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Detailed Project Report

For Grant of Deemed to be University Under Distinct Category (Existing)

Submitted to

University Grants Commission (UGC)
Bahadur Shah Zafar Marg, New Delhi - 110002

Submitted by

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EXECUTIVE SUMMARY

The proposed **CMR Deemed to be University (CMR-DTBU)** seeks recognition under the **Distinct Category (Existing)** of the University Grants Commission (UGC), 2023 regulations. Rooted in the legacy of the **CMR Technical Education Society (CMRTES) Institutions, Hyderabad**, the proposed Deemed to be University aspires to emerge as a **globally benchmarked multidisciplinary institution**, integrating **engineering & technology, management, medical sciences, health sciences, liberal arts & Indian culture** and advancing knowledge through research, innovation, and social impact.

Genesis and Rationale

The CMRTES has a proven track record in establishing and nurturing higher education institutions in engineering, health sciences, and allied domains. Building upon this foundation, the establishment of CMR-DTBU in **Hyderabad, Telangana**, represents a strategic response to the **national demand for advanced skills in new-era technologies** such as **Semiconductor Technology, Quantum Computing, Artificial Intelligence, Digital Twin, Robotics, Digital Health and Liberal Arts**.

The proposal aligns with the **National Education Policy (NEP) 2020**, Government of India's **Vision@2047**, and multiple national missions, including the **National Quantum Mission**, **India Semiconductor Mission**, **Digital India**, and **Atmanirbhar Bharat Abhiyan**. The proposed Deemed to be University will serve as a hub for **multidisciplinary education, translational research, and industry collaboration**, producing a workforce that can address India's strategic and economic priorities.

Vision

To emerge as a globally benchmarked multidisciplinary Deemed to be University integrating engineering & technology, management, medical sciences, health sciences and liberal arts & Indian culture to advance knowledge, foster innovation, and serve humanity with compassion and integrity.

Mission

1. **Nurture Multidisciplinary Excellence** – Establish a broad-based academic ecosystem in line with NEP 2020.

2. **Foster Industry-Supported and Skill-Based Education** – Blend academic rigor with practical exposure through internships, apprenticeships, and industry-led projects.

3. **Advance Research and Innovation in Frontier Areas** – Develop centres of excellence in semiconductor design, AI-driven healthcare, digital health, and sustainable technologies.

4. **Strengthen Healthcare Workforce and Delivery** – Integrate Engineering, allied health sciences, physiotherapy, nursing, and digital health education.

5. **Empower Students for Global Citizenship** – Facilitate global mobility through dual-degree programmes, international collaborations, and student exchange.

6. **Bridge Regional Needs with National and Global Priorities** – Serve the local community while contributing to India's aspirations of becoming a **knowledge superpower by 2047**.

Proposed Academic Framework

The proposed CMR-DTBU will establish **Five Schools of Study** in its initial phase:

1. **School of Engineering and Technology** – UG/PG/Integrated/PhD programmes in AI, Data Science, Cybersecurity and Digital Health, Semiconductor Technology, Quantum Computing, Robotics and AI, Digital Twin Technology, AI in Health Care Technology, Computational Neuroscience and AI, and Health Robotics and Assisted Nursing.

2. **School of Medical Sciences** – UG programme in Medical (MBBS).

3. **School of Nursing** – UG programme in Nursing.

4. **School of Health Sciences** – UG/PG/Integrated programmes in Physiotherapy, Medical Lab Technology, Digital Health, Critical Care Technology, AI in Clinical Diagnostics and allied health sciences.

5. **School of Liberal Arts and Indian Culture** – UG programmes in Indian Knowledge Systems & Cultural Heritage and Public Policy.

The structure will follow **flexible curricula with Academic Bank of Credits (ABC)**, **multiple entry–exit options**, and **credit transfer** mechanisms.

Faculty Recruitment Strategy

- **Phased Recruitment:** Core and Specialized faculty will be recruited in Engineering, Medical, Nursing, Health Sciences and Management in phased manner beginning with 60 members in academic year 2026-27.

- **Qualification Standards:** Recruitment in line with UGC, NMC, INC, and AICTE norms. Preference for Ph.D. holders with research publications, patents, and funded projects.

- **Faculty–Student Ratio Target**: 1:20 for Engineering & Management, 1:10 for Medical Sciences, 1:10 for Nursing, Physiotherapy, Health Sciences, 1:20 for Liberal Arts & Indian Culture, and as per UGC / AICTE / INC / NMC norms.

Students Admission Policy

- **National-level entrance examination** which will be conducted by the Deemed to be University for professional programmes in engineering, health sciences, and management, as per the guidelines of the UGC.

- **Direct merit-based admissions** for certain UG programmes based on academic performance in qualifying examinations, with due consideration to diversity, inclusivity, and outreach.

- The proposed Deemed to be University will ensure compliance with all regulatory frameworks (UGC, AICTE, INC, NMC, etc. as applicable) in determining eligibility, intake, and admission procedures. A centralized Admission Cell will oversee the entire process using **digital platforms** to guarantee efficiency, transparency, and grievance redressal.

Research, Innovation, and Collaborations

The proposed CMR-DTBU will foster a **research-driven culture** through:

- Establishment of **Centres of Excellence (CoEs)** in AI in Healthcare, Semiconductor Fabrication, Robotics & Automation, Digital Health, Sustainable Energy and Indian Knowledge Systems.
- Partnerships with national and international institutions (IITs, NIELIT, CSIR Labs, global universities).
- Active collaboration with industries in IT, semiconductor, quantum technology, aerospace, healthcare, and manufacturing sectors.
- Promotion of entrepreneurship through **EDC Cell, Technology Business Incubator, and Start-up Ventures**.
- Patent facilitation and IPR management.

The goal is to publish **4000+ high-impact papers and file 1000+ patents** within the first ten years.

Infrastructure and Campus Development

The existing **Ac 20 – 25 Gts campus at Kandlakoya, Medchal–Malkajgiri District, Telangana**, is developed with a built-up area of **1,06,945.71 SQM** and further expanded during the progress of the proposed Deemed to be University as a **smart, green, and digitally enabled campus** with:

- Academic Blocks with ICT-enabled classrooms and advanced laboratories.
- Central Library & Digital Knowledge Hub with access to e-resources.
- Research & Innovation Ecosystem: incubation center, fab-labs, maker spaces, IPR cell, and start-up accelerator.
- Healthcare and Wellness Infrastructure: yoga center, sports complex, student amenities, and medical support.
- Hostels and residential facilities for required students.

- Administrative, examination, and seminar halls, including a central auditorium with 2000+ seating capacity.

The campus design emphasizes **sustainability (solar power, rainwater harvesting, zero-waste management)** and **future-ready infrastructure**.

Financial Management

- **Corpus Fund**: ₹25 Crores.
- **Five-Year Projection**: Investment in infrastructure, faculty recruitment, research labs, and digital systems.
- **Revenue streams:** student fees, industry-funded projects, consultancy, patents, and global collaborations.
- **Long-term vision:** financial sustainability with 10–20% of revenue from non-fee sources.

Governance and Administrative Framework

The proposed CMR-DTBU will function with **transparent, decentralized, and autonomous governance**, as per UGC guidelines:

- **Executive Council, Academic Council, Finance Committee, Planning & Monitoring Board, Board of Studies, IQAC**, and non-statutory committees like Anti-Ragging, Grievance Redressal, Ethics, etc. will be constituted for effective governance.
- **Participatory leadership model** with active involvement of students, alumni, and industry stakeholders.
- **Digital governance platforms** will enable administration, finance, and student services.

Quality Assurance and Accreditation

The proposed Deemed to be University will follow a **robust quality framework** aligned with **NAAC, NBA, and NIRF benchmarks**, supported by:

- **Internal Quality Assurance Cell (IQAC)** with a **Students' Quality Assurance Cell (SQAC)**.
- **Accreditation roadmap:** NAAC A+ (within 5 years), NBA accreditation for all eligible programmes, and global accreditations (ABET, AACSB, AMBA, QS I-GAUGE).
- **NIRF ranking target:** Top 300 Universities (within 5 years) and Top 200 Universities (within 15 years).
- Global ranking participation in **QS and THE World University Rankings**.

SWOC ANALYSIS

A comprehensive SWOC (Strengths, Weaknesses, Opportunities and Challenges) analysis has been carried out with inputs from stakeholders.

Strengths

- Well-established ecosystem of institutions in Medical Science, Engineering and Health Sciences.
- Experienced faculty pool, with many holding doctorates and research credentials.
- Integration of teaching hospital with academic programmes ensures real-time clinical exposure.
- Emphasis on digital health, AI, and innovation as emerging priorities.
- Strong social outreach through free rural medical camps, telemedicine, and health awareness drives.

Weaknesses

- Current research output requires expansion to match global standards.
- Limited international faculty/student presence.
- Need for more funded projects from international agencies.
- Infrastructure expansion needed for projected student strength.

Opportunities

- Rising demand for healthcare professionals worldwide.
- NEP 2020 framework encouraging multidisciplinary HEIs.
- Growth of Digital Health and MedTech sectors in India.
- Government incentives for universities focusing on research, innovation, and skilling.
- Scope to become a national model for integrating Indian Knowledge Systems (IKS) into modern healthcare education.

Challenges

- Competing with established Deemed and Private Universities.
  Attracting and retaining top global faculty.
- Managing affordability while sustaining world-class infrastructure.
- Rapidly changing technology and healthcare landscapes, requiring constant curriculum updates.

Impact and Strategic Significance

The proposed CMR-DTBU will:

- Address **regional gaps in advanced education** in Telangana state.
- Contribute to India's **knowledge economy** through high-quality graduates, start-ups, and patents.
- Enhance **employment readiness and entrepreneurship** through skill-oriented programmes.
- Promote **community engagement and healthcare outreach**.
- Position itself as a **Distinct Category of Deemed to be University**, pioneering future-focused education in India.

Conclusion

The proposed **CMR Deemed to be University** embodies a vision of **academic excellence, innovation, and societal service**. It is designed to be an institution of national importance, bridging **local needs with global aspirations**, and nurturing graduates who are **technologically skilled, socially responsible, and globally competent**.

Through **world-class infrastructure, multidisciplinary programmes, and strong industry-academia partnerships**, CMR-DTBU aims to redefine higher education in India, contributing significantly to the nation's progress toward **Viksit Bharat @2047**.

LIST OF ABBREVIATIONS

Abbreviation	Full Form
ABC	Academic Bank of Credits
ABET	Accreditation Board for Engineering and Technology
AI	Artificial Intelligence
AICTE	All India Council for Technical Education
AIML	Artificial Intelligence and Machine Learning
AISHE	All India Survey on Higher Education
AMBA	Association of MBAs
BPT	Bachelor of Physiotherapy
CAS	Career Advancement Scheme
CBCS	Choice Based Credit System
CDC	Curriculum Development Committee
CEOC	Community Engagement & Outreach Committee
CMR-DTBU	CMR Deemed to be University
CMRTES	CMR Technical Education Society
CMRTC	CMR Technical Campus
CMRCON	CMR College of Nursing
CMRCOP	CMR College of Physiotherapy
CMRIMS	CMR Institute of Medical Sciences
CMRIHS	CMR Institute of Health Sciences
CPD	Continuous Professional Development
CSE	Computer Science and Engineering
CSIE	Centre for Start-up, Incubation & Entrepreneurship
CTLE	Centre for Teaching & Learning Excellence
DS	Data Science
DTBU	Deemed to be University
EOC	Equal Opportunity Cell
ESC	Environment & Sustainability Committee
FDC	Faculty Development Centre
GEC	General Education Council
GER	Gross Enrolment Ratio
GRC	Grievance Redressal Committee
GSC	Games & Sports Committee
HECI	Higher Education Commission of India
HEGC	Higher Education Grants Council
ICC	Internal Complaints Committee

ICPC	Internship, Career Counselling & Placement Cell
ICTEC	ICT & E-Governance Committee
IEC	Institutional Ethics Committee
IKS	Indian Knowledge Systems
INC	Indian Nursing Council
IOT	Internet of Things
IPTTC	Intellectual Property and Technology Transfer Cell
IQAC	Internal Quality Assurance Cell
LAC	Library Advisory Committee
LMS	Learning Management System
MBA	Master of Business Administration
MBBS	Bachelor of Medicine, Bachelor of Surgery
MD/MS	Doctor of Medicine / Master of Surgery
MIT	Massachusetts Institute of Technology
NAAC	National Assessment and Accreditation Council
NBA	National Board of Accreditation
NDLI	National Digital Library
NEP	National Education Policy
NETF	National Educational Technology Forum
NHERC	National Higher Education Regulatory Council
NIRF	National Institutional Ranking Framework
NMC	National Medical Commission
NRF	National Research Foundation
NSDC	National Skill Development Corporation
OBC	Other Backward Class
OBE	Outcome-Based Education
RADC	Research Advisory & Development Cell
SDG	Sustainable Development Goals
SQAC	Students' Quality Assurance Cell
STEM	Science, Technology, Engineering and Mathematics
SWC	Student Welfare Committee
SWOC	Strengths, Weaknesses, Opportunities, Challenges
TBI	Technology Business Incubator
UGC	University Grants Commission
VC	Vice Chancellor
WEC	Women's Empowerment Cell

PREAMBLE

The **CMR Technical Education Society Institutions, Hyderabad**, has built a strong legacy of excellence in higher education over the past decades. With a proven record of **academic rigor, innovation, and social responsibility**, CMR has consistently earned recognition through **NAAC and NBA accreditations, NIRF rankings, and robust industry–academia partnerships**.

The proposal to establish **CMR Deemed to be University** under Section 3 of the UGC Act, 1956, marks a natural progression in this journey of growth. It comes at a pivotal moment, when the **National Education Policy (NEP) 2020** calls for the emergence of large, multidisciplinary Deemed to be Universities of global standards. In alignment with this vision, CMR seeks to integrate **engineering & technology, management, medical sciences, nursing, health sciences, liberal arts & Indian culture and research** under one umbrella, thereby transitioning from discipline-specific institutions into a **comprehensive, multidisciplinary and research-driven Deemed to be University**.

The distinctiveness of CMR lies in its **learner-centric and outcome-based education model**, emphasis on **experiential learning, innovation, entrepreneurship, and sustainability**, and its ability to align with both **industry demands and societal needs**. By embedding **digital learning ecosystems, global collaborations, and flexible academic frameworks**, the proposed Deemed to be University will nurture graduates who are not only academically competent but also capable of contributing meaningfully to **nation-building and global development**.

This Detailed Project Report (DPR) sets out the **strategic vision, academic plan, research agenda, infrastructure roadmap, and governance framework** of the proposed CMR Deemed to be University. While inspired by the best practices of leading national and international universities, the institution remains deeply rooted in the CMRTES's founding philosophy: *"Education for Generations, Knowledge for Society."*

The establishment of **CMR Deemed to be University** is not merely an institutional aspiration but a **national responsibility**—to provide high-quality, inclusive, and future-ready education that equips young minds with the **knowledge, skills, and values to meet the challenges of the 21st century**.

This vision also resonates with the national developmental agenda of **'Viksit Bharat @2047'**, launched by the Hon'ble Prime Minister of India, Shri Narendra Modi, on 11th December 2023. As India strives to become a **Developed Nation by 2047**, with goals of economic growth, innovation leadership, social equity, and environmental sustainability, Deemed to be Universities are expected to play a critical role in achieving this transformation. The proposed CMR Deemed to be University is committed to contributing towards this mission by:

- Driving **world-class education and research** across disciplines.
- Building **global collaborations and cutting-edge laboratories**.
- Developing professionals and entrepreneurs who can serve as **champions of innovation and societal development**.

Guided by **NEP 2020**, India's vision of **Viksit Bharat @2047** and **UN-SDGs,** the proposed CMR Deemed to be University aspires to emerge as an **institution of eminence in education, research, and outreach**, dedicated to improving the quality of life both nationally and globally.

1 INTRODUCTION

1.1 BACKGROUND OF PROPOSAL

1.1.1 Evolution of CMR Technical Education Society Institutions, Hyderabad

The **CMR Technical Education Society (CMRTES)**, established in 2007 (vide Reg. No. 1128/2007 of AP Societies Registration Act. 2001) with a vision to provide high-quality education and contribute to nation-building, has been the driving force behind the growth of **CMR Technical Education Society Institutions** in Hyderabad. Over the years, the Society has laid a strong foundation of excellence in professional education, healthcare, and research, progressively expanding its footprint in diverse domains.

Early Beginnings

- The Society began its journey with the establishment of **CMR Technical Campus** in 2009 which conferred Autonomous status in 2019, offering undergraduate and postgraduate programmes in engineering & technology and management. Approved by **All India Council for Technical Education (AICTE)** and affiliated to **Jawaharlal Nehru Technological University Hyderabad (JNTU-H)**, the institution quickly earned recognition for its quality of teaching, well-qualified faculty, and emphasis on industry-oriented learning.

- The Technical Campus diversified its offerings by introducing programmes in engineering & technology and management, thereby becoming a comprehensive professional education hub.

- The Institution is **Ranked by NIRF in Engineering Category** in the year
  2025 in the band of 201-300
  2021 & 2022 in the band of 201-250

- The Institution is **Ranked by NIRF-Innovation in 2023 in the band of 151-300.**

Expansion into Healthcare

- Recognizing the growing need for healthcare professionals and holistic medical education, the Society established the **CMR Institute of Medical Sciences** in 2023 in Hyderabad.

- The Medical Institute, along with proposed allied institutions in **nursing, physiotherapy, and health sciences**, reflects the Society's commitment to multidisciplinary growth and service to the community.

- These institutions not only focus on clinical excellence but also integrate community health programmes, research, and skill development, making them a cornerstone for healthcare education in the region.

Growth and Recognition

- Over the last two decades, CMRTES Institutions have expanded to serve **thousands of students** across engineering, management and healthcare.

- The institutions have received accreditations and recognitions from **NBA, NAAC with A grade, NIRF, NIRF-Innovation and DSIR-SIRO recognition** reflecting their national standing.

- Strong **industry linkages**, professional body collaborations, and student support systems have made CMRTES Institutions a preferred choice for higher education in Telangana.

- A focus on **outcome-based education, digital learning tools, research projects, and patents** has fostered a culture of innovation and entrepreneurship.

Towards Multidisciplinary Excellence

- In alignment with the **National Education Policy (NEP) 2020**, the Society has taken initiatives to integrate **engineering & technology, management, medical sciences, nursing and health sciences** under a unified academic and governance framework.

- Establishment of **centres of excellence, incubation hubs, and international collaborations** further strengthens its readiness for the Deemed to be University status.

Rationale for Deemed-to-be University

The natural progression of CMRTES Institutions is towards becoming a **distinct, industry-supported, multidisciplinary, research-intensive, and globally connected Deemed to be University**. The proposed **CMR Deemed to be University, Hyderabad** will:

- Provide a platform to consolidate diverse programmes under one umbrella.

- Promote **interdisciplinary research and innovation** in frontier areas.

- Enhance **global visibility** through **NAAC, NBA, NIRF, QS, and THE rankings** and academic and industry partnerships.

- Build capacity for **future-ready education** in alignment with India's vision for becoming a knowledge economy.

- Contribute significantly to India's vision of **Viksit Bharat @2047** by producing skilled, ethical, and socially responsible graduates.

1.1.2 Current Status of Engineering and Medical Education in Hyderabad

Engineering Education

Category	Hyderabad in Telangana State	Key Observations
Total Engineering Colleges	Telangana - 180+ Hyderabad - 100+	Mix of autonomous, affiliated, and private institutions under JNTU-H.
Annual Intake Capacity	1.2 lakh	Largest concentration in Hyderabad & Ranga Reddy districts.
Premier Institutions	IIT Hyderabad, IIIT Hyderabad, BITS Pilani (Hyderabad Campus), JNTU-Hyderabad, University College of Engineering - Osmania University, Hyderabad Central University	Recognized for global-level research and industry linkages.
Accreditations	40+ colleges with NBA 60+ with NAAC	Reflects growing quality focus.
Emerging Programmes	AI, Data Science, Cybersecurity, IoT, Robotics, IT	Industry demand-driven.

Medical Education

Category	Hyderabad & Telangana	Key Observations
Total Medical Colleges (MBBS)	Telangana - 58 Hyderabad - 8	Includes Osmania, Gandhi, ESIC, Kamineni, Deccan, private colleges.
Annual MBBS Intake	Telangana - 9500 Hyderabad - 2500	Strong demand, high competition.
Postgraduate Seats (MD/MS)	Telangana - 4223	Expanding capacity in clinical specialties.
Allied Health / Nursing Colleges	100+ institutions	Growing focus on physiotherapy, paramedical, and nursing.
Hospitals for Clinical Training	CMR, Apollo, Yashoda, KIMS, AIG, CARE, Govt. Hospitals	Provides wide exposure for students.

Strategic Position of CMRTES Institutions

Institution	Discipline	Students Strength	Status
CMR Technical Campus (Autonomous) **(AISHE-C-19705)**	Engineering & Technology	5327	Commenced in 2009 Autonomous in 2019 NAAC with A-Grade NBA for 3 programmes DSIR-SIRO recognized NIRF Ranked in 201-300 band 100% Admissions Strong Placement record
CMR Institute of Medical Sciences **(AISHE-C-71657)**	Medicine & Healthcare	300	Commenced in 2023 - Addressing regional need for medical professionals
CMR College of Nursing **(AISHE-C-71658)**	Nursing	147	Commenced in 2023 - Producing skilled healthcare workforce
CMR Institute of Health Sciences **(AISHE-C-72386)**	Allied Health Sciences	198	Commenced in 2023 - Producing skilled healthcare workforce
CMR College of Physiotherapy **(AISHE-C-71656)**	Physiotherapy	97	Commenced in 2023 - Producing skilled healthcare workforce

Implications for proposed CMR Deemed to be University

- Hyderabad has a **high concentration of engineering and medical institutions**, but many are **fragmented** under different affiliating universities.
- There is a **gap in multidisciplinary integration**, particularly between **engineering, technology and healthcare**.
- The proposed **CMR Deemed to be University** aims to bridge this gap, aligning with **NEP 2020** by offering **distinct, integrated, multidisciplinary, and research-driven programmes**.

1.1.3 Need for Deemed to be University Status

The transformation of all the CMR Technical Education Society Institutions into **CMR Deemed to be University, Hyderabad** under Section 3 of the UGC Act, 1956, is both a natural progression and a national necessity. The following factors highlight the compelling need for Deemed to be University status:

1. **Multidisciplinary Integration**

- Presently, CMRTES Institutions operate under multiple affiliating universities, limiting their scope for curricular innovation and inter-institutional integration.

- Deemed to be University status will enable **seamless convergence of Engineering & Technology, Management, Medical Sciences, Nursing, Health Sciences and Liberal Arts & Indian Culture** creating a **true distinct, industry-supported, multidisciplinary ecosystem** as envisioned in **NEP 2020**.

2. **Academic and Curriculum Autonomy**

- Under affiliating systems, flexibility in curriculum design, credit structures, and examination reforms is constrained.

- Deemed to be University status will allow **CMRTES to design contemporary, industry-aligned, and globally benchmarked curricula**, including **flexible degree pathways, multiple entry-exit options, credit transfer, online/blended learning, and skill integration**.

3. **Promotion of Research and Innovation**

- Hyderabad's ecosystem of **IT, biotech, and healthcare industries** provides immense scope for **applied and translational research**.

- Deemed to be University status will enable CMR to establish **research clusters, innovation hubs, incubation centers, and interdisciplinary doctoral programmes**, directly contributing to **patents, start-ups, and societal problem-solving**.

4. **Global Collaborations and Rankings**

- CMRTES institutions already maintain industry and academic collaborations, but their impact is diluted under fragmented structures.

- As a Deemed to be University, CMR can pursue **international partnerships, dual-degree programmes, and exchange initiatives** while aiming for recognition in **NIRF, QS, and THE rankings**.

5. **Meeting the Needs of Viksit Bharat @2047**

- India's vision of becoming a **developed nation by 2047** requires universities that can produce **globally competent graduates, impactful research, and indigenous innovation**.

- CMR-DTBU, through its **engineering-medical-healthcare integration**, is uniquely positioned to contribute to **human resource development, healthcare delivery, and technological advancement**.

6. **Expansion of Capacity and Quality**

- Demand for **engineering and medical education in Hyderabad** far exceeds existing capacity.

- Deemed to be University status will empower CMRTES to expand **student intake, programme offerings, and specialized research**, thereby addressing regional and national demand for skilled professionals.

7. **Governance and Institutional Excellence**

- A unified governance model under Deemed to be University status will ensure **strategic planning, effective leadership, and efficient resource utilization**.

- This shift will also help attract **top faculty, international scholars, and high-quality students**, enhancing the academic profile.

The approval of **Deemed-to-be University status** on CMR will enable the institution to:

- Emerge as a **distinct, industry-supported, multidisciplinary and research-intensive Deemed to be University**.

- Exercise **academic freedom** to innovate in teaching, learning, and evaluation.

- Strengthen **industry-academia-healthcare linkages** for impactful outcomes.

- Contribute meaningfully to **NEP 2020 goals and Viksit Bharat @2047 vision**.

Thus, the proposed **CMR Deemed to be University, Hyderabad** is not only an institutional aspiration but a **strategic requirement** for advancing education, research, and development in Telangana and the nation at large.

1.2 Context of Indian Higher Education and NEP 2020 Alignment

1.2.1 National Reforms in Higher Education

India's higher education sector is at the cusp of a historic transformation. Guided by the **National Education Policy (NEP) 2020** and the restructuring of regulatory and quality frameworks, the focus is now on building **multidisciplinary, innovation-driven, globally competitive universities**.

1. National Education Policy (NEP) 2020 – Transformative Framework

The NEP 2020 provides the blueprint for higher education reforms in India. Key features include:

- **Multidisciplinary Universities:** Transition from fragmented institutions to comprehensive universities offering broad-based, holistic, and flexible education.
- **Academic Flexibility:** Implementation of **Multiple Entry–Exit options** and the **Academic Bank of Credits (ABC)** to allow seamless mobility of learners across institutions.
- **Increased Access and GER:** Target to raise the **Gross Enrolment Ratio (GER) to 50% by 2035**.
- **Skill-Integrated Learning:** Strong emphasis on **vocational training, industry linkages, and experiential learning**.
- **Research and Innovation:** Creation of the **National Research Foundation (NRF)** to fund and strengthen a vibrant research ecosystem.
- **Technology-Enabled Education:** Integration of **MOOCs, SWAYAM, digital platforms, and blended learning models** to democratize quality education.

2. Regulatory Restructuring

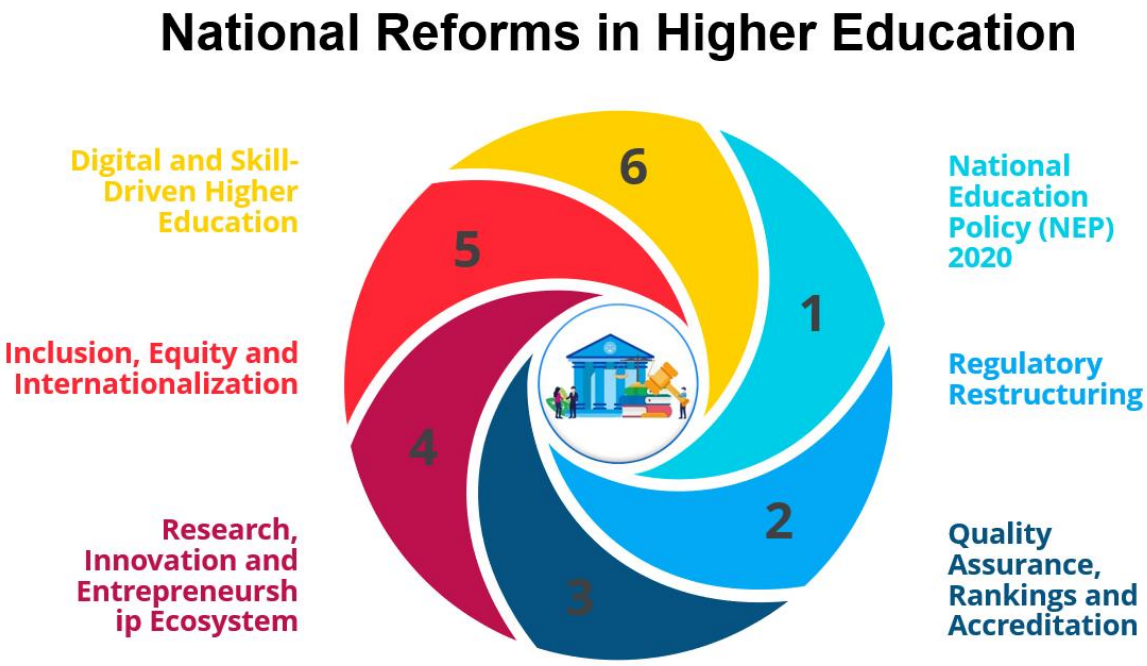
The Government of India has initiated landmark reforms in governance and regulation of higher education:

- **Higher Education Commission of India (HECI):** An umbrella body with four verticals:
    - NHERC (National Higher Education Regulatory Council) – regulation.
    - NAC (National Accreditation Council) – accreditation.
    - HEGC (Higher Education Grants Council) – funding.
    - GEC (General Education Council) – academic standards.
- **End of Affiliation System:** By 2035, affiliating systems will be phased out, replaced by autonomous multidisciplinary universities.

3. Quality Assurance, Rankings, and Accreditation

To enhance competitiveness and global visibility, quality assurance has been strengthened through:

- **NAAC (Revised Binary/Maturity Model):** New frameworks emphasizing outcomes and institutional maturity.
- **NBA (OBE-based Accreditation):** Outcome-based accreditation for technical and professional programmes.
- **NIRF Rankings:** Encouraging institutions to benchmark against national peers in teaching, research, innovation, and outreach.
- **ARIIA Rankings:** Focus on innovation, start-ups, and entrepreneurship.
- **Global Ranking Aspirations:** Promoting participation in QS, THE, and other world rankings.



4. Research, Innovation, and Entrepreneurship Ecosystem

- India's vision is to evolve **Research-Intensive Universities** by 2030.
- Establishment of **Centres of Excellence, Technology Business Incubators, and Start-up Ecosystems** with strong industry-academia collaborations.
- Support for **patents, consultancy, and commercialization of research outputs**.
- Incentives for **interdisciplinary research** in cutting-edge areas such as AI, data science, clean energy, and sustainable development.

5. Inclusion, Equity, and Internationalization

- **Gender Inclusion Fund** and measures for disadvantaged groups to ensure **equitable access**.
- Promotion of **internationalization of higher education** through dual degrees, twinning programmes, student and faculty mobility.
- Enabling **foreign universities to collaborate and set up joint campuses in India**.

6. Digital and Skill-Driven Higher Education

- **National Educational Technology Forum (NETF):** Supporting integration of digital technologies in teaching, learning, and assessment.
- Expansion of **online and lifelong learning programmes** to upskill professionals.
- Special focus on **AI, Data Science, Cyber Security, Renewable Energy, and Future Skills** as national priority areas.

1.2.2 Key Provisions of NEP 2020 Relevant to Engineering & Technology, Management, Medical Sciences, Nursing, Physiotherapy, Health Sciences and Liberal Arts & Indian Culture

The **National Education Policy (NEP) 2020** outlines a comprehensive framework to reimagine higher education in India. It emphasizes **multidisciplinarity, research, innovation, skills, flexibility, equity, and global competitiveness**. The following provisions are most relevant to engineering & technology, management, health sciences (including medical sciences, nursing, and physiotherapy) and liberal arts & Indian culture:

1. Multidisciplinary and Holistic Education

- All Higher Education Institutions (HEIs) to evolve into **multidisciplinary universities** by 2035.
- Integration of engineering & technology, management, medical sciences, nursing, physiotherapy, allied health sciences and liberal arts to foster collaboration.
- Focus on holistic education combining professional knowledge, liberal arts, ethics, and social responsibility.

2. Academic Flexibility and Choice-Based Learning

- **Academic Bank of Credits (ABC)** to enable seamless transfer of credits across institutions.
- **Multiple entry and exit options** in degree programmes, allowing students to exit with certificates/diplomas and re-enter to complete higher degrees.
- Flexible curricula with multidisciplinary electives across professional domains.

3. Research, Innovation, and Knowledge Creation

- Establishment of the **National Research Foundation (NRF)** to fund high-quality research.
- Strong emphasis on **interdisciplinary and translational research** in engineering, medicine, and allied sciences.
- Promotion of **innovation, patents, start-ups, and entrepreneurship** through Deemed to be University incubators and research parks.

4. Professional Education Reform

- **Engineering and Technology:** Adoption of **Outcome-Based Education (OBE)**, global accreditation standards (NBA, ABET), and integration of emerging technologies such as AI, Data Science, Robotics, Clean Energy, and Smart Manufacturing.
- **Management:** Focus on experiential learning, entrepreneurship, business analytics, and global business strategies.
- **Medical Sciences:** Introduction of **competency-based curricula**, emphasis on public health, digital health, and inter-professional learning.
- **Nursing and Physiotherapy:** Expansion of skill-based, practice-oriented programmes aligned with WHO standards and India's health workforce requirements.
- **Liberal Arts & Indian Culture:** The proposed School of Liberal Arts & Indian Culture precisely embodies the characteristics by bridging ancient Indian wisdom traditions and contemporary public policy studies, thereby creating a unique intellectual ecosystem aligned with the **National Education Policy (NEP) 2020**, **Viksit Bharat 2047** Vision, and UN SDGs.

5. Digital and Technology-Enabled Learning

- Expansion of **online and blended learning models** through SWAYAM, MOOCs, and digital platforms.
- Development of **virtual labs, simulation centres, AR/VR models, and telemedicine platforms** for health sciences.
- Integration of **ICT-enabled teaching** in engineering, technology, and management education.

6. Employability, Skills, and Experiential Learning

- Integration of **vocational training, internships, apprenticeships, and industry projects** across disciplines.
- Emphasis on **21st-century skills** such as problem-solving, design thinking, leadership, and communication.
- Strong focus on **industry-academia collaboration** for curriculum design and workforce readiness.

7. Quality Assurance and Accreditation

- Implementation of the revised **NAAC framework (binary and maturity-based accreditation)**.
- Mandatory **NBA accreditation** for technical and professional programmes and **AACSB accreditation** for management programmes.
- Encouragement of institutions to participate in **NIRF, and global ranking frameworks** to benchmark quality.

8. Inclusion, Equity, and Expansion of Access

- Target to increase **Gross Enrolment Ratio (GER) to 50% by 2035**.
- Special provisions through **Gender Inclusion Fund** and measures for disadvantaged groups.
- Expansion of **medical, nursing, and allied health institutions** to address national health workforce shortages.

9. Internationalization of Higher Education

- Encouragement of **foreign collaborations, dual degrees, and student/faculty mobility**, as per UGC norms.
- Promotion of India as a **global hub for higher education**.

1.2.3 CMR-DTBU as a Model Institution under NEP 2020

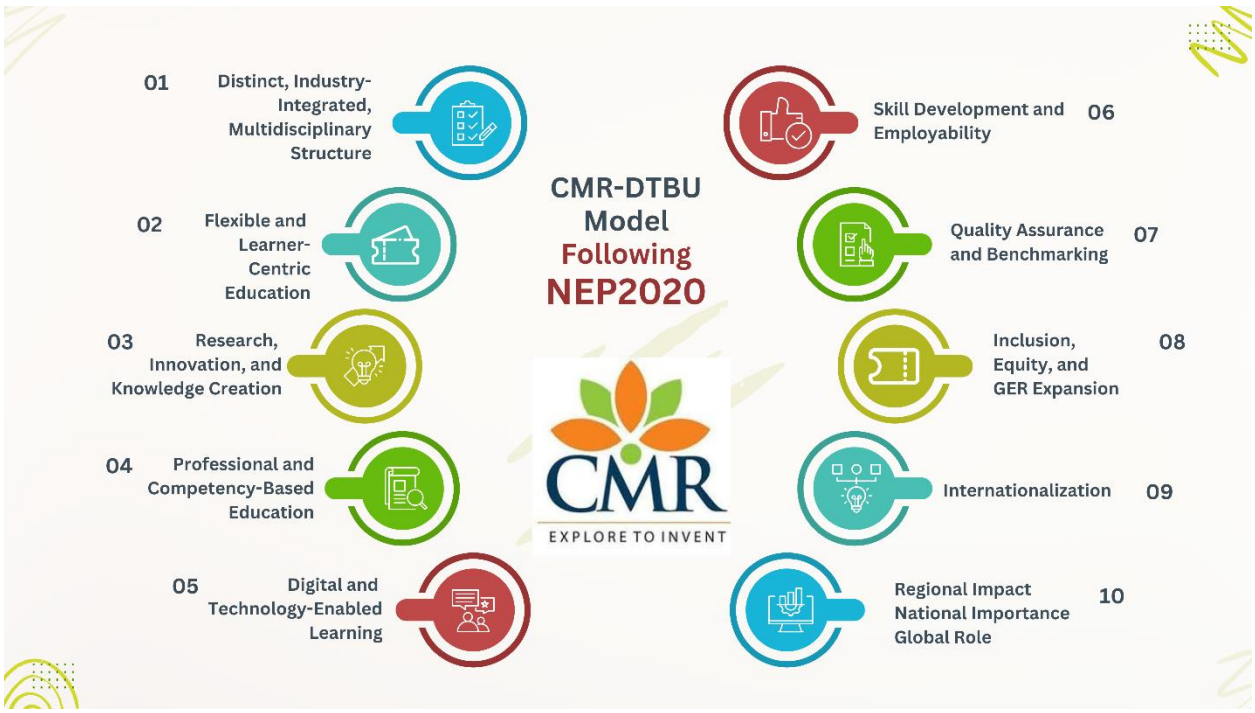
The **National Education Policy (NEP) 2020** sets the roadmap for transforming Indian higher education into a **multidisciplinary, flexible, research-driven, and globally competitive ecosystem**. The proposed **CMR Deemed to be University (CMR-DTBU), Hyderabad**, is envisioned to be a **pioneering model institution** that embodies the principles and aspirations of NEP 2020.

1. Distinct, Industry-Supported, Multidisciplinary Structure

CMR-DTBU will be established as a **comprehensive multidisciplinary Deemed to be University** bringing together Engineering, Technology, Management, Medical Sciences, Nursing, Physiotherapy, and Allied Health Sciences under one umbrella. This structure reflects NEP 2020's mandate for large, integrated institutions offering diverse academic pathways.

2. Flexible and Learner-Centric Education

- Adoption of the **Academic Bank of Credits (ABC)** to enable seamless credit transfer.
- Implementation of **multiple entry–exit options** for undergraduate and postgraduate programmes.
- Introduction of **minor/major electives** across disciplines, encouraging students to customize their learning journey.



3. Research, Innovation, and Knowledge Creation

- Establishment of **Centres of Excellence** in Artificial Intelligence, Digital Health, Biomedical Engineering, Biotechnology, Clean Energy, and Smart Manufacturing.
- Strong focus on **interdisciplinary and translational research**, aligned with the **National Research Foundation (NRF)**.
- Promotion of **start-ups, incubation, patents, and consultancy** through industry partnerships and innovation hubs.

4. Professional and Competency-Based Education

- **Engineering & Technology:** Outcome-Based Education (OBE) and alignment with global standards.
- **Management:** Practice-based pedagogy, industry immersion, and entrepreneurship-driven learning.
- **Medical, Nursing, and Physiotherapy:** Competency-driven education, clinical training, and public health orientation.
- **Interdisciplinary Pathways:** Joint programmes in technology-enabled healthcare, health informatics, and hospital management.
- **Liberal Arts & Indian Culture:** Integrate ancient Indian knowledge with modern policy sciences; Promote innovation in governance, cultural sustainability, and social transformation; Advance India's global thought leadership in knowledge traditions and public policy.

5. Digital and Technology-Enabled Learning

- Adoption of **blended and online learning platforms** including SWAYAM, MOOCs, and NPTEL.
- Use of **simulation labs, AR/VR platforms, and telemedicine technologies** in health sciences.
- Integration of **data analytics, AI-driven learning systems, and virtual labs** in engineering and management programmes.

6. Skill Development and Employability

- Embedding of **industry-linked curricula, internships, apprenticeships, and project-based learning**.
- Establishment of **Entrepreneurship and Innovation Cells** to promote start-up culture.
- Alignment with **21st-century skill requirements**—critical thinking, design thinking, problem-solving, leadership, and teamwork.

7. Quality Assurance and Benchmarking

- Targeting **top-tier accreditations** under NAAC, NBA, ABET & AACSB.
- Active participation in **NIRF, QS, and THE rankings**.
- Continuous improvement through **academic and administrative audits**.

8. Inclusion, Equity, and GER Expansion

- Contributing to the NEP 2020 target of **50% Gross Enrolment Ratio (GER) by 2035**.
- Scholarships and outreach programmes to ensure equitable access for rural and underprivileged students.
- Enhanced intake in nursing, physiotherapy, and allied health sciences to meet **national health workforce needs**.

9. Internationalization

- Establishment of **collaborations with global universities** for joint research, student/faculty exchange, and dual degrees, as per UGC norms.
- Attracting international students through globally relevant programmes and Hyderabad's strategic location.
- Promotion of CMR-DTBU as a **regional hub for international education**.

CMR-DTBU is envisioned as a **living model of NEP 2020** - a multidisciplinary Deemed to be University with academic flexibility, strong research orientation, digital integration, industry partnerships, global collaborations, and inclusive access. By aligning fully with the reform agenda of NEP 2020, it will not only serve the educational aspirations of Hyderabad and Telangana but also contribute significantly to India's emergence as a **global knowledge superpower**.

1.3 Distinct Category Justification

1.3.1 Existing Strengths of CMRTES Institutions

The proposed CMR Deemed to be University draws its strength from the well-established educational institutions functioning under the aegis of the **CMR Technical Education Society**. These institutions cover the entire spectrum of professional education—Engineering & Technology, Management, Medical Sciences, Nursing, Physiotherapy, and Health Sciences—thereby creating a unique foundation for a **multidisciplinary Deemed to be University of distinction**.

1. CMR Technical Campus – Engineering & Technology and Management

- Inception in the year **2009** and approved by **All India Council for Technical Education (AICTE), New Delhi.**
- As per AICTE Extension of Approval for 2025-2026, approved student intake for **UG & PG is 1224** and affiliated to **Jawaharlal Nehru Technological University, Hyderabad**.
- **Academic Breadth:** Offers 4 undergraduate and 3 postgraduate programmes in **Engineering, Technology, and Management** with an annual intake of 1224. All the programmes are approved by AICTE and affiliated to JNTU-Hyderabad.
- **Accreditations:** Recognized with **A grade by NAAC** and NBA accreditations for 3 programmes, DSIR-SIRO approval and compliance with AICTE/UGC standards.
- **Research & Innovation:** Centres of Excellence in AI, Data Science, IoT, and emerging technologies; funded projects and patents. AICTE supported IDEA Lab, DST supported FIST, DST supported STI Hub, DST-SREB, DST-SEED projects are part of ongoing research support with over **5.3 Cr funding**. MoE's IIC with **4-star rating** proves the innovation culture in the campus. 180 patents are published in which 6 are granted. **DSIR-SIRO recognized** as research-based institution.
- **Industry Integration:** Active **MoUs with IT, core engineering, and management sectors**; strong placement ecosystem in Hyderabad's industrial corridor. Total MoUs with industries and organizations are 52.
- **Student Development:** Emphasis on entrepreneurship, incubation, internships, and outcome-based learning.
- **Ranking Recognition:** Consistent participation in **NIRF and other national ranking frameworks and positioned in Top 300 (201-300 band)**, showcasing quality assurance and performance.

- Programmes offered details are given below:

Programmes Offered	Intake	Admitted Students during 2025-2026	Percentage Admission	NBA Accreditation Status
BTech-CSE	420	420	100%	Yes Valid till 30.06.2025 and SAR submitted
BTech-CSE (Data Science)	240	240	100%	Under Process
BTech-CSE (AIML)	240	240	100%	Under Process
BTech-ECE	60	60	100%	Yes Valid till 30.06.2025 and SAR submitted
MTech-CSE	12	10	83%	No
MTech-Embedded Systems	12	11	92%	No
MBA	240	240	100%	Under Process

2. CMR Institute of Medical Sciences – Medical Education and Healthcare

- Inception in the year **2023** and approved by **National Medical Commission (NMC), New Delhi.**
- Approved student intake for **MBBS is 250** and affiliated to **KNR University of Health Sciences, Warangal**. The admission percentage in MBBS is **100%**.
- **Teaching Hospital Ecosystem:** Well-established medical college integrated with a **multispecialty teaching hospital**, ensuring clinical exposure and community service.
- **Faculty Strength:** Experienced and qualified doctors across clinical, para-clinical, and pre-clinical departments.
- **Healthcare Services:** Advanced diagnostic, surgical, and emergency facilities serving diverse communities.
- **Research Orientation:** Initiatives in clinical research, epidemiology, and public health aligned with **national health priorities**.

- **Community Engagement:** Regular rural and urban health camps, preventive healthcare initiatives, and extension services.

- **Future Potential:** Capacity to expand into **super-specialty programmes, public health, and digital healthcare education**.

3. CMR College of Nursing – Nursing Education and Training

- Inception in the year **2023**.

- **Programme Range:** Offers **B.Sc. Nursing** with an intake of 100, approved by **Indian Nursing Council (INC)**.

- Affiliated to **KNR University of Health Sciences, Warangal**.

- The admission in B.Sc. Nursing is **85%.**

- **Skill Emphasis:** Clinical training integrated with hospitals; emphasis on **patient care, simulation labs, and practical exposure**.

- **Global Relevance:** Curriculum aligned with international nursing competencies, preparing graduates for employment opportunities in India and abroad.

- **Faculty & Research:** Dedicated nursing faculty with focus on community health, maternal care, and hospital administration.

- **Outreach:** Regular community health visits, awareness camps, and collaborations with local hospitals.

4. CMR Institute of Health Sciences – Allied Health Sciences

- Inception in the year 2023.

- Offers **5 B.Sc. programmes** with a total intake of 120, approved by **Government of Telangana** and affiliated to **KNR University of Health Sciences, Warangal**.

S.No	Name of the Programme	Number of Seats per year	Students admitted in 2025-2026
1	B.Sc. Medical Lab Technology	50	47
2	B.Sc. Anaesthesia Technology	20	20
3	B.Sc. Operation Theatre Technology	20	20
4	B.Sc. Respiratory Therapy Technology	10	10
5	B.Sc. Radiology & Image Technology	20	20

- **Programme Diversity:** Offers degree in **Allied Health Sciences**, including medical laboratory technology, imaging technology, and emergency care.
- **Skill-Driven Curriculum:** Strong focus on **hands-on training, laboratory practice, and clinical exposure**.
- **Industry Alignment:** Programmes tailored to meet growing demand for allied healthcare professionals in hospitals, diagnostic centres, and research labs.
- **Innovation Potential:** Integration with engineering and medical schools to develop **bio-instrumentation and health informatics programmes**.
- **Employment Pathways:** High demand for allied health graduates ensures strong placement potential in domestic and international healthcare systems.

5. CMR College of Physiotherapy

- **Specialized Programmes:** Offers undergraduate **B.Sc. in Physiotherapy** aligned with rehabilitation sciences with an annual intake of 50, approved by **Government of Telangana**.
- Affiliated to **KNR University of Health Sciences, Warangal.**
- The admission in B.Sc. Physiotherapy is **100%.**
- **Clinical Training:** Students receive hands-on training in physiotherapy clinics and hospitals, covering orthopaedic, neurological, sports, and paediatric rehabilitation.
- **Research & Practice:** Focus on evidence-based physiotherapy practices and applied research in rehabilitation sciences.
- **Growing Relevance:** Rising demand for physiotherapy in preventive, curative, and rehabilitative healthcare enhances institutional importance.
- **Community Service:** Active involvement in **sports rehabilitation, rural health camps, and outreach for differently-abled populations**.

Summary of Institutional Strengths

- **Comprehensive Multidisciplinary Base:** Together, these institutions cover **engineering, management, medical sciences, nursing, physiotherapy, allied health sciences and liberal arts & Indian culture** aligning with NEP 2020's vision of large multidisciplinary universities.
- **Accreditations & Quality Assurance:** Recognitions from **NAAC, NBA, NMC, INC, and other regulatory bodies**.
- **Research & Innovation Ecosystem:** Centres of Excellence, start-up incubators, patents, and funded projects.

- **Community & Industry Engagement:** Integration with local industry and healthcare, combined with strong community outreach.

- **Employability & Global Outlook:** Graduates consistently placed in reputed industries, hospitals, and global healthcare systems.

1.3.2 Rationale for Seeking Distinct Category under UGC Clause 7

The University Grants Commission (Institutions Deemed to be Universities) Regulations provide for the recognition of **"Distinct Category" Deemed to be Universities** under **Clause 7**, intended for institutions that are unique in their academic character, multidisciplinary scope, and contribution to national priorities. The proposed **CMR Deemed to be University (CMR-DTBU), Hyderabad**, fully justifies its application under this category for the following reasons:

1. Distinct, Industry-Supported, Multidisciplinary Professional Ecosystem

- CMRTES institutions already span the **entire spectrum of professional education**, covering **Engineering & Technology, Management, Medical Sciences, Nursing, Physiotherapy, Allied Health Sciences and Liberal Arts & Indian Culture**.

- This convergence of disciplines positions the Deemed to be University to function as a **holistic multidisciplinary institution**, in alignment with **NEP 2020's vision** of comprehensive universities.

2. Integration of Technology and Health Sciences

- The distinctiveness of the proposed Deemed to be University lies in the **synergy between Engineering & Technology and Health Sciences**.

- Unique academic and research opportunities will emerge at this interface:

    - Biomedical engineering, medical devices, and assistive technologies.
    - Artificial Intelligence, Data Science, and Digital Health solutions.
    - Healthcare management and hospital administration supported by business and management schools.

- Such integration is rare among Indian universities, giving the proposed institution a **distinct identity and relevance**.

3. Research, Innovation, and Entrepreneurship Orientation

- The sponsoring institutions have a proven track record in **research publications, patents, consultancy, and start-ups**.

- The proposed Deemed to be University will establish **Centres of Excellence** in emerging areas such as AI, Robotics, Cybersecurity, Clinical Research, and Rehabilitation Sciences.

- A strong focus on **entrepreneurship and incubation** will nurture student start-ups across engineering, health sciences, and management, thereby contributing to the innovation ecosystem of the country.

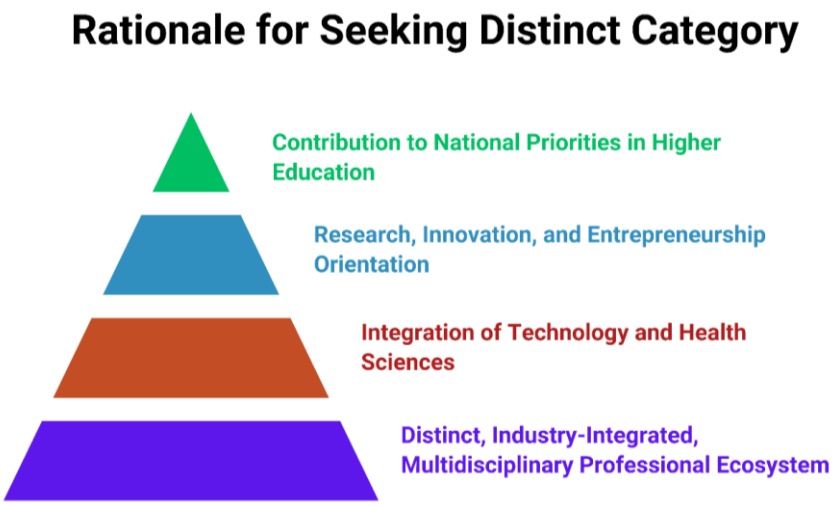
4. Contribution to National Priorities in Higher Education

- **Gross Enrolment Ratio (GER):** Expansion of capacity in medical, nursing, and allied health sciences will directly contribute to achieving India's GER target of 50% by 2035.

- **Healthcare Workforce:** The Deemed to be University will address the critical shortage of doctors, nurses, physiotherapists, and allied health professionals in India.

- **Skill Development:** Programmes will be competency-driven and outcome-based, aligned with industry and healthcare sector needs.

- **Global Knowledge Leadership:** By combining professional programmes with research and innovation, the Deemed to be University will aspire to feature in national and global rankings (NIRF, QS, THE).



Distinct Category Justification

- Unlike single-stream institutions, the proposed CMR-DTBU is inherently **multidisciplinary, practice-oriented, and research-driven**.

- Its **unique combination of engineering & technology, management, health sciences and liberal arts & Indian culture** differentiates it from conventional universities and positions it as a **Distinct Category Institution** under UGC Clause 7.

- The Deemed to be University will serve as a **model aligned with NEP 2020**, demonstrating the future of higher education in India: flexible, inclusive, multidisciplinary, and globally relevant.

1.3.3 Positioning of CMR-DTBU

- **Unique Identity:** Positioned as a **Distinct Category Deemed to be University**, with a multidisciplinary professional ecosystem that bridges engineering, management, health sciences and liberal arts & Indian culture.
- **Alignment with NEP 2020:** Functions as a **model institution**, adopting credit-based, flexible, learner-centric curricula and fostering research and innovation.
- **Regional Impact:** Addresses the growing demand for **engineering talent, healthcare professionals, and management leaders** in Hyderabad and Telangana.
- **National Contribution:** Supports India's goals of **50% GER by 2035, healthcare workforce expansion, skill development, and innovation-driven economy**.
- **Global Aspirations:** Aims to establish itself as a **globally recognized Deemed to be University**, competing with world-class institutions through international collaborations, rankings, and research excellence.

1.4 Objectives of the Proposed CMR Deemed to be University

1.4.1 Academic Objectives

Strategic Vision

To emerge as a multidisciplinary Deemed to be University of global standards, providing transformative education that integrates engineering & technology, management, healthcare and liberal arts & Indian culture while nurturing critical thinking, creativity and ethical responsibility.

Detailed Objectives

1. **Curriculum & Pedagogy**
    - Design **flexible and credit-based programmes** aligned with NEP-2020, NSQF, SDG and global benchmarks.
    - Introduce **multidisciplinary programmes** combining Engineering, Medical Sciences, Health Sciences, Management, Liberal Arts (e.g., AI in Healthcare, Health Robotics, Medical Data Science, Cyber Security in Healthcare, Digital Health).
    - Implement **multiple entry-exit and Academic Bank of Credit (ABC)** models.

- Develop **digital classrooms, MOOCs, flipped learning, and simulation labs** to foster student-centered learning.

2. **Distinct Programmes**

   - Introduce UG & PG: Semiconductor Technology, Digital Twin Technology, Digital Health and Quantum Computing leads to distinct and needs of the country for development.

3. **Industry-Supported Programmes**

   - To connect with industries for the new distinct, integrated, multidisciplinary programmes or academic support or internship.

4. **Programme Portfolio (First 5 Years)**

   To offer,

   - UG: Engineering (AI in Healthcare, Data Science, Cybersecurity, Robotics, Digital Twin Technology, Quantum Computing, Semiconductor Technology, Computational Neuroscience & AI etc.,)
   - UG: Medical Sciences, Nursing, Physiotherapy and Allied Health
   - UG: Liberal Arts & Indian Culture: Indian Knowledge Systems & Cultural Heritage and Public Policy
   - PG: MBA, M.Tech (AI, Sustainable Engineering), MSc (AI in Clinical Diagnostics)
   - Ph.D. in Engineering and Management.

5. **Student Development on improving Employability**

   To have,

   - Mandatory **internships, community projects, and industry-driven capstone projects**.
   - Soft skills & global languages training for employability.
   - Structured **mentorship and counseling programs**.

6. **Faculty Advancement**

   - To establish a **Centre for Teaching & Learning Excellence (CTLE)**.
   - To conduct Faculty Development Programs (FDPs) in OBE, AI-enabled pedagogy, simulation-based training.
   - To incentivise for publishing, patents, and international collaborations.

Milestones

5-Year Milestones (2026–2031)

- **Programme Expansion**
    - Introduce **12 new UG and PG programmes** across five Schools (Engineering & Technology, Medical Sciences, Health Sciences, Nursing and Liberal Arts & Indian Culture).
    - Launch industry-supported programmes and dual-degree pathways in new-era domains such as AI in Healthcare, Robotics, and Indian Knowledge Systems.
- **Accreditation & Quality**
    - Achieve **NAAC A+ / MBGL Level-2** accreditation.
    - Obtain **NBA accreditation** for at least 75% of eligible programmes.
- **National Standing**
    - Secure position within **Top 300 universities in NIRF (Overall)**, **Top 200 in Engineering category** and **Top 200 in Innovation category**.
    - Feature in **Top 300 in Sustainability, Top 300 in Medical and Top 300 in Research categories.**
- **Research & Publications**
    - Establish **5 Centres of Excellence** in frontier areas.
    - Achieve **2000+ publications** and **500+ patents filed/published/granted**.
- **Student Development**
    - Ensure **30% students engaged in internships and industry projects**.
    - Introduce **skill labs, employability enhancement modules, and value-added certifications**.

10-Year Milestones (2026–2036)

- **Academic Breadth**
    - Expand to a total of **45+ academic programmes** across UG, PG, Doctoral, and Integrated levels.
    - Develop **online/blended programmes** to reach working professionals and international learners.
- **Quality & Benchmarking**
    - Secure **NAAC A++ / MBGL Level-3** accreditation.
    - Attain at least **one international accreditation** (ABET for Engineering, AACSB/ACBSP for Management).

- **National Recognition**
    - Attain **Top 200 NIRF Overall ranking**.
    - Feature consistently in **Top 150 NIRF Engineering ranking**.
    - Attain **Top 150 in Innovation category.**
    - Feature in **Top 200 in Sustainability, Top 200 in Medical and Top 200 in Research categories.**
- **Research Ecosystem**
    - Set up **10+ CoEs** in multidisciplinary areas.
    - Cross **₹50+ Cr in cumulative funded research projects**.
    - Launch **Innovation & Start-up Park**.
- **Globalization of Academics**
    - Establish **joint degree programmes and exchange partnerships with 20+ international universities**.
    - Ensure **5% student enrolment from outside India/region**.

15-Year Milestones (2026–2041)

- **Academic Leadership**
    - Offer **60+ programmes** across disciplines, with **50% students enrolled in multidisciplinary/dual-degree programmes**.
- **International Benchmarking**
    - Retain **NAAC A++ / MBGL Level-4** accreditation.
    - Achieve **multiple international accreditations** (ABET, AACSB, ACBSP, EQUIS, AMBA).
- **National & Global Rankings**
    - Rank in **Top 100 NIRF** in Overall category.
    - Attain **Top 100 NIRF in Engineering and Top 100 in Innovation.**
    - Improve **NIRF Sustainability, Research, Medical, Management with in Top 100.**
    - Enter **Top 1000 QS/THE World Rankings**.
    - Feature in **Top 1000 in THE Impact Rankings (SDGs)**.
- **Research & Innovation**
    - File/Publish/Grant **2000+ patents**.
    - Establish **Global Research Hubs** in AI, Digital Health, and Sustainable Development.
    - Attract **₹100+ Cr cumulative external research funding**.

- **Global Academic Engagement**
    - Achieve **8% international student enrolment**.
    - Launch **overseas academic/research centers** in partnership with reputed universities.

1.4.2 Research and Innovation Objectives

Strategic Vision

To build a globally recognized ecosystem for interdisciplinary research and innovation addressing societal, industrial, and healthcare challenges.

Detailed Objectives

1. **Centres of Excellence (CoEs)**
    - AI & Data Science in Healthcare
    - Biomedical Devices & Rehabilitation Engineering
    - Renewable Energy & Smart Infrastructure
    - Digital Health & Telemedicine
    - Public Policy & Indian Knowledge Systems
2. **Research Culture**
    - Mandatory research involvement for PG/Ph.D. students.
    - Seed funding and intramural research grants for faculty and students.
    - Annual Research & Innovation Conclave to showcase outcomes.
3. **Innovation & Entrepreneurship**
    - Establish **Technology Business Incubator (TBI)** for healthcare and engineering start-ups.
    - Launch a **Healthcare Innovation Hub** to link hospitals, researchers, and industry.
    - Support student-led start-ups with mentoring, seed capital, and incubation.
4. **IPR and Publications**
    - Encourage high-quality publications (Scopus, SCI, PubMed indexed).
    - File/Publish/Grant 500+ patents in first five years; target 2000+ by year 15.
    - Establish a **Technology Transfer Office** for commercialization.
5. **External Funding**
    - Target national and international funding agencies (DST, ICMR, DBT, WHO, World Bank).
    - Secure consultancy and contract research projects with industries.

Milestones

- **5-Year (2026–2031):**
    - Set up 5 CoEs, file/publish/grant 500 patents, publish 2,000+ research papers.
    - Generate ₹20 crore in external research funding.
- **10-Year (2026–2036):**
    - Set up 10 CoEs, file/publish/grant 1000 patents, publish 4,000+ research papers.
    - Generate ₹50 crore in external research funding.
- **15-Year (2026–2041):**
    - Establish 15 CoEs; file/publish/grant 2000+ patents.
    - Achieve ₹100 crore cumulative research funding.
    - Be recognized as a Research-Intensive Deemed to be University with global partnerships (IITs, Johns Hopkins, NUS, Oxford).

1.4.3 Community Health and Outreach Objectives

Strategic Vision

To be a hub for community-centered education, healthcare, and social development, advancing holistic well-being and inclusive growth.

Detailed Objectives

1. **Healthcare Services**
    - Establish a Teaching Hospital with tertiary care, mobile health clinics, and telemedicine services.
    - Annual **free health camps** in rural and semi-urban areas.
    - Specialized outreach in maternal & child health, geriatrics, physiotherapy, and rehabilitation.
2. **Public Health & Social Responsibility**
    - Conduct **awareness campaigns** on sanitation, nutrition, mental health, NCD prevention.
    - Adopt **5 rural and 2 urban communities** under Unnat Bharat Abhiyan.
    - Launch a **Digital Health Literacy Program** to bridge the rural-urban divide.
3. **Skill Development & Employability**
    - Community-oriented certificate programmes: paramedical training, geriatric care, primary health assistants.
    - Vocational programmes for women empowerment and youth entrepreneurship.

4. **CSR & Partnerships**

    - Collaborate with NGOs, government health missions, and industries on CSR-funded projects.
    - Establish a **Community Engagement Cell** integrating NSS, NCC, YRC activities.

Milestones

- **5-Year (2026–2031):**

    - Deliver healthcare to 1 lakh+ beneficiaries annually.
    - Adopt 7 communities (rural + urban) for comprehensive outreach.
    - Launch 20+ community-oriented certificate/vocational programmes.

- **10-Year (2026–2036):**

    - Deliver healthcare to 3 lakh+ beneficiaries annually.
    - Adopt 15 communities (rural + urban) for comprehensive outreach.
    - Launch 50+ community-oriented certificate/vocational programmes.

- **15-Year (2026–2041):**

    - Impact 5 lakh+ beneficiaries through sustained outreach.
    - Establish a Regional Public Health Research Centre.
    - Position as a **national model in community healthcare integration with higher education**.

1.5 Regional, National, and Global Significance

1.5.1 Role in Bridging Healthcare Gaps

The Hyderabad region and its adjoining districts in Telangana and Andhra Pradesh are experiencing rapid urbanization and population growth, which has intensified the demand for quality healthcare and trained medical professionals. However, several **regional gaps** persist: shortage of doctors and nurses in public health facilities, limited access to tertiary care in semi-urban and rural areas, and insufficient integration of technology-driven healthcare solutions.

CMR Deemed to be University proposes to address these gaps through the following measures:

- **Expansion of Healthcare Access**

    Establishing a multi-specialty teaching hospital and affiliated medical, nursing, and physiotherapy colleges will directly improve access to quality care. Mobile health clinics, telemedicine platforms, and rural health camps will extend these benefits to underserved populations, ensuring inclusivity in and around Hyderabad region and extend support to about 10% of the population.

- **Community-Centric Skill Development**

  By launching diploma and certificate programmes in **paramedical sciences, geriatric care, rehabilitation, and digital health**, the Deemed to be University will prepare a **local workforce** capable of supporting hospitals, primary health centres, and community health missions.

- **Integration with Regional Industry**

  Hyderabad is a national hub for **IT, biotechnology, and pharmaceuticals**. CMR-DTBU will leverage this ecosystem to develop **digital health innovations, biotech start-ups, and AI-driven healthcare solutions**, positioning itself as a **regional innovation hub**.

- **Inclusivity and Equity**

  Scholarships, bridge courses, and remedial programmes for atleast 20% of the rural students and first-generation learners in the target region of in and around Hyderabad will ensure equitable access to healthcare education, aligning with the Gross Enrolment Ratio (GER) targets of NEP-2020.

Through these initiatives, CMR-DTBU will **bridge the healthcare divide in the region** by simultaneously strengthening **education, service delivery, and local innovation.**

1.5.2 National Significance: Importance in Developing Healthcare Professionals

At the national level, India faces pressing challenges in healthcare human resources. The **WHO benchmark** prescribes 44.5 skilled health workers per 10,000 population, whereas India currently lags behind this figure. There is a national shortfall of **doctors, nurses, physiotherapists, and allied health professionals**—a challenge that has been further highlighted by the COVID-19 pandemic.

CMR-DTBU's contribution to the national landscape will include:

- **Workforce Development**

  By 2035, the Deemed to be University aims to graduate **5,000+ healthcare professionals annually**, including doctors, nurses, physiotherapists, public health specialists, skill-enriched and employability-enhanced engineers, and allied health practitioners.

- **Alignment with National Missions**

  The Deemed to be University will support Ayushman Bharat, Skill India, and Digital India by preparing graduates trained in **digital health, electronic health records, telemedicine, AI-based diagnostics, and community health delivery models**.

- **Multidisciplinary Education**

  CMR-DTBU will pioneer programmes that integrate **Engineering and Health Sciences**—for example, Biomedical Engineering, Healthcare Data Science, Hospital Management with AI, and Assistive Technology Design. These will address national needs for technologically skilled healthcare professionals.

- **Research and Policy Leadership**

  The Deemed to be University's Centres of Excellence in areas such as **Public Health Policy, Biomedical Devices, AI in Healthcare, and Non-Communicable Diseases (NCDs)** will generate evidence-based solutions to national health challenges, supporting government health programmes and contributing to policy-making.

- **Quality and Ranking Benchmarks**

  CMR-DTBU will seek NAAC A++ and NBA accreditations, with a goal to be ranked among **Top 100 in NIRF (Overall)**, setting a benchmark for private universities contributing to India's healthcare education.

Thus, CMR-DTBU will play a **strategic role in strengthening India's healthcare capacity**, aligning with NEP-2020 reforms, and ensuring a sustainable health workforce for the nation.

1.5.3 Global Significance: Collaborations and International Benchmarking

In an era of globalization, healthcare and higher education must align with international standards and contribute to global knowledge networks. CMR-DTBU envisions becoming a **globally recognized hub for healthcare and multidisciplinary education**.

Its global role will be realized through:

- **International Academic Collaborations**

  MoUs with universities in the **USA, UK, Singapore, Germany, and Australia** will enable joint degree programmes, student and faculty exchanges, dual certifications, and collaborative research. These partnerships will enhance the global employability of CMR graduates.

- **Global Research Networks**

  Participation in **WHO, UNESCO, UN SDG initiatives, and World Bank-funded research projects** will align CMR-DTBU with pressing global priorities such as tropical diseases, pandemic preparedness, maternal and child health, sustainable healthcare, and digital inclusion.

- **International Accreditation and Rankings**

  Adoption of **WFME standards (Medical), ABET (Engineering), AACSB/EQUIS/AMBA (Management)**, along with targeted performance in **QS and THE global rankings**, will ensure international credibility and benchmarking.

- **Attracting International Students**

  Hyderabad's connectivity and multicultural ecosystem provide a fertile base for attracting students from **South Asia, Africa, and the Middle East**. CMR-DTBU aims to have a **10% international student population by 2035**, positioning itself as a **regional hub for global education.**

- **Thought Leadership**

  Hosting Global Conclaves on Healthcare, Innovation, and Public Health will showcase India's contribution to global knowledge while positioning CMR-DTBU as a **knowledge-exporting Deemed to be University**.

Through these global initiatives, CMR-DTBU will contribute not only to India's soft power in higher education but also to **global healthcare resilience and innovation.**

The proposed **CMR Deemed to be University** will have:

- **Regional Impact** → Bridging healthcare access gaps, training local youth, and fostering innovation ecosystems.

- **National Importance** → Developing India's next generation of healthcare professionals, supporting national missions, and setting benchmarks in quality education

- **Global Role** → Collaborating internationally, benchmarking with global standards, and contributing to global health and education networks

This tri-level significance ensures that CMR-DTBU will evolve as a **model NEP-2020 institution** that is regionally relevant, nationally vital, and globally benchmarked.

2. ABOUT THE SPONSORING BODY

2.1 Genesis & Evolution of CMR Technical Education Society

The **CMR Technical Education Society (CMRTES)** was established in 2007 as a **not-for-profit educational society** under the Andhra Pradesh Societies Registration Act, 2001 with the purpose of advancing school, professional and higher education in India. Guided by visionary founders and philanthropists, the Society was created to cater to the growing demand for **quality technical and healthcare education** in the Hyderabad region.

The CMR Technical Education Society (CMRTES) was registered in Hyderabad by the Registrar of Societies, Hyderabad T.S with Regd No 1128/2007 on 13-07-2007 with its registered office at Jayanagar Colony, Bowenpally, Secunderabad.

From its inception, CMRTES has acquired land, developed campuses, and systematically expanded its institutions. The Society currently owns more than **20 acres of land in Kandlakoya, Medchal–Malkajgiri District, Telangana**, as evidenced by registered gift deeds, sale deeds, and land conversion proceedings. The **master plan** includes state-of-the-art academic blocks, laboratories, and healthcare facilities, symbolizing the long-term vision of creating a **multidisciplinary higher education hub**.

Over the years, CMRTES has promoted institutions in engineering, management, medical sciences, nursing, physiotherapy, and allied health sciences - gradually shaping itself into a sponsoring body capable of nurturing a **Deemed to be University** of national repute.

2.2 Aims and Objectives of CMR Technical Education Society

a. To further the fine moral and cultural traditions of secular India through imparting education to childrens / students in the Educational Schools, Colleges, Institutions specially started by the Society.

b. To organize and promote the study of Science, Humanities, Fine Arts, Computer Science or other programmes in the context of developing India.

c. To train and prepare selected students so that they may excel in their choosen fields / courses / programmes.

d. To establish Schools, Junior, Degree, Engineering, Management, I.T.I., Technical, Business Schools, Information Technology, Medical Colleges and other Educational Institutions and run the same for no profit and no loss for the progressive realisation of the objectives of the Society.

e. To establish self employment units for unemployee youth on no profit and no loss basis.

f. To protect the Sovernity & Integrity of the Nation and work for development of secular values, brotherhood and tolerance among the different sections of the Society.

g. The funds of the society shall be spent for the attainment of the aims and objects of the Society and raise loans from Financial Institutions, Banks etc by creating charge over the assets / property of the Society.

2.3 Educational, Healthcare, and Social Outreach Activities

Educational Institutions Established

Under CMRTES, the following institutions have been promoted:

- **CMR Technical Campus (Autonomous – AISHE C-19705)** – offering B.Tech, M.Tech, and Management programmes.
- **CMR Institute of Medical Sciences** (**AISHE C-71657)** – providing medical education and clinical training and offering MBBS programme.
- **CMR College of Nursing** (**AISHE C-71658)** – offering B.Sc Nursing programme.
- **CMR College of Physiotherapy** (**AISHE C-71656)** – focused on rehabilitation sciences and offering B.Sc Physiotherapy programme.
- **CMR Institute of Health Sciences** (**AISHE C-72386)** – providing allied health and paramedical education and offering B.Sc in Medical Lab Technology, Anaesthesia Technology, Operation Theatre Technology, Respiratory Therapy Technology and Radiology & Image Technology programmes.

Healthcare & Community Initiatives

- Annual **free medical and health camps** in surrounding villages.
- Mobile health services and **telemedicine support** in rural areas.
- Preventive health campaigns in **sanitation, maternal and child health, mental health, and NCD prevention**.

Scholarships & Student Welfare

- Merit and need-based scholarships for underprivileged students.
- Free or subsidized hostel and transportation facilities for rural students.
- Special support for **girl students and first-generation learners**.

Partnerships with Government & NGOs

- Collaboration with **state health missions** and local government hospitals.
- MoUs with NGOs for rural healthcare delivery, community skill training, and environmental initiatives.

- Participation in **Unnat Bharat Abhiyan, Swachh Bharat, and Fit India Movement** programmes.

2.4 Members of the Society and Governance Structure of CMRTES

Members of the Society

The Members of the Society of CMRTES comprises social workers, philanthropists and business people who provide strategic vision and policy direction. Detailed members list as per the Bye-Laws is given below.

Serial No.	Name	Age	Designation in Society	Known Address / Contact Details	Profession / Nature of Business
1	**Sri C. Gopal Reddy** S/o Late Malla Reddy	55	Chairman	Villa No: 7, Anthem Vistas, Devaryamjal, GVK - EMRI Lane, Kompally, Medchal-Malkajgiri, Telangana – 500014.	Educationalist
2	**Sri Abhinav Chamakura** S/o C. Gopal Reddy	30	Vice-Chairman	Villa No: 7, Anthem Vistas, Devaryamjal, GVK - EMRI Lane, Kompally, Medchal-Malkajgiri, Telangana – 500014.	Educationalist
3	**Smt. C. Vasantha Latha** W/o C. Gopal Reddy	52	Secretary	Villa No: 7, Anthem Vistas, Devaryamjal, GVK - EMRI Lane, Kompally, Medchal-Malkajgiri, Telangana – 500014.	Educationalist
4	**Smt. C. Aruna** W/o C. Muthyam Reddy	45	Joint Secretary	H.No.1-6-46/A, Old Alwal, Secundrabad	Social Worker
5	**Smt. C. Laxmi** W/o C. Shanker Reddy	74	Treasurer	H.No.1-6-46/A, Old Alwal, Secundrabad	House Wife
6	**Sri C. Muthyam Reddy** S/o Late C. Shanker Reddy	50	Executive Member	H.No.1-6-46/A, Old Alwal, Secundrabad	Business
7	**Smt. Padma Latha** W/o Chandra Shanker Reddy	56	Executive Member	H.No.1-6-46/A, Old Alwal, Secundrabad	Business

Governance Mechanisms

- Functioning under **approved Bye-Laws and statutory provisions**.
- Democratic governance with clear delegation of powers to committees for **academics, finance, infrastructure, and healthcare operations**.
- Transparent systems of accountability, annual audits, and statutory compliances.
- Advisory councils with **academic leaders, industry experts, and healthcare practitioners**.

2.5 Impact on Regional Development

Healthcare Service Delivery

- CMRTES institutions and affiliated hospitals cater to **thousands of patients annually**, offering free treatment.
- Telemedicine and rural outreach programs improve **last-mile healthcare access**.

Employment Generation

- Direct employment for **faculty, doctors, nurses, technical staff, and administrative professionals**.
- Indirect employment through **ancillary services, hospital support, and campus operations**.
- Contribution to the healthcare and education workforce in **Telangana and across India**.

Educational Upliftment

- Significant improvement in **literacy and higher education enrollment** in the region.
- Creation of **first-generation graduates** from rural and semi-urban families.
- Enhanced **Gross Enrolment Ratio (GER)** and support for NEP-2020 targets.

2.6 Chronological Evolution of CMR Technical Education Society

Year	Milestone	Significance
2007	CMR Technical Education Society (CMRTES) was registered in Hyderabad	Foundation for establishing educational and healthcare institutions.
2009	Commencement of CMR Technical Campus	Offers Engineering, Technology & Management programmes
2016	Establishment of CMR Hospital	Reinforced philanthropic and service-oriented mission of the Society.
2023	Commencement of CMR College of Medical Sciences CMR College of Nursing CMR College of Physiotherapy CMR Institute of Health Sciences	Offers programmes in MBBS, Nursing, Physiotherapy & Health Sciences
2025	Proposal for **CMR Deemed to be University under Distinct Category** is under process	Strategic milestone aligning with NEP-2020 vision of multidisciplinary Deemed to be Universities.

2.7 Future Expansion Vision

- To establish the **CMR Deemed to be University** as a multidisciplinary institution under NEP-2020.
- To create **Centres of Excellence in AI, Healthcare Technology, Sustainable Engineering, Public Health and Indian Knowledge Systems & Public Policy**.
- To expand social responsibility initiatives, including **adopting villages, rural health centers, and skill development hubs**.
- To attain **national and international rankings**, benchmarking against global standards.

3. PROPOSED INSTITUTION:
CMR – DEEMED TO BE UNIVERSITY (DISTINCT CATEGORY)

3.1 Proposed Deemed to be University

The proposed **Deemed to be University (CMR-DTBU)** is the natural evolution of the academic and social legacy built by the **CMR Technical Education Society**, which has, for over three decades, nurtured institutions of excellence in **Engineering & Technology, Management, Medical Sciences, Nursing, Physiotherapy, Allied Health Sciences and Liberal Arts & Indian Culture**. These institutions, established in Hyderabad, Telangana have steadily expanded their reach and reputation through consistent adherence to quality, innovation, and social responsibility.

Proposed Name and Address of the Deemed to be University

CMR

Kandlakoya (V), Medchal Road,
Hyderabad – 501401, Telangana, India.

Proposed Location of the Deemed to be University

Latitude - 17.59722007975115° N
Longitude - 78.48649784249483° E

3.2 Vision, Mission, and Core Values

Vision

To emerge as a globally benchmarked multidisciplinary Deemed to be University integrating engineering & technology, management, medical sciences, health sciences and liberal arts & Indian culture to advance knowledge, foster innovation, and serve humanity with compassion and integrity.

Mission

1. **To Nurture Multidisciplinary Excellence:** The University will integrate diverse fields such as Engineering & Technology, Management, Medical Sciences, Health Sciences and Liberal Arts fostering a culture of academic breadth and depth, thus ensures students and faculty collaborate across disciplines to address complex societal and industry challenges.

2. **To Foster Industry-Integrated and Skill-Based Education:** Through strong partnerships with industries, hospitals and research centres, the University will embed practical training, internships and skill certifications into every program. This ensures graduates are employment-ready and entrepreneurial, with real-world competencies aligned to future workforce needs.

3. **To Advance Research and Innovation in Frontier Areas:** The University will establish research centres of excellence in emerging areas such as AI, digital health, robotics, sustainability and Indian Knowledge Systems, encourages faculty and students to engage in cutting-edge projects. The University aims to contribute to knowledge creation, patents and societal innovation.

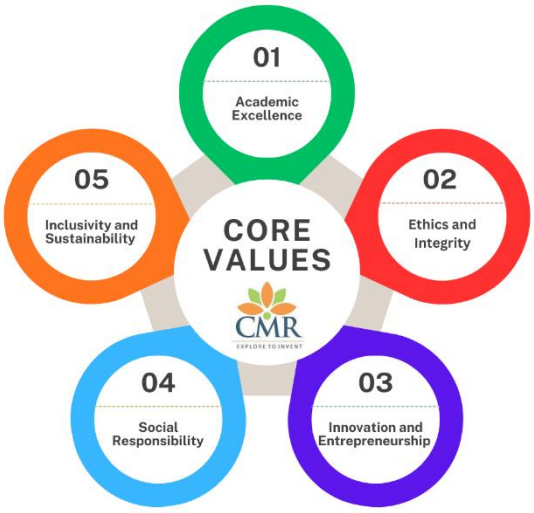
4. **To Strengthen Healthcare Workforce and Delivery:** Recognising the national need for quality healthcare professionals, the University will expand programs in medicine, nursing, physiotherapy, allied health sciences and digital health. It will produce a skilled, compassionate healthcare workforce while also contributing to better healthcare access in undeserved regions.

5. **To Empower Students for Global Citizenship:** Education at the University will emphasise values, ethics, cultural understanding, sustainability and global exposure. Students will be prepared not only as competent professionals but also as responsible citizens, capable of contributing to both their local communities and the global society.

6. **To Bridge Regional Needs with National and Global Priorities:** The University will act as a knowledge hub for regional development, addressing local socio-economic challenges while aligning its teaching, research and outreach with national development goals and global agendas (e.g., SDGs). This balance will position the University as a globally benchmarked yet locally relevant institution.

Core Values

- **Academic Excellence** – Pursuit of high standards in teaching, learning, and research.
- **Ethics and Integrity** – Ensuring honesty, transparency, and accountability.
- **Innovation and Entrepreneurship** – Encouraging creativity and start-up culture.
- **Social Responsibility** – Extending services to underprivileged and rural communities.



- **Inclusivity and Sustainability** – Promoting gender equality, environmental care, and equitable opportunities.

3.3 Distinctiveness / Uniqueness

The distinctiveness of CMR-DTBU lies in its ability to merge **medical sciences, engineering & technology, allied health sciences, management, liberal arts & Indian culture** in a holistic way, positioning it uniquely within the Indian higher education system.

- **Academic Multidisciplinarity**

  CMR-DTBU will integrate disciplines across medicine, engineering, technology, nursing, physiotherapy, allied health sciences, arts, commerce and management. Interdisciplinary programmes (e.g., Health Informatics, AI and Cyber Security in Healthcare, Digital Health, Hospital Management) will create graduates capable of solving real-world problems with convergent skills.

- **Community Healthcare Integration**

  With its strong network of medical colleges, nursing institutions, and rural health camps, CMR-DTBU will act as a **hub for community health outreach**. Free rural clinics, telemedicine services, and preventive care initiatives will ensure that academic activity translates into measurable health outcomes for society.

- **Digital Health and AI Leadership**

  The proposed Deemed to be University will establish Centres of Excellence in **Digital Health, AI and Robotics in Medicine, and Health Informatics**, making it a pioneer in next-generation healthcare technology. Research will focus on wearable devices, AI-based diagnostic tools, electronic health records, and remote monitoring systems.

3.4 Integration of Indian Knowledge Systems (IKS)

CMR-DTBU will champion the **NEP 2020 emphasis on Indian Knowledge Systems (IKS)** by embedding traditional health sciences and cultural knowledge into its curricula and research agenda.

- **Holistic Wellness**: Yoga, meditation, nutrition, and wellness management will be mandatory credit-bearing modules across programmes, encouraging lifestyle modification and preventive health.

- **NEP 2020 Alignment**: By blending ancient wisdom with modern science, CMR-DTBU will create a **holistic, globally relevant educational framework** that emphasizes both employability and well-being.

3.5 Proposed Societal Contribution & SDG Alignment

The proposed CMR-DTBU is designed as a **societal-impact institution**, aligned with the United Nations Sustainable Development Goals (SDGs).

- **SDG 3: Good Health and Well-being** – By providing affordable healthcare services through teaching hospitals, mobile medical units, nursing outreach, and physiotherapy clinics.

- **SDG 4: Quality Education** – By offering multidisciplinary, flexible, and inclusive programmes using digital platforms and Academic Bank of Credits (ABC).

- **SDG 5: Gender Equality** – By empowering women in nursing, medical sciences, management, and STEM disciplines, and ensuring leadership opportunities for female faculty.

- **SDG 8: Decent Work and Economic Growth** – By fostering entrepreneurship and start-ups in health-tech and bioengineering.

- **SDG 9: Industry, Innovation and Infrastructure** – By developing Centres of Excellence in Biomedical Devices, AI-HealthTech, and Digital Hospitals.

- **SDG 17: Partnerships for the Goals** – By forging global collaborations with universities, hospitals, research centers, and industries.

3.6 Community Commitments

- **Free treatment for patients** in the medical college
- Annual **free health** and physiotherapy camps in rural areas of Telangana
- **Scholarships** for underprivileged and first-generation learners.
- **Training programs** for community health workers and paramedics.
- **Public health research** addressing local epidemiological challenges.

3.7 A Holistic Approach to Nation Building and Global Impact

The proposed CMR Deemed to be University (CMR-DTBU) is envisioned not merely as an academic institution but as a catalyst for nation building and global impact. In alignment with the National Education Policy (NEP) 2020, Viksit Bharat @2047, and the United Nations Sustainable Development Goals (SDGs), the Deemed to be University shall pursue an integrative model of higher education that fosters knowledge, skills, innovation, and social responsibility.

Nation Building Dimensions

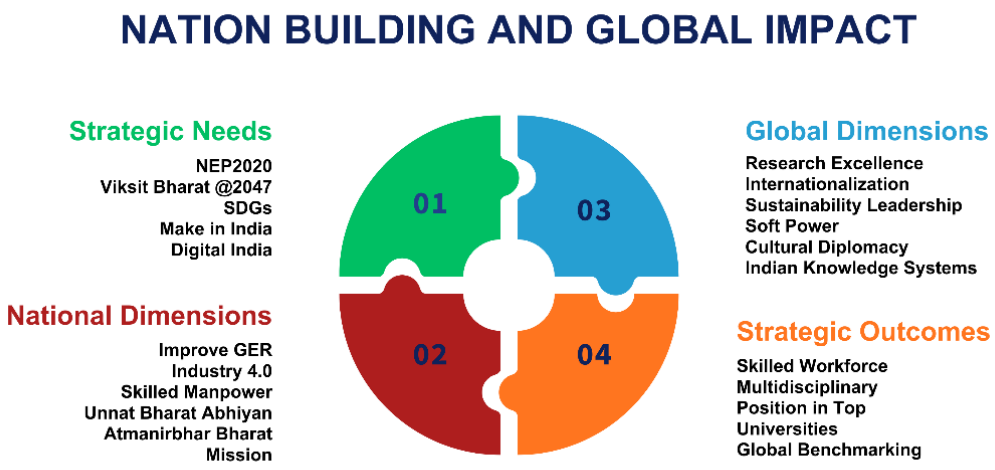
- Educational Empowerment: Expanding Gross Enrolment Ratio (GER) through multidisciplinary, flexible, and inclusive education.
- Skill Development & Employability: Industry 4.0–aligned programmes in semiconductor technology, quantum computing, digital health, AI, robotics, and allied health sciences.
- Healthcare Strengthening: Preparing skilled manpower for hospitals, clinics, and digital health systems to address national healthcare gaps.
- Rural & Community Development: Village adoption, healthcare outreach, agricultural innovation, and sustainability initiatives in line with Unnat Bharat Abhiyan.
- Entrepreneurship & Innovation: Establishment of incubation, startup, and innovation centres to contribute to the Atmanirbhar Bharat mission.

Global Impact Dimensions

- Research Excellence: Collaborative research in frontier areas—AI in healthcare, renewable energy, robotics, and biotechnology—positioning India in the global knowledge economy.
- Internationalization: Partnerships with global universities for joint degrees, student/faculty mobility, and research collaborations.
- Sustainability Leadership: Integration of green campus practices, renewable energy, and SDG-oriented curricula to contribute to global climate goals.
- Soft Power & Cultural Diplomacy: Promotion of Indian Knowledge Systems (IKS), Ayurveda, Yoga, and traditional values in tandem with modern science, strengthening India's global academic footprint.

Strategic Outcomes

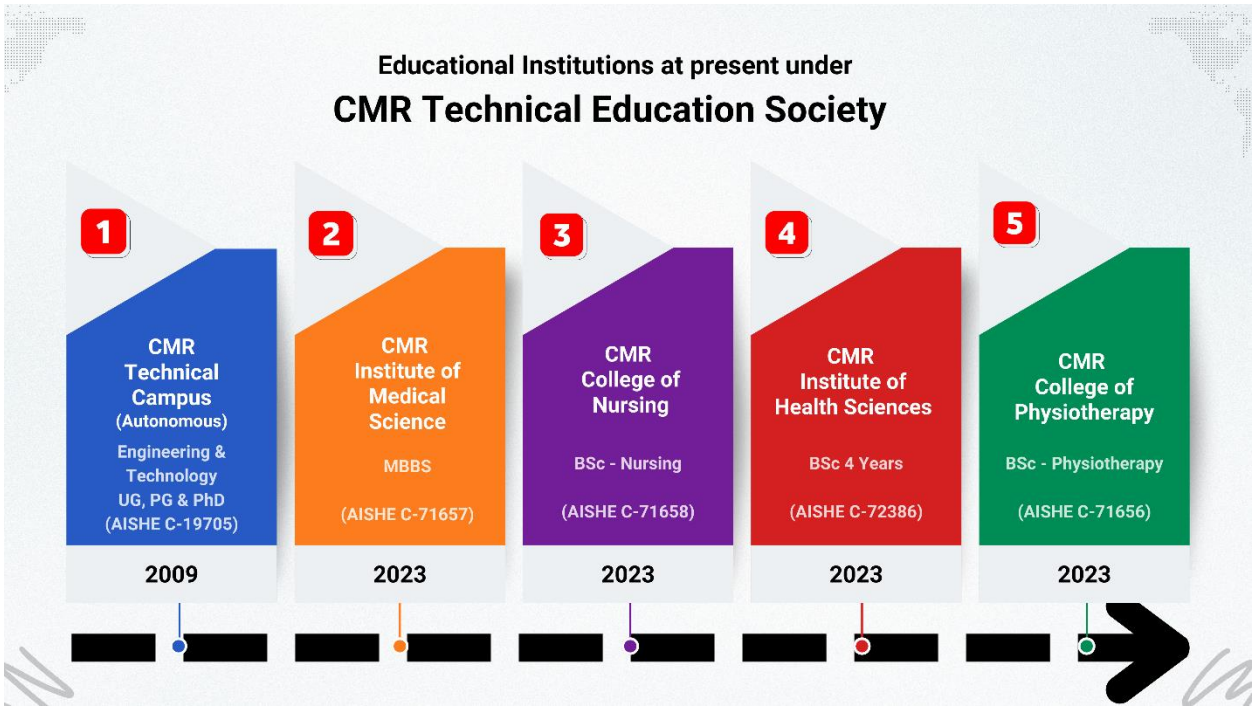
- By 2031: Contribute a skilled workforce across sectors such as digital health, semiconductors, cyber security, and renewable energy.
- By 2036: Position among top 200 NIRF Institutions nationally and top 1000 QS/THE globally.
- By 2041: Emerge as a globally benchmarked multidisciplinary Deemed to be University that empowers India's transition to a developed nation.



4. EXISTING INSTITUTIONS AND PROPOSED SCHOOLS

4.1 Existing Institutions of CMR Technical Education Society

The CMR Technical Education Society has established a diverse portfolio of higher education institutions spanning engineering, medical sciences, nursing, physiotherapy, and allied health sciences. These institutions have built a strong reputation for academic excellence, accreditation achievements, industry linkages, and community outreach. Under the proposed CMR-DTBU, they will serve as constituent colleges forming the foundation for the Deemed to be University's multidisciplinary model.



4.1.1. CMR Technical Campus (Engineering & Technology – Autonomous - (AISHE C-19705)

- Established in 2009.
- Approved by AICTE and affiliated to JNTU-H.
- Approved by UGC with 2f & 12 B status.
- An Autonomous Institution under UGC.
- Programmes: B.Tech in CSE, CSE(DS), CSE(AIML) & ECE, M.Tech in CSE & Embedded Systems, MBA and Ph.D. research programmes.

- Accreditations: NBA accreditation for major programmes, NAAC 'A' grade, NIRF ranking in Engineering & Innovation bands.

- Distinct Features: Technology Business Incubator, Centres of Excellence in Robotics, Renewable Energy, Industry 4.0, and Start-up mentoring ecosystem.

- Institution details and activities - Annexure 10.1
- Existing programme curriculum - Annexure 10.2
- Faculty List - Annexure 10.4
- MoUs & Collaboration - Annexure 10.5

4.1.2. CMR Institute of Medical Sciences (AISHE C-71657)

- Established in 2023.

- Approved by NMC and affiliated to KNR University of Health Sciences.

- Programme Offered: MBBS (annual intake of 250)

- Hospital: A 900+ bedded teaching hospital with advanced departments in Cardiology, Neurology, Orthopaedics, and General Medicine.

- Community Role: Rural health outreach programs, government partnerships for vaccination drives, and digital telemedicine initiatives.

- Institution details and activities - Annexure 10.1
- Existing programme curriculum - Annexure 10.2
- Faculty List - Annexure 10.4
- MoUs & Collaboration - Annexure 10.5

4.1.3. CMR College of Nursing (AISHE C-71658)

- Established in 2023.

- Approved by INC and affiliated to KNR University of Health Sciences.

- Programme: B.Sc Nursing (annual intake of 100)

- Strengths: High placement record in national and international healthcare organizations, simulation labs for clinical training, and emphasis on holistic patient care.

- Institution details and activities - Annexure 10.1
- Existing programme curriculum - Annexure 10.2
- Faculty List - Annexure 10.4
- MoUs & Collaboration - Annexure 10.5

4.1.4. CMR College of Physiotherapy (AISHE C-71656)

- Established in 2023.
- Approved by Government of Telangana and affiliated to KNR University of Health Sciences.
- Programme: Bachelor of Physiotherapy (BPT), annual intake of 50, with specializations in Neurology, Orthopedics, Cardio-respiratory sciences, and Sports Physiotherapy.
- Clinical Focus: Collaborations with sports academies, rural rehabilitation camps, and integration with the medical hospital for patient-centered training.

- Institution details and activities - Annexure 10.1
- Existing programme curriculum - Annexure 10.2
- Faculty List - Annexure 10.4
- MoUs & Collaboration - Annexure 10.5

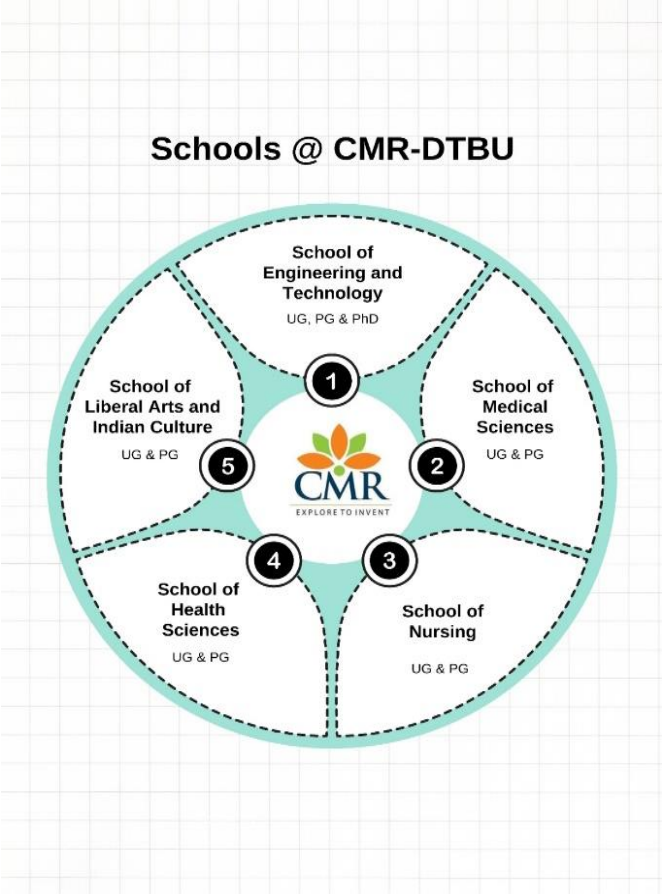
4.1.5. CMR Institute of Health Sciences (AISHE C-72386)

- Established in 2023.
- Approved by Government of Telangana and affiliated to KNR University of Health Sciences.
- Programmes: 5 Nos with annual intake of 120 - B.Sc in Medical Laboratory Technology, Radiology & Imaging Technology, Operation Theatre Technology, Respiratory Therapy Technology, Anaesthesia Technology;
- Special Features: Diagnostic training, industry internships, collaborations with diagnostic centers and hospitals, research projects in epidemiology and community health.

- Institution details and activities - Annexure 10.1
- Existing programme curriculum - Annexure 10.2
- Faculty List - Annexure 10.4
- MoUs & Collaboration - Annexure 10.5

4.2 Proposed Schools under CMR-DTBU

The proposed CMR-DTBU will reorganize and expand its academic offerings into **FIVE Schools of Study**, reflecting a **distinct, industry-supported, multidisciplinary** structure, flexibility of learning pathways, and alignment with National Education Policy 2020.



4.2.1. School of Engineering and Technology

- Programmes:
    - UG: B.Tech in Computer Science and Engineering, Electronics and Communication Engineering, AI & ML, Data Science, Semiconductor Technology, Quantum Computing, Digital Twin Technology, Cyber Security and Digital Health, etc .
    - PG: M.Tech in Computer Science Engineering, Embedded Systems, Computational Neuroscience & AI and Health Robotics and Assisted Nursing
    - Integrated PG: MTech in AI in Health Care Technology, Robotics and AI, etc.
    - MBA
    - Ph.D. in multiple engineering disciplines.

- Research Focus: Health informatics, AI-driven diagnostics, Smart Cities, Renewable Energy Systems, Robotics, Autonomous Vehicles, etc.
- Industry Partnerships: MoUs with IT/Tech firms, Start-up incubation labs, joint research with manufacturing industries.
- Detailed Programme Curriculum are given in Annexure 10.2 & 10.3
- Justification for Distinctiveness of the proposed Programmes and proposed Industry-Integrations are given in Chapter 9.
- Year of introduction of the proposed new Programmes with intake of the students are given below.

UG/PG/ Integrated	Name of the Programme	Duration (Yrs)	Existing or New	Intake	To offer in
UG	**Computer Science and Engineering**	**4**	**Existing**	**840**	**-**
UG	**Computer Science and Engineering (AIML)**	**4**	**Existing**	**300**	**-**
UG	**Computer Science and Engineering (Data Science)**	**4**	**Existing**	**240**	**-**
UG	**Electronics and Communication Engineering**	**4**	**Existing**	**60**	**-**
UG	**Semiconductor Technology**	**4**	**New**	**60**	**2026-27**
UG	**Quantum Computing**	**4**	**New**	**60**	**2026-27**
UG	**Digital Twin Technology**	**4**	**New**	**60**	**2026-27**
UG	**Cyber Security & Digital Health**	**4**	**New**	**60**	**2029-30**
Integrated	**AI in Health Care Technology**	**5**	**New**	**60**	**2026-27**
Integrated	**Robotics and Artificial Intelligence**	**5**	**New**	**60**	**2028-29**
PG	**Computer Science and Engineering**	**2**	**Existing**	**12**	**-**
PG	**Embedded Systems**	**2**	**Existing**	**12**	**-**
PG	**Computational Neuroscience and AI**	**2**	**New**	**12**	**2026-27**
PG	**Health Robotics and Assisted Nursing**	**2**	**New**	**12**	**2026-27**
PhD	**Engineering and Technology**	**2/3**	**Existing**	**-**	**-**
PG	**MBA**	**2**	**Existing**	**240**	**-**

4.2.2. School of Medical Sciences

- Programmes: MBBS.
- Teaching Hospital: Serves as a real-time clinical training ground, handling over 2,000 outpatients daily.
- Research Agenda: Translational medical research, epidemiological studies, digital healthcare integration.
- Detailed Programme Curriculum are given in Annexure 10.2 & 10.3
- Justification for Distinctiveness of the proposed Programmes and proposed Industry-Integrations are given in Chapter 9.
- Year of introduction of the proposed new Programmes with intake of the students are given below.

UG/PG/ Integrated	Name of the Programme	Duration (Yrs)	Existing or New	Intake	To offer in
UG	**MBBS**	**5**	**Existing**	**250**	**-**

4.2.3. School of Nursing

- Programmes: B.Sc Nursing.
- Key Features: Simulation centers, community-based nursing practice, international certification programmes.
- Focus: Women empowerment, maternal-child health, geriatric nursing, and global employability.
- Detailed Programme Curriculum are given in Annexure 10.2 & 10.3
- Justification for Distinctiveness of the proposed Programmes and proposed Industry-Integrations are given in Chapter 9.
- Year of introduction of the proposed new Programmes with intake of the students are given below.

UG/PG/ Integrated	Name of the Programme	Duration (Yrs)	Existing or New	Intake	To offer in
UG	**BSc - Nursing**	**4**	**Existing**	**100**	**-**

4.2.4. School of Health Sciences (Allied Health + Physiotherapy)

Allied Health Sciences

- Programmes: B.Sc in Allied Health (MLT, Radiology, Anaesthesia, Radiology, Digital Health, AI in Clinical Diagnosis).
- Community Role: Training community health workers, rural epidemiology research, mobile diagnostic units.
- Alignment: Contributing to SDG 3 (Good Health), SDG 6 (Clean Water & Sanitation), and SDG 11 (Sustainable Cities & Communities).

Physiotherapy

- Programmes: BPT
- Clinical Outreach: Rehabilitation clinics in rural communities, collaborations with sports organizations, neuro-rehab centers.
- Research: Innovations in assistive devices, digital and traditional rehabilitation, and geriatric wellness.
- Detailed Programme Curriculum are given in Annexure 10.2 & 10.3
- Justification for Distinctiveness of the proposed Programmes and proposed Industry-Integrations are given in Chapter 9.
- Year of introduction of the proposed new Programmes with intake of the students are given below.

UG/PG/ Integrated	Name of the Programme	Duration (Yrs)	Existing or New	Intake	To offer in
UG	BSc - Medical Lab Technology	4	Existing	50	-
UG	BSc - Anaesthesia Technology	4	Existing	20	-
UG	BSc - Operation Theatre Technology	4	Existing	20	-
UG	BSc - Respiratory Therapy Technology	4	Existing	10	-
UG	BSc - Radiology & Image Technology	4	Existing	20	-
UG	BSc - Digital Health	4	New	60	2026-27
Integrated	MSc - AI in Clinical Diagnostics	5	New	20	2030-31
UG	Bachelor of Physiotherapy (BPT)	4	Existing	50	-

4.2.5. School of Liberal Arts and Indian Culture

- Programmes:
  B.A. (Hons.) Indian Knowledge Systems and Cultural Heritage
  B.A. (Hons.) Public Policy.

- Both programs merge multiple disciplines — philosophy, sociology, economics, data science, governance, communication, and heritage studies — addressing India's critical knowledge and governance gaps.

- Detailed Programme Curriculum are given in Annexure 10.2 & 10.3

- Justification for Distinctiveness of the proposed Programmes are given in Chapter 9.

- Year of introduction of the proposed new Programmes with intake of the students are given below.

UG/PG/ Integrated	Name of the Programme	Duration (Yrs)	Existing or New	Intake	To offer in
UG	**B.A. (Hons.) Indian Knowledge Systems and Cultural Heritage**	**4**	**New**	**60**	**2026-27**
UG	**B.A. (Hons.) Public Policy**	**4**	**New**	**60**	**2027-28**

4.3 Interdisciplinary and Collaborative Initiatives

- Health-Tech Hub: Joint research and teaching between Medical Sciences and Engineering Schools in AI in Healthcare and wearable health devices.
- Community Health Integration: Nursing, Physiotherapy, and Public Health students to collaborate on free rural clinics, telemedicine initiatives, and maternal health camps.
- Global Collaborations: MoUs with international universities for dual degrees, exchange programmes, and collaborative research in Digital Health, and Management.
- Entrepreneurship & Start-up Ecosystem: Dedicated incubation hubs promoting student-led innovations in Health-Tech and Digital Business Models.

School	**Programmes (UG/PG/Ph.D.)**	**Focus Areas / Research Themes**	**Industry/Community Engagement**
Engineering & Emerging Tech	B.Tech, M.Tech, MBA, Ph.D.	AI, IoT, Smart Cities, Digital Health, Semiconductor	IT, Manufacturing, Robotics, AI, Cyber Security
Medical Sciences	MBBS	Clinical Research, Epidemiology	Teaching Hospital, Rural Outreach
Nursing	B.Sc	Maternal & Child Health	Simulation Labs, WHO partnerships
Health Sciences	BPT	Geriatrics, Sports, Neuro, Cardio Rehab, Community Health, Diagnostics	Rural Rehab, Mobile Diagnostic Units
Liberal Arts and Indian Culture	B.A. (Hons.)	National Mission for Indian Knowledge Systems (IKS), policy science and governance studies	Lokasamgraha, Vedantic and Yogic principles, sustainable practices

5. DETAILED STRATEGIC VISION PLAN FOR 15 YEARS

5.1 ACADEMIC PLAN

5.1.1 Strategic Academic Vision (5–10–15 Years)

The proposed CMR Deemed to be University (CMR-DTBU) envisions becoming a **globally benchmarked multidisciplinary institution** that integrates engineering, health sciences, management, liberal arts, and frontier technologies. Anchored in the spirit of the **National Education Policy (NEP 2020)** and aligned with **Viksit Bharat 2047**, the Deemed to be University aims to advance knowledge, nurture innovation, and deliver impactful education that addresses local, national, and global needs.

Our vision for the next fifteen years rests on three guiding pillars:

- **Excellence in Multidisciplinary Education** – NEP-aligned, flexible, credit-based programmes.
- **Innovation and Research Leadership** – hubs in digital health, AI, quantum computing, digital twins, and MedTech.
- **Societal Impact and Global Citizenship** – affordable healthcare, inclusive education, sustainability, and SDG contribution.

Phase I – Foundation (2026–2031)

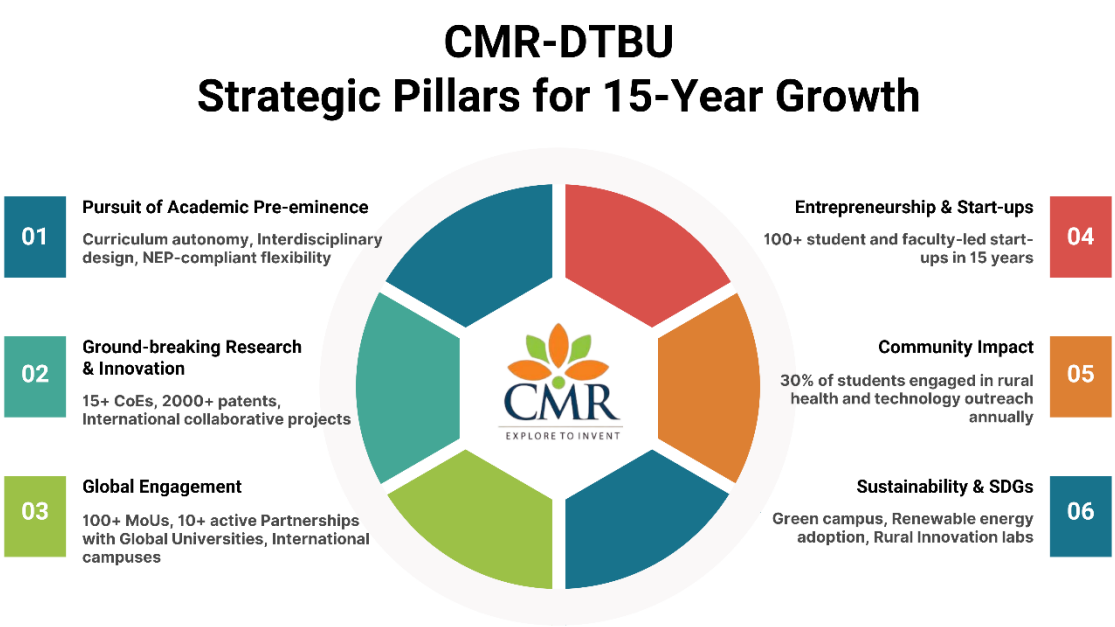
- Establishment of **five Schools of Study**: Engineering & Technology, Medical Sciences, Nursing, Health Sciences and Management.
- Launch of flagship **UG, PG, Integrated, and Ph.D. programmes** in frontier technologies and healthcare.
- **Centres of Excellence (CoEs):** Digital Health, AI & Robotics in Medicine, Public Health Policy, Semiconductor & Quantum Research.
- Creation of **Skill Development Centres, Simulation Labs, and Incubation Spaces**.
- **Accreditation Goals:** NBA for eligible programmes; NAAC A+ / Level-2 in MGBL grade within 5 years.
- **Ranking Targets:** NIRF entry in Overall, Engineering, Innovation, and Sustainability categories; achieve Top 300 in University, Management, Medical, Sustainability, Top 200 in Engineering, and Top 200 in Innovation.

Phase II – Expansion & Consolidation (2031–2036)

- Introduction of **interdisciplinary programmes**: AI in Healthcare, Health Informatics, Global Public Health, Cybersecurity in Medicine.
- Development of **Research & Innovation Hubs** in MedTech, Digital Medicine, Renewable Energy, and Sustainable Cities.
- Establish **international academic partnerships** for dual degrees, joint PhDs, and faculty/student exchanges.
- Scale-up of **funded projects** with ICMR, DBT, DST, WHO, and international funding bodies.
- Consolidate **start-up and entrepreneurship ecosystem** with incubators, accelerators, fablabs, and IP support.
- **Accreditation & Rankings:** NAAC A++ / Level-3 in MGBL; NIRF 200 Overall; Top 150 in Engineering, Top 150 in Innovation, Top 200 in Sustainability, Management, Research and Medical. Top global participation in QS & THE rankings.

Phase III – Global Leadership (2036–2041)

- Attain **QS/THE Top 800 global ranking** through internationalization and high-impact research.
- Position one among **Top 100 institutions in India** in NIRF Overall.
- Establish **international branch campuses and transnational collaborations** in Asia, Europe, and Africa.
- Emerge as a **world leader in translational medical research, AI-driven healthcare, and multidisciplinary learning**.
- Institutionalize **sustainability and SDG impact**—net-zero campus, healthcare outreach, rural technology solutions.
- Become a **preferred global destination** for students, faculty, and industry partners.



5.1.2 Proposed Distinct (D), Industry-Supported (I), Multidisciplinary (M) & Transdisciplinary (T) Programmes

School-wise

Sl.No	School	UG/PG/ Integrated	Name of the Programme	Duration (Yrs)	Intake	To offer in	Category
1	Engineering & Technology	UG	Semiconductor Technology	4	60	2026-27	D+I
2		UG	Quantum Computing	4	60	2026-27	D+I
3		UG	Digital Twin Technology	4	60	2026-27	D+I
4		UG	Cyber Security & Digital Health	4	60	2029-30	D+I
5		Integrated	AI in Health Care Technology	5	60	2026-27	D+I+M
6		Integrated	Robotics and Artificial Intelligence	5	60	2028-29	D+I+M
7		PG	Computational Neuroscience & AI	2	12	2026-27	D+M
8		PG	Health Robotics and Assisted Nursing	2	12	2026-27	D+T
9	Health Sciences	UG	BSc - Digital Health	4	60	2026-27	D+M
10		PG	MSc - AI in Clinical Diagnostics	2	20	2030-31	D+M
11	Liberal Arts and Indian Culture	UG	B.A. (Hons.) Indian Knowledge Systems and Cultural Heritage	4	60	2026-27	D
12		UG	B.A. (Hons.) Public Policy	4	60	2027-28	D

D - Distinct, I – Industry-Supported, M – Multidisciplinary, T-Transdisciplinary

Year-wise

Sl.No	To offer in	UG/PG/ Integrated	Name of the Programme	Duration (Yrs)	Intake	Category
1	2026-27 UG-5 PG-2 Integrated-1	UG	BTech -Semiconductor Technology	4	60	D+I
2		UG	BTech - Quantum Computing	4	60	D+I
3		UG	BTech - Digital Twin Technology	4	60	D+I
4		Integrated	BTech/MTech - AI in Health Care Technology	5	60	D+I+M
5		PG	MTech - Health Robotics and Assisted Nursing	2	12	D+T
6		PG	MTech - Computational Neuroscience & AI	2	12	D+M
7		UG	BSc - Digital Health	4	60	D+M
8		UG	B.A. (Hons.) Indian Knowledge Systems and Cultural Heritage	4	60	D
9	2027-28	UG	B.A. (Hons.) Public Policy	4	60	D
10	2028-29	Integrated	BTech/MTech - Robotics and Artificial Intelligence	5	60	D+I+M
11	2029-30	UG	BTech - Cyber Security & Digital Health	4	60	D+I
12	2030-31	PG	MSc - AI in Clinical Diagnostics	2	20	D+M

D - Distinct, I – Industry-Supported, M – Multidisciplinary, T-Transdisciplinary

5.1.3 Industries identified for Industry-Support of the proposed Programmes

Sl.No	Name of the Programme	Industry	Address
1	BTech - Semiconductor Technology	Tessolve & AMD	Gachibowli, Hyderabad & Raheja IT Park, Mindspace, APIIC Software Layout, Madhapur, Hyderabad
2	BTech - Quantum Computing	Qulabs & Quinfosys Pvt Ltd	Banjara Hills, Hyderabad & Tirumalagiri, Hyderabad
3	BTech - Digital Twin Technology	AVEVA	IT/ITES SEZ Nanakramguda, Hyderabad
4	AI in Health Care Technology	CMR Medical College & Hospital	Proposed CMR-DTBU campus
5	M.Tech in Computational Neuroscience and AI	Kastech Software Solutions Group	DLF Cyber City, Serilingampally, Hyderabad
6	M.Tech in Health Robotics and Assisted Nursing	Robotspace	Chanda Naik Nagar, Madhapur, Hyderabad
7	BSc - Digital Health	CMR Medical College & Hospital	Proposed CMR-DTBU campus

5.1.4 Employability, Skill Development, and Industry Linkages

- Establishment of Skill Labs (Nursing, Allied Health, Simulation Centres).
- Mandatory internships in hospitals, corporates, and research labs.
- Strong industry partnerships with IT majors, MedTech firms, pharma companies.
- Entrepreneurship Development Cell to support start-ups and innovation.
- Collaboration with National Skill Development Corporation (NSDC) for healthcare and digital technology certifications.
- Global exposure through international internships and exchange programs.

5.1.5 Entry–Exit Flexibility and Academic Bank of Credits (ABC)

Aligned with NEP 2020, CMR-DTBU will fully implement ABC-based academic pathways:

- **Multi-entry/Multi-exit Framework:**
    - UG Diploma after 1 year, Advanced Diploma after 2 years, Degree after 3/4 years.
    - PG Diploma after 1 year, Master's Degree after 2 years.
- **Credit Transfer Mechanism:**
    - Credits stored in Academic Bank of Credits (ABC).
    - Students can transfer credits between CMR-DTBU and other universities, including global partners.
    - Recognition of SWAYAM/NPTEL, Coursera, edX courses for credit transfer.
- Flexibility Outcome: Students receive personalized, flexible learning journeys, ensuring lifelong learning opportunities and enhanced employability.

5.1.6 Integration of Technology for Enhanced Learning Experience

The proposed CMR Deemed to be University envisions a digitally empowered learning ecosystem that seamlessly integrates technology into pedagogy, curriculum delivery, assessment, research, and student engagement. Technology will not be an adjunct, but a catalyst for innovation, inclusivity, and excellence in higher education.

Smart Classrooms & Digital Infrastructure

- All classrooms are ICT-enabled with interactive smart boards, AR/VR tools, and high-speed connectivity, ensuring immersive learning experiences.
- A Learning Management System (LMS) will be deployed for course delivery, assessments, discussion forums, and real-time feedback.
- Advanced simulation and digital twin laboratories will support programmes in AI, robotics, quantum computing, and healthcare technologies.

Online & Blended Learning Ecosystem

- Adoption of MOOCs, SWAYAM, NPTEL, and global platforms to supplement learning and provide credit-based flexibility in line with NEP 2020 and Academic Bank of Credits (ABC).
- Flipped classrooms and hybrid pedagogy will enable personalized, self-paced learning.
- Virtual labs and remote access tools will allow students to conduct experiments beyond physical constraints.

Artificial Intelligence in Teaching & Assessment

- AI-enabled adaptive learning platforms will analyze student learning patterns, identify gaps, and recommend personalized resources.
- Automated, data-driven assessment and feedback systems will enhance objectivity and help track continuous improvement.
- AI-powered proctoring tools will ensure transparency in online assessments.

Research, Innovation & Industry 4.0 Integration

- Establishment of Centers of Excellence in AI, Digital Health, Cybersecurity, Semiconductor Technology, and Quantum Computing with advanced computational infrastructure.
- Digital twin environments, robotics labs, and maker spaces will nurture experiential learning, prototyping, and entrepreneurship.
- Industry-aligned project platforms will enable students to work on live, tech-driven challenges.

Student-Centric Digital Services

- A Deemed to be University mobile app will integrate academic records, mentoring, library access, placements, and feedback systems.
- 24/7 digital library and e-resources, including international databases, journals, and AI-assisted search tools.
- Virtual career counseling, e-mentorship, and global exposure through collaborative online international learning (COIL).

Capacity Building for Faculty & Staff

- Faculty will undergo continuous training in digital pedagogy, AR/VR applications, AI-based analytics, and instructional design.
- A Teaching-Learning Excellence Centre (TLEC) will drive adoption of innovative teaching methods and blended learning practices.

Future-Oriented Vision

By 2030, CMR-DTBU aims to be recognized as a digitally advanced “University of the Future”, where technology enhances inclusivity, democratizes access, and creates global opportunities. By aligning with NEP 2020, Digital India Mission, and Viksit Bharat 2047 goals, the Deemed to be University will foster a generation of graduates who are digitally fluent, industry-ready, and globally competitive.

5.1.7 Mode of Imparting Education

The proposed CMR Deemed to be University will adopt a **learner-centric, technology-enabled, and outcome-based education model**, blending academic rigor with experiential learning and industry integration. The framework will ensure flexibility, inclusivity, and global relevance, in line with the **National Education Policy (NEP) 2020**, UGC guidelines, and Sustainable Development Goals (SDG 4: Quality Education).

Classroom-Based Learning

- All **lecture halls and tutorial rooms** will be ICT-enabled with interactive boards, digital projectors, and audio-visual systems.
- Emphasis on **outcome-based education (OBE)**, ensuring clarity of programme outcomes, course outcomes, and learning outcomes.
- Incorporation of **multidisciplinary curricula** and **choice-based credit system (CBCS)** for holistic learning.

Blended and Hybrid Learning

- Integration of **MOOCs, SWAYAM, NPTEL, Coursera, edX, and global platforms** as part of the credit framework.
- **Flipped classrooms** and **hybrid pedagogy** to combine face-to-face teaching with online resources.
- Virtual laboratories, simulation tools, and AR/VR applications to supplement hands-on learning.

Experiential and Practice-Based Learning

- Strong focus on **project-based learning (PBL)**, **case studies**, and **capstone projects** across programmes.
- Industry internships, apprenticeships, and **live consultancy assignments** for practical exposure.
- Establishment of **Innovation Centres, Maker Spaces, Fablabs, and Incubation Hubs** to nurture entrepreneurship and problem-solving.

Digital and Online Learning Ecosystem

- A **Learning Management System (LMS)** will provide course materials, assignments, assessments, and real-time feedback.
- **24/7 access to e-resources, e-library, digital repositories, and research databases** for continuous learning.
- AI-enabled personalized learning paths and adaptive assessments for diverse learner needs.

Collaborative and Global Learning

- **Collaborative Online International Learning (COIL)** and **joint classrooms** with partner universities abroad.

- Faculty and student exchange programs to foster global exposure.
- Guest lectures, webinars, and masterclasses by international experts and industry leaders.

Skill-Integrated and Vocational Learning

- Each programme will integrate **21st-century skills**: digital literacy, critical thinking, design thinking, entrepreneurship, and leadership.
- Vocational courses and add-on certifications will be aligned with **NSQF, Skill India, and Digital India missions**.
- **Multiple entry and exit options** under the Academic Bank of Credits (ABC).

Assessment and Continuous Evaluation

- **Continuous Internal Evaluation (CIE)** through assignments, presentations, group projects, and peer review.
- Competency-based examinations with an emphasis on **application, creativity, and innovation** rather than rote memorization.
- AI-driven analytics to track student progress and provide personalized academic support.

5.2 FACULTY RECRUITMENT PLAN

5.2.1 Recruitment Strategies

The proposed CMR-DTBU will adopt a multi-pronged recruitment strategy to ensure the appointment of competent faculty across disciplines.

- **Phased Recruitment**
    - Year 1–3: Core faculty for foundational programmes in Engineering, Medical, Nursing, Health Sciences and Management.
    - Year 5 onwards: Expansion to specialized programmes, hiring experts in AI, Health Informatics, Public Health, and IKS.
    - Year 10–15: Global recruitment drive for international faculty and visiting professors.
- **Qualification Standards**
    - Recruitment in line with UGC, NMC, INC, and AICTE norms.
    - Preference for Ph.D. holders with research publications, patents, and funded projects.
    - Medical faculty must fulfil statutory norms for teaching and clinical practice.
- **Recruitment Channels**
    - National and international advertisements in reputed newspapers and job portals.
    - Collaborations with faculty recruitment agencies for specialized programmes.
    - Visiting/Adjunct faculty and Professor of Practice appointments from leading global universities and industries.
- **Merit-based Selection**
    - Transparent screening, written assessment, and expert panel interviews.
    - Weightage for teaching ability, research potential, and industry/clinical experience.

5.2.2 Faculty Metrics and Projections

CMR-DTBU will maintain faculty–student ratios as per statutory norms (UGC/AICTE/NMC/INC).

- **Faculty–Student Ratio Target**: 1:20 for Engineering & Management, 1:10 for Medical Sciences, 1:10 for Nursing, Physiotherapy, Health Sciences, 1:20 for Liberal Arts, and as per UGC / AICTE / INC / NMC norms.
- Projected requirement is planned for 15 years in alignment with programme expansion.

Academic Year	Expected Campus Students Strength	Faculty Requirement
2025-2026 (Current AY)	**6343 (Existing)**	**628 (Available)**
Year-1 2026-2027	**7471**	**688**
Year-2 2027-2028	**8280**	**723**
Year-3 2028-2029	**9346**	**778**
Year-4 2029-2030	**10466**	**832**
Year-5 2030-2031	**10726**	**846**
Year-10 2035-2036	**12000**	**960**
Year-15 2040-2041	**14000**	**1120**

- By Year 15, the Deemed to be University will have ~1120 faculty members serving ~14,000 students.

5.2.3 Faculty Development and Training

Faculty are the cornerstone of academic excellence. CMR-DTBU will establish a Faculty Development Centre (FDC).

- **Induction & Orientation**
    - New faculty undergo pedagogy training, NEP 2020 orientation, and research methodology workshops.
    - Mentoring system pairing junior faculty with senior academicians.

- **Continuous Professional Development (CPD)**
    - Mandatory participation in FDPs, MOOCs (SWAYAM, NPTEL, Coursera), and certification programmes.
    - Faculty internships in industries and hospitals for exposure to real-world practices.
    - Funding support to present papers in national and international conferences.
- **Research Enablement**
    - Seed grants for faculty research.
    - Incentives for publications in Scopus/Web of Science journals.
    - Support for patent filing and commercialization of research.
    - Sabbatical leave for pursuing advanced research or post-doctoral studies abroad.
- **Leadership Development**
    - Training programs on academic leadership, outcome-based education, and governance.
    - Faculty encouraged to take up administrative roles (HoDs, Deans, Directors).

5.2.4 Human Resource Policy

CMR-DTBU will implement a progressive HR policy to ensure attractiveness, retention, and satisfaction of its faculty.

- **Recruitment & Promotion**
    - Transparent promotion system based on API scores, teaching feedback, research output, and community service.
    - Career Advancement Scheme (CAS) as per UGC norms.
- **Compensation & Benefits**
    - Competitive salary packages aligned with UGC/AICTE/NMC/INC scales.
    - Performance-linked incentives for research, publications, patents, and consultancy.
    - Health insurance and wellness programs for faculty and families.

- **Work-Life Balance**
    - Flexibility in teaching schedules with blended learning options.
    - Childcare and family-friendly policies.
    - Sabbatical, study leave, and exchange opportunities.
- **Recognition & Awards**
    - Annual awards for best teacher, researcher, innovator, and mentor.
    - Public acknowledgment of faculty achievements in academic forums.
- **Retention Strategies**
    - Housing facilities on campus for long-term faculty.
    - Faculty fellowship programmes with global universities.
    - Structured career progression to retain top talent.

5.3 STUDENTS ADMISSION PLAN

5.3.1 Admission Policy

The proposed CMR Deemed to be University will follow a **transparent, merit-based, and inclusive admission policy** in line with UGC Regulations and NEP 2020 guidelines. Admissions will be carried out through a combination of:

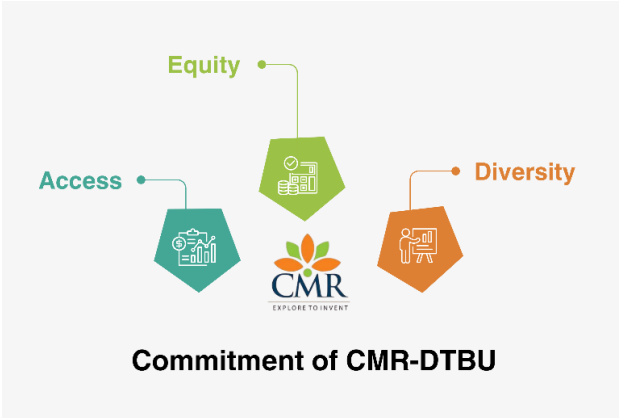
- **National-level entrance examinations** which will be conducted by the Deemed to be University for professional programmes in engineering, management, health sciences, and liberal arts as per the guidelines of the UGC/AICTE/NMC/INC.
- **Deemed to be University-level entrance tests and interviews** for select innovative and interdisciplinary programmes.
- **Direct merit-based admissions** for certain UG programmes based on academic performance in qualifying examinations, with due consideration to diversity, inclusivity, and outreach.

The proposed Deemed to be University will ensure compliance with all regulatory frameworks (UGC, AICTE, INC, NMC, etc. as applicable) in determining eligibility, intake, and admission procedures. A centralized Admission Cell will oversee the entire process using **digital platforms** to guarantee efficiency, transparency, and grievance redressal.

5.3.2 Inclusivity, Reservation, and Diversity

CMR is committed to **equity, access, and diversity** as cornerstones of its admission process:

- Reservation of seats for SC, ST, OBC (Non-Creamy Layer), EWS, and PwD categories will be provided as per Government of India and UGC norms. Special provisions will be made for **girls, first-generation learners, rural students, and economically weaker sections**.
- An **Equal Opportunity Cell** will monitor diversity and inclusivity, ensuring fair representation across disciplines.
- International admissions will be promoted through dedicated quota (up to 15% supernumerary seats), aligning with India's vision of becoming a **global education hub**.



Commitment of CMR-DTBU

5.3.3 Annual Intake Distribution

The Deemed to be University plans a **phased introduction of programmes**, starting with professional and emerging areas of engineering, management, health sciences, applied sciences and liberal arts.

- **Year 1 (2026–27):** Launch of flagship, industry-aligned and supported programmes (B.Tech, B.Sc. Health Sciences, MBA, MBBS, Nursing, Physiotherapy, liberal arts etc.) with an **initial intake of ~2128 students**.
- **Year 5 (2030–31):** Expansion to multidisciplinary and industry-supported offerings, growing to **~2328 students** across UG, PG, Integrated, and Ph.D. programmes.
- **Year 15 (2040–41):** A fully developed multidisciplinary Deemed to be University with an estimated **annual intake of ~4000 students**, aligning with regional, national, and international demand.

Distribution will balance **STEM (Engineering, Health Sciences, Technology)** with **Social Sciences, Management, and Liberal Arts**, ensuring multidisciplinary growth.

5.3.4 Scholarships and Financial Aid

The proposed Deemed to be University is committed to making education accessible through **comprehensive scholarship and financial aid mechanisms**:

1. **Merit Scholarships** – For top-ranking students in entrance examinations and board results.
2. **Economically Weaker Section Scholarships** – For students from economically weaker backgrounds.
3. **First Graduate Scholarships** – For students who are first grauate in their family.
4. **Government & Agency Scholarships** – Support for students availing central/state schemes.
5. **Research Fellowships & Teaching Assistantships** – For Ph.D. and postgraduate scholars.
6. **Special Scholarships** – For girls, wards of single parent, differently-abled students, and wards of defense personnel.
7. **Industry-sponsored scholarships** – Through MoUs with corporates and industry partners.

Financial aid will cover tuition waivers, fee concessions, and living allowances, supported by a dedicated **CMR Student Support Fund** from the CMR Technical Education Society.

5.3.5 Rural and Marginalized Outreach

To bridge the urban-rural educational divide, the proposed Deemed to be University will adopt a **community-centric admission strategy**:

- Establishment of **admission facilitation centers** in rural and semi-urban areas of Telangana and neighbouring states.
- Conducting **awareness campaigns, bridge courses, and career counselling programs** for rural students.
- Reservation of a portion of seats for students from **rural, tribal, and marginalized communities**.
- Collaboration with NGOs, local schools, and government bodies to identify and support deserving candidates.
- Provision of **free remedial coaching, English communication training, and digital literacy programmes** to ease the transition of rural students into higher education.

By integrating inclusivity and outreach, the proposed Deemed to be University aims to become a **regional catalyst** for educational equity, while simultaneously contributing to national Gross Enrolment Ratio (GER) targets.

5.4 RESEARCH AND INNOVATION PLAN

5.4.1 Research Thrust Areas

The proposed CMR Deemed to be University will align its research priorities with **national missions, global challenges, and local community needs**. The key thrust areas include:

1. **Engineering & Technology**
    - Artificial Intelligence, Machine Learning & Data Analytics
    - Cybersecurity, Blockchain, Cloud Computing & Quantum Computing
    - Internet of Things (IoT), 5G/6G, and Smart Systems
    - Advanced Materials, Nanotechnology, and Smart Manufacturing
    - Drone Technology, and Autonomous Systems
    - Semiconductor Technology
    - Quantum Computing
    - Digital Twin Technology
2. **Health Sciences**
    - Digital Health & Medical Informatics
    - Precision Medicine, Genomics, and Biotechnology
    - Regenerative Medicine & Tissue Engineering
    - Public Health, Epidemiology, and Preventive Care
    - Nutrition, Sports Science, and Rehabilitation
3. **Sustainable Development**
    - Renewable Energy & Green Hydrogen
    - Climate Resilience, Water Resource Management, and Agriculture 4.0
    - Smart Cities, Urban Sustainability & Circular Economy
4. **Liberal Arts & Indian Culture**
    - Public Policy, Governance, and Inclusive Development

5.4.2 Translational and Community Research

CMR will emphasize **translational research** that bridges laboratories with industry, hospitals, and communities:

- **Healthcare Outreach:** Low-cost medical devices, telemedicine, and AI-enabled diagnostics for rural and underserved populations.
- **Agritech Innovations:** Drone-enabled crop monitoring, soil health analytics, and IoT-based irrigation for farmers.

- **Digital Literacy & Inclusion:** Development of mobile-based platforms for education, health awareness, and financial inclusion.

- **Rehabilitation & Physiotherapy Research:** Affordable prosthetics, assistive technologies, and community rehabilitation models.

A **CMR Community Research and Innovation Centre (CMR-CRIC)** will be established to pilot solutions in nearby districts, ensuring research directly impacts regional socio-economic development.

5.4.3 Centres of Excellence (CoEs)

To foster multidisciplinary innovation, the proposed Deemed to be University will establish specialized CoEs aligned with its academic programmes:

1. **Centre for AI, Data Science & Cybersecurity**
   Focus: AI applications, data analytics, cyber defense, and blockchain for digital health & governance.

2. **Centre for Digital Health & Precision Medicine**
   Focus: AI in diagnostics, biomedical devices, genomics, electronic health records, wearable sensors.

3. **Centre for Start-up, Incubation & Entrepreneurship (CSIE)**
   Focus: Student/faculty start-ups, incubation, acceleration, industry mentoring, and investor connect.

4. **Centre for Semiconductor Technology**
5. **Centre for Quantum Computing**
6. **Centre for Digital Twin Technologies**
7. **Centre for Robotics**
8. **Centre for Indian Knowledge Systems**

5.4.4 Incubation and Start-up Ecosystem

CMR-DTBU will host a **Technology Business Incubator (TBI)** registered with **MSME and DST**, providing:

- **Pre-incubation training** on design thinking and entrepreneurship.
- **Incubation spaces** with co-working labs, prototyping facilities, and mentorship.
- **Funding avenues** through SIDBI, BIRAC, Atal Innovation Mission, and CSR partnerships.
- **Student Innovation Fund** to seed early-stage ideas.
- Annual **Start-up Conclave & Innovation Expo** to showcase entrepreneurial talent.

The goal is to **nurture 100+ start-ups in the first 10 years** in areas of HealthTech, EdTech, AgriTech, FinTech, and GreenTech.

5.4.5 Collaborations and MoUs

Strategic partnerships will drive CMR-DTBU's global research footprint.

Proposed Collaborators in India:

- **IIT Madras, NIT Warangal, IIIT Hyderabad** (Emerging Tech & AI)
- **AIIMS Delhi, NIMHANS, CMC Vellore** (Health Sciences)
- **ICMR, DRDO, ISRO, BARC, CSIR Labs** (National research agencies)
- **Apollo Hospitals, Narayana Health, Dr. Reddy's Labs** (Industry healthcare partners)
- **TCS, Infosys, Tech Mahindra, Microsoft India** (IT & Digital Transformation)

Proposed International Collaborators:

- **MIT (USA), Stanford University, Johns Hopkins University** (Digital Health, Biomedical Research)
- **University of Oxford & University of Cambridge (UK)** (Public Health, Policy, Genomics)
- **Nanyang Technological University (Singapore)** (AI, Smart Cities)
- **Technical University of Munich & ETH Zurich** (Sustainable Engineering, Materials)
- **University of Melbourne & Monash University (Australia)** (Healthcare and Nursing)

5.4.6 Patents and IPR

The proposed Deemed to be University will develop a robust **Intellectual Property and Technology Transfer Cell (IPTTC)**:

- Filing/Publishing/Granting **500+ patents in the first 5 years** across engineering, medical devices, and social innovations.
- Encouraging **student innovation disclosure forms** and providing financial support for patent filing.
- Establishing **industry licensing models** to commercialize university research.
- Conducting **IPR awareness programs** in collaboration with NEN, Indian Patent Office, CIPAM, WIPO, and NRDC.
- Setting a target of **2000+ patents (file/publish/grant) and 30 technology transfers in 15 years**.

5.5 CAMPUS INFORMATION AND COMMUNICATION TECHNOLOGY PLAN

5.5.1 Libraries and e-Resources

- **Central Library (Phase 1: available area of 2232 sq.m; Phase 2: additional 1000 sq.m; Phase 3: additional 2000 sq.m)** with reading halls, reference sections, discussion zones, and e-learning pods.
- **Digital Library & Repositories:** Subscriptions to **IEEE, ACM, Elsevier, Springer, ProQuest, Scopus, Web of Science**.
- **Institutional Repository:** Digital theses, faculty publications, and open access materials.
- **Learning Resource Centres in each School** equipped with discipline-specific resources.
- Integration with **National Digital Library (NDLI)**, **DELNET**, and **Shodhganga** for research access.

5.5.2 ICT and Smart Campus Plan

The proposed Deemed to be University will develop a **smart, digitally integrated campus** with:

- **ICT-enabled Classrooms:** 100% classrooms fitted with digital boards, projectors, lecture capture, and hybrid teaching capabilities.
- **High-Speed Connectivity:** 10 Gbps campus backbone with Wi-Fi across hostels, academic, and administrative areas.
- **Learning Management System (LMS):** Moodle/Blackboard integrated with AI-enabled analytics to track learning outcomes.
- **Smart Campus Applications:** RFID-enabled student ID, smart attendance, e-examination systems, and digital payments.
- **Virtual Labs & AR/VR Classrooms:** In partnership with IIT Virtual Labs and global ed-tech platforms.

5.5.3 Student Support Systems

A comprehensive set of support systems will ensure holistic student development:

- **Counselling & Mentoring:** Student Mentorship Scheme with faculty advisors, counselling psychologists.

- **Career Development Centre:** Placement training, internships, skill-building workshops.
- **Clubs & Societies:** Technical clubs, cultural associations, music/drama societies, sports clubs, and entrepreneurship cells.
- **International Student Support Cell:** Visa, language, and integration support.
- **Special Cells:** Equal Opportunity Cell, SC/ST Cell, Women's Development Cell, Grievance Redressal, Anti-Ragging Committee.
- **Healthcare:** 24x7 health centre with CMR Medical College Hospital; telemedicine facilities.

5.5.4 Sustainability and Green Initiatives

The proposed CMR Deemed to be University will be a **sustainable green campus**, integrating:

- **Energy:** Solar power generation (target: 2 MW in 10 years), LED lighting, energy-efficient systems.
- **Water:** Rainwater harvesting, sewage treatment plants, grey water recycling.
- **Green Landscaping:** Botanical gardens, herbal medicine garden, shaded walkways.
- **Waste Management:** Solid waste segregation, organic composting, and e-waste disposal.
- **Green Buildings:** IGBC-certified classrooms and laboratories with natural lighting and ventilation.
- **Sustainable Mobility:** Bicycle-sharing, electric shuttle buses, and EV charging stations.

5.6 INFRASTRUCTURE DEVELOPMENT PLAN

5.6.1 Existing Infrastructure

The CMR Technical Education Society currently operates institutions in Engineering, Technology, Medical Sciences, Nursing, Allied Health Science and Physiotherapy with modern academic facilities. These existing campuses provide a robust baseline infrastructure consisting of:

- **Academic Blocks:** ICT-enabled classrooms, specialized laboratories, computer centres, indoor auditorium and seminar halls.
- **Library & Digital Access:** Central library of all the existing institutions with 50,000+ volumes, journals, e-journal access (IEEE, Scopus, ScienceDirect).
- Medical College, Engineering and Technology Labs, Nursing skill labs, Medical simulation centres, Operation theatres, etc.
- **Student Amenities:** Canteens, sports grounds, indoor recreation facilities, and health centres.
- **Residential Facilities:** Separate hostels for boys and girls with Wi-Fi connectivity.
- **Innovation Ecosystem:** Initial incubation and project labs to promote entrepreneurship and start-ups.

Present Status

- **Land Area : Ac 20-25 Gts**
- **Building Space : 1,06,945.71 SQ.M**
- **Present Students Strength : 6343**
- **Students Staying in Hostels : 2000 (1000 men and 1000 women)**
- **Number of Faculty and Staff: 628 + 523**

The detailed existing facilities are given in Annexure – 10.1.

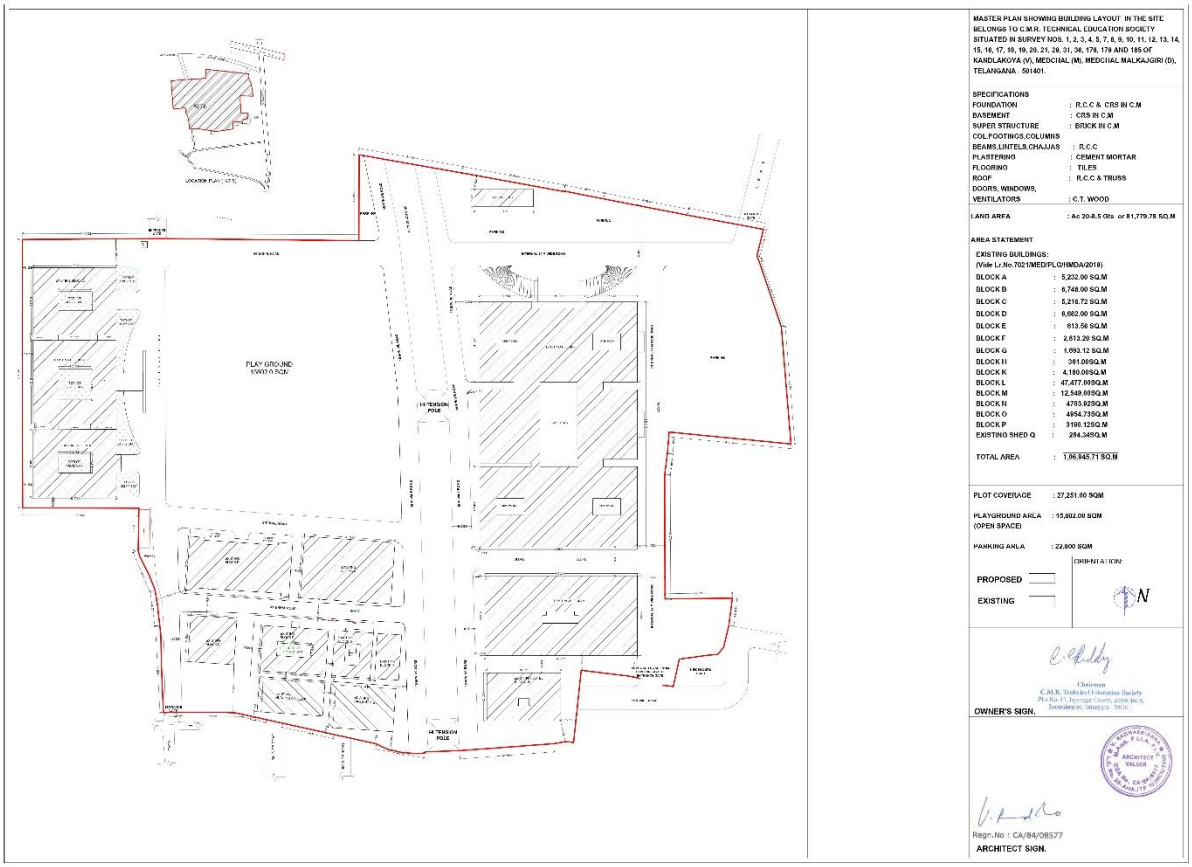
Existing Facilities

Land availability for CMR Technical Education Society

Place: Kandlakoya (V), Medchal Road, Hyderabad - 501401, Telangana
Connectivity: All lands are connected (one piece)

Total Area : Ac 20-25 Gts

Master Plan


PLAY GROUND
MASTER PLAN SHOWING BUILDING LAYOUT IN THE SITE BELONGS TO C.M.R. TECHNICAL EDUCATION SOCIETY SITUATED IN SURVEY NOS. 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 28, 31, 36, 178, 179 AND 185 OF KANDLAKOYA (V), MEDCHAL (M), MEDCHAL MALKAJGIRI (D), TELANGANA - 501401.
SPECIFICATIONS
FOUNDATION : R.C.C & CRS IN C.M
BASEMENT : CRS IN C.M
SUPER STRUCTURE : BRICK IN C.M
COL,FOOTINGS,COLUMNS BEAMS,LINTELS,CHAJJAS : R.C.C
PLASTERING : CEMENT MORTAR
FLOORING : TILES
ROOF : R.C.C & TRUSS
DOORS, WINDOWS, VENTILATORS : C.T. WOOD
LAND AREA : Ac 20-8-5 Gts or 81,779.78 SQ.M
AREA STATEMENT
EXISTING BUILDINGS:
(Vide Lr.No.7021/MED/PLG/HMDA/2019)
BLOCK A : 5,232.00 SQ.M
BLOCK B : 6,748.00 SQ.M
BLOCK C : 5,216.72 SQ.M
BLOCK D : 6,662.00 SQ.M
BLOCK E : 813.56 SQ.M
BLOCK F : 2,813.20 SQ.M
BLOCK G : 1,092.12 SQ.M
BLOCK H : 361.00SQ.M
BLOCK K : 4,180.00SQ.M
BLOCK L : 47,477.00SQ.M
BLOCK M : 12,548.00SQ.M
BLOCK N : 4703.92SQ.M
BLOCK O : 4954.73SQ.M
BLOCK P : 3198.12SQ.M
EXISTING SHED Q : 284.34SQ.M
TOTAL AREA : 1,06,845.71 SQ.M
PLOT COVERAGE : 27,251.80 SQM
PLAYGROUND AREA (OPEN SPACE) : 15,802.00 SQM
PARKING AREA : 22,800 SQM
ORIENTATION:
PROPOSED
EXISTING
N
Chairman
C.M.R. Technical Education Society
OWNER'S SIGN.
ARCHITECT
VALUER
Regn.No : CA/84/08577
ARCHITECT SIGN.

Administrative Area

S. No	Details	Area (SQ.M)
1	Block B	1012.16
2	Block M	1815.49
3	Block NC	139.35
Total Area : 2967 SQ.M		

Academic Area

S. No	Details	Area (SQ.M)
1	Block A	5232.00
2	Block B	6748.00
3	Block C	5216.72
4	Block D	6682.00
7	Block K	4180.00
8	Block L	40635.16
9	Block M	12796.00
10	Block NC	3188.89
Total Area : 84,680.00 SQ.M		

Library Area

S. No	Details	Area (SQ.M)
1	Block-D	1499.13
2	Block-M	733.00
Total Area : 2,232.13 SQ.M		

Other Facilities

S. No	Details	Area (SQ.M)
1	Cafeteria [Block-E & H]	974.56
2	Auditorium	1057.25
3	Seminar Halls	781.02
4	Yoga Centre	138.00
5	Indoor Sports Facilities	308.80
Total Area : 3,259.63 SQ.M		

Hostel Area

S. No	Details	Area (SQ.M)
1	Block F (Girls)	2813.20
2	Block G (Girls)	1693.12
3	Block N (Boys)	4703.92
4	Block NCH (Girls)	4954.73
Total Area : 14,164.97 SQ.M		

CMRTES will be **scaled significantly** for the proposed Deemed to be University to meet UGC norms and cater to the planned phased intake (Year 1: ~7,471 students; Year 5: ~10,726 students; Year 15: ~14,000 students).

CMR DTBU – INFRASTRUCTURE FACILITIES

Aerial Plan

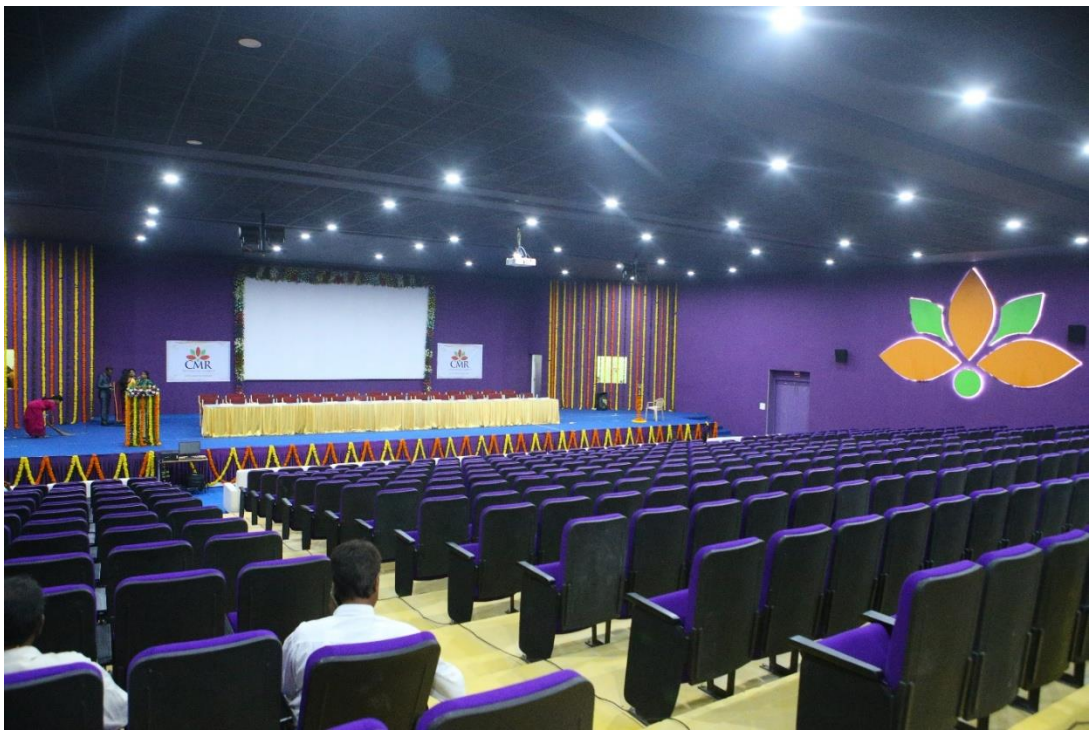
Blocks-A, B, C [CMRTC – Buildings]

Block-D [Auditorium Building]

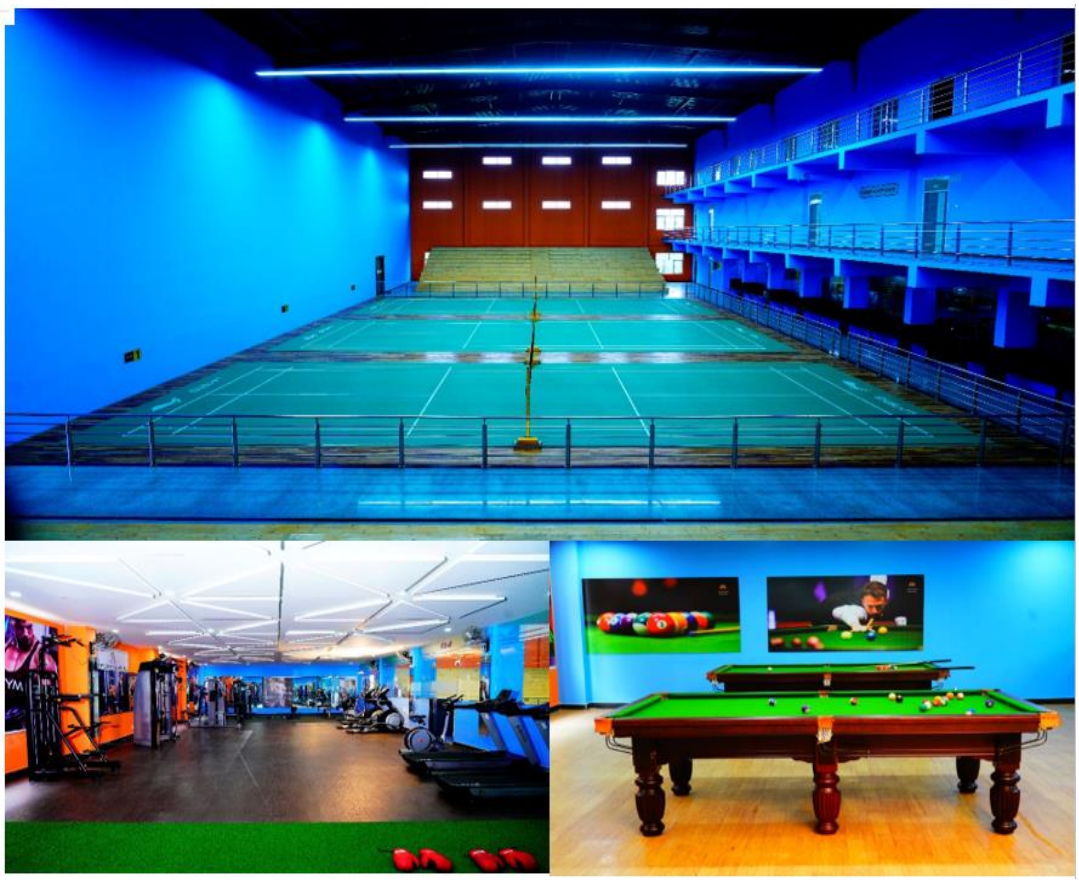
Block-M [CMRIMS Building]

Block-K [Sports Complex]

Central Play Ground



Auditorium



Sports Complex Facilities

Seminal Hall & Central Library

Digital Class Rooms and Computer Laboratories

CT Scan Equipment

Research Laboratory

Laboratory

Operation Theatre

Operation Theatre

Operation Theatre

ICU Unit

5.6.2 Proposed Expansion

The proposed Deemed to be University shall be developed on **expanding the existing campus** in Kandlakoya Village, Medchal Rd, nearby Nehru Outer Ring Road, EXIT 6, Hyderabad, Telangana 501401 with Ac **20-25 Gts**, designed for multidisciplinary growth.

Year-wise Intake & Expected Students Strength

Academic Year	Intake Proposed	Students Admitted / to be Admitted	Expected Campus Students Strength
2025-2026 (Existing)	**1744** (Existing)	**1744** (Admitted)	**6343** (Existing)
Year-1 2026-2027	**1744+384 = 2128**	**2128**	**7471**
Year-2 2027-2028	**2128+60 = 2188**	**2188**	**8280**
Year-3 2028-2029	**2188+60 = 2248**	**2248**	**9346**
Year-4 2029-2030	**2248+60 = 2308**	**2308**	**10466**
Year-5 2030-2031	**2308+20 = 2328**	**2328**	**10726**
Year-10 2035-2036	**2568**	**2568**	**12000**
Year-15 2040-2041	**4000**	**4000**	**14000**

The expansion is planned in **phases** aligned with student growth:

- **Land:** For future expansion, if required, the adjoining land owned by the Board of Members of the Society - beyond the existing Ac 20–25 Gts - may be leased to the proposed Deemed to be University on a long-term basis or donated.

- **Academic Area (per phase):**
  - Year 1: For additional about 384 students – Already Available to accommodate
  - Year 5: To built 3,500 sq.m for additional about 3255 students
  - Year 15: To built 10,000 sq.m for additional about 6530 students

- **Administrative Area:** Dedicated offices for Chancellor, Vice-Chancellor, Pro Vice-Chancellor, Registrar, Controller of Examinations, Finance & HR, IQAC, and Deans – Already Available.

- **Student Amenities Centre:** Dining, health centre, bank/ATM, stationery, and student counselling.

- **Hostels:** Accommodation with separate residences for men and women.

  - Year 1: Accommodation for 2000 students (1000 men and 1000 women) is available
  - Year 5: additional 1000 students
  - Year 15: additional 2000 students

- **Sports & Wellness Infrastructure:**

  - Outdoor stadium for cricket, football, athletics
  - Indoor stadium for badminton, basketball, and table tennis
  - Yoga and meditation halls
  - Gymnasiums for boys and girls

- **Academic Support Facilities:**

  - Seminar Halls (capacity: 200–300 each) in every school
  - Auditorium (2000 seating) for conferences, convocation, and cultural events – existing
  - Examination Block with secure digital evaluation systems
  - Dedicated faculty rooms, tutorial rooms, and lounges

5.7 FINANCIAL PLAN

5.7.1 Corpus Fund Requirement

As per UGC Regulations for Deemed-to-be Universities, a **minimum corpus of ₹25 crore** is mandatory for self-financing institutions under the Distinct Category.

The Sponsoring Body, **CMR Technical Education Society**, will establish:

- **Corpus Fund:** ₹25 crore.
- Campus development, laboratories, faculty recruitment, and technology adoption.

Key Assumptions:

- Average annual fee: ₹0.65–0.85 lakh for BA/BSc programmes, ₹1.05–2.00 lakh for BTech programmes, ₹0.60–23 lakh for MBBS.
- 10% growth in revenue per year through enhanced intake and value-added courses.
- Major expenditure heads: Salaries (35%), Infrastructure (25%), Labs & ICT (15%), Research (10%), Scholarships (10%).

5.7.2 Resource Mobilization

Funds will be mobilized through **multiple streams**:

1. **Student Fee Revenue:** Primary revenue stream, contributing ~80-90% of annual income.
2. **Research Grants & Consultancy:** DST, DBT, ICMR, UGC, AICTE, CSR partnerships; projected ₹25 Cr. in 5 years.
3. **Industry Collaborations:** Sponsored labs, Centres of Excellence, and endowments (Infosys, Microsoft, Apollo, Dr. Reddy's Labs).
4. **Alumni & Philanthropy:** Creation of **CMR Deemed to be University Foundation** to attract alumni donations and CSR funding.
5. **International Students:** 10–15% supernumerary seats at higher tuition fees.
6. **Auxiliary Revenue:** Hostel, transport, executive training, online programmes.

5.7.3 Fund Flow Statements (Illustrative)

Year 1 (2026–27):

- **Inflows:**
  - Fee Collection: ₹104 Cr.
  - Hostel & Amenities: ₹7 Cr.
  - Grants/Donations: ₹3 Cr.

- **Outflows:**
  - Salaries & Benefits: ₹39 Cr.
  - Infrastructure & Labs: ₹26 Cr.
  - ICT, Library, Digital Resources: ₹7 Cr.
  - Scholarships & Aid: ₹9 Cr.
  - Operating Expenses: ₹11 Cr.
  - Innovation, Research & Development: ₹8 Cr.

Year 5 (2030–31):

- **Inflows:**
  - Fee Collection: ₹190 Cr.
  - Hostel & Amenities: ₹13 Cr.
  - Grants/Research/CSR: ₹6 Cr.

- **Outflows:**
  - Salaries & Benefits: ₹71 Cr.
  - Infrastructure Expansion: ₹48 Cr.
  - ICT, Library & Digital Resources: ₹13 Cr.
  - Scholarships & Aid: ₹17 Cr.
  - Operating Expenses: ₹21 Cr.
  - Innovation, Research & Development: ₹15 Cr.
  - Surplus over Expenditure: ₹25 Cr. (used for New School establishment)

Year 10 (2035–36):

- **Inflows:**
  - Fee Collection: ₹220 Cr.
  - Hostel & Amenities: ₹15 Cr.
  - Grants/Donations: ₹7 Cr.

- **Outflows:**
  - Salaries & Benefits: ₹82 Cr.
  - Infrastructure & Labs: ₹56 Cr.
  - ICT, Library, Digital Resources: ₹15 Cr.
  - Scholarships & Aid: ₹19 Cr.
  - Operating Expenses: ₹24 Cr.
  - Innovation, Research & Development: ₹17 Cr.

Year 15 (2040–41):

- **Inflows:**
  - Fee Collection: ₹250 Cr.
  - Hostel & Amenities: ₹18 Cr.
  - Grants/Donations: ₹8 Cr.

- **Outflows:**
  - Salaries & Benefits: ₹94 Cr.
  - Infrastructure & Labs: ₹63 Cr.
  - ICT, Library, Digital Resources: ₹17 Cr.
  - Scholarships & Aid: ₹22 Cr.
  - Operating Expenses: ₹28 Cr.
  - Innovation, Research & Development: ₹19 Cr.

5.7.4 Fee Structures (Indicative)

School	Programme	Fee Range (per year) (₹ in lakh)
School of Engineering & Technology	BTech	1.05 – 2.00
	MTech	0.65 – 1.00
	MBA	0.65 – 1.00
School of Medical Sciences	MBBS	0.60 – 23.00
School of Nursing	BSc Nursing	0.45 – 0.90
School of Health Sciences	BSc Allied Health	0.45 – 0.90
	MSc Allied Health	0.45 – 0.90
	BPT	0.45 – 0.90
School of Liberal Arts and Indian Culture	B.A. (Hons.)	0.70 – 1.00

Scholarships: Up to **10-15% students** will be covered under merit, means-cum-merit, sports, girl child, rural outreach, and EWS categories.

STRATEGIC VISION PLAN FOR 15 YEARS			
Parameter	**5 Year (2026-2031)**	**10 Year (2026-2036)**	**15 Year (2026-2041)**
Number of Total Programmes	24	45	60
Campus Strength (Students)	10726	12000	14000
Number of Faculty on Campus	846	960	1120
Quality Publications	2000	4000	8000
Patents (File/Publish/Grant)	500	1000	2000
Transfer of Technology	5	15	30
Startups	10	50	100
Research Funding (Govt. & Industry)	20 Cr	50 Cr	100 Cr
Centre of Excellence	7	10	15
Administrative Area (SQ.M)	1667	1750	1925
Academic Area (SQ.M)	91520	96096	10570
Library Area (SQ.M)	2232	2344	2578
Hostel (SQ.M)	13804	14494	15943
Financial In-Flow	209 Cr	242 Cr	275 Cr
Financial Out Flow	184 Cr	213 Cr	242 Cr

QUALITY ASSURANCE AND ACCREDITATION			
Parameter	**5 Year (2026-2031)**	**10 Year (2026-2036)**	**15 Year (2026-2041)**
NAAC Accreditation	A+ / Level-2 in MBGL	A++ / Level-3 in MBGL	A++ / Level-4 in MBGL
NBA Accreditation	75% of eligible programmes	90% of eligible programmes	100% eligible programmes
NIRF – Overall	Top 300	Top 200	Top 100
NIRF – Engineering	Top 200	Top 150	Top 100
NIRF – Innovation	Top 200	Top 150	Top 100
NIRF – Sustainability	Top 300	Top 200	Top 100
NIRF – Medical	Top 300	Top 200	Top 100

NIRF – Management	Top 300	Top 200	Top 100
NIRF – Research	Top 300	Top 200	Top 100
ABET for Engineering Programme	-	2 Programmes	5 Programmes
AACSB/EQUIS/AMBA (Management),	-	Accreditation	Accreditation
QS I-Gauge	Gold Rank	Diamond or Platinum Rank	-
QS / THE Ranking	-	Top 1000 in World	Top 800 in World
THE IMPACT Ranking	-	Top 1000 in World	Top 800 in World

5.8 GOVERNANCE AND ADMINISTRATIVE PLAN

CMR-DTBU shall function as a multidisciplinary, outcome-driven Deemed to be University with transparent and accountable governance. The framework ensures academic autonomy, fiscal prudence, quality assurance, and participatory decision-making across Schools/Faculties, Departments, and Centres.

5.8.1 Governance Model

Guiding Principles

- Compliance with UGC Regulations, 2023; statutory council norms (AICTE/PCI/INC/NMC, as applicable); and NEP-2020.

- Autonomy with accountability; academic freedom with rigorous quality benchmarks; inclusivity, ethics, and E-governance.

Statutory and Academic Bodies

- Executive Council (Principal executive authority)
- Academic Council (Principal academic authority)
- Finance Committee
- Boards of Studies (by School/Department)
- Planning & Monitoring Board (advisory/strategic)
- Internal Quality Assurance Cell (IQAC)
- Students' Quality Assurance Cell
- Standing Committee on Academic Affairs

Deemed to be University-Level Non-Statutory and Advisory Committees

- Anti-Ragging Committee (ARC)
- Internal Complaints Committee (ICC)
- Grievance Redressal Committee (GRC)
- Examination & Disciplinary Committee (EDC)
- SC/ST Cell
- OBC Cell
- Equal Opportunity Cell (EOC)
- Women's Empowerment Cell (WEC)
- Student Welfare Committee (SWC)
- Research Advisory & Development Cell (RADC)
- Curriculum Development Committee (CDC)
- Institutional Ethics Committee (IEC)
- Library Advisory Committee (LAC)
- Admission Committee (AC)
- Purchase Committee (PC)
- ICT & E-Governance Committee (ICTEC)

- Games & Sports Committee (GSC)
- Cultural Committee (CC)
- Internship, Career Counselling & Placement Cell (ICPC)
- Alumni Engagement Committee (AEC)
- Other Committees as may be prescribed by regulatory agencies or established by the Deemed to be University from time to time.

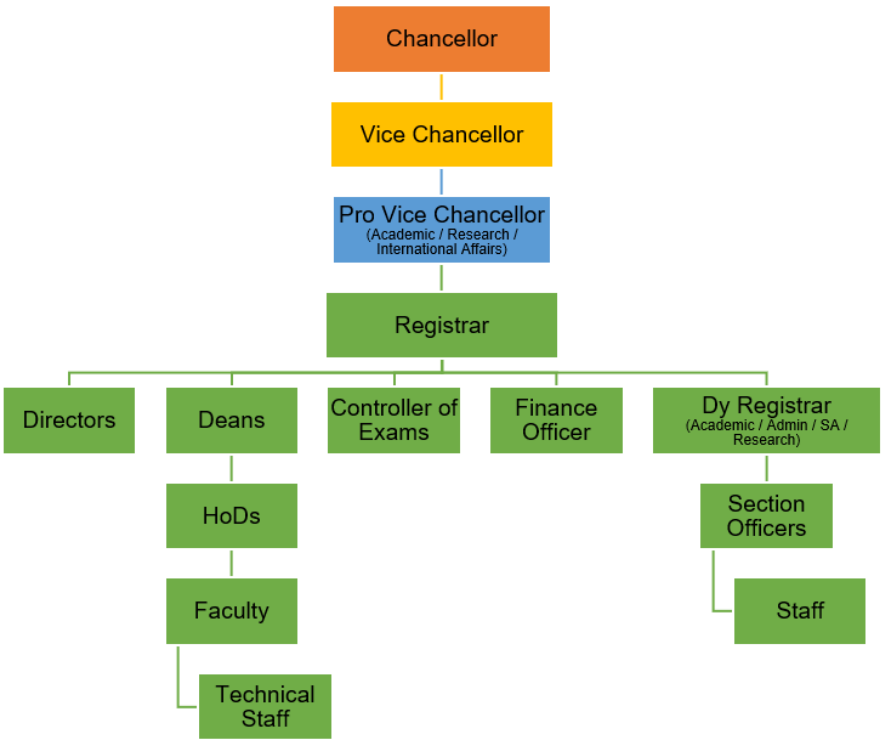
Decision Architecture

- Policies originate at BoS/CDC, vetted by Deans, cleared by Academic Council, and—where financial/establishment matters arise—approved by the Executive Council based on Finance Committee advice.

- Quality oversight by IQAC; statutory compliance monitored by Registrar and designated officers.

- Digital governance via ERP/LMS, e-minutes, e-tenders, ABC integration, NAD/Digilocker, and MIS dashboards.

5.8.2 Organization Structure



5.8.3 Executive Council

Status: Principal executive authority responsible for administrative, financial, academic, and developmental decisions of CMR-DTBU.

Composition (illustrative, conforming to UGC 2023):

- Vice-Chancellor - Chairperson
- Pro-Vice-Chancellor - Member
- Two Deans (by rotation) - Members
- One Professor, one Associate Professor, one Assistant Professor (by rotation) - Members
- One UGC nominee - Member
- Up to four nominees of the Sponsoring Body - Members
- Registrar - Ex-officio Secretary

Tenure:

- Rotational teachers: up to 1 year (or until they hold the post).
- Deans (rotational): up to 3 years or till they hold office.
- UGC/Sponsoring Body nominees: 3 years.
- Ex-officio as per appointment term.

Core powers/functions:

- Approve creation of Schools/Departments/Centres, programmes, posts, and major projects.
- Appoint faculty/academic staff based on Selection Committee recommendations; approve Professors of Practice/Adjunct/Visiting/Emeritus.
- Approve budgets, fees, scholarships, audited accounts, financial rules, and investments.
- Enforce service rules, disciplinary matters, and E-governance policies.
- Ratify urgent actions taken by VC; approve MoUs/strategic partnerships.

Meetings & quorum: At least four per year (≥2 per semester); 7-day notice (shorter for emergencies with reasons recorded); quorum: one-third; decisions by simple majority; casting vote to Chair.

5.8.4 Academic Council

Status: Principal academic body supervising programmes, curricula, assessment, research standards, and academic collaboration.

Composition (indicative, aligned to UGC):

- Vice-Chancellor - Chairperson
- Pro-Vice-Chancellor - Member
- All Deans and Heads - Members
- Up to 10 Professors (excl. Deans/HoDs) by rotation - Members
- Up to 5 Associate Professors (excl. HoDs) by rotation - Members
- Up to 5 Assistant Professors by rotation - Members
- Six eminent external experts (academia/industry/regulatory) - Members
- Registrar - Ex-officio Secretary

Tenure: Nominated/non-ex-officio members - 3 years, with rotation ensuring broad representation.

Core powers/functions:

- Frame/approve programme structures, syllabi, academic regulations, and assessment schemes (CBCS/OBE/ABC, multi-entry/exit).
- Recommend institution/closure of programmes, Schools, Centres.
- Set norms for admissions, attendance, evaluation/grading, academic integrity, awards/medals.
- Promote interdisciplinary offerings, internships, industry projects, MOOCs, and internationalization.
- Periodic review of department performance and student learning outcomes.

Meetings & quorum: Minimum four per year; quorum: one-third; majority decisions; circulation permitted for urgent items.

5.8.5 Board of Studies (BoS)

Status: Foundational academic unit for curriculum, pedagogy, and continuous improvement at School/Department level.

Composition (per School/Department):

- Dean/HoD - Chair
- All Professors of the unit - Members
- Two Associate Professors (rotation) - Members
- Two Assistant Professors (rotation) - Members
- Two external experts (academia/industry/regulatory) - Co-opted Members
- One alumni/industry invitee (programme-specific) - Optional

Functions:

- Design and revise curricula, syllabi, course outcomes, assessment blueprints, and rubrics (OBE-aligned).
- Recommend programme electives, value-added/skill courses, internship/project modalities, and credit mappings (ABC/NHEQF/NSQF alignment).
- Recommend research supervisors/panels (where applicable) and list of learning resources/EdTech platforms.
- Submit proposals to Academic Council via the Dean.

Frequency: At least twice a year; additional meetings as required for new launches/revisions.

5.8.6 Finance Committee

Status: Fiscal advisory and oversight body for prudent resource planning and utilization.

Composition:

- Vice-Chancellor - Chairperson
- Pro-Vice-Chancellor - Member
- Three members nominated by the Executive Council (at least one EC member) - Members
- One representative nominated by UGC/Commission - Member
- Three members nominated by the Chancellor - Members
- Finance Officer - Ex-officio Secretary

Functions:

- Scrutinize annual budget, revised estimates, non-budgeted proposals, and creation of posts.
- Recommend limits for recurring/non-recurring expenditure consistent with income/corpus.
- Review annual accounts, audit observations, and fund-flow/investment plans before EC approval.
- Ensure financial discipline, transparency, and statutory compliance.

Meetings & quorum: At least four per year; quorum: one-third.

5.8.7 Selection Committees

Principle: Merit-based, transparent recruitment in line with UGC qualifications/statutory councils; reservation and diversity as per law; due diligence on credentials and research integrity.

A. Faculty (Professor / Associate Professor / Assistant Professor)

- **Chair:** Vice-Chancellor
- **Dean of the concerned School**
- **Head of Department/Director (where applicable)**
- **Two subject experts** (external) empanelled/approved as per norms
- **One nominee of the Sponsoring Body/Chancellor** (optional where statutes provide)
- **Registrar/HR Head** — Member-Secretary (non-voting)

Functions: Screening, seminar/classroom talk, interaction, API/credit/portfolio evaluation, selection panel recommendations with merit order and reservation roster compliance.

B. Professors of Practice / Adjunct / Visiting / Emeritus

- VC (Chair), Dean, HoD, two external experts (incl. senior industry/clinical leader, as relevant), and Registrar/HR.

- Evaluate professional eminence/impact, practice portfolios, and contribution plan (teaching, mentoring, industry liaison, innovation).

C. Non-Teaching/Officers (Registrar/FO/CoE/Directors/Managers)

- VC (Chair), Pro-VC (if any), concerned Dean/Functional Head, external expert (finance/legal/admin as relevant), and HR Head.

- Transparent tests/interviews and background verification.

General norms:

- Panel validity period; conflict-of-interest declarations; minutes with scoring grids; EC approval for appointments; offer letters with probation/tenure and performance KPIs.

5.8.8 Internal Quality Assurance Cell (IQAC)

Objective: Institutional mechanism for planning, guiding, and monitoring quality enhancement across academics, research, administration, outreach, and governance.

Composition (balanced and inclusive):

- Vice-Chancellor - Chair
- Pro-VC and senior administrative officers
- 3-8 faculty nominees (across Schools)
- One management nominee
- 1-2 nominees from local society/students/alumni
- 1-2 nominees from employers/industry/stakeholders
- Senior faculty as IQAC Coordinator/Director

Key functions/deliverables:

- Quality benchmarks; academic/admin audits; data culture and MIS dashboards.

- Learner-centric practices, FDP/CPD plans, and T-L-E innovation (LMS, MOOCs, blended).

- Feedback systems (students/parents/alumni/employers) and action-taken tracking.

- Best-practice documentation; annual **AQAR** to NAAC; SSR support.

- Rankings/ratings (NIRF/QS/THE/Impact); sustainability tracking and green audits.

- ABC integration, examination reforms, integrity and ethics sensitization.

Frequency: Quarterly reviews; additional meetings for accreditation cycles/compliances.

5.8.9 Students' Quality Assurance Cell (SQAC)

Objective: To embed a culture of quality among students; enable their active role in institutional quality enhancement; and provide structured, evidence-based feedback to the IQAC, in line with NAAC's emphasis on stakeholder participation.

Composition:

- Dean of Student Welfare – Chairperson
- IQAC Coordinator – Ex-officio Member
- 5–7 Student Representatives (UG, PG, Research), ensuring gender and diversity inclusion
- Two Student Club/Association Leaders (e.g., Cultural, Sports, NSS/NCC)
- One Faculty Mentor nominated by IQAC – Member-Secretary

Functions:

- Define and apply student-centric quality benchmarks for academic and administrative processes.
- Promote learner-centric pedagogy and support faculty development for participatory teaching-learning.
- Collect, analyze, and report feedback from students, parents, alumni, and employers on institutional quality processes.
- Disseminate information on quality parameters and best practices in higher education.
- Conduct intra-/inter-institutional workshops, seminars, and awareness programs on quality.
- Maintain a digital repository/database of quality initiatives and outcomes.
- Coordinate, document, and institutionalize best practices.
- Support IQAC in compiling inputs to the **AQAR** and other NAAC/UGC submissions.
- Develop and maintain an MIS dashboard for quality monitoring and early-warning signals.
- Catalyze innovation, continuous improvement, and internal communication for sustained excellence.

Governance Note:

- IQAC shall meet at least once every quarter; SQAC at least once every semester.
- Both follow the proposed Deemed to be University norms on tenure, quorum, minutes, and reporting.
- IQAC reports to the Vice-Chancellor, Academic Council, and Executive Council; SQAC reports to IQAC for consolidation.

5.8.10 Deemed to be University-Level Non-Statutory and Advisory Committees

CMR-DTBU shall constitute the following non-statutory/advisory committees to uphold safety, equity, transparency, academic excellence, and inclusion in accordance with UGC regulations and national legal frameworks. Each committee is constituted by the Vice-Chancellor; composition, tenure, and functions are approved by the Academic Council and Executive Council.

- Anti-Ragging Committee (ARC)
- Internal Complaints Committee (ICC)
- Grievance Redressal Committee (GRC)
- Examination & Disciplinary Committee (EDC)
- SC/ST Cell
- OBC Cell
- Equal Opportunity Cell (EOC)
- Women's Empowerment Cell (WEC)
- Student Welfare Committee (SWC)
- Research Advisory & Development Cell (RADC)
- Curriculum Development Committee (CDC)
- Institutional Ethics Committee (IEC)
- Library Advisory Committee (LAC)
- Admission Committee (AC)
- Purchase Committee (PC)
- ICT & E-Governance Committee (ICTEC)
- Games & Sports Committee (GSC)
- Cultural Committee (CC)
- Internship, Career Counselling & Placement Cell (ICPC)
- Alumni Engagement Committee (AEC)

(Additional mandatory/advisory committees shall be constituted as required by UGC/NAAC/NBA and other regulators.)

5.8.10.1 Anti-Ragging Committee (ARC)

Objective: To ensure a safe, respectful, and inclusive campus free from ragging/harassment, operating through prevention, awareness, and time-bound redressal in accordance with **UGC Regulations, 2009** (as amended).

Composition:

- Chairperson – Dean of Student Welfare / Senior Faculty Member
- 4–6 Faculty Members (multi-disciplinary)
- Registrar/Proctor/Hostel Warden – Administrative Representative
- 2–3 Student Representatives (junior/senior mix)
- One Non-teaching Staff Representative
- Psychological Counsellor
- Legal Advisor (as required)
- One External Member (NGO/civil society) – optional as per UGC norms

Functions:

- Prevent and prohibit ragging across academic, residential, and recreational spaces.
- Conduct orientation/awareness on anti-ragging laws and policies; display notices prominently.
- Receive, investigate, and resolve complaints with confidentiality and speed.
- Refer serious cases to law-enforcement as per UGC directives.

- Provide counselling and protection to affected students.
- Submit statutory compliance reports and maintain records.

5.8.10.2 Internal Complaints Committee (ICC)

Objective: To prevent sexual harassment; ensure gender equity; and provide confidential, impartial redressal in line with **UGC (Prevention, Prohibition and Redressal of Sexual Harassment…) Regulations, 2015**.

Composition (as per Regulations):

- Presiding Officer – Senior Woman Faculty (mandatory)
- Two or more Faculty Members with social/legal awareness
- One Non-teaching Employee (preferably a woman)
- Three Student Representatives (UG/PG/Research, where applicable)
- One External Member (NGO/legal/civil society) – mandatory
- ≥50% women members

Functions:

- Receive and inquire into complaints confidentially; ensure due process.
- Recommend disciplinary action and remedies.
- Protect complainants from retaliation; provide requisite support.
- Conduct awareness/sensitization on gender equity and prevention.
- Submit annual reports and maintain complete documentation.

5.8.10.3 Grievance Redressal Committee (GRC)

Objective: To establish a transparent, impartial, and time-bound mechanism for grievances from students, faculty, staff, and stakeholders, per **UGC Grievance Redressal Regulations** (as amended).

Composition:

- Chairperson – Dean/Senior Professor/Registrar (nominated by VC)
- 2–3 Senior Faculty Members (different Schools)
- One Administrative Representative
- Legal Advisor (optional)
- One Student Representative (for student cases)
- Member-Secretary – Nodal Officer/GRC Coordinator

Functions:

- Operate secure online/offline grievance intake.
- Investigate fairly, maintain confidentiality, ensure natural justice.
- Recommend corrective/disciplinary action within defined timelines.
- Maintain records; submit periodic reports; widely publicize mechanisms.

5.8.10.4 Examination & Disciplinary Committee (EDC)

Objective: To uphold academic integrity and institutional discipline; to investigate misconduct and recommend actions.

Composition:

- Dean of Student Affairs – Chairperson
- Registrar/Proctor
- Two Senior Faculty Members
- Legal Advisor (as required)
- One Student Representative (for student-related cases)

Functions:

- Review cases of academic/behavioral/examination misconduct.
- Conduct fair inquiries; ensure confidentiality and due process.
- Recommend proportionate disciplinary measures to the VC.
- Submit reports to the Executive Council where required.

5.8.10.5 SC/ST Cell

Objective: To safeguard rights of SC/ST stakeholders; prevent discrimination; implement reservation and welfare policies per UGC/GoI directives.

Composition:

- Chairperson – Dean/Senior Faculty (preferably from SC/ST community)
- Coordinator/Nodal Officer – Faculty member nominated by VC
- 2–3 Faculty Representatives (at least one SC and one ST)
- One Administrative Officer (Registrar/Academics)
- One SC and one ST Student Representative (UG/PG)
- External Member (NGO/government welfare body) – optional

Functions:

- Monitor reservation in admissions/recruitment/promotions.
- Address discrimination/harassment complaints.
- Conduct awareness on rights, scholarships, welfare schemes.
- Provide academic/counselling support; liaise with UGC/MoE; file compliance reports.

5.8.10.6 OBC Cell

Objective: To ensure equity and effective implementation of OBC reservation and welfare measures.

Composition:

- Chairperson – Dean of Student Welfare/Senior Faculty
- Coordinator/Nodal Officer – Faculty nominated by VC
- 2–3 Faculty Members (incl. at least one OBC member)
- One Administrative Staff (Registrar/Academic Section)
- 1–2 Student Representatives (UG/PG/Research)

Functions:

- Monitor 27% OBC reservation implementation.
- Address grievances related to discrimination/harassment.
- Run awareness on government schemes/scholarships.
- Provide mentoring/counselling; maintain compliance records.

5.8.10.7 Equal Opportunity Cell (EOC)

Objective: To sustain an inclusive environment ensuring equal access—especially for SC, ST, OBC, minorities, women, PwD, and EWS.

Composition:

- Chairperson – VC/Dean/Senior Faculty
- Coordinator/Nodal Officer – Faculty with social justice experience
- 3–4 Faculty Members (diverse representation)
- One Administrative Representative (Registrar/Student Welfare)
- 2–3 Student Representatives (diverse groups)

Functions:

- Promote non-discrimination and inclusiveness.
- Ensure EWS 10% reservation compliance.
- Facilitate accessibility and support for PwD.
- Conduct sensitization on diversity, human rights, constitutional values.
- Provide counselling/mentoring/career guidance; coordinate with SC/ST/OBC Cells and SWC.
- Submit annual inclusion/equity reports.

5.8.10.8 Women's Empowerment Cell (WEC)

Objective: To promote gender equity, leadership, safety, and opportunity for women students and staff.

Composition:

- Chairperson – Senior Woman Faculty
- 2–3 Faculty Members (at least one woman; one from Social Sciences)
- One Administrative Officer (Student Welfare/Registrar)
- Two Student Representatives (UG/PG; at least one woman)
- External Woman Member (NGO/civil society) – optional

Functions:

- Conduct programmes on rights, leadership, entrepreneurship, and health.
- Provide counselling/mentorship; collaborate with ICC on sensitization.
- Celebrate achievements; improve participation in academics/governance.

5.8.10.9 Student Welfare Committee (SWC)

Objective: Holistic student development, safety, and well-being via institutional support and leadership opportunities.

Composition:

- Dean of Student Welfare – Chairperson
- 2–3 Senior Faculty Members
- Two Student Representatives (gender-inclusive)
- One Medical Officer/Counsellor
- One Member nominated from SC/ST/OBC/EOC

Functions:

- Administer scholarships, insurance, financial-aid.
- Run leadership and life-skills programmes.
- Address health, safety, and inclusion; liaise with ARC/GRC.
- Provide emergency response and counselling.

5.8.10.10 Research Advisory & Development Cell (RADC)

Objective: To strengthen the research and innovation ecosystem aligned with NEP-2020 and UGC emphasis on quality research.

Composition:

- Vice-Chancellor – Chairperson
- Pro-Vice-Chancellor/Dean (Research) – Convener
- Heads of Research Centres/Senior Professors
- Three External Experts (academia/industry/funding)
- Controller of Examinations (research compliance)
- One IQAC Nominee

Functions:

- Frame research policy; set funding priorities and KPIs.
- Vet/approve projects, collaborations, grants.
- Ensure research ethics, integrity, and high-quality publications.
- Promote patents, tech transfer, incubation, and start-ups.
- Coordinate MoUs/fellowships with national/international agencies.

5.8.10.11 Curriculum Development Committee (CDC)

Objective: To design/review curricula aligned with NEP-2020, UGC frameworks, industry needs, and global standards for interdisciplinarity and employability.

Composition:

- Dean (Academics) – Chairperson
- Five Senior Faculty (different Schools)
- Two External Subject Experts
- One Industry Representative (as applicable)
- One Final-Year Student Representative

Functions:

- Develop/revise curricula and syllabi with outcome-based design.
- Integrate industry-oriented and interdisciplinary modules.
- Embed ICT, MOOCs, and blended learning.
- Align with NSQF/NCrF and SDGs where relevant.
- Route proposals to Boards of Studies and Academic Council.

5.8.10.12 Institutional Ethics Committee (IEC)

Objective: To ensure ethical conduct across research and institutional practices per ICMR/UGC and national frameworks.

Composition:

- Chairperson – Senior Faculty/Dean (nominated by VC)
- One Legal Expert
- One Social Scientist/Ethicist
- Two Senior Faculty with research expertise
- One Local Community Representative
- One External Domain Expert
- Member-Secretary (appointed by VC)

Functions:

- Review/approve research involving human/animal subjects.
- Monitor ethical compliance in academics/administration.
- Conduct training on ethics and integrity; advise on misconduct cases.
- Maintain records and statutory reports.

5.8.10.13 Library Advisory Committee (LAC)

Objective: To guide the development and digital transformation of CMR-DTBU's library system in support of learning, research, and outreach.

Composition:

- Dean (Academics)/Chief Librarian – Chairperson
- One Faculty Representative from each major School
- One Student Representative (UG/PG)
- One IT Representative (e-resources/digital infra)
- Librarian – Member-Secretary

Functions:

- Recommend procurement/subscription/weeding policies.
- Approve annual budgets for print/digital resources.
- Drive automation, repository, and remote-access services.
- Address user feedback and access grievances.
- Promote e-resources, open access, IP literacy, and knowledge management.

5.8.10.14 Admission Committee (AC)

Objective: To ensure fair, transparent, and merit-based admissions aligned with UGC/GoI and institutional regulations.

Composition:

- Dean (Admissions)/Senior Faculty – Chairperson
- 3–4 Faculty Members (different Schools)
- Controller of Examinations or Registrar – Member
- Admission Officer – Member-Secretary
- One Student Nominee (final year; advisory, optional)

Functions:

- Frame and implement admission policies; ensure SC/ST/OBC/EWS/PwD norms.
- Conduct entrance tests, counselling, and selections where applicable.
- Publish accurate schedules, handbooks, and notifications.
- Maintain transparent records and grievance processes.

5.8.10.15 Purchase Committee (PC)

Objective: Transparent, need-based, and cost-effective procurement in line with financial rules and institutional needs.

Composition:

- Registrar/Finance Officer – Chairperson

- Dean (Academics)/Senior Faculty – Member
- Head of Requisitioning Department/Section – Member
- Two Senior Faculty (rotation) – Members
- Purchase Officer – Member-Secretary

Functions:

- Scrutinize and approve departmental requisitions.
- Invite/evaluate quotations/tenders per financial guidelines.
- Recommend vendors and finalize procurements.
- Ensure quality control, documentation, and reporting to Finance Committee.

5.8.10.16 ICT & E-Governance Committee (ICTEC)

Objective: To develop robust ICT infrastructure, ensure cybersecurity and data protection, and mainstream digital governance and pedagogy.

Composition:

- Director (IT/Digital Learning) – Chairperson
- One Faculty Representative from each School
- MIS/ERP Coordinator – Member
- Network/System Administrator – Member
- External ICT Expert – optional

Functions:

- Frame ICT/e-governance policies; oversee ERP, LMS, MOOCs, blended tools.
- Ensure cybersecurity, privacy, and digital literacy.
- Develop smart classrooms; run regular ICT training for faculty/staff/students.
- Monitor ICT-enabled governance for transparency and efficiency.

5.8.10.17 Games & Sports Committee (GSC)

Objective: To promote fitness, wellness, and competitive sports; to enable participation in intra- and inter-university events.

Composition:

- Director of Physical Education – Chairperson
- 2–3 Faculty Members interested in sports
- NCC/NSS Coordinator – Member
- 2–3 Student Representatives (including women; different Schools)
- External Sports Expert – optional

Functions:

- Conduct inter-departmental sports events.
- Facilitate participation at state/national/international levels.
- Maintain and upgrade sports infrastructure and scheduling.
- Introduce wellness programmes; build teamwork, discipline, leadership through sport.

5.8.10.18 Cultural Committee (CC)

Objective: To encourage artistic expression, cultural literacy, and national integration through diverse cultural/literary activities.

Composition:

- Director, Centre for Outreach Programs / Faculty Coordinator (Cultural) – Chair/Coordinator
- 2–3 Faculty Members (arts/languages/social sciences)
- NCC/NSS/Cultural Club Coordinators – Members
- 3–4 Student Representatives (inclusive, multi-School)
- External Cultural Expert/Artist – optional

Functions:

- Organize festivals, competitions, exhibitions; facilitate youth festival participation.
- Promote folk, classical, and contemporary forms; collaborate with clubs/societies.
- Encourage inclusivity and cross-cultural engagement.

5.8.10.19 Internship, Career Counselling & Placement Cell (ICPC)

Objective: To build strong industry linkages for internships, career guidance, and placements; to enhance employability in line with UGC/NAAC expectations.

Composition:

- Dean (Training & Placement)/Placement Officer – Chairperson
- Two Faculty Members (different streams) – Members
- Alumni Representative from industry – Member
- Three Final-Year Student Representatives – Members
- External HR/Industry Expert – optional

Functions:

- Establish/expand industry, R&D, and public-sector partnerships.
- Conduct campus drives, job fairs, and structured internship programs.
- Deliver training on aptitude, communication, GDs, interviews, and career readiness.
- Analyze placement data for accreditation/regulatory submissions; publish annual reports.
- Capture alumni/employer feedback for continuous improvement.

5.8.10.20 Alumni Engagement Committee (AEC)

Objective: To strengthen alumni relations, mobilize alumni contributions, and integrate alumni expertise into academic and institutional development.

Composition:

- Dean (Alumni Affairs) – Chairperson
- Two Faculty Members (nominated by VC) – Members
- One Administrative Officer – Member
- Four Alumni Representatives (diverse batches/industries/geographies) – Members
- One Final-Year Student Representative – Member

Functions:

- Maintain an up-to-date alumni database and online portal/community.
- Organize reunions, meets, webinars, and mentoring initiatives.
- Leverage alumni for mentoring, internships, placements, guest talks.
- Mobilize support for scholarships, research, infrastructure, and endowments.
- Celebrate alumni achievements; encourage governance/quality contributions.

5.8.11 Special Committees for Sustainability & Outreach

To advance SDGs, environmental stewardship, and social impact, CMR-DTBU shall constitute the following special committees under the Centre for Outreach Programs. Annual reports shall be placed before the Academic Council, Executive Council, and relevant accreditation bodies.

5.8.11.1 Environment & Sustainability Committee (ESC)

Objective: To drive ecological responsibility, green campus practices, and climate action aligned to Deemed to be University Green Policy, UGC guidelines, and NAAC green metrics.

Composition:

- Chairperson – Dean (Academics/Planning) or Senior Faculty with sustainability expertise
- Director, Centre for Outreach Programs – Ex-officio Member
- Two Faculty Members (Environmental Sciences/Engineering/Natural Sciences)
- One Administrative Officer (Campus Development/Maintenance)
- Two Student Representatives (incl. Eco-Club/NSS)
- One External Expert (NGO/Government/Industry CSR)

Functions:

- Formulate/update the Green Policy.
- Implement energy conservation, water harvesting, solid-waste management, biodiversity measures.
- Conduct periodic green audits; ensure statutory compliance.
- Promote sustainability in curriculum, research, and outreach.
- Run workshops and student-led eco-initiatives; collaborate with external agencies.
- Prepare and publish the **Annual Sustainability Report**.

5.8.11.2 Community Engagement & Outreach Committee (CEOC)

Objective: To integrate service-learning and outreach with academics for measurable societal impact, aligned with NEP-2020.

Composition:

- Chairperson – Director, Centre for Outreach Programs
- Two Faculty Members (Social Sciences/Humanities/Applied Sciences)
- NSS or NCC Coordinator – Member
- Two Student Representatives (UG/PG; gender-inclusive)
- One Administrative Officer – Member
- One External Community Representative (local NGO/Gram Panchayat/Industry CSR)

Functions:

- Design projects in education, health, digital literacy, women's empowerment, skilling.
- Align with national missions (e.g., Swachh Bharat, Jal Jeevan, Digital India).
- Offer credit-linked service-learning per NEP-2020.
- Build partnerships with NGOs/CSR/government; mentor civic engagement.
- Document outcomes for NAAC/UGC; publish an **Annual Outreach Report**.

Governance Note (ESC & CEOC):

Operate with the same tenure, quorum, reporting, and diversity norms as other committees. Recommendations are submitted to the Vice-Chancellor for placement before the Academic Council and Executive Council.

5.8.12 General Norms Applicable to All Committees

- **Tenure:** Members – three years; student representatives – one year.
- **Meetings:** Minimum two per semester (or more as required).
- **Quorum:** One-third of total members; decisions by simple majority.
- **Reporting:** Minutes and recommendations submitted to the Vice-Chancellor and, where required, to the Academic Council/Executive Council.
- **Gender & Diversity:** Committees strive for gender balance and inclusive representation; comply with Deemed to be University equity policies.
- **External Participation:** Experts from academia, industry, civil society, or regulatory bodies may be co-opted for impartiality and domain expertise.
- **Transparency & Compliance:** Maintain proper records; file periodic reports per UGC regulations and other applicable norms.

5.8.13 Administrative Hierarchy

Chancellor

- Ceremonial head; presides over convocations; appoints the Vice-Chancellor per UGC process; receives annual reports and major decisions for oversight.

Vice-Chancellor

- Chief executive and academic officer; chairs EC/AC/FC/IQAC/PMB; leads strategy, compliance, partnerships, resource mobilization, and discipline; emergency powers subject to EC ratification. Tenure: As per UGC norms (not more than two terms; each ≤5 years).

Pro-Vice-Chancellor

- Assists VC; portfolios may include Research & Innovation, International Relations, Health Sciences/Clinical Affairs, or Faculty Affairs; acts on delegation and presides in VC's absence.

Registrar

- Statutes/records custodian; Secretary to EC/AC; HR/legal/establishment; coordinates statutory returns and E-governance documentation.

Finance Officer

- Budgeting, accounts, audits, investments, compliance; Secretary to Finance Committee; implements financial controls and transparency.

Controller of Examinations (CoE)

- Conduct of examinations; confidentiality; results/time-lines; grievance redressal; adherence to academic calendar and integrity protocols.

Deans (Schools/Faculties)

- Academic leadership for Schools; programme portfolio, faculty deployment, curriculum delivery, accreditation readiness, research/extension.

Directors (Centres/Cells/Clinics) – as applicable

- Research, Innovation & Incubation; IPR; Quality; International Relations; Hospital/Clinical Services (for Health Sciences); ICT & Digital; Student Affairs; Alumni & Development; EDC/Start-ups.

Heads of Departments (HoDs)

- Day-to-day academic administration; workload, timetables, outcomes monitoring, labs, projects, internships, MoUs, records, and student mentoring.

Administrative/Technical cadres

- Section Officers/Managers/Coordinators, Lab Superintendents/Technicians, Library & ICT teams, Clinical/Paramedical teams (where applicable), and campus services—operating through approved service rules/SOPs.

Lines of reporting (high-level)

- HoDs → Deans → Pro-VC/VC
- Directors (functional) → VC
- Registrar/FO/CoE → VC
- All statutory bodies report through their Secretaries to VC/EC as mandated.

Meetings, quorum, records

- Bodies meet at the prescribed frequency; quorum as notified (generally one-third); minutes recorded, confirmed, actioned, and archived (digital + physical) as per records retention policy; secure MIS access for authorized officials and regulators.

6. FIVE-YEAR ROLLING IMPLEMENTATION PLAN (2026–2031)

The Five-Year Rolling Implementation Plan (2026–2031) outlines the phased operational strategy of the proposed **CMR Deemed to be University**, Hyderabad. It integrates the core functional domains, **Academics, Faculty Development, Admissions, Research and Innovation, Infrastructure, Finance, and Quality Assurance**, ensuring coordinated institutional growth and alignment with **NEP 2020**, **UGC (Institutions Deemed to be Universities) Regulations, 2023**. Each year builds upon the previous year's achievements, progressively scaling capacity, quality, and outreach while embedding sustainability, inclusivity, and global competitiveness.

6.1 Academic Plan

Year	Key Academic Milestones	Expected Outcomes
2026–27	Launch 5 UG, 2 PG, and 1 Integrated Programmes across five Schools with an additional intake of 384. Implement NEP 2020-compliant credit system (ABC, multiple entry-exit). Curriculum framing through Boards of Studies and Academic Council.	Foundation of multidisciplinary programs; operational Academic Council and IQAC.
2027–28	Introduce additional 1 UG Programme with an intake of 60. Also, Doctoral Programmes in other Engineering disciplines. Develop interdisciplinary electives between Engineering, Health Sciences, and Management. Establish Centre for Teaching & Learning Excellence (CTLE).	Enhanced flexibility and interdisciplinary curriculum ecosystem.
2028–29	Introduce additional 1 PG Programme with an intake of 60. Introduce online and blended learning modules. Integrate MOOCs/SWAYAM credits. Curriculum revision based on feedback and outcome data.	Full adoption of technology-enabled academic delivery.
2029–30	Introduce additional 1 UG Programme with an intake of 60. Launch international collaborative programs and dual degrees. Introduce outcome-based education audit system.	Global mobility and benchmarking with international standards.

2030–31	Introduce additional 1 PG Programme with an intake of 20. Comprehensive curriculum restructuring aligned with 2031–2036 vision. Full accreditation readiness of all eligible programs.	Attainment of NAAC A++ benchmark and NBA, ABET accreditation readiness.

6.2 Faculty Recruitment Plan

Year	Major Actions	Expected Outcomes
2026–27	To maintain Faculty-Student ratio by recruiting additional 60 faculty members to meet the requirement of total 688. Establish Faculty Development Centre (FDC).	Faculty strength adequate for first-year intake; FDP calendar implemented.
2027–28	Recruitment expansion to meet the total of 723.	60% faculty participation in FDPs and MOOCs.
2028–29	Introduce Faculty Research Grants and Post-Doctoral Fellowship scheme. Total faculty strength: 778.	Publication and innovation culture established.
2029–30	Faculty exchange with national/international institutions. Total faculty strength: 832.	Enhanced exposure and interdisciplinary collaborations.
2030–31	Career Advancement Scheme implementation. Total faculty strength: 846.	80% faculty with Ph.D. or pursuing doctoral research.

6.3 Students Admission Plan

Year	Actions	Expected Intake
2026–27	Launch admissions through Institution Entrance Test for Professional programmes. Direct merit-based admissions for other UG programmes. Special provisions will be made for girls, first-generation learners, rural students, and economically weaker sections.	2,128 students

2027–28	Expand to 2,600 students; initiate international student enrolment. Establish admission facilitation centers in rural and semi-urban areas for community-centric admission strategy.	2,188 students
2028–29	Introduce lateral entry for working professionals.	2,248 students
2029–30	Digital admission platform with AI-based counseling.	2,308 students
2030–31	Total student strength reaches 10,726 across all schools.	2,328 students

6.4 Research and Innovation Plan

Year	Key Focus Areas	Expected Outcomes
2026–27	Establish Research Advisory & Development Cell (RADC). Establish 2 research thrust areas (Digital Health, Start-up, Incubation and Entrepreneurship). R&D fund will be ₹8 Cr	2 Centres of Excellence; 20 research proposals.
2027–28	Launch Technology Business Incubator (TBI) and IPR Cell. Establish 1 Centre for Semiconductor Technology Research Incentives and Seed Money support for Researchers and Scholars.	30 patents (file/publish/grant); 400+ publication; 3+ Cr funding
2028–29	Attract extramural funding from DST, AICTE, DBT. Establish Centre for Quantum Computing and Robotics and Indian Knowledge Systems Research Collaboration with Foreign Universities (Top 200 ranking in QS/THE).	5+ Start-ups; 40+ research proposals.
2029–30	International research collaborations and joint publications. Establish Centre for Digital Twin Technology	2+ Transfer of Technology

	Commercialization and technology transfer initiatives.	
2030–31	Continue to improve the expected outcomes. R&D fund will be ₹15 Cr.	Overall, 500+ Patents; 10+ Start-ups; 5+ Transfer of Technology; 2000+ Publications; 20+ Cr Research Funding

6.5 Campus Information and Communication Technology Plan

Libraries and e-Resources

- **Central Library (Phase 1: available area of 2232 sq.m; Phase 2: additional 1000 sq.m; Phase 3: additional 2000 sq.m)** with reading halls, reference sections, discussion zones, and e-learning pods.
- **Digital Library & Repositories:** Subscriptions to **IEEE, ACM, Elsevier, Springer, ProQuest, Scopus, Web of Science**.
- **Institutional Repository:** Digital theses, faculty publications, and open access materials.
- **Learning Resource Centres in each School** equipped with discipline-specific resources.
- Integration with **National Digital Library (NDLI)**, **DELNET**, and **Shodhganga** for research access.

ICT and Smart Campus Plan

The proposed Deemed to be University will develop a **smart, digitally integrated campus** with:

- **ICT-enabled Classrooms:** 100% classrooms fitted with digital boards, projectors, lecture capture, and hybrid teaching capabilities.
- **High-Speed Connectivity:** 10 Gbps campus backbone with Wi-Fi across hostels, academic, and administrative areas.
- **Learning Management System (LMS):** Moodle/Blackboard integrated with AI-enabled analytics to track learning outcomes.
- **Smart Campus Applications:** RFID-enabled student ID, smart attendance, e-examination systems, and digital payments.
- **Virtual Labs & AR/VR Classrooms:** In partnership with IIT Virtual Labs and global ed-tech platforms.

Student Support Systems

A comprehensive set of support systems will ensure holistic student development:

- **Counselling & Mentoring:** Student Mentorship Scheme with faculty advisors, counselling psychologists.
- **Career Development Centre:** Placement training, internships, skill-building workshops.
- **Clubs & Societies:** Technical clubs, cultural associations, music/drama societies, sports clubs, and entrepreneurship cells.
- **International Student Support Cell:** Visa, language, and integration support.
- **Special Cells:** Equal Opportunity Cell, SC/ST Cell, Women's Development Cell, Grievance Redressal, Anti-Ragging Committee.
- **Healthcare:** 24x7 health centre with CMR Medical College Hospital; telemedicine facilities.

Sustainability and Green Initiatives

The proposed CMR Deemed to be University will be a **sustainable green campus**, integrating:

- **Energy:** Solar power generation (target: 2 MW in 10 years), LED lighting, energy-efficient systems.
- **Water:** Rainwater harvesting, sewage treatment plants, grey water recycling.
- **Green Landscaping:** Botanical gardens, herbal medicine garden, shaded walkways.
- **Waste Management:** Solid waste segregation, organic composting, and e-waste disposal.
- **Green Buildings:** IGBC-certified classrooms and laboratories with natural lighting and ventilation.
- **Sustainable Mobility:** Bicycle-sharing, electric shuttle buses, and EV charging stations.

6.6 Infrastructure Development Plan

Year	Infrastructure Milestones	Outcomes
2026–27	Existing Infrastructure of 1,06,945.71 SQM is available to meet the existing and additional requirement for the Academic Year 2026-27 Administrative area of 1667 SQM is available.	Operational readiness for first-year programs.
2027–28	New academic block with additional classrooms and laboratories, Additional rooms in the Hostels (boys/girls)	Meeting the requirements of improving students strength

2028–29	R&D Complex and innovation labs	Research ecosystem in place.
2029–30	Smart classrooms, solar energy plant, and green campus certification.	ICT-enabled and sustainable campus.
2030–31	Expansion of Phase-II academic area, international centre, and industry park. Built additional infrastructure area of 3500 SQM.	World-class infrastructure benchmark.

6.7 Financial Plan

Year	Expected Student Strength	Estimated Revenue (₹ Cr.)	Estimated Operational Expenditure (35-40 %) (₹ Cr.)	Estimated Capital Expenditure (30-35%) (₹ Cr.)	Net Surplus (₹ Cr.) used for Infrastructure Augmentation & Scholarships
2025-2026 (Current Year)	**6343**	**82** (₹ 1.3 L / Student)	**32**	**30**	**20**
2026–27 (Year 1)	**7471**	**104** (₹ 1.4 L / Student)	**42**	**30**	**32**
2027–28 (Year 2)	**8280**	**128** (₹ 1.55 L / Student)	**51**	**30**	**47**
2028–29 (Year 3)	**9346**	**150** (₹ 1.6 L / Student)	**60**	**40**	**50**
2029–30 (Year 4)	**10466**	**178** (₹ 1.7 L / Student)	**70**	**47**	**60**
2030–31 (Year 5)	**10726**	**190** (₹ 1.8 L / Student)	**75**	**53**	**62**

Year	Investment Focus
2026–27	Corpus deposit, land and building phase-I
2027–28	Lab establishment, ICT, hostel development
2028–29	Research labs, incubation centre, sustainability initiatives
2029–30	International collaborations and research funding
2030–31	Campus expansion, surplus reinvestment

6.8 Governance and Administrative Plan

Chancellor

- Ceremonial head; presides over convocations; appoints the Vice-Chancellor per UGC process; receives annual reports and major decisions for oversight.

Vice-Chancellor

- Chief executive and academic officer; chairs EC/AC/FC/IQAC/PMB; leads strategy, compliance, partnerships, resource mobilization, and discipline; emergency powers subject to EC ratification. Tenure: As per UGC norms (not more than two terms; each ≤5 years).

Pro-Vice-Chancellor

- Assists VC; portfolios may include Research & Innovation, International Relations, Health Sciences/Clinical Affairs, or Faculty Affairs; acts on delegation and presides in VC's absence.

Registrar

- Statutes/records custodian; Secretary to EC/AC; HR/legal/establishment; coordinates statutory returns and E-governance documentation.

Finance Officer

- Budgeting, accounts, audits, investments, compliance; Secretary to Finance Committee; implements financial controls and transparency.

Controller of Examinations (CoE)

- Conduct of examinations; confidentiality; results/time-lines; grievance redressal; adherence to academic calendar and integrity protocols.

Deans (Schools)

- Academic leadership for Schools; programme portfolio, faculty deployment, curriculum delivery, accreditation readiness, research/extension.

Directors (Centres/Cells/Clinics) – as applicable

- Research, Innovation & Incubation; IPR; Quality; International Relations; Hospital/Clinical Services (for Health Sciences); ICT & Digital; Student Affairs; Alumni & Development; EDC/Start-ups.

Heads of Departments (HoDs)

- Day-to-day academic administration; workload, timetables, outcomes monitoring, labs, projects, internships, MoUs, records, and student mentoring.

Administrative/Technical cadres

- Section Officers/Managers/Coordinators, Lab Superintendents/Technicians, Library & ICT teams, Clinical/Paramedical teams (where applicable), and campus services—operating through approved service rules/SOPs.

Lines of reporting (high-level)

- HoDs → Deans → Pro-VC/VC
- Directors (functional) → VC
- Registrar/FO/CoE → VC
- All statutory bodies report through their Secretaries to VC/EC as mandated.

Meetings, quorum, records

- Bodies meet at the prescribed frequency; quorum as notified (generally one-third); minutes recorded, confirmed, actioned, and archived (digital + physical) as per records retention policy; secure MIS access for authorized officials and regulators.

General Norms Applicable to All Committees

- **Tenure:** Members – three years; student representatives – one year.
- **Meetings:** Minimum two per semester (or more as required).
- **Quorum:** One-third of total members; decisions by simple majority.
- **Reporting:** Minutes and recommendations submitted to the Vice-Chancellor and, where required, to the Academic Council/Executive Council.
- **Gender & Diversity:** Committees strive for gender balance and inclusive representation; comply with Deemed to be University equity policies.
- **External Participation:** Experts from academia, industry, civil society, or regulatory bodies may be co-opted for impartiality and domain expertise.
- **Transparency & Compliance:** Maintain proper records; file periodic reports per UGC regulations and other applicable norms.

Monitoring and Review

- **Planning & Monitoring Board (PMB)** will review progress annually.
- **KPIs** across academic, research, infrastructure, and finance will be tracked.
- **Mid-term review (2028–29)** to recalibrate goals and budgets based on outcomes.
- Reports will be submitted to **Executive Council**, year-wise.

6.9 Summary of Five-Year Rolling Implementation Plan

The five-year plan (2026–2031) establishes a structured pathway for CMR Deemed to be University to evolve into a multidisciplinary, globally recognized institution. By 2031, the University will demonstrate:

- Fully operational **five Schools of Study**
- **Accreditation compliance** with NAAC A++ and NBA for 90% programmes
- **10726 students** and **846 faculty members**
- **500+ patents**, **2000+ research publications, 10+ start-ups, 5+ transfer of technology, 20 Cr research funding, totally**
- **Financial sustainability and global academic presence**

7. QUALITY ASSURANCE AND ACCREDITATION

7.1 NAAC Roadmap

CMR Technical Campus has already established a strong foundation in quality assurance:

- **NAAC Accreditation:** The institution is accredited by **NAAC with 'A' Grade & 3.12 score in Cycle I**, valid till December 31, 2025 and awaiting for the New Framework, reflecting excellence in teaching-learning, governance, research, and student support.

- **Future Roadmap for CMR-DTBU:**

    - Establish an **Internal Quality Assurance Cell (IQAC)** as per UGC and NAAC guidelines at inception including all the proposed Schools.

    - Implement structured **Academic and Administrative Audits (AAA)**, outcome-based education (OBE), and stakeholder feedback systems.

    - Target **'A+' grade within the first cycle of NAAC for the Deemed-to-be University** by embedding continuous quality improvement, sustainability practices, and digital transformation.

7.2 NIRF Strategy

CMR Technical Campus is a consistent participant in **NIRF India Rankings**. The institution has featured in the **Engineering Category (Rank Band 201–300)** in the year 2025 and also competes in **Innovation rankings**.

- **Short-term Strategy (Years 1–5):**

    - Enter NIRF in **Overall (Top 300), Engineering (Top 200), Innovation (Top 200) and Sustainability categories** with a focus all the required parameters.

    - Improve **Teaching-Learning and Resources (TLR)** by expanding qualified faculty and advanced infrastructure.

- **Medium-term (Years 5–10):**

    - Achieve ranking within the **Top 200 Overall institutions** and establish visibility **(Top 200)** in **Innovation, Sustainability, Management and Health Sciences categories**.

- **Long-term (15 Years):**

    - Attain **Top 100 overall ranking** and **Top 100 in Innovation, Engineering, Management, Medical and Sustainability categories.**

- **NIRF Cell:** A dedicated monitoring cell will track progress on all NIRF parameters - **Research & Professional Practice, Graduation Outcomes, Outreach & Inclusivity, and Perception**.

7.3 Statutory Approvals (UGC, AICTE, NMC, INC)

Existing Colleges under CMRTES presently operates with the approvals of respective approving bodies. For the proposed Deemed to be University, the approvals will be continued with

- **UGC:** Recognition under Section 2f & 12B of the UGC Act, 1956.
- **AICTE:** Continued approval for Engineering, Technology, and Management disciplines.
- **NMC (National Medical Commission):** For proposed medical programmes, approvals will be secured before launch.
- **INC (Indian Nursing Council):** Adherence to faculty, intake, and infrastructure standards for nursing programmes.
- **SIRO** from Department of Scientific and Industrial Research (DSIR)

7.4 Continuous Quality Improvement

Building on CMR Technical Campus' quality culture, the Deemed to be University will institutionalize **Continuous Quality Improvement (CQI)** across all domains:

- **Academic Quality:** Adoption of **Outcome-Based Education**, flexible curriculum under **NEP 2020**, Academic Bank of Credits (ABC), and industry-supported teaching.
- **Faculty Development:** Regular FDPs, mandatory **industry immersion for faculty**, and support for research and patents.
- **Benchmarking:** Participation in **QS, Times Higher Education (THE), and ISO 9001:2015** certification.
- **Digital Monitoring:** ERP and LMS-enabled dashboards for student progression, placements, research outputs, and governance transparency.
- **Stakeholder Engagement:** Continuous structured feedback from students, alumni, faculty, employers, and society.
- **Best Practices:** Green campus initiatives, energy conservation, innovation & incubation centres, and community outreach.

Year	NAAC Roadmap	NBA (Programme Accreditation)	NIRF Strategy	Other Certifications / Benchmarks
Year 1 (2026–27)	Establish IQAC; initiate AAA (Academic & Administrative Audit)	Maintain NBA for existing eligible programmes (CSE, ECE)	Participate in **Engineering (target 151–200 band)** and **Innovation category (band 101–200)**	Apply for ISO 21001 (Educational Organization Management Standard)
Year 2 (2027–28)	Pre-accreditation quality enhancement plan implementation + AQAR submission + Audits + Satisfaction Survey	NBA preparedness to newly eligible UG & PG programmes	Improve **Research & Professional Practice** score by increasing publications, patents, and projects	Apply for **QS I-GAUGE rating** (Silver/Diamond)
Year 3 (2028–29)	Mock peer team visits; Gap analysis for NAAC A++ readiness + AQAR submission + Audits + Satisfaction Survey	Secure NBA for eligible UG programmes and MBA	Target **NIRF Engineering and Innovation in Top 200** and **Management, and Sustainability entry (Top 300)**	Begin preparation for **THE Impact Rankings**
Year 4 (2029–30)	Institutionalize continuous NAAC compliance system + AQAR submission + Audits + Satisfaction Survey + Gap analysis	NBA reaccreditation cycle begins	Target **NIRF Innovation Top 200**; enter **Overall NIRF (Top 300)**	Secure **Environmental Management** for Green Campus
Year 5 (2030–31)	Prepare & Submit SSR to NAAC; Target **Cycle I Accreditation with A++**	Expand NBA to Allied Health, Management (if launched)	Target **NIRF Overall Top 300**, **Engineering Top 150**, **Management Top 300 Innovation Top 150**	Apply for **International Rankings (QS Asia, THE World Impact Rankings)**

8. REGULATORY COMPLIANCE

8.1 Existing Recognitions

CMRTES Institutions, under the aegis of **CMR Technical Education Society**, has already secured the following statutory recognitions and affiliations for its existing campuses in Hyderabad:

- **UGC Recognition (Sections 2(f) & 12(B))** for selected institutions under the Society.
- **AICTE Approval** for all Engineering and Management programmes at CMR Technical Campus.
- **NMC Approval** for MBBS.
- **INC Approval** for BSc Nursing.
- Government of Telangana Approval for BSc Physiotherapy and Allied Health Science programmes
- **NAAC Accreditation:** CMR Technical Campus accredited with **'A' Grade and 3.12 score**, valid till December 31, 2025 and waiting for new framework to apply under Maturity-Based Graded Level.
- **NBA Accreditation:** Core UG programmes such as ECE, CSE and IT have been granted NBA accreditation.
- **NIRF Participation:** CMR Technical Campus has consistently participated in the National Institutional Ranking Framework and is listed in the **201–300 rank band in Engineering** in the year 2025.
- **SIRO Recognition:** Recognition as a Scientific and Industrial Research Organization (for select research centres) from the Department of Scientific and Industrial Research (DSIR)
- **Affiliations:**
    - Jawaharlal Nehru Technological University – Hyderabad (JNTUH) for Engineering, Technology, and Management programmes.
    - Kaloji Narayana Rao University of Health Sciences (KNRUHS), Warangal for Medical, Nursing, Physiotherapy, and Health Sciences programmes.

These recognitions establish the regulatory credibility of the sponsoring society and its constituent institutions.

8.2 Alignment with Regulatory Bodies

The proposed CMR Deemed to be University will align with and adhere to all regulatory frameworks:

- **UGC Regulations (2023):** Full compliance with UGC (Institutions Deemed to be Universities) Regulations, including governance structure, academic autonomy, and mandatory corpus fund requirements.

- **AICTE:** Engineering, Technology, and Management programmes shall follow AICTE norms on intake, curriculum, OBE framework, and infrastructure.

- **NMC (National Medical Commission):** For proposed medical programmes, norms related to teaching hospitals, faculty ratios, laboratories, and clinical exposure will be complied with.

- **INC (Indian Nursing Council):** Nursing programmes will follow INC guidelines regarding intake, curriculum, faculty-student ratio, and clinical affiliations.

8.3 NOC from JNTU-H & KNR University of Health Sciences, Warangal

As per UGC requirements for conversion into a Deemed-to-be University:

- **NOC from JNTUH:** The affiliating university (Jawaharlal Nehru Technological University, Hyderabad) is requested to issue a No-Objection Certificate for CMR Technical Campus under CMR Technical Education Society (NOC request letter is enclosed).

- **NOC from KNRUHS:** The affiliating health sciences university (Kaloji Narayana Rao University of Health Sciences, Warangal) is approached to issue NOC for Medical, Nursing, Physiotherapy, and Allied Health programmes currently affiliated (NOC request letter is enclosed).

9. DISTINCT FEATURES OF CMR-DTBU

9.1 Multidisciplinary Framework

CMR-DTBU is envisioned as a truly **multidisciplinary Deemed to be University**, integrating **Engineering & Technology, Management, Medical Sciences, Nursing, Health Sciences and Liberal Arts & Indian Culture** under a single framework.

School	Programmes
Engineering & Technology	Advanced programmes in Artificial Intelligence, Cybersecurity, Data Science, Quantum Computing, Digital Twin Technology, Semiconductor Technology, Robotics, EV Technology, AI in Healthcare and Cybersecurity in Healthcare.
Medicine & Healthcare	Medicine (MBBS)
Nursing	Nursing (UG & PG)
Health Sciences	Physiotherapy, Allied Health, Digital Health and AI in Clinical Diagnoses
Liberal Arts and Indian Culture	Indian Knowledge Systems and Cultural Heritage, Public Policy

Interdisciplinary Centers: Innovation hubs in **Bioinformatics, Digital Health, Medical Devices, IPR & Entrepreneurship, Incubation & Start-ups**, cutting across schools.

This integrated academic ecosystem is designed in line with **NEP 2020's vision of large multidisciplinary universities**, positioning CMR-DTBU as a model institution for the future.

9.2 Distinct Category Justification of the Programmes & Course Structure

CMR-DTBU seeks recognition under **"Distinct Category – Existing"** as per UGC norms because:

- It brings together **Engineering & Technology, Management, Medical Sciences, Nursing, Health Sciences and Liberal Arts** – a rare combination in India's higher education ecosystem.
- The sponsoring body (CMR Technical Education Society) already operates **engineering & technology, management, medical, nursing, physiotherapy, and allied health sciences institutions** with strong accreditations (NAAC-A, NBA programmes, NIRF ranked).
- The Deemed to be University will introduce **programmes not commonly offered in affiliating/state universities**, such as:

Sl.No	School	UG/PG/ Integrated	Name of the Programme	Duration (Yrs)	Intake	To offer in	Category
1	Engineering & Technology	UG	Semiconductor Technology	4	60	2026-27	D+I
2		UG	Quantum Computing	4	60	2026-27	D+I
3		UG	Digital Twin Technology	4	60	2026-27	D+I
4		Integrated	AI in Health Care Technology	5	60	2026-27	D+I+M
5		PG	Computational Neuroscience & AI	2	12	2026-27	D+M
6		PG	Health Robotics and Assisted Nursing	2	12	2026-27	D+T
7	Health Sciences	UG	BSc - Digital Health	4	60	2026-27	D+M
8	Liberal Arts and Indian Culture	UG	B.A. (Hons.) - Indian Knowledge Systems and Cultural Heritage	4	60	2026-27	D

D - Distinct, I – Industry-Supported, M – Multidisciplinary, T-Transdisciplinary

B.Tech in Semiconductor Technology

Justification:

National Impact:

India is in need of qualified workforce to support the India Semiconductor Mission (ISM) to enhance the economy, establish technical sovereignty, and lessen reliance on imports, semiconductor courses are essential to India's national significance. These courses are essential for fostering creativity, building a strong ecosystem for chip design and production, and securing the country's place in the world of technology. The sector is projected to create over a million jobs by next few years as a part of Industry 4.0, including roles in design, fabrication, testing, and manufacturing. We need a strong talent pool is needed to embrace this technological shift.

Overall Impact:

The semiconductor industry is a massive global market in itself, with sales reaching hundreds of billions of dollars annually. It supplies the vital chips that enable contemporary goods and services to function, enabling trillions of dollars in downstream industries like electronics, automobile, and finance. For nations with a significant presence in the sector, it is a big employer and a substantial factor in boosting economic strength and competitiveness. India can improve its standing internationally and establish itself as a center for electronics innovation and production by emerging as a key player in the semiconductor sector. This sector fosters innovation that improves many facets of daily life by making gadgets more potent, effective, and small.

Employability:

Initiatives like the India Semiconductor Workforce Development Program (ISWDP) and courses mapped to the National Skills Qualification Framework (NSQF) are critical for developing a workforce that meets industry needs.

• Government Initiatives: The India Semiconductor Mission (ISM, 2021) with an outlay of ₹76,000 crores under the Production Linked Incentive (PLI) scheme is aimed at making India a global hub for semiconductor design and manufacturing.
• National Electronics Policy 2019 targets a $400 billion electronics manufacturing industry by 2025, requiring skilled chip designers, fabrication engineers, and materials scientists.
• Skilled Manpower Demand: India needs over 2,00,000 semiconductor professionals in design, manufacturing, and R&D over the next decade.

Year 1: Foundation (40 Credits)

I SEMESTER (20 Credits)

S. No	Course Title	Credits
1	Mathematics I (Calculus & Differential Equations)	4
2	Engineering Physics (Solid State Physics, Quantum Basics)	4
3	Engineering Chemistry / Environmental Science	3
4	Introduction to Programming (C/Python)	3
5	Basic Electrical & Electronics Engineering	3
6	Communication Skills & Professional English	2
7	Engineering Graphics / Workshop Practice	1
	Total Credits	**20**

II SEMESTER (20 Credits)

S. No	Course Title	Credits
1	Mathematics II (Probability, Statistics, Complex Analysis)	4
2	Materials Science & Engineering	3
3	Analog & Digital Electronics	3
4	Object-Oriented Programming	3
5	Engineering Mechanics	3
6	Design Thinking & Innovation	3
7	Internship	1
	Total Credits	**20**

Year 2: Core Electronics & Devices (40 Credits)

III SEMESTER (20 Credits)

S. No	Course Title	Credits
1	Signals & Systems	4
2	Semiconductor Physics & Devices	4
3	Electronic Circuits	3
4	Microprocessors & Microcontrollers	3
5	Electromagnetic Theory	3
6	Humanities Elective (Ethics/Industrial Psychology)	2
7	Internship	1
	Total Credits	

IV SEMESTER (20 Credits)

S. No	Course Title	Credits
1	VLSI Design Fundamentals	4
2	Integrated Circuit Fabrication Technology	3
3	Analog & Mixed Signal Design	3
4	Control Systems	3
5	Open Elective I (CS/AI/IoT/Mechatronics)	3
6	Laboratory: Device Fabrication & Characterization	3
7	Internship	1
	Total Credits	

Year 3: Semiconductor Specialization (40 Credits)

V SEMESTER (20 Credits)

S. No	Course Title	Credits
1	CMOS Circuit Design	3
2	MEMS & Nanoelectronics	3
3	Wafer Fabrication & Cleanroom Practices	4
4	Semiconductor Packaging & Testing	3
5	Elective I (Photonics, Optoelectronics, Power Semiconductors)	3
6	Minor Project I (Chip Design / Fabrication Simulation)	4
	Total Credits	**20**

VI SEMESTER (20 Credits)

S. No	Course Title	Credits
1	Advanced VLSI & SoC Design	3
2	Semiconductor Process Integration	3
3	EDA Tools & Verification	3
4	Embedded Systems & Applications	3
5	Open Elective II (AI for Chip Design, Quantum Computing, 5G Hardware)	3
6	Minor Project II (Prototype Device or Design Validation)	5
	Total Credits	**20**

Year 4: Industry & Research Integration (40 Credits)

VII SEMESTER

S. No	Course Title	Credits
1	Semiconductor Manufacturing & Supply Chain	3
2	Reliability & Failure Analysis of Semiconductors	3
3	Elective II (Nano-materials, Compound Semiconductors, Flexible Electronics)	3
4	Elective III (Automotive Electronics, Biomedical Devices, IoT Hardware)	3
5	Emerging Technologies in Semiconductors (AI Chips, Neuromorphic, Quantum Devices)	3
6	Industry Internship (2 months)	4
7	Major Project Phase I (Chip/Product Development)	4
	Total Credits	**19**

VIII SEMESTER

S. No	Course Title	Credits
1	Intellectual Property Rights & Tech Entrepreneurship	3
2	Major Project Phase II (Capstone Project with Industry/Research Lab)	10
3	Open Elective III (Interdisciplinary)	2
	Seminar / Viva-Voce / Portfolio Development	2
	Total Credits	**17**

Credit Distribution
Basic Sciences & Mathematics – 24
Engineering Sciences – 12
Core Electronics & Semiconductor Engineering – 45
Specialization & Professional Electives – 27
Open Electives – 8
Projects & Internships – 26
Humanities & Management – 18
Total = 160 Credits

B.Tech in Quantum Computing

Justification:

National Impact:

Quantum computing is important for India as it offers a competitive advantage in critical areas like national security, cryptography, AI, and scientific discovery, and supports the country's goal of becoming a developed nation by 2047. India is investing in the field through the National Quantum Mission (NQM), fostering a domestic ecosystem through various institutions and supporting start-ups. This strategic focus aims to drive economic growth, societal transformation, and position India as a leader in advanced technologies. As a part of NQM providing substantial funding and support to researchers, institutions, and start-ups across the country.

Overall Impact:

The potential of quantum computing to improve AI and large data analysis, change industries like banking and logistics, and alter medical and materials science through drug discovery and molecular simulation makes it significant on a global scale. Many sectors and logistics depend on this technology's ability to solve intricate optimization issues with numerous variables. The race is already being led by nations like the United States, China, and the European Union, while many more are developing their own national quantum agendas. It is believed that dominance in quantum computing is strategically necessary for future national security and economic prosperity.

Employability:

• Government Initiatives:

- The National Quantum Mission (NQM, 2023–2031) has an allocation of ₹6,003 crore to develop quantum computers, secure communications, quantum sensors, and post-quantum cryptography.
- India aims to build intermediate-scale quantum computers (50–1000 qubits) in the next 8 years.
• Skilled Manpower Demand: Requires highly specialized talent in quantum algorithms, quantum physics, and advanced cryptography. Projected demand of ~25,000 quantum technology experts by 2030.

Year 1: Foundation (40 Credits)

I SEMESTER

S. No	Course Title	Credits
1	Mathematics I (Calculus & Linear Algebra)	4
2	Physics I (Mechanics, Waves, Optics)	4
3	Chemistry / Environmental Science	3
4	Programming Fundamentals (Python/C)	3
5	Basic Electrical & Electronics Engineering	3
6	Communication Skills & Professional English	2
7	Engineering Graphics / Workshop Practice	1
	Total Credits	**20**

II SEMESTER

S. No	Course Title	Credits
1	Mathematics II (Probability, Statistics, Complex Variables)	4
2	Physics II (Modern Physics & Introduction to Quantum Mechanics)	4
3	Data Structures & Algorithms	3
4	Digital Logic & Computer Organization	3
5	Introduction to AI & Emerging Technologies	3
6	Humanities Elective (Ethics, Philosophy of Science)	2
7	Internship	1
	Total Credits	**20**

Year 2: Core Computing + Quantum Basics (40 Credits)

III SEMESTER

S. No	Course Title	Credits
1	Linear Algebra & Group Theory for Quantum Computing	4
2	Quantum Mechanics for Engineers	4
3	Operating Systems	3
4	Database Management Systems	3
5	Signals & Systems	3
6	Open Elective I (IoT/Robotics/Applied Math)	3

7	Internship	1
	Total Credits	**21**

IV SEMESTER

S. No	Course Title	Credits
1	Quantum Physics II (Spin, Entanglement, Measurement Theory)	3
2	Computer Networks & Cybersecurity	3
3	Algorithms & Complexity Theory	3
4	Quantum Programming (Qiskit, Cirq, PyQuil)	4
5	Machine Learning Foundations	3
6	Laboratory: Quantum Simulation Tools (IBM Q Experience)	3
7	Internship	1
	Total Credits	**20**

Year 3: Quantum Specialization (40 Credits)

V SEMESTER

S. No	Course Title	Credits
1	Quantum Algorithms (Shor's, Grover's, Variational Algorithms)	4
2	Quantum Error Correction & Fault Tolerance	3
3	Quantum Hardware (Superconducting Qubits, Trapped Ions, Photonics)	3
4	Quantum Information Theory	3
5	Elective I (Quantum Chemistry / Quantum Materials / Quantum Sensing)	3
6	Minor Project I (Quantum Simulation/Software)	4
	Total Credits	**20**

VI SEMESTER

S. No	Course Title	Credits
1	Quantum Cryptography & Quantum Communication	3
2	Cloud Quantum Computing (IBM, Google, Azure Quantum)	3
3	Quantum Machine Learning	4
4	Elective II (Quantum Optics, Topological Qubits, Neuromorphic Computing)	3
5	Open Elective II (AI for Quantum, Data Science, HPC)	3
6	Minor Project II (Prototype QC Application)	4
	Total Credits	**20**

Year 4: Industry & Research Integration (40 Credits)

VII SEMESTER

S. No	Course Title	Credits
1	Quantum Operating Systems & Compilers	3

2	Quantum Devices & Semiconductor Integration	3
3	Emerging Frontiers in Quantum Tech (Quantum Internet, Quantum Cloud, Quantum Metrology)	3
4	Elective III (Quantum Finance, Quantum Biology, Quantum AI)	3
5	Elective IV (Quantum Materials, Quantum Sensors, Space Applications)	3
6	Internship in Quantum Lab / Industry	4
7	Major Project Phase I (Product/System Prototype)	4
	Total Credits	**23**

VIII SEMESTER

S. No	Course Title	Credits
1	Tech Entrepreneurship & IPR in Quantum Technologies	3
2	Major Project Phase II (Capstone with Research Lab / Startup)	10
3	Open Elective III (Multidisciplinary – Policy, Ethics, Futuristic Tech)	2
4	Viva-Voce / Seminar / Portfolio	2
	Total Credits	**17**

Credit Distribution
Basic Sciences & Mathematics – 28
Core Computing (CS + Engineering Sciences) – 36
Core Quantum Engineering – 39
Professional Electives – 15
Open Electives – 9
Projects & Internships – 26
Humanities, Ethics & Policy – 7
Total = 160 Credits

B.Tech in Digital Twin Technology

Justification:

National Impact:

India's primary mission in digital twin technology is the **Sangam: Digital Twin initiative**, led by the Department of Telecommunications (DoT) to revolutionize infrastructure planning and design. The initiative aims to use digital twins, combined with AI, IoT, and 5G/6G, to create a real-time virtual model for testing and planning sustainable infrastructure projects before physical implementation. Digital twin technology is important for transforming operations and decision-making in a variety of sectors like Manufacturing, Healthcare, Aerospace, Automotive, Energy, Retail, Construction and Urban planning. Organizations can use digital twins to optimize resource consumption, which are very important to focus for Sustainable Development.

Overall Impact:

Digital twin technology's worldwide goal is to transform businesses in order to boost productivity, facilitate predictive maintenance, and spur innovation in fields including urban planning, manufacturing, and healthcare. The global market for digital twins is expected to rise significantly, from about $21 billion in 2025 to over $240 billion by 2035. The integration of

AI, IoT, and machine learning technologies, as well as the growing need for virtual prototyping and predictive maintenance across sectors including manufacturing, healthcare, and automotive, are the key drivers of this quick growth. According to various assessments, the industry is growing quickly, with a high Compound Annual Growth Rate (CAGR) of 30.54% through 2035 and 47.9% between 2025 and 2030.

Employability:

• Various policies related to Digital Twin like Sangam, National Smart Cities Mission and Industry 4.0 states the importance of skilled professionals in this technology.
• Supported by National Smart Cities Mission, which integrates digital twins for urban infrastructure, energy management, and transportation planning.
• Skilled Manpower Demand: Engineering services companies in India (Infosys, TCS, LTTS) already employ thousands in simulation and twin modelling. Demand is projected to cross 50,000 professionals by 2030 across aerospace, automotive, healthcare, and smart infrastructure.

Year 1: Foundation (40 Credits)

I SEMESTER

S. No	Course Title	Credits
1	Mathematics I (Calculus & Linear Algebra)	4
2	Physics for Engineers (Mechanics, Waves, Optics)	4
3	Chemistry / Environmental Science	3
4	Programming Fundamentals (Python/C)	3
5	Engineering Graphics & CAD	3
6	Communication Skills & Professional English	2
7	Workshop Practice / Basic Electronics	1
	Total Credits	**20**

II SEMESTER

S. No	Course Title	Credits
1	Mathematics II (Probability, Statistics, Differential Equations)	4
2	Engineering Mechanics & Materials	3
3	Data Structures & Algorithms	3
4	Electrical & Electronics Engineering Fundamentals	3
5	Introduction to IoT & Emerging Technologies	3
6	Design Thinking & Innovation	3
7	Internship	1
	Total Credits	**20**

Year 2: Core Computing + Systems (40 Credits)

III SEMESTER

S. No	Course Title	Credits
1	Signals & Systems	3
2	Database Management Systems	3
3	Computer Networks & Cybersecurity	4

4	Sensors, Actuators & Embedded Systems	3
5	Thermodynamics & Fluid Systems (for physical twins)	3
6	Humanities Elective (Industrial Psychology, Ethics)	3
7	Internship	1
	Total Credits	**20**

IV SEMESTER

S. No	Course Title	Credits
1	Modeling & Simulation Fundamentals	3
2	Control Systems & Automation	3
3	Cloud Computing & Edge Computing	3
4	Mechatronics & Cyber-Physical Systems	3
5	Open Elective I (AI/Robotics/AR-VR)	3
6	Laboratory: Simulation Tools (MATLAB, ANSYS, Simulink)	4
7	Internship	1
	Total Credits	**20**

Year 3: Digital Twin Specialization (40 Credits)

V SEMESTER

S. No	Course Title	Credits
1	Digital Twin Architecture & Platforms	4
2	3D Modeling & Additive Manufacturing (CAD/CAM/3D Printing)	3
3	Data Analytics & Machine Learning for Digital Twins	3
4	Industrial IoT (IIoT)	3
5	Elective I (Smart Cities / Healthcare Twins / Aerospace Twins)	3
6	Minor Project I (System-level Digital Twin Prototype)	4
	Total Credits	**2**

VI SEMESTER

S. No	Course Title	Credits
1	Cloud-Edge Integration for Digital Twins	3
2	AR/VR & XR Interfaces for Twin Visualization	3
3	Predictive Maintenance & Asset Management	3
4	Elective II (Defence DT, Automotive DT, Energy Systems)	3
5	Open Elective II (Blockchain, Quantum Tech, Sustainability)	3
6	Minor Project II (Industry Case Study with Simulation Lab)	5
	Total Credits	**20**

Year 4: Capstone, Industry & Research (40 Credits)

VII SEMESTER

S. No	Course Title	Credits
1	Advanced Digital Twin Applications (Smart Manufacturing, Defence, Healthcare)	3
2	AI-Driven Digital Twin Ecosystems	3
3	Emerging Trends in Digital Twin (Metaverse, Industry 5.0, Twin Transition for Sustainability)	3

4	Elective III (Robotics Twins, Human Digital Twins, Space Systems)	3
5	Elective IV (Autonomous Systems, IoT Security, Cognitive Twins)	3
6	Internship (2 months, Industry/Research Lab)	4
7	Major Project Phase I (DT Product/System Prototype)	4
	Total Credits	**23**

VIII SEMESTER

S. No	Course Title	Credits
1	Tech Entrepreneurship, IPR & Innovation Management	3
2	Major Project Phase II (Capstone – Industry/Startup Collaboration)	10
3	Open Elective III (Interdisciplinary / Management / Policy)	2
4	Seminar / Viva-Voce / Portfolio	2
	Total Credits	**17**

Credit Distribution
Basic Sciences & Mathematics – 24
Core Computing & Engineering Sciences – 36
Digital Twin Core & Labs – 37
Professional Electives – 15
Open Electives – 9
Projects & Internships – 26
Humanities, Ethics & Management – 13
Total = 160 Credits

M.Tech in AI in Healthcare Technology
M.Tech in Computational Neuroscience and AI
M.Tech in Health Robotics and Assisted Nursing

Justification:

The courses in healthcare domain are unique, inter and multidisciplinary in nature. These courses are in sync with Sustainable Development Goals (SDGs) and various National Healthcare Initiatives launched by the Government of India to promote health initiative and healthy lifestyle. With the increase in demand for healthcare, which includes preventive and curative medical treatments, there is rising demand for products promoting health and well-being along with alterative systems of healthcare.

National Impact:

India's mission in healthcare education is to address the country's shortage of skilled health professionals, especially in rural areas, through an overhaul of medical education, increased digitalization, and a greater emphasis on skill-based and community-focused training. India's mission in healthcare education involves a multi-pronged approach, including expanding access through the National Health Mission (NHM) and Ayushman Bharat Programme, strengthening the workforce via the Skill India Mission and promoting interdisciplinary courses, and modernizing with digital health initiatives like the National Digital Health Mission. The goal is to improve the quality and accessibility of healthcare for all Indians by focusing on both rural and urban areas, and by integrating technology into the education and delivery of healthcare services. The course supports India's vision to create a resilient and inclusive healthcare system.

Overall Impact:

With its global perspective, the interdisciplinary domain education related to Healthcare incorporates international health policy trends and financial strategies, enabling students to compare, contrast, and apply global best practices within the global context. This international outlook prepares graduates to contribute both domestically and on the global healthcare stage. Using technology to bridge the gap between formal education and the practical needs of the healthcare industry. Providing high-quality medical education to Prepare a workforce that is competent, compassionate, and equipped to handle global health challenges.

Employability:

Skilled Manpower Demand for AI & Healthcare:

o National AI Strategy –AI for All (NITI Aayog, 2018) identifies healthcare, agriculture, smart cities, and education as priority sectors.
o The IndiaAI Mission (2023) with ₹10,371 crore funding promotes AI compute infrastructure, datasets, and workforce skilling.
o India has the second-largest AI workforce globally (~420,000 professionals), yet faces a talent shortfall of 200,000+.
o Annual demand is growing at 20–25%, especially for AI/ML engineers, data scientists, and AI-in-healthcare specialists.

Demand for healthcare in India will outgrow supply by 2035 owing to growing population and consumer class. India's Medical device market is growing at 15 per cent annually and stands currently at $11 - $12 billion, with projections to reach $50 billion by 2030, of which around 70-80 per cent is imported. India is likely to be the second largest driver of growth in the global nutraceutical market to the 2030 (after China), driven by rising incomes and consumer awareness. In order to strengthen healthcare, the Government of India is reforming medical education through structural and regulatory reforms, and overhaul of modern medical education as well as Indian System of Medicine by ensuring Uniform standards of education, create curriculum relevant to Indian context.

Graduates of this can be a part of Health Policy, Planning, and Finance program are well-suited for impactful roles in healthcare management and administration, including Health Policy Analyst, Healthcare Planner, Health Economist, Health Finance Manager, Healthcare Strategist, and Healthcare Consultant. Their specialized training in health policy analysis, strategic planning, and financial management positions them as essential contributors to shaping and optimizing healthcare systems, ensuring efficiency, equity, and sustainability in the delivery of healthcare services with the integration of e-learning, AI, virtual reality (VR), and augmented reality (AR) offers more flexible, scalable, and immersive training experiences. These graduate can do the innovation and implementation of cutting-edge technologies in the healthcare sector.

Skilled Manpower Demand for Computational Neuroscience and AI:

Opportunities in both business and research in domains like neuro technology, data science, AI development, and digital health, computational neuroscience and AI offer excellent employability. Graduates can pursue careers in user experience design, scientific journalism, computational finance, or as AI specialists, neuroscientists, or neuro-engineers. Computational

neuroscience informs the design of more advanced AI algorithms, especially for deep learning, reinforcement learning, and spiking neural networks (SNNs). Both the business sector and academics provide a wide range of prospects, including start-ups, and large tech organizations.

- The cognitive AI market is growing even faster, with a projected compound annual growth rate (CAGR) of 26.74% from 2025 to 2030.
- The global neuroscience market, which includes computational tools, was valued at $38.86 billion in 2025 and is projected to grow at a CAGR of 6.18% to reach $52.45 billion by 2030. Another report forecasts the broader digital health and AI neuroscience market to reach $79.3 billion by 2033.

Skilled Manpower Demand for Health Robotics and Assisted Nursing:

Graduates of this program are well-prepared for diverse roles at the intersection of healthcare and technology, including Medical Device Engineer, Wearable Technology Developer, Regulatory Affairs Specialist for Medical Devices, Healthcare Data Analyst, Clinical Research Manager, and Biomedical Product Manager.

o Make in India and Atmanirbhar Bharat encourage robotics in manufacturing, defense, agriculture, and healthcare.
o SAMARTH Udyog Bharat 4.0 Programme (under Department of Heavy Industries) supports robotics-driven smart factories.
o National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS, 2018) with ₹3,660 crore outlay includes robotics as a priority.
o The Indian robotics market is projected to grow at 18–20% CAGR, reaching $7–8 billion by 2030.
o Estimated 1 million robotics and automation professionals will be required by 2035 in manufacturing, logistics, medical robotics, and AI-driven service robots

M.Tech - AI in Healthcare Technology

Duration: 5 Years (10 Semesters)
Total Credits: 200

Credit Distribution
Basic Sciences (BS): 24–26
Engineering Sciences (ES): 20–22
Healthcare & Life Sciences (HS): 24–26
Professional Core (PC): 60–65
Professional Electives (PE): 18–20
Open Electives (OE): 12–15
Humanities & Management (HSMC): 8–10
Projects / Internships / Thesis: 30–35
Mandatory Courses (MC): Induction, Environmental Studies, Constitution of India, Professional Ethics (Non-credit)

Semester-wise Structure
I SEMESTER (20 Credits)

S. No	Course Title	Credits
1	Mathematics – I (Calculus & Linear Algebra)	4
2	Engineering Physics / Chemistry	3

3	Programming for Problem Solving (Python/C)	3
4	Human Anatomy & Physiology	3
5	Communication Skills / Professional English	2
6	Programming Lab	2
7	Basic Sciences Lab	2
8	Induction / Environmental Studies (MC)	
	Total Credits	**20**

II SEMESTER (20 Credits)

S. No	Course Title	Credits
1	Mathematics – II (Probability & Statistics, Differential Equations)	3
2	Data Structures & Algorithms	3
3	Principles of Electrical & Electronics Engineering	3
4	Biochemistry & Medical Biology	3
5	Healthcare Systems & Medical Terminology	3
6	Data Structures Lab	2
7	Biology / Biochemistry Lab	2
8	Internship	1
	Total Credits	**20**

III SEMESTER (20 Credits)

S. No	Course Title	Credits
1	Object-Oriented Programming (Java/C++)	3
2	Database Management Systems	3
3	Biomedical Instrumentation	3
4	Signals & Systems	3
5	Open Elective – I	3
6	OOP & DBMS Lab	2
7	Biomedical Lab	2
8	Constitution of India / Universal Human Values (MC)	0
9	Internship	
	Total Credits	**19**

IV SEMESTER (20 Credits)

S. No	Course Title	Credits
1	Operating Systems	3
2	Computer Networks & IoT for Healthcare	3
3	Fundamentals of Artificial Intelligence	3
4	Medical Imaging Systems	3
5	Open Elective – II	3
6	AI Lab	2
7	Imaging & IoT Lab	2
8	Mini Project – I	1
	Total Credits	**20**

V SEMESTER (20 Credits)

S. No	Course Title	Credits
1	Machine Learning	3
2	Healthcare Data Analytics	3
3	Cloud Computing for Health Data	3
4	Medical Ethics, Regulations & Standards	3
5	Professional Elective – I	3

6	ML Lab	2
7	Healthcare Data Lab	2
8	Minor Project – II (AI for Clinical Dataset)	1
	Total Credits	**20**

VI SEMESTER (20 Credits)

S. No	Course Title	Credits
1	Deep Learning	3
2	Natural Language Processing in Healthcare	3
3	Digital Health & Telemedicine	3
4	Biosignal Processing (ECG, EEG, EMG)	3
5	Professional Elective – II	3
6	DL Lab	2
7	Biosignal Lab	2
8	Innovation Lab / Prototype Development	1
	Total Credits	**20**

VII SEMESTER (20 Credits)

S. No	Course Title	Credits
1	AI in Medical Imaging (Radiology, Pathology, Ophthalmology)	3
2	Robotics in Surgery & Rehabilitation	3
3	Reinforcement Learning for Healthcare Systems	3
4	Professional Elective – III	3
5	Open Elective – III	3
6	Healthcare AI Lab	2
7	Seminar / Technical Writing	2
8	Mini Project – III (Clinical AI Pilot Project)	1
	Total Credits	**20**

VIII SEMESTER (20 Credits)-B. Tech Exit Point

S. No	Course Title	Credits
1	Advanced Healthcare Systems & Hospital Management	3
2	Cybersecurity & Privacy in Health Data	3
3	Professional Elective – IV	3
4	Comprehensive Viva / Qualifying Exam	2
5	Major Project – I (Capstone: AI-Healthcare Solution)	9
	Total Credits	**20**

IX SEMESTER (20 Credits)-M. Tech Phase

S. No	Course Title	Credits
1	Advanced Topics in AI for Healthcare (Precision Medicine, Genomics AI)	3
2	AI-driven Drug Discovery & Personalized Therapy	3
3	Research Methodology & Paper Writing	2
4	Professional Elective – V	3
5	Open Elective – IV	3
6	Major Project – II (Research/Product Development)	6
	Total Credits	**20**

X SEMESTER (20 Credits)-M. Tech Phase

S. No	Course Title	Credits
1	Dissertation / Thesis (Healthcare AI Application)	16

2	Seminar & Publications	2
3	Clinical / Industry Internship	2
	Total Credits	**20**

Elective Baskets
Professional Electives
AI in Oncology, Cardiology, Neurology
Wearable Devices & Remote Monitoring
AR/VR in Medical Training & Surgery
Predictive Analytics for Public Health
AI for Genomics & Precision Medicine
Digital Twins in Healthcare
Open Electives
Bioethics & Health Policy
Entrepreneurship in Healthcare Tech
Cognitive Science & Human Factors
Business Analytics in Pharma/Healthcare
Global Health & Sustainable Development

M.Tech in Computational Neuroscience and AI

Duration: 2 Years (4 Semesters) | **Total Credits:** 80 |
Program Type: Interdisciplinary (Engineering + Cognitive Science + AI)

I SEMESTER (Foundation (17 Credits)

S. No	Course Code	Course Title	L	T	P	Credits
1	CNS 101	Fundamentals of Neuroscience for Engineers	3	0	0	3
2	CNS 102	Mathematical Foundations for Neural Computation	3	1	0	4
3	CNS 103	Machine Learning & Deep Learning Techniques	3	0	2	4
4	CNS 104	Neural Signal Processing & Brain Data Analytics	3	0	2	4
5	CNS 105	Neuroscience & AI Simulation Lab (Python/MATLAB/NEURON)	0	0	4	2
6	CNS 106	Research Methodology & IPR (Audit/Non-Credit)	2	0	0	2
		Total Credits				**17**

II SEMESTER (Cognitive and Computational Models (18 Credits))

S. No	Course Code	Course Title	L	T	P	Credits
1	CNS 201	Cognitive Computing & Brain Modeling	3	0	2	4
2	CNS 202	Artificial Neural Systems & Spiking Neural Networks	3	0	2	4
3	CNS E1	Program Elective – I (choose 1)	3	0	0	3
4	CNS E2	Program Elective – II (choose 1)	3	0	0	3
5	CNS 203	Cognitive-AI Project / Innovation Lab	0	0	4	2
6	CNS 204	Technical Seminar / Review Presentation	0	2	0	2

		Total Credits				**18**

Elective Pool – I & II (Indicative):
• Neuro-Dynamics & Biophysical Modeling
• Neuromorphic Computing and Edge AI
• Reinforcement Learning and Decision Neuroscience
• Explainable AI for Biomedical Systems
• Natural Language Processing for Neural Data

III SEMESTER (Applications & Research Integration (17 Credits))

S. No	Course Code	Course Title	L	T	P	Credits
1	CNS 301	Neuroinformatics & Computational Cognition	3	0	0	3
2	CNS 302	Brain–Computer Interfaces & Neural Prosthetics	3	0	2	4
3	CNS E3	Program Elective – III	3	0	0	3
4	CNS OE1	Open/Interdisciplinary Elective (Industry / HealthTech / Robotics)	3	0	0	3
5	CNS 303	Mini Research Project / Design Studio – I	0	0	8	4
		Total Credits				**17**

Elective Pool – III (Open):
. Bioinformatics and Genomic Data Analytics
• Biomedical Signal & Image Processing
• Robotics and Neural Control Systems
• Human–Computer Interaction & AR/VR

IV SEMESTER (Dissertation & Capstone (13 Credits))

S. No	Course Code	Course Title	L	T	P	Credits
1	CNS 401	Major Thesis / Dissertation (Phase II)	0	0	24	12
2	CNS 402	Comprehensive Viva / Publication Seminar	0	0	0	1
		Total Credits				**13**

Overall Program Summary Semester Credits
Semester I 17
Semester II 18
Semester III 17
Semester IV 13
Total 80 Credits

M.Tech in Health Robotics and Assisted Nursing

Duration: 2 Years (4 Semesters) | **Total Credits:** 80 |
Eligibility: B.E./B.Tech in Biomedical / Electronics / Mechatronics / AI & Robotics / Instrumentation / Allied Health Sciences (B.Sc. Nursing, BPT, BOT, etc.) with bridge courses as needed.

I SEMESTER (Foundations of Health Robotics (17 Credits))

S. No	Course Code	Course Title	L	T	P	Credits
1	HRA 101	Human Anatomy, Physiology & Biomechanics for	3	0	0	3

		Engineers				
2	HRA 102	Fundamentals of Robotics and Mechatronic Systems	3	1	0	4
3	HRA 103	Sensors, Actuators & Control Systems in Healthcare Devices	3	0	2	4
4	HRA 104	AI & Machine Learning for Health Robotics	3	0	2	4
5	HRA 105	Health Robotics Simulation & Prototyping Lab (MATLAB / ROS / Arduino / SolidWorks)	0	0	4	2
6	HRA 106*	Research Methodology, Biostatistics & IPR (Audit Course)	2	0	0	0
		Total Credits				**17**

II SEMESTER (Intelligent Systems and Assisted Care (18 Credits))

S. No	Course Code	Course Title	L	T	P	Credits
1	HRA 201	Rehabilitation Robotics and Human–Robot Interaction	3	0	2	4
2	HRA 202	Embedded Systems & IoT for Healthcare Monitoring	3	0	2	4
3	HRA 203	Clinical Nursing Informatics and Patient Safety Systems	3	0	0	3
4	HRA E1	Elective – I (choose one)	3	0	0	3
5	HRA E2	Elective – II (choose one)	3	0	0	3
6	HRA 204	Technical Seminar & Case Study on Health Robotics	0	2	0	2
		Total Credits				**18**

Elective Pool – I & II (Illustrative):

- Assistive & Companion Robots for Elderly Care
- Biomedical Signal & Image Processing
- AI in Clinical Decision Support Systems
- Ethical and Regulatory Frameworks in Medical Robotics
- Robotic Surgery Systems & Haptics

III SEMESTER (Integration, Research & Application (17 Credits))

S. No	Course Code	Course Title	L	T	P	Credits
1	HRA 301	Intelligent Prosthetics & Exoskeleton Design	3	0	2	4
2	HRA 302	Tele-Nursing and Remote Assistance Systems	3	0	2	4
3	HRA E3	Elective – III	3	0	0	3
4	HRA OE1	Open / Interdisciplinary Elective (Innovation / Entrepreneurship / Bioethics)	3	0	0	3
5	HRA 303	Mini Project / Design Studio – I (Prototype Development)	0	0	8	4
		Total Credits				**17**

Elective Pool – III (Examples):

- Wearable Health Devices & Smart Fabrics
- Cyber-Physical Systems in Healthcare
- Advanced 3D Printing for Prosthetic Devices
- AI-Driven Rehabilitation Planning

IV SEMESTER (Dissertation & Industry Immersion (13 Credits))

S. No	Course Code	Course Title	L	T	P	Credits
1	HRA 401	Major Thesis / Industry-Linked Research Project	0	0	24	12
2	HRA 402	Comprehensive Viva / Research Publication Seminar	0	0	0	1
		Total Credits				**13**

Total Credits Summary
Semester Credits
Semester I 17
Semester II 18
Semester III 17
Semester IV 13
Total 80 Credits

BSc. in Digital Health

Justification:

The integration of technology in healthcare domain is providing more holistic approach to diagnose, prevent and treat diseases. Digital health uses computing platforms, connectivity, sensors, software, in medical device, as device or as companion therapy. Health innovations are accelerating in the digital health domain and therefore, there is a need for the course to be aligned with a dedication to skill development and human resources in order to meet future demands.

Digital Health Market in India is expected to grow $18.34 Bn by 2030 compared to $3.83Bn in 2022 with an impressive CAGR of 21.6%. This growth in digital demand will spur increased uptake of skilled workforce providing them ample opportunities of employability to work in healthcare industry.

National Impact:

- The B.Sc Digital Health program in Hyderabad/Telangana caters to local healthcare needs, integrating digital technologies to enhance patient care and healthcare management, contributing to the region's evolving medical landscape.
- Aligned with India's digital health initiatives, the program contributes to the nation's expertise in leveraging technology for healthcare delivery, preparing graduates to address national health challenges through innovative digital solutions.

Overall Impact:

- With a global outlook, the program incorporates international best practices in digital health, fostering collaborations with global experts and institutions through the application of digital technologies.

Employability:

Generating a dedicated skill workforce in the digital health domain, the course aligns with the needs of the future healthcare landscape. Graduates are equipped to excel not only in traditional healthcare practices but also in harnessing the transformative potential of digital technologies.

Graduates are well-prepared for diverse roles in healthcare technology, digital health start-ups, and healthcare institutions globally. The program's emphasis on practical skills and industry-relevant knowledge enhances employability in the dynamic and rapidly evolving field of digital health.

Graduates of this course will be employed in roles such as Health Informatics Specialist, Digital Health Project Manager, Telehealth Coordinator, Clinical Data Analyst, Health App Developer, Digital Health Consultant, Medical Device Integration Specialist, Healthcare Data Privacy and Security Analyst, E-health Marketing Specialist, Health Technology Assessment Specialist, Population Health Analyst, User Experience (UX) Designer for Health Apps, Digital Health Educator, and Public Health Technologist.

Duration: 4 Years (8 Semesters)
Total Credits: 180 (including Internship)

Credit Distribution
- **Basic Sciences (BS):** 20–22
- **Medical Sciences (MS):** 20–24
- **Professional Core (PC – Digital Health, Data, AI, ICT):** 70–75
- **Professional Electives (PE):** 10–12
- **Open Electives (OE):** 6–8
- **Humanities, Ethics & Management (HSMC):** 8–10
- **Research Project / Dissertation:** 5–6
- **Internship (Industry/Clinical/Tech):** 20–22
- **Mandatory Courses (MC):** Induction, Environmental Studies, Constitution of India, Professional Ethics (Non-credit)

I SEMESTER (19 Credits)

S. No	Course Title	Credits
1	Human Anatomy & Physiology – I	4
2	Introduction to Healthcare Systems	3
3	Basics of Computer Science & Digital Technologies	3
4	English Communication & Professional Skills	2
5	Mathematics for Data Analytics	3
6	Anatomy & Physiology Lab	2
7	Computer Fundamentals Lab	2
8	Environmental Studies (MC)	0
	Total Credits	**19**

II SEMESTER (20 Credits)

S. No	Course Title	Credits
1	Human Anatomy & Physiology – II	4
2	Biochemistry & Pathology Basics	3
3	Database Management Systems	3
4	Health Information Systems & EHR	3
5	Programming Fundamentals (Python/R)	3
6	DBMS Lab	2
7	Digital Health Systems Lab	2

8	Constitution of India / Universal Human Values (MC)	0
	Total Credits	**20**

III SEMESTER (20 Credits)

S. No	Course Title	Credits
1	Medical Terminology & Clinical Workflows	3
2	Epidemiology & Public Health Informatics	3
3	Data Structures & Algorithms	3
4	Telemedicine & Telehealth Platforms	3
5	Open Elective – I	3
6	Data Structures Lab	2
7	Telemedicine Lab	3
	Total Credits	**20**

IV SEMESTER (22 Credits)

S. No	Course Title	Credits
1	Biostatistics & Research Methodology	3
2	Digital Health Devices, IoT & Wearables	3
3	Artificial Intelligence in Healthcare	3
4	Cybersecurity & Privacy in Health Data	3
5	Open Elective – II	3
6	AI in Healthcare Lab	3
7	IoT & Wearables Lab	4
	Total Credits	**22**

V SEMESTER (22 Credits)

S. No	Course Title	Credits
1	Cloud Computing & Health Data Storage	3
2	Machine Learning Applications in Healthcare	3
3	Blockchain & Digital Records Management	3
4	Health Data Analytics & Visualization	3
5	Professional Elective – I	3
6	ML in Healthcare Lab	3
7	Mini Project – I (Digital Health Prototype)	4
	Total Credits	**22**

VI SEMESTER (22 Credits)

S. No	Course Title	Credits
1	Advanced Digital Health Platforms (Smart Hospitals)	3
2	Mobile Health (mHealth) Applications	3
3	Predictive Analytics & Precision Medicine	3
4	Hospital Information Systems & Digital Transformation	3
5	Professional Elective – II	3
6	Digital Health Application Development Lab	3
7	Research Project / Dissertation	4
	Total Credits	**22**

VII SEMESTER (24 Credits) - Internship Phase - I)

S. No	Course Title	Credits
1	**Industry/Clinical Internship (6 months)**	20

	(Rotations: Hospitals, Health IT Companies, EHR Vendors, Telemedicine Firms)	
2	Seminar & Technical Writing	4
	Total Credits	**24**

VIII SEMESTER (24 Credits) - Internship Phase - II)

S. No	Course Title	Credits
1	**Industry/Research Internship (6 months)** (Rotations: AI Health Startups, Global Digital Health Projects, WHO/NGO Health Informatics Labs)	20
2	Comprehensive Viva & Exit Examination	4
	Total Credits	**24**

Professional Electives (Basket)
• AI & Deep Learning in Diagnostics
• Digital Therapeutics (DTx)
• Health Economics & Policy Analytics
• AR/VR for Healthcare Training
• Robotics in Surgery & Digital Assistance
• Genomics & Bioinformatics for Digital Health

B.A. (Hons.) - Indian Knowledge Systems and Cultural Heritage

Justification:

- Clear focus on emerging or frontier areas of knowledge;
- Interdisciplinary and innovative curricula integrating national priorities and global competencies;
- Distinction in academic vision, pedagogy, and societal relevance not generally offered by conventional universities.
- The proposed B.A. (Hons.) Indian Knowledge Systems and Cultural Heritage is a pioneering academic program designed to revive, reinterpret, and recontextualize India's civilizational knowledge systems — encompassing Vedic, philosophical, linguistic, artistic, scientific, and ecological traditions — in a structured, multidisciplinary academic framework.
- The program integrates Sanskrit texts, philosophy, performing arts, yoga, traditional science, and heritage conservation, with modern tools such as digital archiving, cultural analytics, and heritage entrepreneurship.
- It directly supports the National Mission for Indian Knowledge Systems (IKS) launched by the Ministry of Education and aligns with the AICTE's Model Curriculum for IKS, thus serving as an institutional platform for knowledge preservation, translation, and innovation.
- First-of-its-kind 4-year Honours curriculum combining Indian Philosophy, IKS & Modern Science, Heritage Management, and Digital Humanities.
- Integration of NEP 2020's Multidisciplinary and ABC Framework with internship, field documentation, and capstone projects.

National Impact:

This program supports the Government's vision for an 'Aatma Nirbhar, Ethically Empowered, and Knowledge-Driven India'.

Overall Impact:

Curriculum include fieldwork, internships, projects, and capstone research, fostering experiential and employability-linked learning.

The proposed School of Liberal Arts and Indian Culture, through these two flagship programs, clearly satisfies the Distinct Category criteria by offering academically original, socially responsive, and nationally strategic programs that:

- Integrate ancient Indian knowledge with modern policy sciences;
- Promote innovation in governance, cultural sustainability, and social transformation;
- Advance India's global thought leadership in knowledge traditions and public policy.

Hence, the proposed Deemed-to-be University merits recognition under the Distinct Category for its pioneering academic vision and national relevance, establishing a unique educational model where heritage meets innovation, and tradition meets transformation.

Employability:

Heritage Management, Museum Curation, Digital Humanities, IKS Research, Tourism & Cultural Entrepreneurship.

Duration: 4 Years (8 Semesters) | **Total Credits:** 160 |
Framework: NEP-2020 (CBCS, ABC, Multi-Entry–Exit)

Semester I – Foundations (20 Credits)

Code	Course Title	L	T	P	C
IKS 101	Foundations of Indian Knowledge Systems	3	0	0	3
IKS 102	Introduction to Sanskrit Language – Level I	2	1	0	3
IKS 103	Indian History & Civilization – Pre-Vedic to Gupta Era	3	0	0	3
AEC 101	Communication Skills in English	2	0	2	3
VAC 101	Yoga, Wellness & Human Values	1	0	2	2
MDC 101	Environmental Studies / Indian Ecology & Sustainability	3	0	0	3
Total		**14**	**1**	**4**	**20**

Semester II – Heritage & Philosophy (20 Credits)

Code	Course Title	L	T	P	C
IKS 201	Indian Philosophy – Darshanas & Thinkers	3	0	0	3
IKS 202	Sanskrit Language – Level II	2	1	0	3
IKS 203	Cultural Heritage of India: Art, Architecture & Literature	3	0	2	4
SEC 201	Digital Tools for Heritage Documentation	1	0	2	2
VAC 201	Indian Logic & Scientific Thought	2	0	0	2
OEC 201	Comparative Civilizations / Global Heritage Studies	3	0	0	3
Total		**14**	**1**	**4**	**20**

Semester III – Knowledge Traditions (20 Credits)

Code	Course Title	L	T	P	C
IKS 301	Vedic & Upanishadic Knowledge Traditions	3	0	0	3
IKS 302	Indian Society, Ethics & Governance	3	0	0	3
IKS 303	Heritage Conservation & Museum Studies	2	0	2	3
AEC 301	Telugu / Sanskrit for Knowledge Texts	2	1	0	3
VAC 301	Life Skills & Emotional Intelligence	1	0	2	2
OEC 301	Performing Arts, Music & Aesthetics of India	3	0	0	3
Total		**14**	**1**	**4**	**20**

Semester IV – Indian Sciences & Research (20 Credits)

Code	Course Title	L	T	P	C
IKS 401	Indian Sciences: Ayurveda, Astronomy & Mathematics	3	0	0	3
IKS 402	Indian Epics, Puranas & Narratives	3	0	0	3
IKS 403	Research Methodology in IKS	2	1	0	3
SEC 401	Heritage Field Study / Temple Architecture Mapping	0	0	4	2
OEC 401	Indian Polity & Legal Traditions	3	0	0	3
VAC 401	Value Education & Ethics of Governance	2	0	0	2
Total		**13**	**1**	**4**	**20**

Semester V – Integration & Practice (20 Credits)

Code	Course Title	L	T	P	C
IKS 501	Indian Knowledge & Modern Science Dialogue	3	0	0	3
IKS 502	Indigenous Technologies & Craft Traditions	2	0	2	3
IKS 503	Cultural Heritage Management	3	0	0	3
MNE 501	Multidisciplinary Elective I	3	0	0	3
EXP 501	Internship / Fieldwork in Museum / Cultural Centre	0	0	6	3
VAC 501	Employability & Career Skills	2	0	0	2
Total		**13**	**0**	**8**	**20**

Semester VI – Application & Outreach (20 Credits)

Code	Course Title	L	T	P	C
IKS 601	Indian Aesthetics & Performing Traditions	3	0	0	3
IKS 602	Contemporary Relevance of IKS	3	0	0	3
IKS 603	Heritage Laws & Intellectual Property	3	0	0	3
MNE 601	Multidisciplinary Elective II	3	0	0	3
PRJ 601	Community Heritage Project / Documentation	0	0	6	3
VAC 601	Personality Development & Leadership	2	0	0	2
Total		**14**	**0**	**6**	**20**

Semester VII – Advanced Studies (20 Credits)

Code	Course Title	L	T	P	C
IKS 701	Indian Knowledge Systems in Global Context	3	0	0	3
IKS 702	Advanced Sanskrit Texts & Commentaries	3	1	0	4
IKS 703	Research Seminar / Thesis Proposal	0	2	2	3
DSE 701	Discipline Elective (Yoga Science / Comparative Philosophy / Indian Logic)	3	0	0	3
EXP 701	Heritage Tourism / Outreach Internship	0	0	6	3
Total		**9**	**3**	**8**	**20**

Semester VIII – Capstone & Professional (20 Credits)

Code	Course Title	L	T	P	C
IKS 801	Dissertation / Major Project on IKS & Cultural Heritage	0	0	12	6
IKS 802	Entrepreneurship in Culture & Heritage Industries	2	0	2	3
OEC 801	Indian Knowledge for Sustainable Development	3	0	0	3
VAC 801	Professional Ethics & Global Citizenship	2	0	0	2
IKS 803	Comprehensive Viva / Portfolio Presentation	0	0	6	3
Total		**7**	**0**	**20**	**20**

Program Summary

Category	Total Credits	Percentage of Total (160 Cr)
Core Courses (IKS & Major Subjects)	88	**55 %**
Ability Enhancement Courses (AEC – Communication, Language, Life Skills)	16	**10 %**
Multidisciplinary / Discipline Electives (MNE / OEC / DSE)	24	**15 %**
Skill / Value Added Courses (VAC / SEC)	20	**12.5 %**
Interdisciplinary / Experiential (Internship, Project, Dissertation)	12	**7.5 %**
Total	**160**	**100 %**

Multiple Entry-Exit Options (as per NEP 2020)

- **Exit after 1 Year (40 Cr):** Certificate in Indian Knowledge and Culture
- **Exit after 2 Years (80 Cr):** Diploma in Indian Culture and Heritage
- **Exit after 3 Years (120 Cr):** B.A. in Indian Knowledge Systems and Heritage
- **4 Years (160 Cr): B.A. (Hons.) / B.A. (Hons. with Research)**

- This distinctiveness lies in **unique disciplines, industry-integrations, strategic needs of the country and bridging technology and healthcare**, a frontier that aligns with **India's National Digital Health Mission (NDHM)** and global healthcare priorities.

9.3 Industries identified for Industry-Support of the proposed Programmes

Sl.No	Name of the Programme	Industry	Address
1	BTech - Semiconductor Technology	Tessolve & AMD	Gachibowli, Hyderabad & Raheja IT Park, Mindspace, APIIC Software Layout, Madhapur, Hyderabad
2	BTech - Quantum Computing	Qulabs & Quinfosys Pvt Ltd	Banjara Hills, Hyderabad & Tirumalagiri, Hyderabad
3	BTech - Digital Twin Technology	AVEVA	IT/ITES SEZ Nanakramguda, Hyderabad
4	AI in Health Care Technology	CMR Medical College & Hospital	Proposed CMR-DTBU campus
5	M.Tech in Computational Neuroscience and AI	Kastech Software Solutions Group	DLF Cyber City, Serilingampally, Hyderabad
6	M.Tech in Health Robotics and Assisted Nursing	Robotspace	Chanda Naik Nagar, Madhapur, Hyderabad
7	BSc - Digital Health	CMR Medical College & Hospital	Proposed CMR-DTBU campus

Recent Articles in News about the proposed Technologies

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BACKGROUNDERS
Press Information Bureau
Government of India

India's Semiconductor Revolution

Powering the Future of Electronics

14th August, 2025

"Today's India inspires confidence in the world… When the chips are down, you can bet on India"- Prime Minister Narendra Modi.

Key Takeaways

- **India's chip market is booming**, set to hit $100–110 Bn by 2030.
- **India Semiconductor Mission (₹76,000 Cr outlay)** boosts local manufacturing, design, and talent.
- On 12th August, 2025, **four more semiconductor units were approved**; with an outlay of **Rs.4600 crore.**
- Total approved projects under ISM reaches to **10** with cumulative investments of around **Rs.1.60 lakh crore in 6 states.**
- **India is emerging as a global semiconductor hub** with major investments and events like SEMICON India 2025.
- **Semicon India 2025** from **300+ global exhibitors** and **18 countries**, signalling India's rise as a trusted chip partner.

SHAPING THE FUTURE

- AP govt plans to launch Quantum Valley on Jan 1, 2026
- Amaravati Quantum Valley to host India's first full-stack quantum infrastructure

55 acres allotted in Amaravati for Quantum Valley

- Research and development activities
- Quantum computing, communication, sensing
- Product design and algorithm development for sectors like healthcare, logistics, finance
- Advanced prototyping of quantum hardware and software
- Application-specific R&D hubs
- Talent development through training programs and startup incubation
- Small-scale advanced manufacturing of specialised components like superconducting chips and cryogenic devices

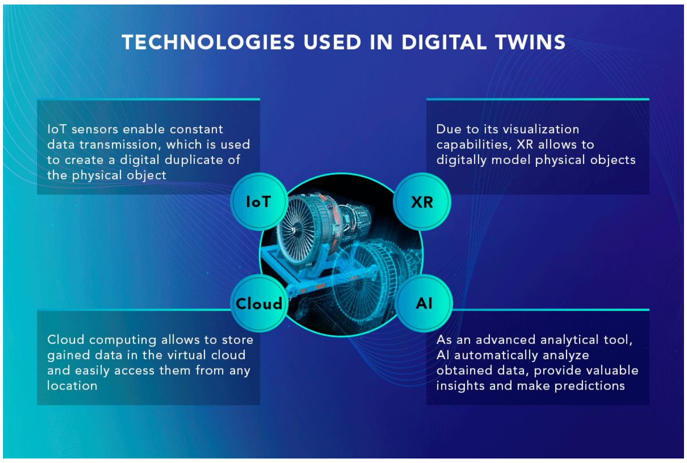
Source – Times of India Jun 26, 2025

INDIA CENTRAL TO GLOBAL PLAY

AI, quantum computing new focus for Big Tech

IBM, SAP and Siemens Healthineers bank on India innovation hubs

THE WINNING FORMULA



TIMES TECHIES

Govt wants to focus on it. Go for it if you have a strong aptitude for maths and problem solving, an understanding of C++, Python, ML

QUANTUM COMPUTING: For ambitious young techies

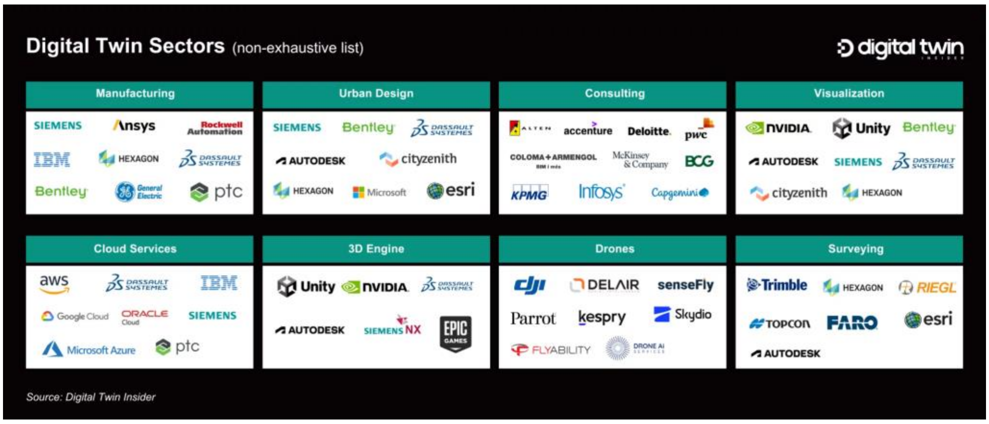
INDIA HAS ENGG TALENT TO BECOME GLOBAL QUANTUM HUB

IGNITE YOUR CAREER

With engineering talent and targeted upskilling, India can become a global quantum computing hub

Take the Next Quantum Leap

Anil Nair



9.4 Addressing the Strategic Needs of the Country through Graduate Attributes

The proposed CMR Deemed to be University will adopt the **Outcome Based Education (OBE) framework**, in line with the **National Board of Accreditation (NBA)** guidelines, to define, assess, and continuously improve graduate attributes. This ensures that graduates are not only industry-ready but also aligned with the **strategic developmental priorities of India**.

Graduate Attributes as per NBA & OBE Framework

The NBA identifies a set of Graduate Attributes (GAs) which every professional graduate must acquire. CMR-DTBU will contextualize these attributes to address national priorities:

- **Engineering Knowledge / Domain Mastery** – Graduates will apply principles of science, engineering, health sciences, and management to provide innovative solutions to national missions in semiconductors, quantum technologies, and digital health.

- **Problem Analysis & Critical Thinking** – Ability to analyze complex societal and industrial problems and design solutions for clean energy, healthcare access, cybersecurity, and smart cities.

- **Design & Development of Solutions** – Skill to design systems, processes, and products that meet *Atmanirbhar Bharat* and *Make in India* goals.

- **Research & Modern Tool Usage** – Competence in using AI, digital twin, robotics, and advanced labs to contribute to India's R&D ecosystem, in line with the National Quantum Mission and Digital India.

- **Ethics & Sustainability** – Commitment to ethical practices, sustainability, and social equity, aligning with *SDG 4 (Quality Education)* and *SDG 9 (Industry, Innovation, Infrastructure)*.

- **Communication & Leadership** – Graduates trained to effectively lead multidisciplinary teams, bridging academia–industry–society linkages.

- **Life-long Learning** – Inculcating adaptability and readiness for continuous skilling, supporting *Skill India* and the demographic dividend.

Mapping Graduate Attributes to India's Strategic Needs

- **Semiconductor Mission & Electronics Policy 2019** → Graduates in Semiconductor Technology with GA in research, design, and innovation.

- **National Quantum Mission (2023–2031)** → Quantum computing graduates with GA in problem analysis, modern tool usage, and advanced research.

- **National AI Strategy & IndiaAI Mission (2023)** → AI and Data Science graduates with GA in solution design, ethics, and responsible use of technology.

- **National Digital Health Mission (NDHM)** → Digital Health and Allied Health graduates with GA in interdisciplinary knowledge and societal impact.

- **Make in India & Industry 4.0 Programmes** → Robotics, Automation, and Digital Twin graduates with GA in innovation and industry collaboration.

Institutional Approach to OBE

- **Curriculum Design:** Programme Outcomes (POs), Programme Specific Outcomes (PSOs), and Course Outcomes (COs) will be defined in line with NBA graduate attributes and mapped to national priorities.

- **Assessment & Evaluation:** Continuous assessment, rubrics, and direct/indirect measures will evaluate attainment of outcomes.

- **Feedback & Continuous Improvement:** Graduate attribute attainment data will be regularly analyzed, feeding into curriculum revisions and teaching-learning reforms.

- **Industry & Societal Linkages:** Capstone projects, internships, and live industry problems will ensure graduate outcomes directly address *national missions and societal needs*.

9.5 Community-Centric Healthcare Outreach

Healthcare outreach is a **core pillar** of CMR-DTBU. The Deemed to be University shall operate through:

- **Teaching Hospital & Medical College (existing under CMR Institute of Medical Sciences):** Offering affordable healthcare to underserved populations.
- **Mobile Clinics & Telemedicine:** Extending specialist consultations to rural Telangana and neighbouring states.
- **School Health & Wellness Programs:** Screening, awareness, and preventive health drives for schoolchildren and rural women.
- **CSR & NGO Collaborations:** Joint vaccination camps, lifestyle disease prevention programs, and mental health counseling with government and NGOs.
- **Community Research:** Action research projects on maternal health, nutrition, non-communicable diseases, and digital health access.

This reflects the Deemed to be University's **commitment to social responsibility and regional development**, beyond academic pursuits.

9.6 Integration of IKS and Modern Medicine

In alignment with NEP 2020's focus on **Indian Knowledge Systems (IKS)**:

- **Curriculum Integration:** Courses on **Yoga** alongside modern evidence-based rehabilitation.
- **Centre for Integrative Medicine:** Research on blending traditional practices (e.g., yoga therapy, physiotherapy) with modern clinical trials.
- **IKS Electives:** Philosophy of Mind-Body Wellness.
- **Collaborations with AYUSH Institutions:** Partnerships for joint research, clinical validation, and international promotion of Indian healthcare heritage.

This integration will **differentiate CMR-DTBU globally**, as very few multidisciplinary universities combine **modern health sciences with IKS**.

9.7 AI and Digital Health in Education

CMR-DTBU will position itself as a **pioneer in AI-driven healthcare education**:

- **AI in Medical Curriculum:** Modules on predictive diagnostics, genomics, and AI-assisted surgery.
- **Digital Health Labs:** Simulation-based learning with VR/AR for surgery training, telemedicine platforms, and AI-enabled diagnostic devices.
- **Cross-Disciplinary Research:** Joint programmes between Engineering and Health Sciences to create **medical IoT devices, robotics for rehabilitation, and AI models for public health analytics**.
- **Start-up Ecosystem:** Dedicated **Digital Health Incubator** to support student and faculty-led healthcare innovations.
- **National Relevance:** Supporting the goals of the **National Digital Health Mission (NDHM)** and contributing skilled professionals in **Health Informatics & Digital Transformation of Healthcare**.

9.8 Global Collaborations

CMR-DTBU shall establish **strategic global linkages** to ensure international benchmarking:

- **Student & Faculty Exchange:** With top universities in the US, UK, Singapore, and Australia for exposure to cutting-edge healthcare and technology.
- **Dual Degree & Twinning Programmes:** In Digital Health, Public Policy, and Data Science with reputed foreign universities.
- **International Research Consortia:** Participation in Horizon Europe, WHO health innovation projects, and World Bank-funded digital health pilots.
- **Global Advisory Board:** Eminent international faculty and healthcare leaders guiding curriculum and research priorities.
- **International Student Recruitment:** Offering niche programmes in **AI-Healthcare, Drone Technology, Sports Nutrition, and Integrative Medicine** to attract students from Africa, ASEAN, and the Middle East.

10. ANNEXURES

CMR
EXPLORE TO INVENT

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(Deemed to be University)

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