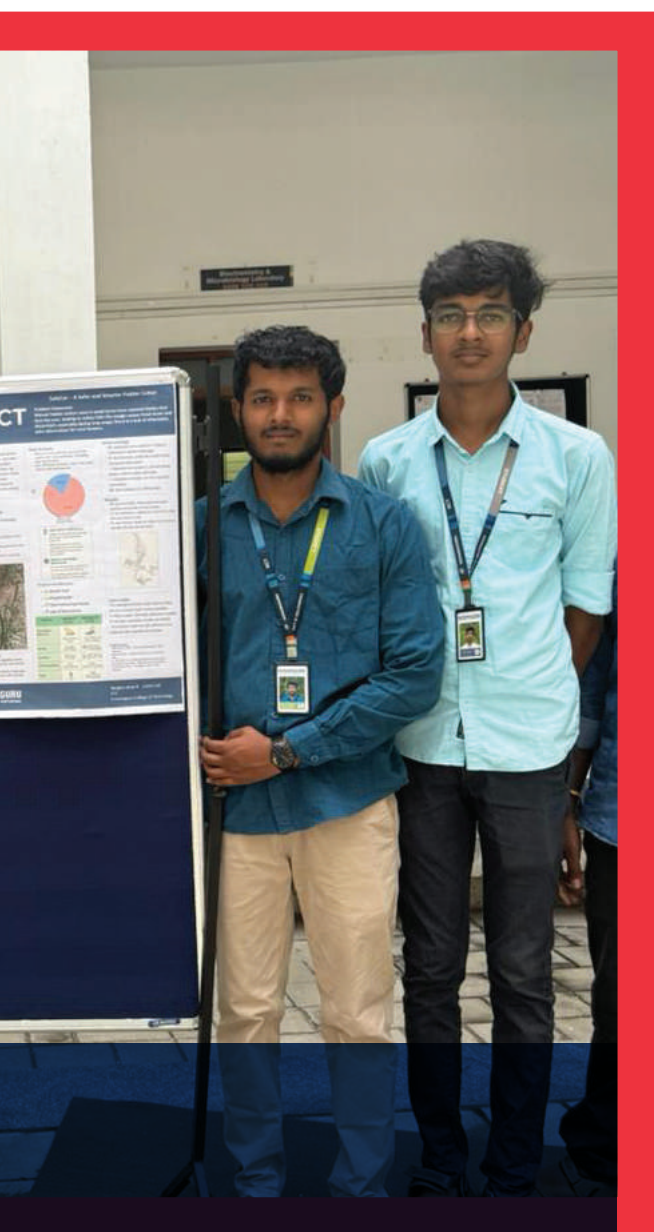
REACT student project presentations from the 5-day hackathon.



Networks that Build Nations

One of Chevening’s greatest gifts is its invisible but powerful asset: its global network. A Chevening connection is as much philosophical as it is professional. It teaches you to think in alliances.

That same principle shapes the REACT ecosystem today — a growing network of farmers, NGOs, industry partners, and global communities. While we work to formalize collaborations with platforms like YOUNGO, SDSN Youth, the Just Transition Academy, and Engineering for Change, our personal engagements with these groups have already deeply influenced REACT’s ethos.



**NOT MERELY
“LEARN
INNOVATION”
THEY LIVE IT.**

Their spirit of collaborative transformation fuels our mission to link local action with global purpose.

Through these networks, young people learn that leadership is not about who leads, but who enables. The Chevening network gave me the confidence to bridge continents. The REACT network now extends that privilege to our students, turning fields into classrooms and curiosity into community-driven solutions.

Ideas that Sustain Change

Ideas are abundant; systems that test and support them are rare. Chevening’s interdisciplinary culture inspired me to design REACT as a structured, replicable model that moves from observation to solution. Every fellow develops a “Digital Fieldfolio,” documenting insights, iterations, and prototypes — building a lifelong archive of learning and impact.

From Edinburgh to Coimbatore — A Circle Completed

Looking back, I see two journeys running in parallel: Chevening shaped my worldview; Kumaraguru gave me the ground to apply it. Between them stands REACT — a bridge where global perspectives meet local realities.

As our students immerse themselves in farms, factories, wetlands, and hospitals, they are not just observing India — they are redesigning it. They are learning that leadership is earned, one problem, one prototype, and one partnership at a time.

The Chevening lens continues to guide this work, reminding us that to lead is to learn, to connect is to create, and to react is to rebuild.



Mr Brathikan V M,

Principal Architect, Research & Development
brathikan@kct.ac.in

LIGHTNING COMPASS: FINDING HOME IN A NEW LANDSCAPE

The question first arrived quietly, shaped by polite confusion: “India? Why India?”

What began as a soft inquiry soon became a steady chorus. For many around me, the path to higher education seemed obvious — France symbolised cultural prestige, the United States stood for technological ambition, Germany represented engineering excellence, and Canada promised structured opportunity.

Kumaraguru did not fit within these familiar mental maps. It was outside their assumptions, a name that did not align with their global templates. “Are you sure this is the right institution?” they asked. Their tone was not discouraging, but it attempted to shake the confidence I held within. Yet my intuition remained firm. It spoke quietly but unmistakably — and I chose to follow it.

Arrival: A Sense of Place

The uncertainty that travelled with me dissolved the moment I walked into the Kumaraguru campus. It did not resemble the polished imagery of international brochures, nor did it attempt to. Instead, it offered a kind of authenticity I had not expected.

White buildings of understated elegance stood amid open green expanses. Trees formed natural

corridors of sunlight and shade. The air carried a calm, grounded rhythm — at once new, yet strangely familiar. In those first moments, I realised my decision was not unconventional; it was accurate. The campus aligned with values I had not yet learned to articulate but instinctively recognised.

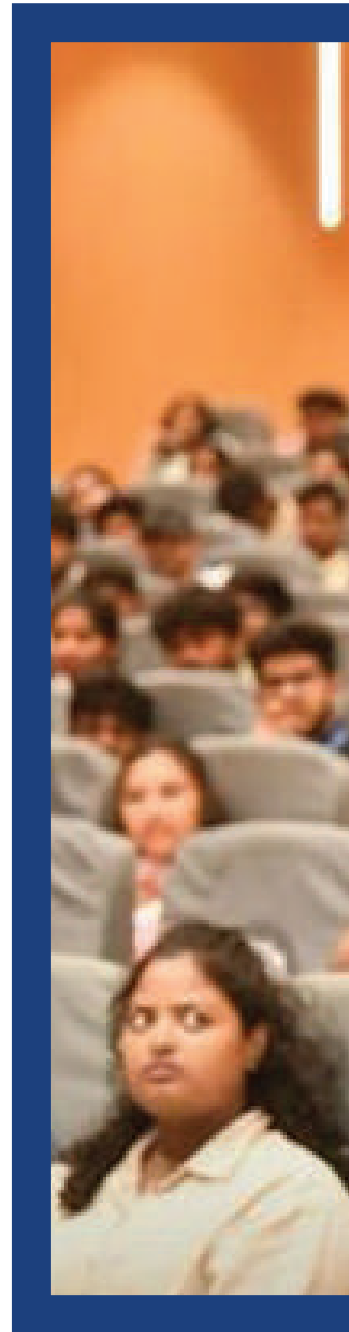
Yugam: An Immersion into Institutional Spirit

Before academic routines could settle, I was introduced to **Yugam**, under the guidance of Ms. Suganthamani C. V., Ms. Iti Dubey, and Ms. Janani. Yugam, one of South India’s largest techno-cultural-sports festivals, is more than an event; it is a declaration of what Kumaraguru stands for.

I watched students engage in rigorous debates, present engineering prototypes, deliver artistic performances, and compete in high-standard sports events.

Yugam showcased a culture where excellence is collective rather than competitive, where students uplift each other to raise the standard for all.

In that space, my identity shifted. I was no longer “the first from my country.” I became part of a larger community of learners — creating, collaborating, exploring.





Learning Beyond the Classroom

One of my most meaningful early experiences happened far from the campus. During a rural camp in **Palakkad** and **Attapadi**, organised by the Social Work department, I met communities whose lives reflected cultural depth, resilience, and social strength. These interactions revealed truths that no classroom could deliver.

My mentors — Santhosh Sir, Rex Sir, Preethi Ma'am, and Binesh Sir — guided me through these engagements and helped me understand the layered realities of India's social fabric. Their mentorship shaped my academic lens and personal growth, encouraging me to see beyond the surface and appreciate complexity.

Crossing Disciplines, Expanding Perspectives

Kumaraguru is built as an interdisciplinary ecosystem. My learning naturally extended beyond the Social Work department into Visual Communication, Management, Data Analytics, the Global Language Centre (KGLC), and the FORGE Innovation and Entrepreneurship Lab.

Each interaction became a bridge — linking concepts, disciplines, and perspectives. This environment showed me that learning is not about collecting information; it is about connecting ideas. Meaning emerges when knowledge intersects.

Faculty members across departments played a crucial part in this transformation. Their teaching extended beyond formal



Celebrating Cameroon Day
20 May 2025 at Kumaraguru
Institutions

lectures into conversations, mentorship, and guidance. They emphasised values, responsibility, curiosity, and critical thinking. This, I realised, is the true culture of Kumaraguru — a place where every individual matters and every initiative adds to collective growth.

A Compass Realigned

I arrived in India with questions and uncertainties. I now stand with clarity and purpose.

Kumaraguru has given me more than an academic education. It has offered a worldview rooted in **community, interdisciplinary learning, cultural immersion, and intellectual humility**. What began as an unconventional choice has become a transformative journey. My intuition had not misled me.

Kumaraguru is not just a place of study — it is a place of becoming. A place where perspectives shift, where values deepen, and where one learns not only to understand the world, but to engage with it thoughtfully.



Chimi Hermann Aubin ,

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“I arrived in India with questions
and uncertainties. I now stand with

**CLARITY AND
PURPOSE.”**

PASSION.

TRANSFORMATION

FROM AIRFIELD TO ACADEMIA:

5 BRD's FIRST EVER PARTNERSHIP WITH KCIRI

As I walked through the gates of 5 Base Repair Depot (5 BRD) at Air Force Station Sulur in July 2023, a familiar engine whine reached me before the security check. It was the Tejas, ready for take-off. The sound pulled me back to my squadron days, where every pitch signaled readiness and trust. This time, I was here representing KCIRI, the research arm of Kumaraguru College of Technology, to show how academia could support the Air Force.

After security, I was taken to meet the Air Officer Commanding. In the conference room, senior officers outlined urgent technical challenges. A Wing Commander handed me the schematic of the Automatic Engine Starting Unit, APD-55, used on IL-76 and IL-78 aircraft. "We need a diagnostic tester, designed and developed indigenously," he said. It was complex, but possible. I accepted it as a test of academia's role in national defence.

Back at KCIRI, all I had was a small team, a few tools, and determination. Along with the APD-55 tester, we were also asked to refurbish the Mirage 2000 Gun Control Unit (GCU) and repair its Fatigue Meter. Three mission-critical projects, one modest lab, and no OEM support. The Mechatronics Department stepped in, sending an intern and helping us build KCIRI's first avionics workspace. The D-block lab soon filled with sweat, solder fumes, and resolve.

Our first APD-55 prototype was bulky and failed ground tests. Rejection hurt, but we

redesigned it into a sleeker, reliable unit. Our project engineer carried it to Agra for aircraft trials.

The Mirage GCU arrived sealed in rock-hard resin with no documentation. It felt like being handed a stone and told to find its heartbeat. We researched, failed, scraped, and heated until we uncovered the hidden circuits. Days turned into nights. When the refurbished GCU finally powered up, it was a breakthrough. Each unit cost the IAF only 2.2 lakhs instead of the original 83 lakhs.

On the same day, the APD-55 tester cleared all trials and the GCU passed flight tests in Gwalior. Two victories from one small lab. Standing outside the DOME building that evening, I felt that success isn't shaped by results alone, but by conviction in every step.

Our partnership with the Air Force deepened. Fifteen Aeronautical Engineering students from KCT completed a month-long live-in internship at 5 BRD, working alongside officers and airmen. Watching them evolve into confident professionals was rewarding.

Our support extended beyond engineering. When 5 BRD and PHDCCI organised an Industry Conclave in August 2024, they urgently needed a structural evaluation for a prefabricated hall. On a Sunday morning, our civil engineering faculty visited the base and ensured the hall was safe. That is the spirit of KCIRI—ready, resourceful, relentless.

Months later, on a rainy day, a truck carrying five APD-55 testers rolled slowly past our D-block.





FIRST ACADEMIC INSTITUTION

in India to provide tactical and strategic solutions to the Air Force.

My team and I stood silently, knowing what it meant.

A small academic research centre had built something for the nation's aircraft fleet. Pride filled us. KCIRI had built, tested, and delivered systems now installed on operational IAF aircraft, becoming the first academic institution in India to provide tactical and strategic solutions to the Air Force.

This success strengthened 5 BRD's trust. They placed new orders: more APD-55 testers, more GCUs, and advanced testers for Pilatus, Dornier, and Mirage avionics. Each order was a vote of confidence earned through perseverance.

As I look back, I feel immense gratitude to the leadership of Kumaraguru Institutions, my team, students, and faculty who believed in this dream.



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THE PULL OF THE POSE: MY JOURNEY THROUGH YOGA

I still remember my first yoga class. I was eight, more curious than serious. Our master taught a challenging asana and asked if anyone wanted to try. I raised my hand without thinking and did it with ease. He stared at me and said, “Your body is made for yoga.” That one line changed everything.

He called my father, Saravanakumar, and told him my flexibility needed to be nurtured. Soon, my father began taking me to a yoga centre every Sunday. What started as a simple school activity slowly became my entire world.

My first competition was at the school level. I didn’t win, and I cried afterward. But that loss lit a fire in me. From then on, I promised myself I would work harder. My father took me to competitions almost every weekend. Many relatives mocked us, saying we were wasting time and money, that it was better to save for my marriage. Some stopped inviting us because we weren’t from a well-settled family. Today, those same people proudly invite us. Yoga didn’t just transform my life—it changed the way people saw us.

One competition became a turning point: the International Yoga Festival in Pondicherry. It was prestigious, with participants from across India and abroad. I took part for more than four years and never won. More than twenty-three yoga masters told me I wouldn’t survive in yoga, that I didn’t have the ability. Their words broke me. I cried many nights and thought of quitting, but I didn’t.

Years later, I was invited as the chief guest at that same event. I performed on the main stage—the one I once looked at with tears and dreams. Afterward, one of the masters said, “You once stood there crying. Today you stand here as our guest. You are on the right path.” That moment still gives me goosebumps. It reminded me that hard work always circles back to you.

People see yoga as graceful, but behind every pose lies struggle. I’ve faced injuries, fatigue, and doubt. Recently, I tore a ligament in my shoulder. It was painful, but yoga taught me patience. I modified my practice, healed slowly, and returned stronger.

Another turning point came when I was selected for a reality show. My celebrity partner, Avinash Ashok, fractured his leg a day before the finale. Everyone expected me to withdraw, but I didn’t. I performed alone, blending yoga and movement from the heart. When I won, it wasn’t just a title—it was proof that resilience bends fate. Holding that trophy, I felt grateful not for fame, but for the strength yoga had given me.

A girl who once doubted herself went on to become an Asian Champion. Nationals once felt huge, but today they are a chapter in a much larger journey. Every failure shaped my strength. Behind every achievement was my father. He wasn’t just my supporter; he became my coach. Though he studied only up to Class 10, he completed a Diploma in Naturopathy and Yogic Science so he could guide me better. Every competition form and Guinness application had his effort behind it.



Vaishnavi at the 2nd Asian Yogasana Championship with her medals.



Beyond medals, yoga made me a better person. It taught me humility, courage, discipline, and calmness. A few years ago, my father and I started a yoga academy in Karumathampatti. Today, I train nearly 30 students, some as young as 18 months. Watching them grow gives me immense joy. Teaching girls feels like a mission. Some have already won medals and set records, and my dream is to guide them to the Olympics as yoga earns recognition as a sport.

My biggest support is my institution, KCLAS. They help me balance studies and sports without barriers. Their belief in me pushes me to aim higher.

As I look ahead, I want to set more Guinness World Records and represent India globally. More than anything, I want to inspire others to find their own pose—their source of balance and happiness.

Yoga taught me that success isn't about how far you stretch your body, but how deeply you stretch your mind. The pull of the pose is in the journey—the choice to show up and bend a little further each day.



Vaishnavi S

M.A Political Science,
KCLAS Batch 2027.

And that keeps me moving,

**ONE BREATH,
ONE POSE,
ONE DREAM
AT A TIME.**

PASSION.

THOUGHT LEADERSHIP

ONE HEALTH, ONE PLANET: BUILDING BRIDGES BETWEEN SPECIES AND SYSTEMS

India stands at a defining moment in its industrial journey. The country is moving rapidly toward technological leadership, and the demand for strong hardware innovation has never been greater. From mobility and energy to health and defence, India's progress depends on its ability to design, build, test, and scale physical products that solve real problems. This is the landscape where Forge was created, with a clear purpose: to build a national platform that strengthens India's hardware innovation capacity and prepares the next generation of creators and companies.

Forge began with a simple but ambitious vision: to bring together talent, technology, and ventures in one integrated ecosystem. The goal is not only to support startups but to create a culture where hardware innovation becomes a natural part of India's growth story. As the nation enters an era of industrial transformation and technological independence, this mission has become even more urgent and relevant.

India's industrial future is shaped by several major areas of opportunity. These include mobility technologies, medical devices, assistive systems, climate and sustainability solutions, industrial intelligence, and defence hardware. Forge calls these the

"future scopes" because they represent the direction in which humanity is moving and the areas where India can emerge as a strong leader. Each scope demands progress in machines, materials, components, and intelligent devices that are ready for global markets. Forge positions itself at this intersection and helps innovators turn ideas into products that matter.

At the core of Forge's approach is Manu Futuring, a vision that brings together innovation in manufacturing and manufacturing for innovation. It reflects the belief that India must strengthen both the technologies used in its factories and the technologies its factories produce. When these layers grow together, industries become more flexible, efficient, and prepared for global competition. This creates self-reliance in production as well as in the intellectual and technological frameworks that support it.

To bring this vision to life, Forge operates through six strategic program verticals: Forge Academy, Forge Labs, Forge Lighthouse, Forge Foundry, Forge Fast, and Forge Fund. Each vertical plays a distinct role, yet all contribute to the path from idea to deployable solution.

Forge Academy focuses on building talent. It develops an innovation-ready workforce through practicum-based learning, where students, educators, and industry professionals learn to design and build minimum usable prototypes and real



KUMARAGURU
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BGU
Ben-Gurion University of the Negev

INTERNATIONAL SYMPOSIUM ON ONE HEALTH

2023



Shri Shankar Vanavarayar,
President, Kumaraguru
Institutions with
Prof. Dr. Daniel Chamovitz,
President, Ben-Gurion
University, at the One health
Symposium hosted by
Kumaraguru Institutions.

industrial solutions. Programs such as the Innovation Practicum and the MTM and MBA IEV courses help learners become practitioners who can move confidently across engineering and entrepreneurial roles. Forge Labs provides the physical backbone for innovation. Across its centres in Tamil Nadu, Forge operates advanced facilities for design, development, verification, validation, and pilot-scale manufacturing.

These labs contain digital fabrication tools, electronics prototyping systems, industrial robotics, additive manufacturing, and emerging industrial metaverse infrastructure. As India's largest network of fabrication labs accredited by the Fab Foundation, Forge Labs

ensures innovators have access to the tools needed to convert ideas into physical form.

Forge Lighthouse helps industries adopt new technologies and accelerate transformation. Through a structured co-innovation model, enterprises discover solutions, test them in real environments, and work with innovators to jointly develop and deploy them. This strengthens operational performance and long-term sustainability.

Forge Foundry and Forge Fast extend similar support to government and public sector



organisations. They help institutions adopt advanced technologies, co-develop strategic solutions, and collaborate with startups to address national challenges. These programmes have shaped major defence, urban innovation, and public sector initiatives across India.

Finally, Forge Fund supports ventures with catalytic capital, ranging from innovation grants to seed investments. It ensures that promising startups receive the resources they need to scale their products and expand into national and international markets.

Together, these efforts form a unified ecosystem that strengthens India's hardware innovation landscape. By developing talent, empowering industries, and supporting ventures, Forge is helping shape a future where India evolves into a confident and influential global innovation leader.



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Forge Labs ensures innovators have access to the tools needed to

**CONVERT
IDEAS INTO
PHYSICAL
FORM.**

REIMAGINING BEHAVIOR: HOW CABPIL IS REDEFINING THE FUTURE OF PUBLIC POLICY IN INDIA

Public policy in India is entering a new chapter that recognises that people do not live in isolated systems. Their choices and challenges are shaped by culture, community, communication, and the environments they move through daily. The Centre for Applied Behavioural and Public Policy Innovation, known as CABPIL, was created to work at this intersection. It brings together research, field experience, and design thinking to build policies that are humane, practical, and grounded in everyday reality.

CABPIL's work is guided by a core belief that behaviour is not only an individual act but also a reflection of social narratives, cultural expectations, and lived experiences. Global institutions such as the United Nations and the OECD study behavioural insights for public benefit, but CABPIL adapts these ideas to India's linguistic, cultural, and economic contexts. Rather than importing Western models, the centre designs solutions with the people who face the problem. Community members, local institutions, and frontline workers become active contributors in understanding behaviour and shaping interventions.



Shri Tikender Panwar (Former Deputy Mayor of Shimla; Member, Kerala Urban Commission) at the Urbanization, ecology and mental health: a behavioral policy dialogue by CABPIL

This approach is strengthened by CABPIL's foundation in the liberal arts. Behavioural science is usually taught through experiments, cognitive biases, and economic theories. CABPIL broadens this view by drawing from sociology, anthropology, psychology, design, ethics, and communication studies. It recognises that behaviour is influenced by family structures, caste dynamics, neighbourhoods, cultural stories, and historical patterns. By combining these perspectives, the centre builds deeper understanding of why people act the way they do and how policies can support them with dignity and respect.

To move ideas into action, CABPIL follows its signature FRIIS model: Frame, Reimagine, Iterate, Implement, and Scale. Problems are framed using behavioural diagnostics and citizen journey mapping. They are reimaged through co-design sessions where communities take part in shaping solutions. Ideas are tested in real environments through civic, digital, and workplace sandboxes. After refinement, the team prepares briefs, toolkits, and dashboards to guide institutions during implementation. The most successful interventions evolve into government-ready models that can be scaled across districts and states.

A key pillar of the centre is the Ethics and Governance Unit. Behavioural interventions must protect autonomy, informed choice, and cultural dignity, particularly among groups with low literacy or limited access to information. The Ethics Unit ensures transparent and responsible practices at every step. To strengthen this commitment, CABPIL is building a Behavioural Data Observatory that curates anonymised datasets, visualisations, and evaluation summaries. This promotes openness and helps researchers, policymakers, and institutions learn and collaborate more effectively.

CABPIL also invests in future behavioural leaders through its fellowships and training



programmes. These initiatives support students, public officials, NGO workers, and practitioners. Participants learn frameworks such as COM-B, the Behaviour Change Wheel, and the EAST model. They also study communication, ethics, systems thinking, and culturally grounded behavioural diagnosis. The goal is to nurture behavioural leadership that understands communities, manages institutional complexity, and designs solutions that are compassionate, feasible, and impactful.

Another major contribution of CABPIL is its work on Southern Methodologies. These are behavioural research approaches suited to the realities of the Global South. They include tools for low literacy groups, multilingual communication models, participatory ethnography, and culturally rooted heuristics mapping. They draw from indigenous narratives and traditional knowledge systems to understand motivation and decision-making. Through this work, the centre is not only adapting global methods but also expanding the field with new perspectives.

CABPIL remains aware of the challenges ahead. India's diversity requires flexible models rather than one-size-fits-all solutions. Collaboration with government and civil society calls for trust, time,



CABPIL offers an

INDIAN AND HUMAN APPROACH TO POLICY INNOVATION

and shared ownership. Behavioural interventions must be monitored for unintended consequences. Scaling successful pilots demands sustained commitment and coordination.

CABPIL meets these challenges with humility, continuous learning, and long-term capacity building.

In a time when behaviour shapes outcomes in health, education, sustainability, gender, and governance, CABPIL offers an Indian and human approach to policy innovation. It is building a future where evidence is rooted in empathy, where communities become partners in change, and where public policy reflects not only data but people.



Dr. Mirza Jahanzeb Beg,

Head, CABPIL.

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FORGING THE FUTURE: BUILDING INDIA'S HARDWARE INNOVATION ECOSYSTEM

Over the past century, humanity dreamed, desired, deserved, and demanded innovations that took shape as hardware. Machines, materials, components, and devices transformed industrial and manufacturing sectors across aerospace, defence, telecom, automotive, infrastructure, healthcare, transportation, logistics, and energy. These hard problems were solved with hardware, and today, as we stand at the edge of another explosion of innovation, the need to act is urgent.

As the world transitions into the Industrial Intelligence Age, a new renaissance is emerging. The rise of hardware is converging manufacturing and technology to drive a second era of progress built on innovating manufacturing for manufacturing innovations. This era will redefine industrial competitiveness, sustainability, and economic growth. To turn these innovations into reality, India needs the next generation of phygital tech startups, young and agile enterprises that combine manufacturing excellence with scale, sustainability, and cutting-edge technological leadership. These high-growth companies will strengthen India's position in the Industrial Intelligence Age and shape the nation's future industrial strength and technological sovereignty.

Forge was founded with a clear purpose: to build and operate India's largest open innovation network that activates, prototypes, funds, commercialises, accelerates, invests, and scales phygital, hardware-first tech innovations and ventures. Its vision is to converge talent, technology, and ventures to power India's innovation economy and achieve transformational scale for hardware innovations from India, in India, and for India. As India advances toward industrial transformation and technological self-reliance, this mission carries even greater urgency.

India's industrial future will be shaped by eight Futurescopes that reflect humanity's aspirations: Mobility Hardware, Production Hardware, Defence Hardware, Assistive Hardware, Industrial Hardware, Health Hardware, Climate Hardware, and Energy and Sustainability Hardware. These Futurescopes highlight the spaces where innovation is needed most. Forge is deeply anchored in these priority areas and focuses on accelerating the development of breakthrough machines, materials, components, and devices that will support India's industrial and economic trajectory.



Forge at the Australian Learning Mission.



At the core of Forge's strategy is its Manu Futuring vision. It unifies innovation of manufacturing with innovation in manufacturing. This approach supports transformation at two levels. At the macro level, it strengthens enterprise strategies for innovation of manufacturing. At the micro level, it drives innovation in manufacturing through factory and product level transformations. Together, these efforts enhance efficiency, productivity, quality, flexibility, and profitability while building self-reliance in production, product, and technology at global standards.

Forge executes its strategy through six Strategic Program Verticals: Forge Academy, Forge Labs, Forge Lighthouse, Forge Foundry, Forge Fast, and Forge Fund. These reflect the strategic priorities of talent, technology, and ventures.

The future will be
powered by hardware

**FROM INDIA,
IN INDIA, AND
FOR INDIA.**

Forge Academy develops an innovation-capable workforce and entrepreneurial talent. The Innovation Practicum enables students, educators, researchers, and industry professionals to design and develop minimum usable prototypes and industrial solutions. The MTM and MBA IEV programmes support hands-on, practicum-driven learning.

OUR IMPACT REFLECTS THE STRENGTH OF OUR INTEGRATED MODEL

- **150 Phygital Tech Startups**
- **130 Startups funded**
- **₹33.87 Cr cumulative funding offered**
- **₹350+ Cr revenue generated**
- **₹500+ Cr follow-on funding**
- **2,500+ jobs created**
- **₹687 Cr portfolio valuation**
- **₹30 Cr+ Forge shareholding valuation**
- **India's largest MIT-accredited Fab Lab network**

Forge Labs operates Industrial Innovation Labs that include product innovation labs, compliance labs, and pilot production facilities. Equipped with digital fabrication tools, electronics prototyping, cyber-physical systems, industrial robotics, additive manufacturing, and industrial metaverse infrastructure, Forge provides end-to-end capabilities for design, development, verification, validation, and low-volume manufacturing.



Forge Lighthouse drives industrial innovation and transformation. Through its Industrial Co-Innovation Platform and Technology Adoption Framework, enterprises can discover, validate, procure, and jointly develop advanced solutions.

Forge Foundry delivers managed open innovation services to public and social sector institutions. It has contributed significantly to iDEX by enabling the co-development and certification of strategic defence technologies. Through CiX with MoHUA, it supports thousands of urban local bodies in adopting innovative urban technologies.

Forge Fast partners with industrial majors to help them adopt the product mindset, accelerate

**ITS VISION
IS TO
CONVERGE
TALENT,
TECHNOLOGY,
AND
VENTURES
TO POWER
INDIA'S
INNOVATION
ECONOMY**





digital transformation, pursue strategic investments, and drive joint industrialisation and go-to-market initiatives.

Forge Fund strengthens startups with catalytic capital through innovation grants, pilot grants, scaleup grants, and seed investments. Global gateways and demand programmes expand international access for Indian hardware startups.

Forge's integrated model has created measurable impact across startup growth, funding, jobs, and industrial outcomes. It remains committed to building India's innovation economy in the Industrial Intelligence Age. The future will be powered by hardware from India, in India, and for India.



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**AS THE WORLD
TRANSITIONS
INTO THE
INDUSTRIAL
INTELLIGENCE
AGE, A NEW
RENAISSANCE
IS EMERGING.**

PROGRESS.

INNOVATION IMPERATIVE

ENGINEERING WITH PURPOSE: THE PROJECT- BASED LEARNING MODEL

Project-Based Learning (PBL) at Kumaraguru College of Technology represents a learning environment where curiosity drives action, and students engage by building, questioning, experimenting, and shaping ideas that create real impact. Launched in 2020 by Dr. Ezhilarasi M., PBL has grown into one of KCT's most transformative academic models, redefining how young engineers understand problems, people, and possibilities.

What began as an ambitious pilot with 58 first-year students during a global crisis has, five years later, expanded into a large, interconnected learning ecosystem involving more than 800 students. This growth has been guided with care by Dr. S. G. Mohanraj, Dr. K. Rathina, Dr. R. Mahalakshmi, and Dr. N. Anitha from the School of Foundational Sciences, making PBL a cornerstone of KCT's hands-on, human-centered learning culture.

From 2020 to 2025, PBL's journey reflects consistent expansion across nine cohorts. Starting with 58 students in the first batch, it steadily grew year after year, reaching over 120 students in the 2025–26 cohort. More than the numbers, the program stayed rooted in its guiding philosophy: give students real problems, real mentors, and real ownership. This steady scaling demonstrates the institution's commitment to experiential learning, ensuring each year brings richer collaborations, more diverse projects, and broader perspectives.

PBL focuses on developing essential skills for a changing world. Aligned with the UN Sustainable Development Goals and India's NEP 2020, the program encourages students to work on meaningful themes such as clean energy, sustainable living, mobility, quality education, community well-being, and health. The learning experience begins with the Project Immersion Program, introducing first-year students to Design Thinking, Biomimicry, ethics, wellness, and social responsibility. This foundation encourages students to observe problems deeply, understand user needs, and design with empathy from day one, allowing them to approach engineering from a human-centered perspective.



AI Testing with VR

PBL's outcomes over four years show how powerful student-driven learning can be:

- 172 projects
- 62 prototypes
- 7 patents filed (2 published)
- ₹5 lakh Yukthi Innovation Grant
- 11 research publications
- 45 paper presentations
- 32 project competition wins
- 30 awards and prizes
- 55 industry experts and 60 academic experts actively engaged

A key strength of PBL is its structured three-tier mentorship model: senior students who understand the process, faculty experts who guide technical depth, and industry mentors who bring clarity from a real-world perspective. Working in interdisciplinary teams, students tackle live industry problems and learn to think not only like engineers but also like designers, researchers, and innovators. This combination ensures that teams gain diverse viewpoints, build stronger solutions, and understand how collaborative engineering works in actual professional environments.





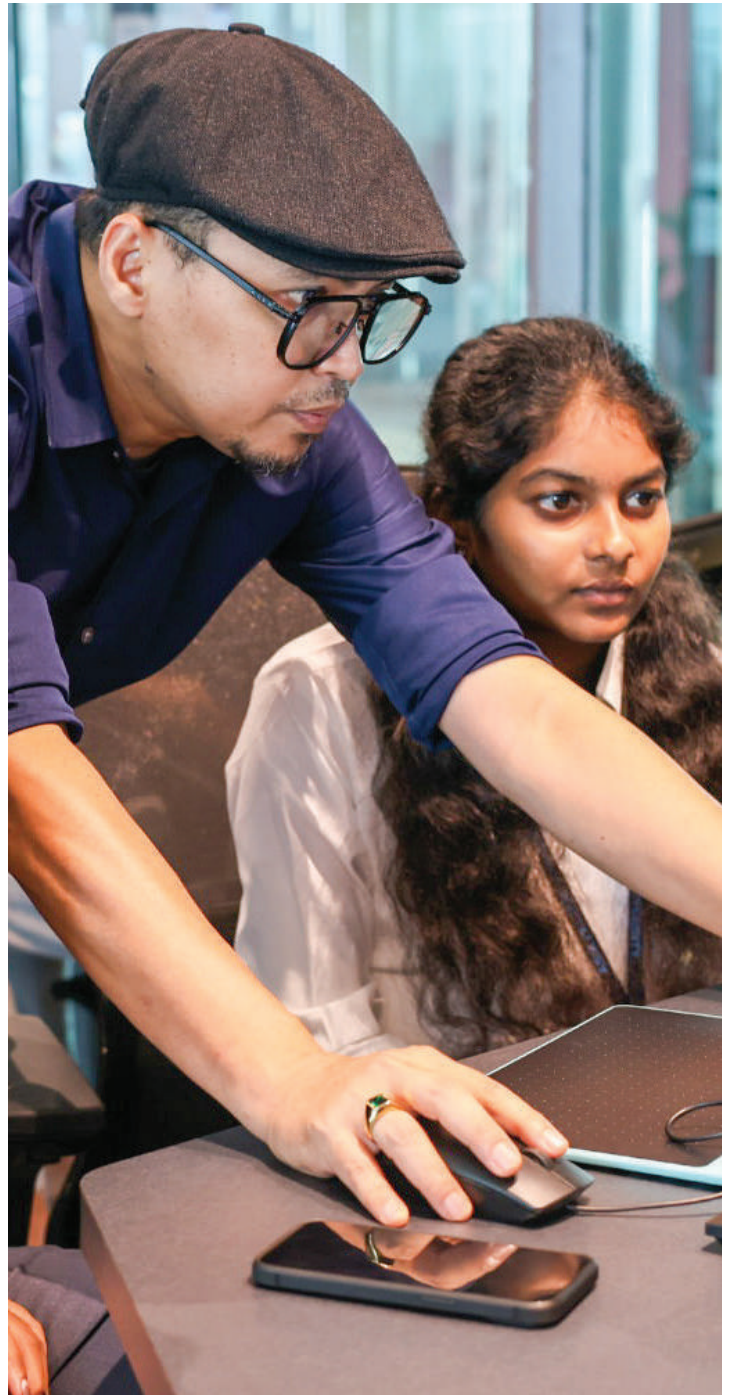
A PBL team receiving their award at the Achievers ceremony

These achievements demonstrate the power of student-driven innovation. Projects span advanced battery systems, sustainable e-trikes, efficient air purifiers, AI-driven applications, and community-focused solutions. Several student projects have evolved into startups, while others have received grants or gained national and international recognition. The ecosystem nurtures not only technical competence but also leadership, creativity, resilience, and problem-solving.

Industry partnerships strengthen the program significantly. Collaborations with Robert Bosch, Infosys, Ford, Cognizant, Decathlon, and over 50 industry practitioners ensure students learn with the industry, not just for it. These partnerships bring mentorship, live problem statements, expert reviews, and feedback that keeps projects aligned with industry expectations and emerging technologies.

Entering its fifth year, PBL is moving toward deeper industry immersion, wider global collaborations, and certifications aligned with future technology skills. Students will engage with international mentors, global innovation challenges, and interdisciplinary domains that push them to think beyond conventional engineering paths. The vision is clear: to make engineering education at KCT more human, more experiential, and more connected to real-world needs.

At KCT, learning moves beyond notebooks and classrooms. It takes shape as ideas, prototypes, collaborations, and impact. PBL transforms engineering into a way of imagining and improving the world—one project, one student, and one solution at a time.



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PROTOSEM: **ENGINEERING INNOVATION** **INTO EDUCATION**



**KUMARAGURU
INSTITUTIONS**

**HAS BUILT ONE OF
INDIA'S
MOST FORWARD
THINKING
ACADEMIC INNOVATION
ECOSYSTEMS THROUGH
ITS INCUBATION
ENTERPRISE,
FORGE INNOVATION &
VENTURES.**

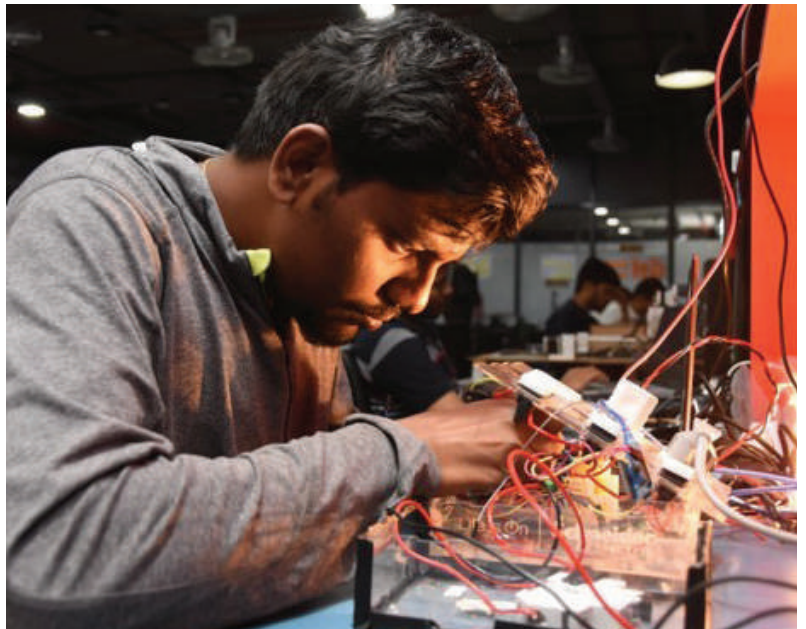
Kumaraguru Institutions has built one of India's most forward-thinking academic innovation ecosystems through its incubation enterprise, Forge Innovation & Ventures. This ecosystem introduces a transformative education model that prepares engineering and technology students for the demands of the Industrial Intelligence Age. It enables learners to operate seamlessly across hardware-first engineering and digital intelligence while being grounded in design thinking, applied innovation, and hands-on prototyping. Through these innovation-driven learning frameworks, students gain deep exposure to Cyber-Physical Systems, Industrial IoT, Robotics, Intelligent Automation, Digital Twins, Applied AI for Manufacturing, and Phygital Industrial Control Systems—skills required to address complex industrial problems.

Central to this ecosystem is the Innovation Practicum, a high-velocity innovation engine and a core pillar of institutional capability-building. The practicum mentors over 210 innovation ideas every year, supports nearly 60 proofs of concept, and enables about 30 functional prototypes. Over time, it has cultivated a strong pool of 240 trained innovation educators who champion innovation culture across departments, strengthening the institution's ability to drive technology-led problem solving. These efforts have resulted in patents, student-led startups, industry pilots, and the transition of multiple innovations into real-world applications.

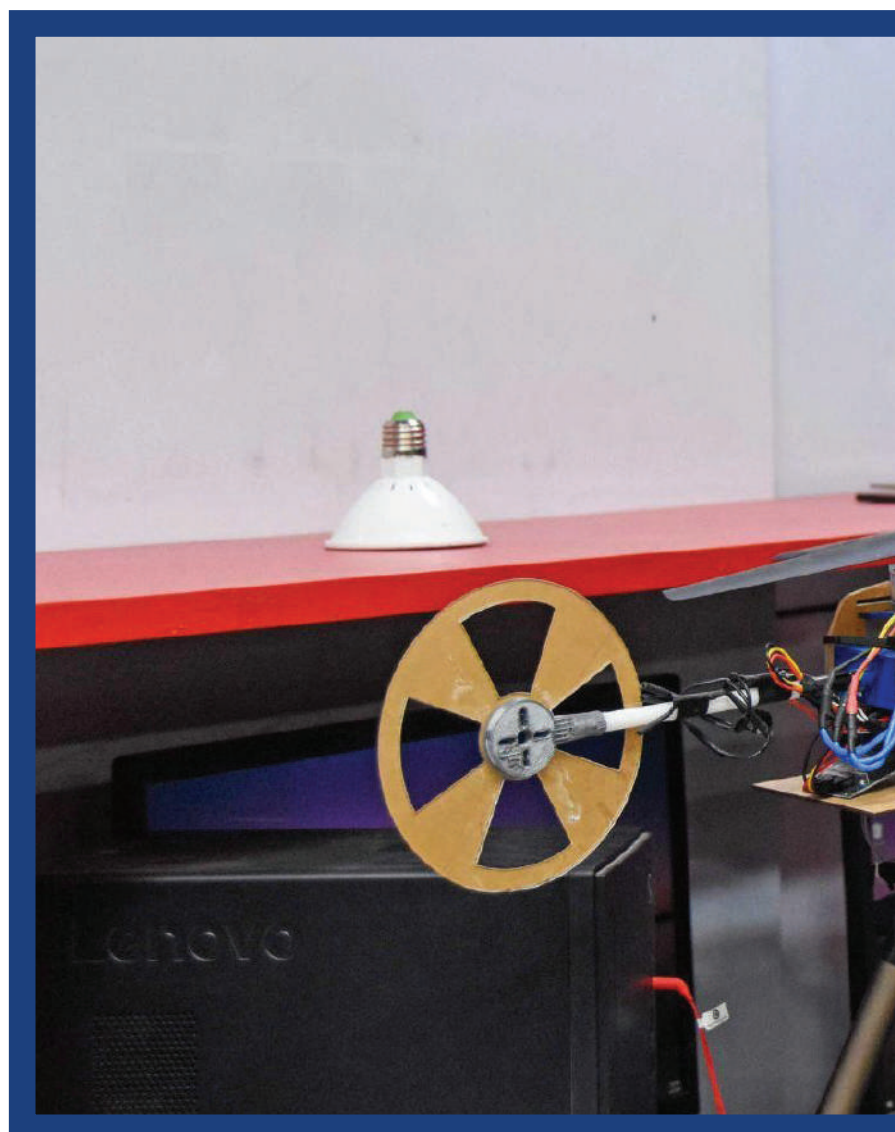
ProtoSem®, the Graduate Innovation Engineer Certification Program, stands as the flagship talent-accelerator within this innovation architecture. Structured as an intensive 20-week practicum, ProtoSem® accelerates learning through a rigorous cycle of designing, building, validating, and deploying solutions. Every participant produces a Minimum Usable Prototype (MUP), a functional and verifiable proof-of-work that establishes industry relevance. Since launch, ProtoSem® has trained 727 innovation engineers across more than 16 cohorts, reflecting the growing demand for innovation-ready engineering talent.

Students gain extensive real-world problem-solving experience in embedded systems, industrial automation, sensing and perception, applied machine learning, robotics, autonomous systems, additive manufacturing, and digital fabrication. Through continuous engagement with industry mentors, domain specialists, and real factory environments, learners refine their solutions to meet industrial and commercial standards. This emphasis on deployment-ready outcomes distinguishes ProtoSem® as a national model for preparing engineers to contribute to India's advanced manufacturing, digital transformation, and deep-tech innovation landscape.

The influence of ProtoSem® extends beyond its home institution. Its frameworks have been adopted by more than 25 private and government institutions across Tamil Nadu, producing 500+ Graduate Innovation Engineers. This widespread adoption demonstrates the scalability and national relevance of the model. Its pedagogy, structure, and execution strategy now serve as reference frameworks for institutions seeking to modernise engineering education and embed innovation at scale.



Protosem Learners building their prototypes



The practicum draws participants from a wide range of disciplines: Mechatronics, Mechanical Engineering, Electrical and Electronics Engineering, Electronics and Communication Engineering, Computer Science, IT, AI & DS, Aeronautical Engineering, Automobile Engineering, Textile Technology, Civil Engineering, as well as MCA, M.Tech, and B.Sc Electronics programs. This multidisciplinary engagement mirrors real industrial problem-solving and encourages cross-functional collaboration, a crucial competence in the Industrial Intelligence Age.

The long-term impact of ProtoSem® is reflected in the achievements of students who have built breakthrough solutions and transitioned into high-impact careers. Over the years, the practicum has resulted in deep-tech ventures and multiple patents. Innovations include smart physiotherapy devices, machine-vision systems for quality control, autonomous wildlife monitoring systems, intelligent weighing and theft detection solutions, robotic cleaning systems, surveillance drones, and underwater inspection devices. Many have secured patents, industry pilots, or evolved into student-led startups.

Innovation Educators Trained- 240	Innovative Ideas Mentored 210/YR
POC Developed 60/YR	Prototypes Developed 20/YR
Patents Filed 6	Startup's Registered 3





Alumni are now employed in advanced technology roles in global organisations including Microsoft (USA), Rivian (USA), Phenom (USA), Tenstorrent (USA), Valeo, Bosch, ThoughtWorks, Accenture, DHL IT Services, Sattva Consulting, and Hughes Systique. They work as Product Managers, Mechanical Design Engineers, Embedded Engineers, AI/ML Engineers, Application Developers, and Product Safety Specialists. Others have pursued higher education in robotics, AI, industrial engineering, automation, and human-machine systems at top universities in the US, UK, Europe, and Australia.

Collectively, the practicum has built a scalable national framework for integrating engineering education with industrial and entrepreneurial innovation. With 727 trained innovation engineers, 240 empowered educators, a strong portfolio of patents and startups, and adoption across 25+ institutions, this ecosystem stands as a benchmark in shaping India's next generation of innovation-driven technology leaders.

STUDENTS GAIN EXTENSIVE REAL-WORLD PROBLEM- SOLVING EXPERIENCE



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CURRICULUM PLUS: **BUILDING LEARNERS** **WITH RANGE**

“Everyone needs habits of mind that allow them to dance across disciplines.” -

David Epstein | Quote from his Book “Range”.

At Kumaraguru, we believe learning is a continuous process, and it is relevance that transforms information into insight. In a world where the boundaries of work shift faster than curriculum updates, we designed our Edge Model with Liberal Edge, Edge + and Core curriculum as three interconnected layers that prepare students to not fit in into the present, but to expand, explore and solve for the world & tomorrow. Together, they form the foundation of Rounded Individual who has the depth of knowledge in a domain, breadth in many, and adaptable to everywhere, everything and all at once.

The Edge Plus: Core Domain Expertise

The Edge Model strengthens the disciplinary spine of every learner. It enhances the academic core through learning experiences, journeys, masterclasses, workshops, industry projects, simulations, and certifications that expose students to a multiplicity of domains, providing a safe space to experiment and engage with them all and choose what best suits their aspiration and alignment. The goal is not to produce narrow specialists who can build solutions familiar problems, but professionals who can frame solution for new ones in our Brittle, Anxious, Non-linear, & Incomprehensible World. Students experience curated exposures to learn how ideas behave in real environments. They begin to understand not just the “what” of their field, but the “why” and “how” behind it, enabling them to transfer knowledge across contexts, a capability highly prized.

Edge our learners step into the world as thinkers who are confident in their domain and capable of stretching beyond it.



**THINKERS WHO
ARE CONFIDENT
IN THEIR DOMAIN
AND CAPABLE
OF STRETCHING
BEYOND IT.**



Liberal Edge: Expanding the Horizon

If Edge Plus strengthens the spine, Liberal Edge builds the wings.

Through the Liberal Edge Week and our SPLASH interdisciplinary model, students cross into sciences, social sciences, policy, arts, literature, and design, fields much necessary, as they solve for the society. These are not usual electives. They are compact, hands-on, curiosity-driven experiences structured using the CUBE model: Contextualise, Understand, Build, Express.



Why does this matter?

Because breakthroughs rarely happen within a single discipline. The most adaptable graduates, those who thrive and win over uncertainty, are the ones who can migrate ideas across domains. A computer science student who learns behavioural science understands users differently. A commerce student exposed to environmental studies thinks more holistically. A designer who touches public policy gains a systemic perspective.

Individuals who will take an idea learned in one context and apply it impactfully in another, driving innovation & new perspectives.



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KCT'S AI RENAISSANCE: EMERGENCE OF G-WIZ AND TRANSFORMATION OF ACADEMIC ASSESSMENTS

Quiet Beginnings of a Bold Future

In early 2023, as artificial intelligence began sweeping global academic conversations, Kumaraguru College of Technology recognised a pivotal moment. Generative AI was not just a trend—it represented a transformation in learning, thinking, and working. Within the campus, this understanding sparked thoughtful pauses, discussions, and a consensus that academic systems must evolve. Faculty explored the implications with curiosity, students were eager to experiment, and leadership acknowledged that AI must be integrated meaningfully. KCT's AI journey began with careful listening, continuous dialogue, and a commitment to progress aligned with sensitivity.

A Small Experiment with a Massive Impact

The first application was modest yet powerful. A customised GPT model was designed with deep prompt engineering, aligned to examination requirements. Faculty set Bloom's levels, topic weightages, and learning outcomes, allowing the model to generate blueprint-aligned question papers. The results were immediate:

- Confidentiality improved
- Manual errors reduced
- Time-saving was significant
- Nearly ₹25 lakhs saved annually

This small success inspired the creation of a unified, intelligent, and transparent examination system—G-Wiz.

G-Wiz: An Evolving Vision of Excellence

G-Wiz was conceived as the institution's thoughtful response to modern assessment challenges. Its goal was coherence, fairness, traceability, and transparency within one of the most sensitive academic areas—evaluation. It was designed not merely as software but as a system reflecting institutional intent.



Generative AI was not just a trend it represented a transformation in learning, thinking, and working

The First Milestone: A Digitised Workflow

G-Wiz first addressed manually intensive processes:

- Digital question paper creation
- Desk-level scrutiny via secure logins
- Encrypted question paper delivery
- Dashboards to track evaluations and pending work

Faculty could now manage assessment securely from their desks, initiating a shift toward streamlined and confidential processes.

Where AI Meets Human Judgement

As trust in the system grew, G-Wiz introduced AI-assisted descriptive evaluation. Though still refining, it demonstrates notable capabilities:

- Auto-clipping answers
- Question-wise arrangement
- Handwriting interpretation
- Diagram and circuit recognition
- Rubric-based suggestive scoring

Faculty retain full control, with AI supporting but never replacing judgment. Student transparency has improved:

- Where marks were awarded
- Why marks were reduced
- Missing steps or reasoning

Revaluations have reduced, strengthening trust in assessments.

A Mature Pillar: GPT-Based Question Paper Generation

A core matured feature of G-Wiz is AI-generated question papers through customised GPT models with engineered prompts. Faculty now benefit from:

- Blueprint-aligned papers
- Fresh, non-repetitive questions
- Model answers
- Rubrics
- Stepwise mark distribution

These improvements enhance fairness, confidentiality, and quality while reducing pattern-based study and improving preparedness.

The Evolution Toward 360° Assessment

G-Wiz aims to evolve into a comprehensive academic insight engine. Future plans include:

- Formative assessments capturing continuous learning
- Group discussion evaluation
- Oral interaction scoring including vivas, interviews, presentations
- Stealth assessments integrated into learning
- Project- and design-based evaluations
- Systems-thinking assessments

This vision positions G-Wiz as a holistic system for evaluating the full complexity of learning.





**EACH STEP
PRIORITISES
ACADEMIC
INTEGRITY,
ACCURACY,
AND FAIRNESS.**



A Responsible Roadmap for Tomorrow

Future enhancements are designed responsibly:

- Fully autonomous descriptive evaluation
- Automated CO–PO attainment
- Diagram concept-matching
- Handwritten plagiarism detection
- Predictive learning analytics
- AI-driven remote proctoring
- Competency-based education integration

Each step prioritises academic integrity, accuracy, and fairness.

Real Impact, Quiet Revolution

Even in its current phase, G-Wiz has created transformation:

- Faculty workload reduced
- Administrative loops simplified
- Confidentiality strengthened
- Student trust enhanced
- Major annual cost savings
- Evidence-based governance

KCT's adoption of AI remains measured, thoughtful, and aligned with academic values.

The Heart of the Journey

At its core, G-Wiz reflects a community effort: educators exploring possibilities, students engaging deeply, technologists building responsibly, and leadership guiding with foresight. It is more than AI adoption—it is the reinvention of assessment with clarity, courage, and vision. The journey continues, promising even greater possibilities ahead.

**KCT'S
ADOPTION OF
AI REMAINS
MEASURED,
THOUGHTFUL,
AND ALIGNED
WITH
ACADEMIC
VALUES.**



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FROM COIMBATORE TO TOULOUSE: EXPLORING THE FRONTIERS OF ADDITIVE MANUFACTURING

I recently had the opportunity to serve as a Visiting Research Professor in Toulouse, France, from 20 May to 20 June 2025. During this one-month academic immersion, I worked closely with researchers from Université Paul Sabatier, the Institut Clément Ader, and ISAE-SUPAERO, focusing on emerging directions in Additive Manufacturing. The experience offered a rare blend of technical depth, collaboration, and cultural discovery.

My time at Université Toulouse III – Paul Sabatier was especially enriching. With origins tracing back to the 13th century and its formal establishment in 1969, the university has earned its reputation as one of the world's leading scientific institutions. Interacting with researchers across its laboratories gave me a deeper understanding of the latest advancements in Additive Manufacturing. At the Institut Clément Ader, discussions revolved around metal AM, topology optimization, advanced materials, and simulation-driven process improvement. The labs featured state-of-the-art equipment and ongoing projects across aerospace, biomedical engineering, and next-generation manufacturing systems. These exchanges highlighted how seamlessly academia and industry collaborate in France to push the boundaries of modern manufacturing.

Beyond the academic engagement, I was grateful for the chance to explore Toulouse itself. The city's vibrant culture, historical architecture, and scenic riverside atmosphere brought a refreshing balance to my research schedule. Strolling through heritage buildings, local markets, and lively city squares helped me appreciate the region's warmth and storied past.





Overall, this visit was both insightful and inspiring. It deepened my understanding of advanced manufacturing technologies, offered meaningful academic connections, and gave me a glimpse into the cultural and technological spirit of Toulouse. It is an experience that will continue to influence my research, my teaching, and the way I view global collaboration in engineering.



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**THE
EXPERIENCE
OFFERED A
RARE BLEND
OF TECHNICAL
DEPTH,
COLLABORATION,
AND CULTURAL
DISCOVERY.**

PROGRESS.

RiDE

REIMAGINING URBAN MOBILITY: THE ELECTRIC TRIKE

The electric three-wheeler Trike is a cutting-edge micromobility vehicle designed for seamless navigation in narrow indoor and campus environments. It excels in agility, stability, and sustainability, offering users a safe and comfortable ride with innovative features such as reduced cornering tilt and customizable attachments. Powered by a 250W BLDC motor and a 720Wh Lithium Ferro Phosphate battery, it combines efficiency with eco-friendly technology to elevate everyday mobility experiences.

Highlighted Technology: Dual Suspension for Comfortable Ride

The Trike incorporates a dual suspension system that significantly enhances ride comfort across various terrains. This technology absorbs shocks and vibrations, allowing for smooth travel even on uneven surfaces. By integrating this system, the vehicle stands out in the micromobility space as a stable and user-friendly solution for both indoor and outdoor environments, contributing to greater accessibility and convenience.



Technological Highlights:

- Electric three-wheeler with compact dimensions (1.3m H x 0.8m W) tailored for tight spaces.
- 250W Brushless DC (BLDC) hub motor for efficient and low-maintenance performance.
- 720Wh Lithium Ferro Phosphate battery ensuring long life and safety.
- Turning radius within five feet, allowing exceptional maneuverability.
- Reduced cornering tilt technology to improve user safety.
- Customizable attachments for specialized user requirements.
- Dual suspension system for improved ride comfort.



Future Vision

The future vision for this Trike and similar micromobility vehicles includes broad adoption across university campuses, industrial complexes, and compact urban environments where space is at a premium. Emphasis on improving sustainable energy use, expanding customizable options, and enhancing user safety remains core. Further integration of smart technologies and IoT connectivity is anticipated, enabling real-time vehicle management and enhanced user interaction. Ultimately, such innovations aim to redefine personal mobility by making it more accessible, eco-friendly, and adaptable to diverse user needs.

This comprehensive approach positions the Trike as a promising leader in evolving micromobility solutions with a commitment to innovation and user-centric design.



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INNOVATION AT SEA: DESIGNING THE FUTURE WITH YALI 3.0

Team Sea Sakthi, with its flagship prototype YALI 3.0, continues to redefine marine sustainability through eco-friendly design, indigenous engineering, and advanced embedded systems. The boat integrates Pineapple Leaf Fiber (PALF) composites into its cockpit and seat structures, marking a major step toward lightweight and sustainable marine materials.

Sustainable Material Innovation:

YALI 3.0 employs PALF-reinforced polypropylene composites (30 wt%), developed using mechanical fiber extraction and hot-press molding. The composite integrates Pineapple Fiber and Carbon Fiber in a sandwich structure, delivering exceptional performance.

Advantages Achieved:

- 18% reduction in overall weight, improving handling and energy efficiency.
- 7.8% higher tensile strength and 54.2% higher flexural strength, enhancing durability.
- Superior impact resistance and corrosion resistance, ideal for marine environments.
- Eco-friendly design, utilizing agricultural waste and reducing carbon footprint.
- Enhanced cockpit comfort through natural thermal regulation and aesthetic texture.

Technological Highlights:

1. Indigenous Propulsion System:

- a. Dual 6.5 kW motors engineered for high thrust and efficiency.

2. Advanced Battery System:

- a. Custom-built 9.6 kWh LFP battery (15S2P) with optimized discharge rate and smart BMS.

3. Performance Metrics:

- a. 42% higher thrust, 25% better manoeuvrability, 15% improved energy efficiency, and 50% weight reduction from the previous version.

4. Embedded Yacht OS:

- a. AI Navigation with real-time weather adaptation.
- b. Docking Assistance using IMU to stabilize against wave oscillations.
- c. Biometric Monitoring of pilot vitals for endurance and safety.





Achievements and Accolades:

- Triple Excellence: Three-time consecutive winners of the Town Hall Cup and Communication Prize.
- Recognition at MEBC 11th Edition:
- Design Award | Innovation Award | Design and Technological Innovations

Future Vision:

Team Sea Sakthi aims to empower coastal communities, preserve marine ecosystems, and promote maritime heritage by integrating modern technology with sustainable materials, paving the way for the next generation of green marine engineering.



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MATERIAL SCIENCE FOR WOMEN'S HEALTH: THE BIODEGRADABLE PAD INNOVATION

India's plastic waste crisis is worsened by commercial sanitary pads, each containing plastic equal to four bags and taking years to degrade. Over 80% of users report health issues from chemicals in these pads. This project develops biodegradable sanitary pads (Bio-pads) as a safer, eco-friendly alternative. The pad consists of viscose and bamboo spun lace (top layer), wood pulp, kenaf, banana, and flax fibers (absorbent core), and bioplastic from corn and tapioca starch (bottom layer). Tested as per BIS standards, Bio-pads outperform commercial pads in biodegradability, affordability, and hygiene, offering a sustainable solution.

Every month, millions of plastic-based sanitary pads are discarded, adding to the growing burden of non-biodegradable waste. With health concerns also linked to the chemicals in these products, the need for a safer and more sustainable alternative has never been more urgent.

This growing concern has pushed researchers to seek eco-friendly alternatives for everyday products. Among them, commercial sanitary pads contribute significantly to non-biodegradable waste, with each pad containing plastic equivalent to four plastic bags. Moreover, the chemicals used in these pads can cause health issues, raising concerns about their long-term impact. In response to these challenges, researchers have developed biodegradable sanitary pads using natural fibers, offering a sustainable, safe, and cost-effective solution.



One of the key aspects of this research is material selection. A sanitary pad consists of three layers: the top layer, the absorbent core, and the bottom layer. Viscose and bamboo spun lace nonwovens were chosen for the top layer due to their high moisture transport capability. For the absorbent core, fibers such as wood pulp, kenaf, banana, and flax were selected for their excellent absorbency and antimicrobial properties. The bottom layer, which prevents leakage, was made from bioplastics derived from corn starch and tapioca starch. These materials were tested and analyzed to identify the most effective combination for a biodegradable sanitary pad.

The research involved rigorous testing of each material. The top layer underwent moisture transport tests to evaluate absorption rate, spreading speed, and overall moisture management. The absorbent core was tested for free swell absorptive capacity using artificial blood, while the bioplastic bottom layer was assessed for moisture vapor transmission and liquid resistance. After optimizing the best materials for each layer, the components were combined using a miniature sanitary napkin machine to create a final product.

“The research on natural fibres under the Natural Fibre Research Centre (NFRC) of KCT began in 2017, initiated by two students, Ms. Niveda R. and Mr. Gowtham S. of the Department of Fashion Technology. They explored unconventional natural fibres such as kenaf to develop an eco-friendly sanitary napkins. Their project evolved into a market-ready product and later grew into their start-up, Bliss Natural Sanitary Napkins a venture that now positively impacts women’s health by providing sustainable, eco-friendly sanitary napkins and hygiene products.”

To ensure reliability, the biodegradable pad was tested against commercial sanitary pads using Bureau of Indian Standards (BIS) guidelines. Parameters such as length, width, thickness, absorbency, pH levels, and disposability were compared. The results showed that the biodegradable pads met all standard requirements and performed on par with commercial pads in terms of quality. Notably, the biodegradable pad demonstrated superior sustainability and better compatibility with women’s personal hygiene needs.

This study highlights the potential of biodegradable sanitary pads in addressing both environmental and health concerns. By utilizing natural fibers and bioplastics, the research provides a practical alternative to plastic-based hygiene products. As awareness grows and production methods improve, biodegradable sanitary pads could become a mainstream choice, reduce plastic waste while ensuring safe and comfortable menstrual hygiene for women.



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ENGINEERING

PRECISION: PNEUMATIC

LAUNCH SYSTEMS FOR

LOITERING UAVS

The development of a pneumatic launcher for loitering UAVs focuses on designing a deployable system capable of launching from a sonobuoy tube at various altitudes. This study integrates theoretical and experimental analyses to assess projectile motion and optimize launch efficiency. Key components such as solenoid valves, high-pressure hoses, and accumulators were refined through multiple test phases. The final design achieved enhanced performance and portability, with a 4 kg projectile reaching a range of 40.8 meters at 40 bar pressure and a 30° launch angle. Future work aims to enhance lightweight materials and automated control mechanisms for improved UAV integration.

A deployable UAV system launched from a sonobuoy tube offers a flexible solution for maritime surveillance and tactical operations. Operating between 8000 meters and 3000 meters AMSL, the UAV autonomously identifies, tracks, and engages surface vessels. With an operational duration of up to one hour and a range of up to 100 nautical miles, the UAV is equipped for sea-skimming and loitering functionalities.

The pneumatic launcher is crucial for ensuring accurate deployment, necessitating theoretical and experimental validation of launch dynamics. The theoretical analysis utilized kinematic equations to predict projectile trajectory, focusing on force and acceleration derived from pressure and inlet port cross-sectional area. Initial velocity, range, and flight time were calculated.



**FUTURE WORK AIMS TO
ENHANCE LIGHTWEIGHT
MATERIALS AND
AUTOMATED CONTROL
MECHANISMS FOR
IMPROVED UAV
INTEGRATION.**

In the first test phase, a 7 kg projectile was launched using a 1/2-inch high-pressure hose and nitrogen as the working fluid. Results indicated the need for efficiency enhancements. In the second test phase, improved components, including a 1 1/2-inch solenoid-operated butterfly valve, a 3/4-inch high-pressure hose, and a 10-liter, 80-bar accumulator, were tested. Trials at pressures between 30 and 50 bar and launch angles of 30° and 45° identified optimal configurations. In the third test phase, a 4 kg and 7 kg projectile were tested with a 1-inch solenoid-operated ball valve and a 20-liter accumulator. Data analysis optimized pressure and angle settings to achieve maximum range and velocity. Theoretical calculations accurately predicted launch velocity, range, and flight time. A projectile launched at 45° and 40 bar pressure achieved a range of 21.8 meters in the second phase. The third phase saw a 4 kg projectile reach 40.8 meters at 40 bar pressure and a 30° angle. System refinements, including valve and accumulator adjustments, improved portability and performance.





Experimental observations highlighted the importance of optimizing launch pressure and angle to enhance projectile range and efficiency. Key improvements included precise valve control and appropriate accumulator capacity. Future advancements will focus on integrating lightweight materials for enhanced portability, implementing automated launch control mechanisms, and incorporating the system with onboard UAV navigation technologies.

Team KCIRI

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2. Mr. U.K Praveen | Project Lead
3. Mr. M. Abishek | Project Engineer
4. Mr. S. Vijaykrishna | Project Engineer
5. Mr. N. Rahul | Project Engineer

PROGRESS.

SOCIAL IMPACT

THREADS OF CHANGE: **BUILDING SKILLS** **FOR SUSTAINABLE** **HANDLOOM** **LIVELIHOODS**

India's handloom sector, one of the oldest creative industries globally, employs over 4.3 million people and has shaped cultural identity for centuries. Yet, many weavers today come from socially and economically marginalised communities. Mechanisation, inconsistent markets, and limited exposure have created a reality where traditional skill alone is insufficient to sustain a livelihood. For the handloom sector to survive and thrive, weavers need more than appreciation—they need training, upskilling, and access to opportunities that align with modern demands. This is precisely the mission of The Centre for Weavers (CW) at Kumaraguru Institutions.



Building Skills That Build Livelihoods

The Centre for Weavers, located in Samathur and Bhavani, was established with a singular aim: to strengthen weavers' capabilities so the craft becomes a sustainable, dignified profession. Its approach emphasises readiness over revival, capacity over nostalgia, and modern skills alongside tradition. CW works with weaving communities across the western belt of Tamil Nadu, home to iconic GI-tagged crafts such as Bhavani Jamakkalam and Kovai Kora Cotton. While the heritage is rich, the market has evolved, and the Centre ensures that the weaver's knowledge evolves accordingly.

Training at Scale: 800+ Weavers Upskilled

Formal training and certification form a cornerstone of CW's work. Under the Textile Sector Skill Council through PMKVY, CW has trained over 800 weavers and designers in areas critical to livelihood growth.

Focus areas include:

- Design fundamentals and colour theory
- New motifs and contemporary patterns
- Eco-friendly materials and natural dyes
- Embroidery, printing, and value-addition
- Fabric diversification for apparel and lifestyle products
- Costing, pricing, and basic business skills

All artisans receive national certification via the National Skill Development Council, strengthening their professional identity and improving earning potential.

Technology That Lightens The Load

Upskilling extends beyond creativity to improving working conditions. Dr. G. Ramakrishnan and his team at KCT developed a lightweight modified jacquard through a DST-SEED funded project, reducing physical strain while boosting productivity. The device allows weavers to create more complex designs with less effort and won the National Meritorious Societal Innovation Award (2020). For many artisans, this technological innovation has made weaving physically manageable again.



Learning Through Real Projects

CW integrates training with hands-on projects to encourage learning by doing.

The Ponnadai Project trained artisans to reinterpret an 1800 AD silk shawl design from the Victoria and Albert Museum, teaching them to translate historic motifs into contemporary products.

Project Jamakkalam, launched in 2020, familiarises weavers with global colour palettes, design trends, and diversified products suited for modern markets.

Natural Dyeing for Wellness, funded by AICTE, trains artisans in natural dyeing techniques for cotton and silk, enhancing their ability to meet global demand for sustainable textiles. Each initiative builds confidence, sparks creativity, and broadens income possibilities.

Exposure Beyond Village Markets

CW ensures training reaches real markets. Collaborations with designer Vino Supraja helped weavers understand international standards, product finishing, and quality benchmarks. Jamakkalam lifestyle products are now present in global retail spaces. This exposure equips artisans with knowledge and perspectives that expand their sense of what is possible, beyond glamour and into practical market impact.

Shaping the Next Phase

The Centre is developing a Weaving Skills Hub and Design Studio to bring together weavers, designers, researchers, industry partners, and students. The goal is to build creativity, capability, and confidence in a collaborative ecosystem that fosters innovation and skill enhancement.

A Future Rooted in Learning

The Centre for Weavers at Bhavani and Samathur demonstrates that preserving craft begins with investing in the people who practice it. Training is not a side initiative—it is the backbone of a sustainable handloom future.

When weavers gain skills, they gain choices; when they gain choices, they gain dignity; and when they gain dignity, the craft thrives naturally. By combining heritage, innovation, and market readiness, CW is ensuring that handloom weaving remains a viable, respected, and evolving profession in India's changing economic landscape.



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BREAKING BARRIERS, ONE STUDENT AT A TIME: THE NM STEP STORY

There is something quietly powerful about watching a student's life shift because someone finally decided to invest in their potential. The NM STEP Scholarship has become one of those rare interventions that does more than cover fees. It opens up possibilities that once felt distant.

STEP, or the Scholarship for Technical Education Programme, was designed for students from government, government-aided, and trust schools where ambition is strong but access is uneven. Over the years, what began in Tamil Nadu has grown into a national programme, strengthened by collaborations with multiple NGOs across India.

These partners identify students with strong potential and bring them into the STEP ecosystem with care and clarity.

Today, STEP represents a wide range of young people from Jammu and Kashmir, Bihar, Maharashtra, Madhya Pradesh, Jharkhand, Karnataka, Tamil Nadu, and Rajasthan. Each one carries a different story, yet all of them needed the same thing: a fair chance. STEP became that chance.

In the academic year 2024–25, 1.9 crores were invested to support STEP scholars at KCT. These numbers matter, but the real impact shows up in smaller, everyday ways. When a student no longer has to worry about hostel fees or commute expenses, their mind clears. When a family feels financially stable for the first time in years, the student studies differently. Growth begins to feel possible, not risky.





What I appreciate most about STEP is its straightforward purpose: make education accessible and remove practical obstacles that often hold students back. Many scholarships stop at tuition. STEP takes responsibility for the full learning environment by covering tuition, hostel, mess, and transport. When these essentials are handled, students are free to focus on learning with fewer distractions.

The programme also invests in development beyond academics. Scholars receive mentorship, technical and soft-skill training, leadership exposure, and internship opportunities. These layers help students transition from simply completing their degree to actually preparing for the world they will enter.

The impact is visible across campus. STEP scholars show stronger academic consistency, improved CGPAs, and greater involvement in clubs, competitions, and project work. For many students who travel from other states, the sense of support and stability becomes the foundation for their confidence.

Kumaraguru Institutions have invested 8.09 crores in STEP so far. Combined with the network of NGO partners, the programme has grown into a strong, dependable support system for students from underserved communities across India. It works not because it is flashy, but because it stays consistent and practical.

STEP's strength lies in how it quietly shifts what students believe is possible. It does not claim to solve every challenge, but it removes the barriers that should never have existed in the first place. And in the space that opens up, students begin to build their own momentum.

NM STEP at a Glance:

2024–25

1.9 Cr | 92 scholars

Total Support

8.09 Cr invested

Reach

Students from 8 states

Network

Multi-NGO partnerships

Covers

Fees, stay, meals, transport, training



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SUSTAINABLE DAIRY, STRONGER COMMUNITIES: THE CLIMATE-SMART ENTREPRENEURSHIP INITIATIVE

Dairy farming has long been a vital source of income and employment for rural communities in Tamil Nadu. Nearly 30% of rural households depend on livestock, making the sector crucial for livelihood security, particularly for women and landless families. Yet, the dairy sector faces persistent challenges: low productivity, high feed and labour costs, fodder scarcity, limited genetic improvement services, disease risk, and restricted access to markets and advisory support. These issues constrain profitability and discourage rural youth from pursuing dairy enterprises. Addressing these constraints while ensuring climate resilience demands innovative, science-backed, and entrepreneurship-driven solutions.

The Tamil Nadu Climate Smart Dairy Entrepreneurship Development Program—an initiative by Kumaraguru Institutions, supported by the Environmental Defense Fund (USA)—is pioneering such transformation. EDF advances solutions that cut emissions, enhance community resilience, and protect ecosystems. Through this partnership, the program aims to build a future-ready dairy ecosystem in Tamil Nadu that is efficient, low-emission, and economically robust.



This initiative empowers rural youth, dairy entrepreneurs, and farm-based start-ups with both scientific knowledge and business intelligence. It focuses on optimising productivity, improving profitability, and reducing methane emissions while fostering green economic growth. Over a 12-month period, more than 100 selected entrepreneurs across two districts received structured training and incubation services. The curriculum spans scientific dairy management, climate-smart technologies, and enterprise development skills. Participants are mentored in business strategy, market research, financial planning, digital tools, regulatory processes, and product innovation—enabling them to establish and scale viable dairy ventures.

A standout feature is the three-month intensive institutional scientific training, covering dairy nutrition, breeding, animal health, and housing management, followed by nine months of field mentoring and hands-on support. Entrepreneurs gain access to networks of experts, technology providers, and market linkages, ensuring long-term sustainability. The initiative addresses critical bottlenecks such as low per-animal milk yield, lack of affordable veterinary services, and rising feed costs by supporting improved breeding, quality fodder planning, climate-smart feeding strategies, and value-added dairy processing.



Impact, Scale & Innovation

1,500+ rural youth registered for 10 taluk-level workshops

400+ aspiring entrepreneurs screened across two districts

200 shortlisted entrepreneurs profiled

100 high-potential entrepreneurs selected for incubation training

These entrepreneurs span diverse subsectors: artificial insemination and breeding services, animal health and preventive care, fodder and feed production, farm advisory services, and value-added products such as paneer, ghee, curd, and ice cream. This diversified approach strengthens multiple segments of the dairy value chain, enhancing farmer livelihoods and service accessibility at the last mile.



Program aims to build a future-ready dairy ecosystem in Tamil Nadu that is efficient, low-emission, and economically robust.

Nationwide Learning & Exposure Yatra for Dairy Entrepreneurs

India's first Dairy Yatra enables participants to learn, observe, and adopt best practices in dairy farming, aligned with the White Revolution. This 15-day immersive journey covers:

- 5 States | 3 Diverse Landscapes | 6,000 Kilometers of Travel
- 3,000+ Hours of Learning and Experience | 3,200+ Hours of Travel
- 5 Livestock Variants | 10 Model Dairy Farms | 5 Dairy Industries | 5 Organizations
- 15+ Expert Interactions | 35 Climate-Smart Dairy Entrepreneurs

The Yatra provides hands-on exposure to advanced, sustainable dairy practices across India.

Partners

- EDF
- AAVIN
- TANUVAS
- NIANP
- StartupTN
- ABT Foods
- FORGE

Grant Value: 3 Crores | Project Duration: 20 Months



Strategic Vision for Tamil Nadu and Beyond

Kumaraguru Institutions envisions Tamil Nadu as a national model for climate-smart dairy transformation, integrating scientific innovation, entrepreneurship, and sustainability to uplift rural communities. With over four decades of excellence in engineering, agriculture, management, and business incubation, Kumaraguru offers a robust platform to scale rural innovations. This initiative demonstrates that when dairy farmers evolve into entrepreneurs, they gain economic resilience, social empowerment, and the confidence to drive change locally.

By combining climate responsiveness, enterprise growth, and environmental stewardship, the Tamil Nadu Climate Smart Dairy Entrepreneurship Program lays a strong foundation for a self-sustaining dairy ecosystem. It strengthens income and food security, reduces emissions, and builds climate-resilient rural economies. For those passionate about improving livelihoods through climate-smart agriculture, this initiative presents a promising blueprint for the future of dairy development in India.

“Together, we can create sustainable agricultural solutions that increase resilience to climate change while enhancing food security, income, and environmental sustainability for rural communities.”



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NURTURING FUTURES ONE CUP AT A TIME NAMADHU PANGU

Namadhu Pangu, the integrated community development programme of Kumaraguru Institutions, was envisioned by Arutchelvar Dr. N. Mahalingam to create an equitable and compassionate future by supporting and empowering the communities surrounding the campus. Focused on the five pillars of Education, Health, Women Empowerment, Environment, and Youth Empowerment, Namadhu Pangu works closely with local communities to implement programmes that uplift people, nurture social responsibility, and drive sustainable, long-term change.

The Milk Distribution Initiative

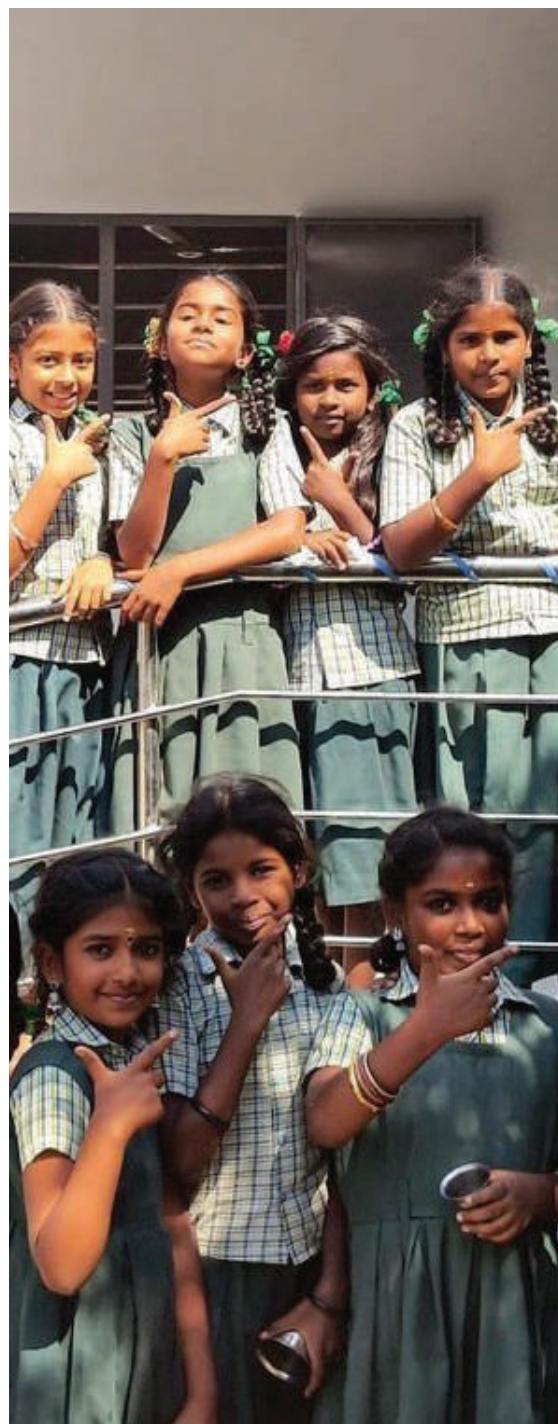
Among the various outreach efforts under Namadhu Pangu, the Milk Distribution Initiative is one of the most longstanding, consistent, and impactful. The programme was launched to support school children in nearby rural areas by addressing malnutrition, a critical factor affecting children's physical growth, energy levels, concentration, and overall learning outcomes.

Started in 2008 with 5 Government schools, the initiative has now grown to benefit 7 schools, ensuring that children receive essential nutritional support regularly.

How the Distribution Works

Every Friday, about 144 litres of fresh milk sourced hygienically from Shakthi Milk are prepared and distributed equally to students. A committed student volunteer team coordinates the entire process:

- Identifying weekly volunteer teams, ensuring equal opportunity for student participation
- Dividing volunteers and routes to ensure balanced and efficient distribution
- Visiting all 7 designated Government schools
- Serving the milk in a smooth, warm, respectful, and timely manner
- Documenting the distribution for accountability, continuity, and programme tracking





The milk is served fresh and warm, ensuring children receive it in the best possible condition. Volunteers interact with students, assist teachers, and ensure that every child is included. The programme not only nourishes children but also shapes the volunteers, strengthening their leadership qualities, responsibility, empathy, and community engagement.

By providing a reliable source of nutrition, the program has improved children's overall health, helping to enhance attendance rates and learning capabilities. Healthier children are more likely to attend school regularly, which positively impacts their academic performance and long-term development.

Over the past 17 years, with nearly 560 weeks of engagement, the initiative has served around 80,000 litres of milk and supported over 15,000 student nourishment

As it continues to nourish children week after week, this initiative reinforces the enduring value of care, commitment, and social responsibility.



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RESTORING A LIVING LANDSCAPE: WETLAND CONSERVATION EFFORT AT SAMATHUR

When a landscape breathes with the rhythm of water, soil, birds, and people, it becomes more than an ecosystem—it becomes shared heritage. For Kumaraguru Institutions (KI), the year-long engagement at Samathur Wetland in Pollachi has been a journey of learning, stewardship, and community-driven ecological science. What began as a biodiversity assessment evolved into a meaningful conservation initiative under the Campus Sustainability Program, with student volunteers collaborating with expert naturalists to document and understand this delicate ecosystem.

The project took shape through a committed sustainability team member who coordinated the study, mobilised volunteers, and facilitated the involvement of field experts. Under this stewardship, the effort grew beyond data collection into a model of youth-led environmental action backed by scientific rigor.

A Landscape of Coexistence

Samathur Wetland—especially the 250-acre Elevakkarai Kulam—is a century-old irrigation system fed by rivers from the Western Ghats. Coconut groves, paddy fields, grazing lands, and water channels form an interconnected mosaic, supporting diverse life. The wetland hosts an assemblage of birds, butterflies, odonates, native plants, amphibians, and fish, creating complex habitats that sustain ecological balance. However, recent changes in land use and water management have disrupted this equilibrium. Recognising the need for baseline environmental data, KI initiated a systematic biodiversity study to observe, record, and understand the wetland across seasons.





Student-Led Science, Expert-Guided Insights

Over twelve months, student volunteers worked with expert naturalists and regional ecological researchers, conducting a structured biodiversity assessment, including:

- Monthly field visits across four ecological zones
- Point counts, transect walks, and visual surveys
- Quadrat sampling to study vegetation patterns
- Seasonal monitoring to track ecological variations
- Photographic documentation and species verification
- Interaction with local communities to capture traditional ecological knowledge

Each visit strengthened students' connection to the site. Early morning bird calls, seasonal butterfly movements, and plant life changes provided lessons beyond the classroom, creating a dynamic learning environment where science, observation, and stewardship merged.

A Year of Discoveries

The study recorded 437 taxa, including:

**148 bird species across
18 orders**

118 butterfly species

24 odonate species

12 fish species

135 plant species

Additional invertebrates and insects yet to be identified suggest the wetland's biodiversity may approach 1,000 species. This richness confirms Samathur's ecological importance, supporting groundwater recharge, nutrient cycling, soil health, pollination, and natural pest control.

A Living Classroom for Sustainability

For students, the Samathur project became a practical learning laboratory. They honed skills in species identification, habitat mapping, ecological documentation, and data analysis. More importantly, they experienced environmental sustainability as a hands-on responsibility.

Each field visit concluded with reflection sessions, species discussions, seasonal comparisons, and collaborative planning. This approach nurtured young citizen-scientists with a deep understanding of local ecology and conservation ethics.

Pathways to Restoration and Stewardship

Beyond data collection, the initiative established foundations for long-term conservation planning, including:

- Wetland restoration strategies
- Community-based stewardship models
- Improved eco-hydrological practices
- Sustainable agriculture in surrounding lands
- Continued biodiversity monitoring

The collaborative effort sparked interest among farmers, youth, and community members, renewing dialogue about traditional water stewardship and ecological responsibility.

A Model for Educational Institutions

The Samathur Wetland Study exemplifies how educational institutions can advance ecological restoration. Through sustained commitment, scientific engagement, and meaningful student participation, Kumaraguru Institutions demonstrate that environmental education can extend beyond campus boundaries into community landscapes.

The project highlights a simple truth:

conservation thrives when people, especially young people, engage. At Samathur, this engagement has taken root, marking the beginning of a long, purposeful journey toward reviving and protecting this vital ecosystem.



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TOWARDS A CLIMATE- RESILIENT FUTURE: KUMARAGURU'S PATH OF PURPOSEFUL SUSTAINABILITY

As an institution that has shaped generations for over four decades, Kumaraguru Institutions believes education is incomplete without cultivating responsible citizens. Leading the Campus Sustainability Program, I witness daily how our 100+ acre campus is evolving into a living model of climate action—where policies actively shape behaviours, choices, and mindsets among 9,000+ students and 900+ staff.

Our philosophy is simple: small, consistent actions at the grassroots create lasting ecological impact. Guided by this, the Climate & Sustainability Vision 2030 sets ambitious yet achievable goals: reduce carbon emissions by 40% by 2030, embed sustainability across academic programs, and develop research solutions for 21st-century environmental challenges. Every initiative stems from this aspiration to reduce our footprint while enhancing coexistence with nature.



Ahimsa Vanam - A tranquil forest at the Kumaraguru Campus





Energy: Powering the Campus Sustainably

Transitioning to clean energy is central to our climate action pathway. Currently, 90% of campus energy comes from renewable sources via a 250 kW on-campus solar plant and green energy procured from windmills. Motion-sensor lighting, automated streetlight timers, efficient water pumping systems, and a full transition from CFLs to LEDs have significantly lowered energy leakage.

Our goal remains 90% renewable energy by 2030. Energy monitoring via Schneider PME ensures each unit saved reflects mindful consumption, reinforcing energy-conscious habits among students and staff.

Water Security: Every Drop Counts

A climate-resilient campus begins with water awareness. Our system integrates technology and tradition:

- 5 rainwater harvesting structures + 2 percolation ponds (8.3 million litre capacity)
- 100 water-saving aerators reducing 5.5 litres per minute per tap
- Waterless urinals, automated pump controls, extensive drip and sprinkler networks
- 1.0 MLD sewage treatment plant returning treated water for irrigation and flushing

This circular water approach ensures responsible reuse and resilience against unpredictable climate patterns.

Biodiversity: Creating an Urban Ecological Haven

A sustainable campus must thrive with life. Kumaraguru now hosts 4,800+ trees, 95+ bird species, and 55+ butterfly species, making it one of Tamil Nadu's richest private urban biodiversity spaces.

Key green spaces include:

- Ahimsa Vanam: A 150-native-species forest garden sequestering nearly 10,000 kg of carbon annually.
- Kumaraguru Vanam: A two-acre urban forest at Chinnavedampatti Lake serving as a carbon sink and environmental classroom.
- Native Tree Nursery: 1.75 lakh seedlings, with 89,406 saplings supplied to communities.

Through the Samathur Wetland biodiversity documentation program, experts and students recorded 600+ species across 300 acres, reinforcing citizen science in ecological restoration.

Waste Management: Closing the Loop

Waste is a resource to reclaim. Our Resource Recovery Park is a model of integrated solid waste management. Last year alone:

- 111 tons of waste recovered, generating ₹20,58,000
- 6 full-time staff managing segregation, composting, recycling, and safe disposal
- Upcycling drives saved over 200 buckets and 10–14 tons of hostel materials from landfills

Policies emphasize source-level waste prevention, instilling sustainable behaviours among incoming students.

Sustainability Education: Every Learner, a Climate Leader

True transformation occurs when sustainability becomes a mindset. Kumaraguru embeds it across Engineering, Science, Liberal Arts, Business, and Agriculture programs through:

- Mandatory foundational courses and electives on climate action
- Internships and volunteering opportunities
- SDG Conversation Series and Sustainability Tours engaging 40+ schools and 2,000+ students

The campus serves as a hands-on laboratory—students apply theory in K-Farm climate-smart agriculture trials, biodiversity surveys, and community outreach.



Policies That Influence Behaviours

Our policies transform culture rather than impose rules. For instance, paper usage policies cut consumption by 60%, saving 20 lakh sheets (8 tonnes of paper). Through sustained communication, orientations, and experiential learning, sustainability becomes instinctive.

A Community Movement, Not Just a Campus Initiative

Students and staff partner with NGOs, government bodies, farmers, and communities across Tamil Nadu. Achievements include 50,000+ saplings planted, 15+ lake restoration activities, 25+ awareness drives, and numerous camps, walks, talks, and workshops. Recognitions—from IGBC Platinum to the Green Championship Award, Bhumi Campus Award, and NIDM acknowledgment—affirm a sustainability model blending science, student leadership, and community engagement.



**EVERY INITIATIVE
STEMS FROM
THIS ASPIRATION
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ENHANCING
COEXISTENCE
WITH NATURE.**



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EMPOWERING RURAL ECONOMY THROUGH SUSTAINABLE ENTERPRISE

Pariyur Fed Farmers Producer Company Limited (Pariyur FPO) is a women-led Farmer Producer Organisation established in June 2024 under the Companies Act, 2013. Supported by the National Agricultural Cooperative Marketing Federation of India Ltd. (NAFED) under the 10K FPO Scheme and facilitated by the Vanavarayar Institute of Agriculture in partnership with the Kumaraguru Institute of Agriculture, the FPO is dedicated to transforming the rural dairy sector in the Gobichettipalayam block of Erode District.

With 350+ women dairy farmers as active members, the organisation works to strengthen rural livelihoods by promoting sustainable dairy practices, improving access to quality inputs, expanding market linkages, and enabling women farmers to grow as value-driven rural entrepreneurs.

Led by Ms Shanthra P, an agriculture graduate and alumna of the Kumaraguru Institute of Agriculture, Pariyur FPO focuses on enhancing productivity, profitability, and climate resilience in dairy farming. Its vision is to build a sustainable and equitable ecosystem where women farmers gain better income opportunities, professional skills, and long-term financial stability.



Impact Snapshot

- 350+ Women Farmer Members
- 800+ Farmers Benefited through input services
- 25+ Villages Covered
- 15 Animal Health Camps Conducted
- 500+ Animals Treated
- Essential licenses obtained: FSSAI, GST, Seed License (Applied), Fertiliser License, GeM Seller ID



Strategic Approaches & Road Map Actions of Pariyur FPO

Pariyur FPO drives its mission through a comprehensive set of services designed to meet the essential needs of dairy farmers:

- **Dairy Input Supply:** Timely access to high-quality cattle feed, mineral mixtures, nutrition supplements, fodder seeds, and veterinary essentials.
- **Animal Health Camps & Veterinary Advisory:** Regular health camps, reproductive care, preventive treatments, and field-based livestock guidance.
- **Artificial Insemination & Breed Improvement:** Scientific breeding services that enhance herd genetics, milk yield, and reproductive efficiency.
- **Fodder Development & Nutrition Management:** Promotion of fodder cultivation, balanced rationing practices, and cost-effective feeding systems.
- **Farmer Skill Building:** Continuous training, demonstrations, and awareness programs on scientific dairy management and climate-smart practices.
- **Value Addition & Special Training:** Support for small-scale enterprises such as goat milk soap making, dairy tool production, and other micro-enterprises.
- **Rural Women Entrepreneurship Development:** Strengthening women's leadership, enterprise skills, and collective empowerment within the dairy value chain.

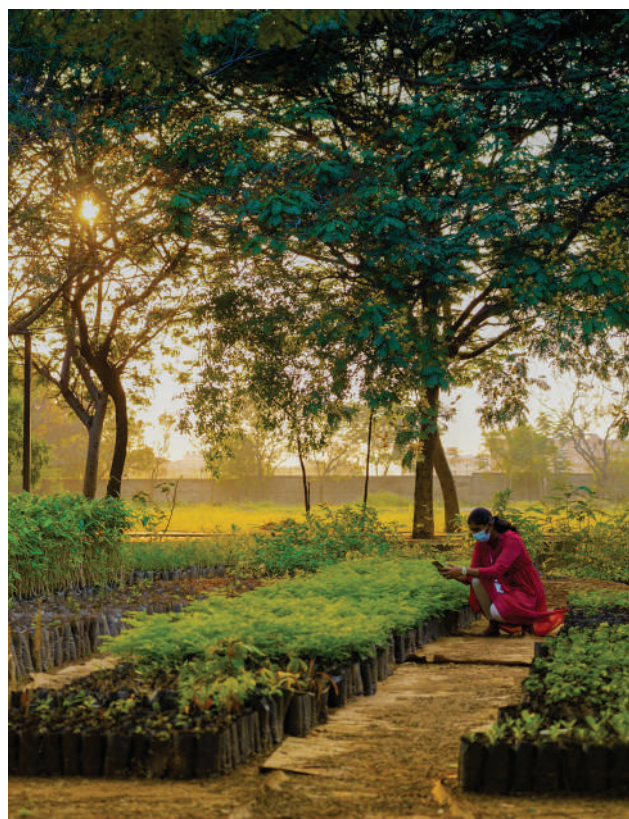
Rural Mart Initiative with NDDB Dairy Services (NDS)

Pariyur FPO operates the Pariyur Rural Mart, established under the Rural Mart Initiative supported by NDDB Dairy Services (NDS), the Environmental Defense Fund (EDF), and Kumaraguru Institutions. The Rural Mart has emerged as a pioneering model in the Gobi block, improving last-mile access to dairy inputs and creating strong community awareness on scientific dairy practices.

Services Offered

- High-quality cattle feed (SAG Gold, Silver)
- Mineral Mixtures & Ethno-Veterinary products
- Fodder seeds & Nutrition supplements
- Artificial Insemination & reproductive management services
- Dairy Tools & Hygiene kits
- On-field demonstrations & Veterinary Advisory

More than 1000 farmers have been reached through the Rural Mart's services, benefiting from improved access to quality dairy inputs and essential livestock support. The Mart has significantly reduced the travel distance for farmers—from nearly 15 km to within a 3 km radius—greatly enhancing affordability, accessibility, and service reliability. Notably, over 80% of the consumers are women, reflecting strong gender inclusion and empowering women in the local dairy value chain.





Strengthening the Dairy Value Chain & Enhancing Rural Livelihoods

Pariyur FPO is building a resilient and inclusive dairy value chain that empowers women farmers through improved access to inputs, scientific services, fair markets, and entrepreneurship opportunities. Partnerships with NDDDB Dairy Services, Environmental Defense Fund, and PUM Netherlands further enable the FPO to enhance capabilities in business planning, farmer dialogue, sustainability, and long-term enterprise development.

By promoting sustainable dairy practices, reducing input costs, improving productivity, and offering value-added services, Pariyur FPO is driving socio-economic transformation in rural Erode. With a strong foundation, committed leadership, and expanding farmer network, the organisation is on course to uplift 10,000+ livestock farmers, strengthening rural livelihoods, local economies, and community resilience.

Partners: NDDDB Dairy Services | EDF | PUM Netherlands



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