HIGHER EDUCATION DEPARTMENT

POLICY NOTE
2024 – 2025

DEMAND No. 20

Dr. K. PONMUDY
MINISTER FOR HIGHER EUDCATION

©

Government of Tamil Nadu
2024

HIGHER EDUCATION DEPARTMENT
POLICY NOTE 2024-25
CONTENTS

POLICY NOTE

DEMAND NO. 20

HIGHER EDUCATION DEPARTMENT
2024–25

**"கேடில் விழுச்செல்வம் கல்வி யொருவற்கு
மாடல்ல மற்றை யவை"**

**"The wealth which can never
decline is not riches but learning"**

(Thirukkural 400)

மாணவச் செல்வங்கள் படிப்பதற்கு, சமூகமோ,
பொருளாதாரமோ, அரசியல் சூழ்நிலையோ எதுவும்
தடையாக இருக்கக் கூடாது என்பதே
திராவிட மாடல் ஆட்சிக் கொள்கையாகும்.

(மாண்புமிகு முதலமைச்சர் உரை)

1. INTRODUCTION

Tamil Nadu pioneers in higher education
catering to the aspirations of the youth being
locally appropriate and context-specific while
also being globally relevant to the needs of all

sections of the society in terms of access and equity thereby fostering inclusivity reaching to the marginalized and disadvantaged sections to evince an overall development of the people. The University of Madras established in 1857 by the *Act of the Legislative Council of India* on the model of the University of London, has been the bedrock for the establishment of other Universities in India.

The Gross Enrollment Ratio of Tamil Nadu in Higher Education stands first in India as per the data in All India Survey on Higher Education (AISHE). This is almost double the National average.

The quality enhancement and sustenance measures of the State Government towards offering high quality Higher Education to its stakeholders, has enabled Tamil Nadu Higher Education Institutions excel at the National

Level, in the National Institutional Ranking Framework (NIRF) 2023.

6 State Universities are in Top 100 in Overall Category while 8 State Universities are in Top 100 in Universities Category. 4 Government Arts and Science Colleges are in Top 100 with Presidency College in the 3rd position for the 3rd consecutive year. 3 State Universities are in Top 50 Research Institutions Category viz., Anna University (13), Bharathiar University (38) and Alagappa University (43).

The State has laid down the roadmap for qualitative development in higher education that encompass reforms in curriculum, research and development, employability and innovation. Some milestones achieved in Higher Education include:

- ❖ 7.5 internal reservation for Government school students in all professional courses from the year 2021-22.

❖ Outcomes-based curriculum for development of cognitive skills viz. Knowledge, Skills & Attitude (KSA) that fosters critical thinking, reflection, project-based learning, problem solving to match local and global needs and standards.

❖ Incentivizing of Rs.1,000/- to girl students who pass out from Government and girl students studying in Tamil Medium in Aided Schools also to pursue higher education through Pudhumai Penn monthly stipend scheme.

❖ Introduction of Tamil Pudhalvan monthly stipend scheme of providing Rs.1,000/- for boys who pass out from Government Schools to pursue higher education from the current academic year (2024-25).

- ❖ Chief Minister Research Grant (CMRG) for faculty members engaged in frontier areas of research to propel academic research environment conducive for research, incubation and technology transfer.

- ❖ Chief Minister Research Fellowship (CMRF) to encourage scholars pursue research programmes in their preferred areas of study.

- ❖ Placement drives enabled by Naan Mudhalvan post implementation of industry-oriented skilling courses.

- ❖ 6 State Universities have secured A++ in NAAC, 2 State Universities have secured A+ NAAC while 4 State Universities have secured A in NAAC among the 13 State Universities.

- ❖ Alagappa University is ranked among Category I Universities by MHRD.

❖ Government Polytechnic Colleges will be upgraded to Industry 4.0 standards in collaboration with Industry Partners at a cost of Rs.3,014 crore.

Quality in higher education is inextricable from Research and Development. In order to propel research, the Government have been working on establishing industry-aligned research parks in Chennai, Madurai and Coimbatore in collaboration with TIDCO.

Enhancing quality in education includes appropriate accreditation in place. Measures have been taken to persuade Higher Educational Institutions (HEIs) to go for NAAC accreditation and participate in NIRF, Times Higher Education and QS rankings to upgrade on par with peers at the National and International levels.

BUDGET ESTIMATE FOR THE YEAR 2024-25

Under Demand No.20 Higher Education,
Total Outlay: **Rs.8,211.78 crore**

Sl. No.	Head of Department	Amount Allotted (Rs. in crore)
1.	Higher Education Department, Secretariat	8.22
2.	Directorate of Collegiate Education	4,470.50
3.	Directorate of Technical Education	2,711.65
4.	Universities	892.27
5.	Tamil Nadu Archives and Historical Research	29.80
6.	Tamil Nadu State Council for Science and Technology	0.83
7.	Tamil Nadu Science and Technology Centre	5.04
8.	Science City	1.85
9.	Tamil Nadu State Council for Higher Education	91.62
10.	Tamil Nadu State Council for Technical Education	0.0001
	Total	**8,211.78**

2. TECHNICAL EDUCATION

2.1. INTRODUCTION

Technical education is instrumental in making remarkable contribution to Nation development through creating skilled manpower, enhancing productivity and improving quality of life. The main objective of technical education is to prepare the individuals for employment and business through skill and knowledge acquisition. In present scenario of science and technology, the society and industry needs the production of skilled and knowledgeable manpower. The rapid industrialization of a country depends upon the acquisition of technical education. Technical education plays vital role in social development of Nation through continuously changes abilities, attitude, knowledge and the way of thinking.

Engineering education plays a crucial role in shaping the future of the world. It equips students with the knowledge and skills needed to design, develop, and innovate across various industries. Polytechnic education combines theoretical knowledge with real-world applications. In addition to providing practical training, polytechnic courses also offer students the opportunity to earn industry-recognized certifications.

The Directorate of Technical Education which was established on 14th October, 1957 has played a key role in development of technical education in the State. This Directorate monitors and coordinates the development of technical education in Degree and Diploma levels, besides formulation of new courses, development of curricula, undertaking initiatives to develop research oriented activities etc. This Directorate is also conducting Government Technical

Examinations in Type-writing, Short-hand, Accountancy and Certificate course in Computer on Office Automation.

In the year 2023-24, there are 506 Engineering Colleges and 492 Polytechnic Colleges in Tamil Nadu as detailed below :

NUMBER OF TECHNICAL INSTITUTIONS IN TAMIL NADU (2023-24)				
Category	Degree level Colleges	Diploma level Colleges		Total
	Engineering and Architecture Colleges	Polytechnic Colleges	Hotel Management & Catering Institutions	
Government Colleges	11	54	-	65
Government Aided Colleges	3	32	-	35
Self Financing Colleges	472	401	1	874

NUMBER OF TECHNICAL INSTITUTIONS IN TAMIL NADU (2023-24)				
Category	Degree level Colleges	Diploma level Colleges		Total
	Engineering and Architecture Colleges	Polytechnic Colleges	Hotel Management & Catering Institutions	
Affiliated Type Colleges	-	4	-	4
Anna University Colleges	20	-	-	20
TOTAL	506	492		998

2.2. TECHNICAL INSTITUTIONS AND COURSES

2.2.1. GOVERNMENT TECHNICAL INSTITUTIONS

11 Government Engineering Colleges and 54 Government Polytechnic Colleges are functioning in Tamil Nadu under the control of Directorate of Technical Education. At present,

11

45,204 diploma students are studying in 54 Government Polytechnic Colleges, 14,761 Under Graduate students are studying in 11 Government Engineering Colleges and 452 Post Graduate students are studying in 7 Government Engineering Colleges.

2.2.2. TECHNICAL COURSES

41 Diploma Courses are conducted in 54 Government Polytechnic Colleges, 11 Undergraduate Engineering Courses in 11 Government Engineering Colleges and 18 Postgraduate Engineering Courses are conducted in 7 Government Engineering Colleges. All the above courses offered are conventionally aiding the students to strengthen their fundamentals and gain the required knowledge in Engineering and at the same time catering to the needs of the present industrial requirements enabling the students to become employable.

2.3. WELFARE SCHEMES AND INITIATIVES

2.3.1. ISSUE OF FREE TEXT BOOKS

In order to increase the enrollment in Polytechnic Colleges and help the polytechnic students to excel in their studies, free text books are being distributed to all the first year Diploma students of Government Polytechnic Colleges from the academic year 2007-08 by the Government of Muthamizharignar Kalaignar. Under this scheme, the books are being distributed at free of cost in the subjects of English, Engineering Physics, Engineering Chemistry and Engineering Mathematics. In the academic year 2022-23, free text books have been issued to 12,398 students and Rs.42.31 lakh have been spent for the above scheme.

2.3.2. ISSUE OF FREE BUS PASS

The issue of free bus pass scheme to all the diploma students studying in Government Polytechnic Colleges was introduced by the Government of Muthamizharignar Kalaignar from the academic year 2007-08 to facilitate students to reach the Institutions without any financial burden. In the academic year 2023-24, 40,231 students have been benefitted under this scheme.

2.3.3. WAIVER OF TUITION FEES FOR DIPLOMA STUDENTS

Most of the students taking up Diploma courses are from socially and economically backward sections. In order to motivate the students hailing from these sections, the Government have waived tuition fees for Diploma students studying in Government Polytechnic Colleges from the academic year 2008-09 by the Government of

Muthamizharignar Kalaignar. In the academic year 2023-24, 45,204 students have been benefitted under this scheme.

2.3.4. POST MATRIC SCHOLARSHIP SCHEME

Post Matric Scholarship Scheme was introduced with the objective to increase the Gross Enrollment Ratio of SC, ST and SC converted into Christianity students in higher education. All compulsory and non-refundable fees fixed by the Fee Fixation Committee are paid for the Engineering and Diploma students admitted under the Government / Management Quota in Self Financing Institutions including minority institutions. Academic allowance is also paid to the students. 80,075 Engineering College students and 46,604 Polytechnic College students have benefitted in the academic year 2022-23.

2.3.5. FIRST GENERATION GRADUATE TUITION FEE CONCESSION

The First-Generation Graduate Scholarship scheme was started by the Government of Muthamizharignar Kalaignar with the objective of promoting higher education among the families where no member is a graduate. The State Government will bear the entire tuition fee of such students who secure admission to professional courses under the single window system. The scholarship is given to the students irrespective of their caste and income. In the academic year 2023-24, Rs.379.31 crore have been given to 1,57,342 first graduate students of Engineering Colleges.

2.3.6. FACILITIES EXTENDED TO SRILANKAN TAMIL REPATRIATES

The students of Sri Lankan Tamil repatriates in Tamil Nadu have been permitted to participate in the single window counseling for admission to first year and second year lateral

entry B.E. / B.Tech and Post Graduate courses MBA / MCA / M.E. / M.Tech. The tuition fee concession granted to the First Generation Graduate students selected for professional courses through Single Window Counseling in Tamil Nadu has been extended to the eligible students of SriLankan Tamil repatriates. In the academic year 2023-24, 29 students have been admitted.

2.3.7. POST GRADUATE ASSISTANTSHIP

The Government have sanctioned the stipend of Rs.6,000/- per month to the 600 Postgraduate students studying in Government Engineering Colleges from the academic year 2017-18. The number of students availing Post Graduate Assistantship in Engineering Colleges has been increased from 600 to 1,200 from the academic year 2021-22 onwards. 300 students admitted with top TANCET score in Government Engineering Colleges and 300 students admitted

with top TANCET score in University Departments of Anna University, Anna University Constituent Colleges, Aided PG Courses in Government Aided Engineering Colleges, Annamalai University, National Institute of Technical Teachers Training and Research and Central Institute of Plastics Engineering and Technology and in the self supporting PG Courses offered in the above institutions alone are eligible to receive the stipend amount of Rs.6,000/- per month. The Government has sanctioned Rs.8.64 crore for this scheme. In the academic year 2023-24, a sum of Rs.7.00 crore have been disbursed to 973 students.

2.3.8. INTERNSHIP TRAINING

In order to give opportunity to the student to visit the industries and to know the applied technologies used in the industries and to apply theoretical knowledge which they studied in the class rooms, the Government sanctioned

Rs.16.60 crore as recurring expenditure for giving Internship Training to the students of Government Engineering (2,500 students) and Polytechnic Colleges (7,500 students) towards financial support at the rate of Rs.16,600/- per student for 25 days Internship Training to enhance the technical skill of the students covering 10,000 students every year.

2.3.9. 7.5% SEATS ON PREFERENTIAL BASIS TO GOVERNMENT SCHOOL STUDENTS

"The Tamil Nadu Admission to Undergraduate professional courses on preferential basis to students of Government Schools Act, 2021" was enacted in order to take affirmative action to bring about equality between students studying in Government schools and private schools. The Hon'ble Chief Minister has announced that, the entire fees such as Tuition Fee, Hostel Fee, Transportation Fee, etc. be borne by the Government for these

students admitted under this seats. Accordingly, in the academic 2022-23, Rs.129.08 crore have been disbursed to 8,719 first year and 6,278 second year students. In the academic year 2023-24, Rs.185.59 crore have been disbursed to 9,795 first year, 8,375 second year and 6,162 third year students.

2.3.10. FINANCIAL ASSISTANCE TO GOVERNEMNT SCHOOL STUDENTS JOINING PREMIER INSTITUTIONS

In order to motivate Government School students to aspire to join premier Higher Education Institutions like Indian Institute of Technology, Indian Institute of Science and All India Institute of Medical Sciences, the Government will bear the full cost of their undergraduate education. The entire fees for all the years, have been sanctioned to the students by the Government. During the year 2021-22 and 2022-23, one student each have got admission in IIT, Madras.

2.3.11. FINANCIAL ASSISTANCE FROM CHIEF MINISTER'S PUBLIC RELIEF FUND

In order to encourage and motivate the economically weaker section meritorious students to pursue their engineering courses (B.E. / B.Tech.) the Government provide financial assistance from Chief Minister's Public Relief Fund. The financial assistance of Rs.50,000/- each has been given to 24 students during the academic year 2023-24.

2.3.12. INTRODUCTION OF TAMIL MEDIUM IN DIPLOMA COURSES

The Government have introduced Diploma in Civil Engineering and Diploma in Mechanical Engineering in Tamil Medium in Central Polytechnic College, Chennai and Government Polytechnic Colleges at Coimbatore, Madurai, Tiruchirappalli and Nagercoil from the year 2022-23. Thereby, the students will be able to clearly understand the concepts and applications

better in Tamil. Also, this would help the students to avail the benefits of reservation under Persons Studying in Tamil Medium (PSTM) category for State Government jobs.

2.3.13. INTRODUCTION OF WOMEN - FRIENDLY DIPLOMA COURSES

Women friendly Diploma courses have been introduced from the academic year 2022-23 in the following Colleges with a view to increase the women enrollment in Polytechnic Colleges and also motivate them to take up Higher studies for better employment opportunities: (1) Mechanical Engineering (CAD) in Central Polytechnic College at Chennai (2) Office Management and Computer Application in State Institute of Commerce Education at Chennai (3) ECG Technology in Government Polytechnic College at Coimbatore (4) Web Technologies in Tamil Nadu Polytechnic College at Madurai (5) Bio-Medical Electronics in

Government Polytechnic College at Nagercoil and (6) Interior Decoration in Dr. Dharmambal Government Polytechnic College for Women, Chennai.

2.3.14. REVAMPING OF POLYTECHNIC CURRICULUM BASED ON INDUSTRIAL REQUIREMENT

Tamil Nadu outputs the largest technical talent in the industry for several decades. Polytechnic colleges contribute significantly to the State's talent pipeline by producing skilled technicians to support mass industrialization.

Tamil Nadu's economy is focusing on deep-tech and knowledge-based industries, rather than low-cost labour-intensive talent. With the advancement in technology, there is a change in the industry requirements. The need is for skill-based talents that bridge the industry-academia gap. To nurture the next generation of highly competent individuals who can harness

the power of technology, innovation and enterprise to lead change, and deliver social and economic impact, the syllabi of Polytechnic has been reformed.

Inputs from various industries and Guidance Tamil Nadu have been taken into account to redesign and reform of the Polytechnic Curriculum in the State of Tamil Nadu. The reformation focuses to improve the employability and entrepreneurship outcomes from the campuses through skill-centric and industry-allied curricula and syllabi. The new curriculum has been implemented from the academic year 2023-24.

2.3.15. INTENSIVE COACHING FOR COMPETITIVE EXAMINATIONS

The Government has sanctioned a sum of Rs.42.12 lakh as recurring expenditure for providing intensive coaching for 500 students in 11 Government Engineering Colleges for

competitive examinations CAT / GMAT / GRE and IELTS / TOEFL from the year 2021-22. The intensive coaching would not only enable the students to succeed in these competitive examinations, but also to enhance their employment opportunities with reputed firms at the National and International level.

2.3.16. ESTABLISHMENT OF ENTREPRENEURSHIP DEVELOPMENT HUBS

The Directorate of Technical Education has established Entrepreneurship Development and Innovation Programmes in Polytechnic Colleges through 5 Hubs in collaboration with Entrepreneurship Development Innovative Institute (EDII), Chennai. 5 ED Hubs have been established in 5 Polytechnic Colleges. The programmes conducted under 5 ED Hubs were merged with Naan Mudhalvan Scheme from October 2023 and ED Hub programmes are

now under the control of respective District Collectors.

2.3.17. CHIEF MINISTER'S RESEARCH GRANT SCHEME

In order to motivate faculties, Research scholars and under graduate and post graduate students to do research on current challenges, "Chief Minister's Research Grant Scheme" have been introduced from the academic year 2023-24 and the Government have sanctioned a sum of Rs.50.00 crore as recurring grant towards the allocation of funds for all Government Higher Educational Institutions and Universities in Tamil Nadu. For the year 2023-24, 61 projects are identified in Technical Education domain and funds being released. In Collegiate Education domain, action is being taken to identify the projects.

2.3.18. ESTABLISHMENT OF WORLD SKILL ACADEMY AND SMART MANUFACTURING TECHNOLOGY CENTRES

In order to provide skills and develop the students as per World skills in Electrical Installation, Industrial Controls, Industrial Automation, Building Automation, World Skill Academy, Smart Manufacturing Centres are being established in 6 Government Polytechnic Colleges at Chennai, Coimbatore, Dharmapuri, Mayiladuthurai, Tiruchirappalli and Thoothukudi in collaboration with Schneider Electric India Ltd and the financial assistance of Tamil Nadu Skill Development Corporation, Chennai at a cost of Rs.10.00 crore.

2.3.19. PUDHUMAI PEN THITTAM

The assistance of Rs.1,000/- per month is being issued to Higher Education Pursuing Girls students who studied in Government Schools from sixth to twelfth standard under Pudhumai

Pen Thittam of Social Welfare Department. 4,039 students from Government Polytechnic Colleges and 12,135 students from Government Engineering Colleges have been benefited during the academic year 2023-24.

2.3.20. SCHOLARSHIP INITIATIVE IN THE NAME OF ACCOMPLISHED INDIAN SPACE RESEARCH ORGANISATION SCIENTISTS

The Government has honoured the 10 Indian Space Research Organisation (ISRO) Scientists belonging to Tamil Nadu with the cash amount of Rs.25.00 lakh each for their remarkable achievement and brought pride to Tamil Nadu.

The scholarship initiative has been taken by the Tamil Nadu Government in the name of accomplished ISRO scientists. It deliberates an amount towards all fees including tuition fee, Hostel fee, like etc. to 10 students who have admitted under the 7.5 percent allocation given

to Government School students and have completed their Undergraduate Engineering course and are continuing their Master's Engineering Course in order to create interest in scientific discovery among the students. A corpus fund of Rs.10.00 crore will be created for this scholarship.

2.3.21. INDUSTRY ALIGNED NEW SANDWICH DIPLOMA PROGRAMMES

The new sandwich Diploma Programmes i.e. 1) Diploma in ECE (SWC) at Central Polytechnic College, Chennai and Government Polytechnic College, Coimbatore, (2) Diploma in Textile Technology (SWC) at Government Polytechnic College, Karur, (3) Diploma in Computer Technology (SWC) at Government Polytechnic College for women, Coimbatore and (4) Diploma in Mechanical Engineering (SWC) at Government Polytechnic College, Villupuram have been introduced from the academic year

2023-24 in order to meet the local needs of the Industries identified with the help of GUIDANCE-Tamil Nadu and to increase the Gross Enrollment Ratio.

2.3.22. INTRODUCTION OF DIPLOMA PROGRAMME OF EARN WHILE LEARN

The Earn While Learn Diploma Programme i.e. Diploma in Digital Manufacturing Technologies have been introduced from the academic year 2023-24 in 5 Government Polytechnic Colleges at Jolarpettai, Uthangarai, Vanavaasi, Kadathur and Kelamangalam in order to fulfil the needs of the industry and to make the working people to upgrade their qualification simultaneously while they are working.

2.3.23. ESTABLISHMENT OF CENTER OF EXCELLENCE (COE)

The action is being taken to establish the Center of Excellence (CoE) for Advanced

Manufacturing in all Government Engineering Colleges in collaboration with Micro, Small and Medium Enterprise Department (MSME) with Industry Partners to evolve the students in advanced manufacturing processes which would enhance the employability, research, industry-institute collaboration, innovation and startups of the institutions.

2.3.24. PROVISION INTERNET LEASED LINE

The 100 Mbps Leased Line Internet connection is to be established in 7 Government Engineering Colleges and 31 Government Polytechnic Colleges in the year 2024 to strengthen the Technological and Communication infrastructure.

2.3.25. NEW SKILL TRAINING CENTER FOR THE WELFARE OF DIFFERENTLY-ABLED STUDENTS

The New Skill Training Centre for the welfare of Differently abled students in Central

Polytechnic College is to be established at a cost of Rs.50.00 lakh in order to enable them to employ in technical jobs.

2.3.26. ELECTRIC VEHICLES MOBILITY CENTRE

The action is being taken to establish the Electric Vehicles Mobility Centre at Government Polytechnic College, Coimbatore in partnership with FaMe-TN and Smart e-Mobility (SSeM).

2.3.27. RESTRUCTURE OF CURRICULAM FOR NAAN MUDHALVAN COURSES

The curriculum is restructured with Naan Mudhalvan courses from the academic year 2023-24 in all Polytechnic Colleges in order to promote the employability of the students as well as to fulfill the skilled manpower need of the industries. As on date, 1,75,739 students have been benefitted.

2.4. INFRASTRUCTURE FACILITIES

2.4.1. ESTABLISHMENT OF SMART CLASS ROOM

Well-equipped infrastructure with technically advanced class rooms are supplementary requirements for imparting quality education. In this context, Smart Class Rooms are established in 50 Government Polytechnic Colleges at a cost of Rs.10.00 crore. This will help to incorporate the knowledge gained from text and theoretical content into real life applications and learning. Software and simulation contents like Cyber Security Training, Gas Cutting Process Training, Forklift Training, Lean Manufacturing, Construction Safety, Gearbox, Power Generator, etc., are also being provided through these smart classes.

2.4.2. CONSTRUCTION OF ADDITIONAL HOSTEL BUILDINGS

Considering the growing demand for additional hostel buildings and to provide a proper ambience with adequate space for the students, the additional Hostel Buildings in 4 Government Engineering Colleges at Coimbatore, Salem, Karaikudi, Vellore have been constructed at a cost of Rs.34.10 crore.

2.4.3. INFRASTRUCTURE FACILITIES UNDER PERUNTHALAIVAR KAMARAJAR COLLEGE DEVELOPMENT SCHEME

2.4.3.1. The Government have sanctioned a sum of Rs.176.97 crore for improving Infrastructure Facilities like additional Class Rooms, Laboratory, Workshops, Toilet facilities and Hostel facilities in all Government Engineering / Polytechnic Colleges to improve the Gross Enrollment Ration.

34

2.4.3.2. As per the industry skill based updated curriculum, Laboratories such as Environmental Laboratory, Internet of Things (IoT) Laboratory, Computer Laboratory and the other laboratories are modernized by procurement of Machineries and Equipment in Government Engineering Colleges and Government Polytechnic Colleges at a cost of Rs.50.00 crore.

2.4.4. ENHANCEMENT OF SPORTS FACILITIES

In order to uniting, strengthening and disciplining the students community and also to motivate the students in extracurricular activities, enable them to participate in state and national level sports meet and to improve their achievements, the sports facilities are being enhanced with indoor stadium in 10 Government Engineering Colleges at a cost of Rs.80.00 crore.

2.4.5. ESTABLISHMENT OF FAB LAB / MAKERS SPACE

In order to provide a forum for students and faculty members to apply personalized learning strategies and inherent skills and for promoting creative ideas with practical knowledge, Makers Space is being established with industry partners in four Government Engineering Colleges at Karaikudi, Tiruchirappalli, Tirunelveli, Salem and Tamil Nadu Polytechnic College at Madurai.

Industrial training program on "Innovation Mentor" in collaboratin with TANSIM are being conducted for Faculty members of Government Engineering Colleges and Government Polytechnic Colleges.

2.4.6. PROCUREMENT OF MACHINERIES AND EQUIPMENTS

The Government have sanctioned a sum of Rs.8.74 crore for procurement of Machineries

and Equipments for newly started 30 courses in Government Polytechnic Colleges.

2.4.7. UPGRADATION OF GOVERNMENT POLYTECHNIC COLLEGES INTO CENTRES OF EXCELLENCE IN ACCORDANCE WITH THE INDUSTRY 4.0 STANDARDS IN COLLABORATION WITH INDUSTRY PARTNERS

During Budget session 2024-25, the Hon'ble Minister for Finance and Human Resources Management has announced that a new Scheme will be implemented at a cost of Rs.3,014 crore to upgrade Government Polytechnic Colleges to Industry 4.0 standards.

The proposed project aims at creating Centres of Excellence in Government Polytechnic Colleges in accordance with the Industry 4.0 standards in collaboration with industry partners. The proposed project will focus on infrastructure modernization, industry relevant course content creation, capacity building of

faculty members to boost employment opportunities for the students. Based on the above announcement, orders have been issued according administrative sanction for a sum of Rs.2358.52 crore and financial sanction for a sum of Rs.283.29 crore for construction of prefabricated structures to implement the above pioneer project to develop the curricula and infrastructure in 44 Government Polytechnic Colleges in collaboration with industry partners in order to achieve Industry 4.0 standard.

2.5. E-GOVERNANCE

2.5.1. TAMIL NADU ENGINEERING ADMISSION

Tamil Nadu Engineering Admission is being conducted by the Directorate of Technical Education from the academic year 2019-20. Due to COVID-19, all the activities related to admission such as registration of applications, uploading of certificates, certificate verification,

assigning random numbers to the registered students, release of rank list, counseling for special category, general counseling, vocational counseling, supplementary counseling, SCA to SC counselling, publication of provisional allotment have been conducted through ONLINE mode from the academic year 2020-21. During the year 2023-24, 1,07,262 students were admitted under Government quota. Also, first year admission to B. Arch., Lateral entry and Part time admission to B.E. / B.Tech, First year admission to MBA / MCA courses, First year / Lateral entry / Part Time admission to Government Polytechnic Colleges were conducted through ONLINE mode.

2.5.2. ESTABLISHMENT OF LEARNING MANAGEMENT SYSTEM INTEGRATED WITH AN ENTERPRISE RESOURCE PLANNING SOFTWARE (LMS & ERP)

Learning Management System integrated with an Enterprise Resource Planning Software

(LMS & ERP) shall be established in all Higher Educational Institutions in order to formulate the policies, laws, regulations and provide various programmes based on the needs of the society and for achieving the goals of the Government in the field of Higher Education in Tamil Nadu. In this regard, the Government have sanctioned a sum of Rs.4.09 crore in the year 2021-22 towards engaging Project Management Consultant as Resource cost for the implementation of the project and Design, Selection and Roll-out of a Learning Management System integrated with Enterprise Resource Planning Solution in the State of Tamil Nadu.

The Government have sanctioned Rs.172.50 crore for procurement of Hardware for Government Engineering, Polytechnic and Arts and Science and Education Colleges for implementation of "Learning Management

System integrated with an Enterprise Resource Planning Software" in all Higher Education Institutions. A State Level Committee constituted in this regard will finalise the final requirements for each institution based on which the procurement and installation of systems shall be done in a staggered manner. The development of LMS & ERP Software and Cloud Hosting will be executed by the Tamil Nadu e-Governance Agency (TNeGA).

3. COLLEGIATE EDUCATION

3.1. The Directorate of Collegiate Education was formed in the year 1965 with a view to exclusively administer the Collegiate Education by bifurcating the erstwhile Directorate of Public Instruction into Directorate of School Education and Directorate of Collegiate Education. The present Government is taking constructive measures by introducing advanced Scientific and Technical courses and to cater the need of students to pursue these courses in Tamil Nadu, the most advanced State in the field of higher education. Presently, 949 Arts and Science Colleges, 11 Physical Education Colleges, 4 Oriental Colleges, 2 Schools of Social Work and 660 Colleges of Education altogether 1,626 Colleges are functioning under the Directorate of Collegiate Education.

3.2. FREE EDUCATION

The Government have offered free education by waiving the payment of tuition fee for all the students studying in Under Graduate courses in Government / Government Aided Arts and Science Colleges from the academic year 2007-08 by the Government of Muthamizharignar Kalaignar. Further from the academic year 2010-11 onwards, tuition fee has been waived for students pursuing in Post Graduate courses in Government Arts and Science colleges. This has resulted in reducing the financial burden of the parents of these students very much. Total number of students benefitted during the academic year 2023-24 are 5,30,564.

3.3. FREE BUS PASS TO THE COLLEGE STUDENTS

The Government have introduced the issue of free bus pass to all Government College

students from the academic year 2007-08. Free bus passes are issued based on the applications received from the students in the respective colleges. Total number of students benefitted during the academic year 2023-24 are 4,60,558.

3.4. ONLINE REGISTRATION OF APPLICATIONS FOR STUDENT ADMISSION

The system of getting applications and applying to each Government Colleges for admission of students was modified in College admission. Online registration for student admission was introduced by a single application to all the Government Arts and Science Colleges at State level and admissions are being made. This online registration portal has reduced the hassles of students and provides easy access even through their smart phones. This portal has enabled registration of 2,78,897 applications and admission completed for the academic year 2023-24.

During the year 2024-2025 a total number of 2,11,012 students have applied through online.

3.5. BHARATHI YOUNG POET AWARD

The Government of Tamil Nadu is committed to honour the Great personnel of this State. In commemoration with Mahakavi Bharathi's Centenary Celebration, in the year 2021 it was announced to conduct a State Level Poetry Competition for College students and award the title "Bharathi Young Poet" with cash Prize of Rs.1.00 lakh each for a male and a female student and the award is being given from the academic year 2022-23.

3.6. JOB FAIR

Job Fair has been conducted in the Government / Government Aided Colleges under the control of Directorate of Collegiate Education every year. Special efforts are taken to help the

students studying in Government Arts and Science Colleges to find jobs, after completion of their course. To achieve this goal, Placement Cell in the colleges have been revamped and enthusiastic teachers are placed in charge of Placement Cells.

3.7. SPECIAL COACHING FOR SC / ST AND MBC STUDENTS

The students belonging to SC / ST and MBC communities studying in Government Colleges, particularly in rural areas find it difficult to get through the University examinations in English, Mathematics and Science subjects. With a view to making the students fully conversant in these subjects, special coaching is being given by way of remedial classes after the class hours and also on weekends. This focused and specialized coaching will enable them to have confidence and capacity to compete with other students and

score higher marks in the University examinations. Rs.2 lakh allotted to this Scheme is distributed to 20 Government Arts and Science Colleges at Rs.10,000/- each during the academic year 2023-24. Total number of students benefitted during the academic year 2023-24 are 7,623.

3.8. CHIEF MINISTER'S RESEARCH FELLOWSHIP SCHEME

Aim of CMRF Scheme is to award research fellowship to 120 students pursuing full time Ph.D. Programme in Government Arts & Science Colleges.

Eligible 60 students in Arts Stream and 60 students in Science Stream will be offered monthly fellowship of Rs.25,000/- and an annual contingency grant of Rs.10,000/- for Arts Stream and Rs.12,000/- for Science Stream for a maximum period of 3 years.

In the financial year 2023-24, Rs.1.60 crore has been allotted for this scheme.

3.9. PUDHUMAI PENN SCHEME

With a noble aim to realize the Higher Education dreams of Girl students studying in Government schools, encouraging them to pursue education and to increase the enrolment ratio of the Girl students in Higher Education Rs.1000 per month is awarded to the Girl students who have studied 6th to 12th std in Government Schools and pursuing Higher Education. During the year 2023-24 a total number of 2,71,710 Girl students who are pursuing their education in Arts and Science Colleges have benefitted. This scheme has now been extended to Girl students studying in Tamil Medium in Government Aided Schools also.

3.10. NAAN MUDHALVAN

Naan Mudhalvan is an ambitious scheme which aims at imparting employment oriented skillset to the youth. Identifying the aspirations in early stage and providing a strong base for their employment is the special aspect of this scheme. Under this scheme a total number of 8,67,947 students studying in the colleges coming under the Directorate of Collegiate Education have been imparted skill training. In the job fairs conducted 63,665 students have participated and 15,753 students have been issued offer letters.

3.11. FILLING UP OF 4000 ASSISTANT PROFESSORS POSTS IN GOVERNMENT COLLEGES

Providing quality higher education not only involves infrastructural facilities but also depends on qualified teachers. Realizing the importance of these issues, after discussion with

all stakeholders under the Chairmanship of Hon'ble Chief Minister of Tamil Nadu, action has been taken to fill up 4,000 Assistant Professor posts in Government Colleges through competitive examination for the vacancies upto the year 2019-20.

Based on the Notification No.2, dated 14.03.2024 issued by the Teachers Recruitment Board, the written examination is scheduled to be conducted in the month of August 2024.

3.12. PERUNTHALAIVAR KAMARAJAR COLLEGE DEVELOPMENT SCHEME.

Due to introduction of new course and increase in admission of students in Government Arts and Science Colleges, it is imperative to improve the infrastructural facilities namely Laboratories, Classrooms, Toilets and other amenities. The Government have accorded financial Sanction for Rs.100 Crore to create Infrastructure Facilities like Laboratories,

Classrooms and Toilets in 34 Government Colleges under Perunthalaivar Kamarajar Colleges Development Scheme for the year 2023-24. The above Construction works have been executed by the PWD.

During 2024-25, works will be carried out for an estimated cost of Rs.100.00 crore.

3.13. CONSTRUCTION OF PERMANENT BUILDING

14 Government Arts and Science Colleges started from the years 2017-18 to 2020-21 were functioning in the temporary buildings for many years. The Government have taken speedy action for the identification of land and sanctioned a sum of Rs.159.60 crore for construction of buildings for 13 Colleges. Out of 13 Colleges, the construction of buildings for three Colleges have been completed and the said Colleges are now functioning in the new buildings. Construction of the buildings for

remaining 10 Colleges are in progress. Further, identification of the Land for one College is in progress.

During the academic year 2022-23, 21 new Government Arts and Science Colleges were started. The Government have sanctioned a sum of Rs.49.84 Crore for construction of buildings for the following new Government Arts and Science Colleges and works have been completed. The Colleges are now functioning in the new buildings.

1. Tiruppur District   -   Dharapuram
2. Dindigul District   -   Ottanchathram
3. Erode District   -   Thalavadi
4. Virudhunagar District   -   Tiruchuli

Land have been identified for the following Government Arts and Science Colleges. The Government have sanctioned a sum of Rs.182.93 Crore for construction of buildings for

the said Colleges. Construction works are under progress.

1.	Kallakurichi District	-	Tirukovilur
2.	Tirunelveli District	-	Manur
3.	Pudukottai District	-	Alangudi
4.	Vellore District	-	Serkadu
5.	Trichy District	-	Manapparai
6.	Vilupuram District	-	Gingee
7.	Krishnagiri District	-	Thali
8.	Pudhukottai District	-	Tirumayam
9.	Thanjavur District	-	Tirukattupalli
10.	Dindigul District	-	Rettiyarchathram
11.	Cuddalore District	-	Vadalur
12.	Kancheepuram District	-	Sriperumbudhur
13.	Tirupattur District	-	Natrampalli

Identification of the Land for the following new Government Arts and Science Colleges is under progress.

1.	Tiruvarur District	-	Koothanalur
2.	Dharmapuri District	-	Eriyur
3.	Karur District	-	Aravakurichi
4.	Erode District	-	Anthiyur

3.14. PROVIDING ADDITIONAL INFRASTRUCTURE FACILITIES

The Government have sanctioned a sum of Rs.3.65 crore for the procurement of 2,469 Students Desk and Bench, 371 Teacher Tables for Class Room, 125 Ceramic Boards to 25 Government Arts and Science Colleges (Including 14 University Constituent Colleges Converted as Government Arts And Science Colleges). The above mentioned furniture were supplied to the Government Colleges.

In addition, Government have allotted Rs.10.00 crore for procurement of 6,690 Students Desk and Bench, 446 Teacher Tables for Class Room, 446 Ceramic Boards to 28 Government Arts and Science Colleges. The supply of furniture is in verge of completion.

Apart from this, the Government have sanctioned a sum of Rs.5.20 crore for the procurement of science lab equipments to

62 Government Arts and Science Colleges. Accordingly Science lab equipments have been supplied to concerned Government Colleges.

3.15. CLOSING THE UNDER-PERFORMING COURSES AND INTRODUCING NEW COURSES

It was found that some of the courses in certain Government colleges did not have good number of candidates enrolled. Hence the Government have decided to close the underperforming courses in 12 Government Arts and Science Colleges and introduced new courses like Tamil, Botany, Zoology, Computer Science, Economics (Tamil Medium), B.Com etc. in the year 2023-24 which meets the requirement of the students of that particular area.

3.16. INTRODUCTION OF MBA AND MCA COURSES

Professional courses such as MBA and MCA are available in most of the Government aided and self financing colleges, which provides education. In order to provide quality education to the poor and marginalised students, who has the desire to pursue MBA and MCA at a lower cost, MBA course in 5 Government Arts and Science Colleges and MCA course in 5 Government Arts and Science Colleges was introduced during the academic year 2023-24. This gave widespread opportunities to the economically weaker students.

3.17. RASHTRIYA INDIAN MILITARY COLLEGE (RIMC) SCHOLARSHIP

This scholarship is given to the students belonging to Tamil Nadu State studying in Rasthriya Indian Military College, Dehradun.

The amount of scholarship has been enhanced from Rs.12,000/- per annum to Rs.40,000/- per annum from the year 2016.

Beneficiary Details are as detailed below:

S. No.	YEAR	ACHIEVEMENTS	
		BENEFICIARIES	FINANCIAL SANCTION (Rs. In lakh)
1	2021-22	6	2.4
2	2022-23	4	1.6
3	2023-24	7	2.8
TOTAL		17	6.8

3.18. TAMIL PUTHALVAN THITTAM

In order to increase the enrolment ratio of Girl students in Higher Education, "Pudhumai Penn Scheme" has been introduced and it has brought a remarkable change in women education. Likewise, from the year 2024-25 "Tamil Puthalvan Scheme" is to be implemented to encourage the Male students who have

studied 6th to 12th in Government schools and pursuing their Higher Education. Due to this, the enrolment ratio of Government school students will increase considerably. Rs.1,000/- per month will be awarded to the students. To implement this ambitious scheme it is proposed to allocate Rs.360 crore during 2024-25 financial year.

3.19. AMENDMENTS TO TAMIL NADU PRIVATE COLLEGES (REGULATION) ACT & RULES 1976

The Tamil Nadu Private Colleges (Regulation) Act & Rules 1976 was enacted on 17th April 1976. The Government Aided Colleges and the unaided Colleges are governed by this act. There are certain sections which have become obsolete and certain other sections require updations. Hence, it has been proposed to issue amendments to the said Act during the year 2024-25, so as to strengthen the Act for

the benefit of the students and the staff of Government Aided / Private Colleges.

3.20. STIPEND FOR TAMIL MEDIUM STUDENTS

During the year 1971-72, the Government introduced a scheme of granting stipends to 49 encourage the students enrolled in Tamil Medium. The stipend amount of Rs.400/- per annum has been enhanced as Rs.900/- per annum from the academic year 2018-19. During the year 2024-25, the Government have allotted a sum of Rs.4.24 crore for this Scheme.

3.21. IMPLEMENTATION OF LEARNING MANAGEMENT SYSTEM (LMS) INTEGRATED WITH ENTERPRISE RESOURCE PLANNING SOFTWARE FOR ALL HIGHER EDUCATION INSTITUTIONS

It has been proposed to implement Learning Management System (LMS) Integrated with Enterprise Resource Planning Software in

order to provide best training and Skillsets in all branches of modern education.

To implement this scheme in all Government Engineering / Polytechnic / Arts and Science Colleges, the Government have sanctioned a sum of Rs.172.50 Crore towards procurement of 25,027 Computers, UPS, Printers, Scanners, LAN and Computer Tables and Chairs.

4. UNIVERSITIES

The following Universities are functioning under the aegis of Higher Education Department:

1. University of Madras
2. Madurai Kamaraj University
3. Anna University
4. Bharathiar University
5. Bharathidasan University
6. Mother Teresa Women's University
7. Alagappa University
8. Manonmaniam Sundaranar University
9. Periyar University
10. Tamil Nadu Open University
11. Thiruvalluvar University
12. Tamil Nadu Teachers Education University
13. Annamalai University

4.1. UNIVERSITY OF MADRAS

4.1.1. University of Madras was established in the year 1857. As an affiliating University, it had its jurisdiction over the then Madras Presidency. Now, its jurisdiction spreads over Chennai, Thiruvallur, Chengalpattu and Kanchipuram in Tamil Nadu.

4.1.2. This University has 72 teaching and research departments, 22 research centres and 138 affiliated colleges. It has been placed in 'A++' Grade with 3.59 CGPA by the National Assessment and Accreditation Council (NAAC). It has also been recognized by the University Grants Commission (UGC) as 'University with Potential for Excellence'. It also holds the credit for being the first to introduce the concept of autonomous colleges within the University system. Presently, 23 autonomous colleges are affiliated to the University of Madras, some of which have been identified by the UGC as

"Colleges with the Potential for Excellence". The University has been placed at 50th position among the top Universities of the Country in the National Institutional Ranking Framework 2023 (NIRF).

4.1.3. The University has set up the Institute of Distance Education (IDE) in 1981 to provide wider access to higher education. It presently offers 17 UG courses, 21 PG courses, 19 Diploma / PG Diploma courses and 17 Certificate courses. These courses are recognized by Distance Education Bureau [DEB], UGC.

4.1.4. The University of Madras is in the 2nd position out of the 720 Universities in uploading Ph.D. thesis in the "Shodhganga", the electronic repository of the INFLIBNET of UGC and so far the University has uploaded 14,759 theses.

4.1.5. The University has made 3,063 Publications (July 2022 – June 2023) in the Scopus & Web of Science listed peer reviewed journals with the *h*-index of 27.

4.1.6. In the QS World University Rankings 2024, University of Madras holds the 526th spot out of universities worldwide.

4.1.7. The University has enrolled its Affiliated Colleges under the NAAN MUDHALVAN SCHEME [NMS] with an intention to develop the skills of youths in the State

4.1.8. The Tamil Nadu Skill Development Corporation in collaboration with the University of Madras conducted the Naan Mudhalvan Scheme [NMS] State-wide Placement Drive Program for the Chennai District on 10th June 2023 at the University of Madras, Chennai. 200 students got employment in various companies.

4.1.9. The University of Madras has introduced a new Elective Subjects namely "Social Justice" for the Under Graduate Degree Courses and Five Years Integrated Course and "Thirukural for Professional Ethics" for the Under Graduate courses offered to the students of the affiliated colleges.

4.1.10. The Hon'ble Minister for Higher Education launched the new "Three years Blended Course in Bachelor of Science" in the University of Madras in Collaboration with Melbourne University and executed a MoU to that effect. It will widen the opportunities for students of our State at a global level.

4.1.11. Financial sanction of Rs.28.00 crore was accorded for the construction of New Hostel at the Marina Campus, University of Madras and the above works are in progress.

4.1.12. Funds of Rs.26.32 crore, have been sanctioned for the renovation of the renowned traditional University Centenary Auditorium.

4.2. MADURAI KAMARAJ UNIVERSITY

4.2.1. Madurai Kamaraj University was started in the year 1965. This University is responsible for the growth and development of southern Tamil Nadu through its phenomenal contribution in teaching, innovative research and extension activities. There are 117 affiliated colleges, 5 evening Colleges and 16 recognized institutions spread among Madurai, Theni, Virudhunagar, and Dindigul districts and contributing immensely for the growth of Higher Education.

4.2.2. Madurai Kamaraj University was accredited with "A++" status (CGPA Score of 3.54) by NAAC in the 4th cycle during March 2021. Presently, the University is in the status of Category – I amongst the Universities of India. In the QS World University Rankings Asia – 2024, Madurai Kamaraj University is in the 261 – 270 Rank.

4.2.3. Research Project Grants

Madurai Kamaraj University has been awarded with the special research programmes like DST-PURSE in two phases, DST-FIST, UGC-SAP programmes which are being continuously awarded to the schools. Apart from these programmes, the faculty of this University bagged individual research projects to the tune of Rs.11.44 crore from various Government funding agencies. Through these projects, about 2,419 students enrolled for Doctoral programmes, FIVE patentable inventions were identified by the Centre for Intellectual Property Rights (CIPR) of this University and Two of them were filed in the current academic year. About 461 research articles have been published.

4.2.4. Academic Programmes

In this academic year 2023-24, Masters in Computer Science courses with specialization in

Cyber Security and Artificial Intelligence, Masters in Business Administration with specialisation in Entrepreneurship, Undergraduate courses in Computer Science with specialization in Data Science, Artificial Intelligence and Cyber Security have been started to empower the student community to meet out the global demands on these fields. These new courses were started in collaboration with Manonmaniam Sundaranar University, Thirunelveli with an MoU. Currently, the University has 2,398 students on roll. The overall student strength considerably increased due to the introduction of new courses. Courses in the SWAYAM portal and 16 MOOCs courses were translated into Tamil.

4.2.5. Naan Mudhalvan Scheme

This University has introduced Language Learning and Skill Development courses for the Undergraduate programmes under Naan

Mudhalvan scheme. Madurai Kamaraj University conducted Faculty Development programme for the University and College teachers to equip them to handle the newly introduced courses in four phases during January and July, 2023. 660 faculty members participated.

4.2.6. Entrepreneurship Development & Innovation Institute Hub (EDII HUB – MKU)

The ED Hub of this University, organized 10 Innovation and Entrepreneurship awareness programmes, Entrepreneurship leaders workshop, Faculty Development programme on Entrepreneurship, Design Thinking workshop, Cluster development programme for printing clusters, women handlooms cluster, Tamil Nadu student innovators camp, Ideation camp for students. Through these programmes, 5,203 students and 364 teachers from various colleges, 25 participants from Printing sector and

35 Women Handloom workers got motivated to become entrepreneurs.

4.2.7. Human Resource and Faculty Development Centre

The Hon'ble Chief Minister of Tamil Nadu inaugurated the Human Resource and Faculty Development Centre at Madurai Kamaraj University through online mode on 14th August 2023. The centre is designed to conduct various faculty and skill development programmes at MKU campus.

4.2.8. Installation of Mahakavi Bharathiar Statue

The statue of Mahakavi Bharathiar was installed in front of School of Tamil Studies, Madurai Kamaraj University on 11.12.2023.

4.2.9. Rashtriya Uchchatar Shiksha Abhiyan (RUSA)

A total of 45 research projects are being carried out by the faculty members of MKU with

the RUSA, National Higher Education Mission, programme support. Application oriented research is being the prime focus and the notable areas of investigations include i) ancient genomics, ii) biomedical genomics, iii) molecular diagnostics, iv) development of sensors, chemicals, fluorochromes and biologicals for various biological, biomedical, biotechnological, chemical, energy, and environmental applications, v) utilization of computational intelligence and data analytics for various applications. Faculty members offer consultancy services in the areas of microbial genomics, drug screening, market value assessment and energy auditing.

Skill labs established at MKU includes BSL-III Immunodiagnostic Lab, 3D Printing Lab, IDAD Lab, Medical Entomology Lab, Food Processing Lab & Food Testing Lab, Apiculture Lab, Vermicomposting Facility, Molecular

Diagnostic Lab. Skill courses are offered to the students with these skill labs. A world-class computer and foreign language laboratory with 275 computers has been established for developing the skills of students on Cyber security, AI methods, Data Science, etc.

MKU-RUSA Skill Hub is offering and facilitates a series of employable Skill Development Courses and are offered to the PG and Ph.D students of MKU campus, at present. In the last semester 1,500 students got trained through the skill programmes and skill enhancement courses. In the current semester, faculty members are offering 55 skill courses to the students.

Under Entrepreneurship Projects, MKU - RUSA supports 15 projects in the aspects of Establishing Nursery for the Traditional Medicinal Plants, Smartphone-based Electrochemical Detection of Dopamine, Li-S Battery equipped

Portable Power Banks, Enterprise Development on Jute Based Products.

4.2.10. MoU WITH Zoological Survey of India (ZSI)

The Zoological Survey of India (ZSI) and Madurai Kamaraj University (MKU) have entered into an agreement (MoU) for encouragement and development of cooperation.

4.2.11. Establishment of Research Park in association with TIDCO

Madurai Kamaraj University and TIDCO are jointly developing a Research Park in 8.23.5 Hectare land, identified in Madurai Kamaraj University campus. The University has identified 16 product based active areas in Research.

4.3. ANNA UNIVERSITY

4.3.1. Anna University was established on 4th September 1978, as a unitary type of University by integrating four reputed technical institutions in the city of Madras (now Chennai), College of Engineering, Guindy (CEG) (1794), Alagappa College of Technology (ACT) (1944), Madras Institute of Technology (MIT) (1949) and School of Architecture and Planning (SAP) (1957). Currently, it is an affiliating type of University encompassing all the Engineering Colleges in the State. Anna University, one of the largest technological Universities in India, continues to be a leader in Technical education in the Country.

4.3.2. The University has 4 campuses (CEG, ACT, SAP, and MIT), 13 Constituent Colleges (Arni, Kancheepuram, Tindivanam, Villupuram, Dindigul, Ariyalur, Ramanathapuram, Tiruchirappalli, Panruti,

Pattukkottai, Thirukkuvalai, Nagercoil, Thoothukudi) and 3 Regional Campuses situated in Tirunelveli, Madurai and Coimbatore. There are about 488 Affiliated colleges (Non-Autonomous – 392 & Autonomous – 96) including Government, Government aided and Self Financing Engineering colleges. University Departments of Anna University offer about 31 UG and 89 PG programmes with 12,139 students currently on roll. The number of UG and PG Programmes in affiliated Non-Autonomous Institutions (educating 2,77,691 UG Students and 27,808 PG Students is 52 and 63 respectively. The number of Ph.D. Scholars pursuing doctoral work in University Departments and all Engineering colleges in the State is of 13,434.

4.3.3. Anna University has made a significant leap in QS World Ranking from a band of 551–560 in 2023 to 427 in 2024. In the NIRF

ranking 2023, Anna University has been positioned, 13th among Engineering Institutions and 14th among the Universities in India. Anna University is accredited by NAAC with the highest grade of A++ in the 3rd cycle. According to Times Higher Education (THE) World University Ranking (WUR), Anna University has been ranked in the range of 301 – 400 among Global institutions in the Engineering category. The 'h' index of the University is 194 (as on 07.02.2024) with 33,130 publications and 4,65,696 citations in the first 20,000 documents. Anna University has been granted with 26 patents during the academic year 2022–23. In the academic year 2023-24, Anna University has received 38 funded research projects and 685 consultancy assignments totaling to a value of Rs.14.00 crore.

4.3.4. India's first Remote Pilot Training Organization (RPTO) is the small and medium

category training Centre developed under UAS Rules 2021 and also approved by DGCA, Government of India. The Tamil Nadu Government has established an Unmanned Aerial Vehicle Corporation (TNUAVC) partnering with MIT, Anna University in 2022. RPTO's contribution in training drone pilots is significant, encompassing a total of 1,613 pilots out of 9,514 pilots trained across India.

4.3.5. A sum of Rs.6.50 crore (RUSA 1.0) has been sanctioned and released to Anna University towards the implementation of a Research project proposal entitled "Sustainable Energy Technologies – Integration of Energy Storage Options with Renewable Energy Power Generation for Sustainable Micro Smart Grid" under RUSA Research and Innovation Scheme. Under "Research, Innovation and Quality Improvement – Entrepreneurship Hub" utilizing the grant, numerous advanced Skill

Development programmes are conducted at a cost of Rs.15.00 crore (RUSA 2.0). A new curriculum has been introduced to the students of B.E. Computer Science and Engineering to enhance their knowledge, skill, entrepreneurship and career opportunities. Under "Research, Innovation and Quality Improvement" scheme (RUSA 2.0), the project entitled "Electric vehicle Technologies – Smart Material Characteristics, Manufacturing and Grid Management" is carried out in this scheme, at a cost of Rs.35.00 crore.

4.3.6. The Department of Science and Technology [DST] has sanctioned a sum of Rs.1.15 crore to the Centre for Environment studies, Anna University under FIST Scheme. Out of which, a sum of Rs.1.00 crore has been released by DST.

4.3.7. There is a need to have an improved logistics management system in organizing the dispatch of the question papers

and answer scripts before the examination, after the examination, and during the evaluation. The limitations of the current physical evaluation system are delayed publication of result, increased costs, and a higher risk of manual errors. Hence, it is advisable to use technology in evaluation. (Digital Valuation System (DVS). Under TANII Scheme of Government of Tamil Nadu, the implementation of Digital Valuation System is in progress.

4.3.8. Naan Mudhalvan Scheme was implemented at Anna University with a financial support from the Tamil Nadu Skill Development Corporation (TNSDC), the Government of Tamil Nadu. All the full-time B.E. / B.Tech. students (4,60,734) of Anna University. Under this scheme, 1,500 faculties are trained in 24 skill related courses.

4.3.9. A total of 299 students from University Departments have been admitted to

pursue undergraduate studies at Anna University under 7.5% Reservation Quota. An amount of Rs.1.99 crore has been allocated by Government of Tamil Nadu to implement the scheme. A total of 1,413 students from Anna University, Chennai, have benefitted through the First Graduation Concession Scheme. A sum of Rs.2.12 crore has been utilised to aid the first Graduate joining the Anna University. A total of 153 students from Anna University, Chennai, have been benefitted under the Pudhumai Penn Thittam scheme introduced by Government of Tamil Nadu. A sum of Rs.18.36 lakh has been allocated. 469 students from Anna University, Chennai, have been benefitted by availing PG Assistantship scheme. A sum of Rs.3.59 crore is allocated under this scheme.

4.3.10. Anna University has entered on agreement with University of Nottingham, United Kingdom to improve the relationship between

the two Universities in terms of research, student activities and innovation development.

University also signed 16 National level MoUs with different organisations (Government and private sector).

4.3.11. During the year 2024-25, construction of the indoor stadium cum Auditorium, experiential learning complex housing skill-based laboratories and Platinum jubilee Park at MIT Campus, Anna University will be carried out.

4.4. BHARATHIAR UNIVERSITY

4.4.1. Bharathiar University was established on 1982. Currently, the University has 13 Schools housing, 38 Departments offering 5 UG Programmes, 45 PG Programmes, and 36 Ph.D. Programs.

4.4.2. Bharathiar University has been accredited with a score of 3.63 CGPA & "A++" Grade in the fourth cycle by National Assessment and Accreditation Council (NAAC) for the period 2023 – 2030.

4.4.3. Bharathiar University has been ranked as 21st among Indian Universities, 36th in the overall and 38th in the Research categories by the National Institutional Ranking Framework (NIRF), Ministry of Education (MoE), Government of India for the year 2023.

4.4.4. Bharathiar University has been ranked as 171st among Asian Universities and

24th position in Southern Asia by QS ranking, UK for the year 2024.

4.4.5. Bharathiar University has been placed as 601-800 rank in World University Rankings and 9th among Indian Institutions, 251-300 in World Young Universities by TIMES Higher Education, UK for the year 2023.

4.4.6. Bharathiar University has 142 Affiliated Colleges. Among these, 30 Colleges are having autonomous status.

4.4.7. For the academic year 2023-24, students admitted in the UG & PG under affiliated colleges are 85,918 under University Departments are 1,643 and under Distance Education are 3,402.

4.4.8. Bharathiar University has 12,009 publications with the citations of 1,91,754 with "h" index of 144 as per SCOPUS database.

4.4.9. The University is proud to have 18 faculty members who are listed under World Top 2% Scientists based on the leading scientific research database SCOPUS.

4.4.10. Two of the Faculty members are listed as Highly Cited Researcher in Clarivate Analytics.

4.4.11. One of the faculty members has been elected as the Fellow of the National Academy of Sciences, India. One of the faculty member has been awarded with Manubhai M Shah Memorial Award for Excellence in Commerce.

4.4.12. Bharathiar University was granted with 22 Patents & 22 Copyrights and 13 more patents have been filed.

4.4.13. DRDO-BU CLS is renamed as DRDO – Industry-Academia Center of Excellence Bharathiar University (DIA-CoE BU) has signed

an MoU for the next 25 years (upto 2047). This center facilitates to boost Industry Academia Collaborations in this region to work together on defence technologies and requirements of Government of India. Bharathiar University has signed MoU with DRDO to establish DRDO-IA-CoE-BU.

4.4.14. Various Departments of Bharathiar University have been recognized for their academic excellence and are being supported through Special Assistance Program (SAP) and Centre for Potential of Excellence in Particular Area (CPEPA) by University Grants Commission and DST-FIST grant by Department of Science and Technology, Government of India.

4.4.15. The University, to pay homage to the great National poet Bharathiar with whose name it stands, has started the Bharathiar Uyaraaivu Maiyam which would abode the

memoirs of Life and achievements of Bharathiar. A clock tower is constructed as part of Bharathi Centenary Year Celebrations as well as 75th Year of Indian Independence.

4.4.16. Kalloori Kanavu under Naan Mudhalvan Scheme: 61 affiliated colleges of Bharathiar University have come forward and signed MoU for adoption of 110 schools in the District, in order to educate the students who have completed their SSLC in Government, Government-Aided, and Corporation schools to get an opportunity to know about various streams in higher education.

4.4.17. Establishment of Knowledge Research Park: Bharathiar University is in the process of establishing a "Knowledge Research Park", as announced by the Hon'ble Chief Minister of Tamil Nadu to encourage the participation of University departments and

affiliated colleges in the industrial development of Tamil Nadu.

4.4.18. A Bio Gas Plant with 3 KLD Capacity is established in Bharathiar University Campus based on the kitchen & food wastes in the men's hostel which is converted to energy leaving aside rich manure as discards.

4.5. BHARATHIDASAN UNIVERSITY

4.5.1. Bharathidasan University, established in the year 1982, was named after the Great revolutionary Tamil Poet, Thiru. Bharathidasan. The motto of the University "We will create a brave new world", has been framed from Bharathidasan's poetic words "புதியதோர் உலகம் செய்வோம்".

4.5.2. The University has 4 Faculties, 16 Schools, 37 Departments, 1 PG Extension Centre, 33 Specialized Research Centres, 12 Cells including the Internal Quality Assurance Cell (IQAC), Intellectual Property Rights (IPR), Anti-Sexual Harassment (ASHC), Human Resource Development Centre. 41 PG programmes, 6 Undergraduate programmes under the Choice Based Credit System (CBCS) courses are offered. 44 Ph.D. programmes and 5 certificate courses are offered. There are 258 faculty and 315 administrative staff serving

3,190 students in the University. In addition, the University under its Centre for Distance and Online Education is offering UGC-DEB approved 39 Programmes (20 UG and 19 PG) and 10 Online programme.

4.5.3. The University affiliate 155 colleges (36 Government Colleges, 15 Aided Colleges, 92 Self-Financing Colleges, 1 Uni-Faculty and 11 Approved Institutions) in total.

4.5.4. In the year 2023 University secured 41th rank in NIRF and 4th rank among the Universities in Tamil Nadu. 2023-24 Education World Rankings has secured 8th Position at All India level.

4.6. MOTHER TERESA WOMEN'S UNIVERSITY

4.6.1. Mother Teresa Women's University stands as an exemplary bastion of Women Empowerment. Established in 1984 by the Government of Tamil Nadu, this University boasts the distinction of being the sole institution of its kind in the State and the third in the Nation. The University's motto, "Towards Equal Status," along with its Holistic Vision of Women Empowerment through Education, aims to forge an Egalitarian Society where the potential of women is harnessed for sustainable National development through assuming challenging roles facilitated by high-quality higher education.

4.6.2. With 16 Departments and three Research and Extension Centres in Chennai, Madurai, and Coimbatore, alongside a Training Centre for Women Empowerment at Pallapatti

(SIPCOT campus), Dindigul District, and the University is transitioned from a unitary to an affiliating type in the year 2002. Women's Colleges in Theni and Dindigul Districts operate under the auspices of Mother Teresa Women's University (MTWU), encompassing 13 colleges, including 3 Government, 2 aided (Autonomous), 1 Constituent, and 7 Self-Financing Colleges.

4.6.3. Important Achievements

- ❖ According to the SCOPUS database, 181 publications were released between 2022 and 2024.

- ❖ A total of 26 research projects received funding from both Government and non-Government agencies.

- ❖ The institution conducted 24 workshops / seminars covering topics such as Research Methodology, Intellectual Property Rights

(IPR), entrepreneurship and skill development.

❖ Six awards / recognition were received for research / innovations by institution / teachers / research scholars / students.

❖ Nine patents were awarded.

❖ 35 books and chapters in edited volumes / books were published, along with papers in national / international conference proceedings.

❖ An award and recognition were received for extension activities from Government recognized bodies.

❖ The institution conducted 67 extension and outreach programs, including those through NSS / NCC / Government and Government-recognized bodies, with a total of 4,906 students participating.

❖ Collaborative activities with other institutions / research establishments / industry for research and academic development of faculty and students numbered 23.

❖ Twelve functional MoUs were established with institutions / industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange, and collaborative research.

❖ Violence Against Women Club (VAWC) was established by student volunteers at Mother Teresa Women's University.

❖ The identification and successful registration of two products, namely 'Kodaikanal Malai Poondu' and 'Udangudi Panang Karuppatti,' for Geographical Indication (GI) brought joy to stakeholders and increased awareness among students about GI.

4.7. ALAGAPPA UNIVERSITY

4.7.1. With the prime objective of providing quality education in all spheres, Alagappa University was established in 1985 as a State University. It has 4 faculties, 45 Departments, 10 Directorates, 63 Approved Research Centres and 2 University Constituent Colleges. Besides, it has 45 Affiliated Colleges spreading two Districts namely Sivaganga and Ramanathapuram.

4.7.2. Around 1.59 lakh of students are pursuing the higher studies through various streams of education. The University offers 112 Programmes in the University Departments, 81 in Affiliated Colleges, 25 in Distance Education & Online and 118 programmes in collaborative mode of education.

4.7.3. Achievements

Under QS World Ranking 2024, Alagappa University is placed 59th position in QS Southern Asia Ranking and has been placed in the bandwidth of 271 - 280 in QS Asia University Ranking. Under THE (Times Higher Education) ranking - 2024, Alagappa University has secured 111th position in THE- ASIA ranking and secured 101–150th bandwidth under the category of World Young University Ranking. Further, in general category, Alagappa University has secured 601–800th bandwidth in 2023.

Alagappa University is one of the top 10 State Universities in the Country, handpicked by the Ministry of Education (MoE), Government of India to promote quality enhancement in Teaching and Research. Recognizing this, Ministry of Education, Government of India has sanctioned Rs.100 crore under component 4 (Enhancement of Quality in Teaching and

Research to Select State Universities) to Alagappa University under RUSA 2.0 Scheme. With the sharing pattern of 60:40 between the Ministry of Education, New Delhi and Government of Tamil Nadu, so far, Rs.69.25 crore has been received and expenditure incurred by Alagappa University.

4.7.4. Activities / Schemes undertaken

NAAN MUTHALVAN SCHEME

As per the direction of the Government of Tamil Nadu, the scheme is implemented to impart Industry relevant, employable and Entrepreneurial skills to the students. Under this scheme, in second semester – English communication will be offered which is certified by the Cambridge University. Digital Skill will be provided in fourth semester certified by Microsoft, NSE etc.,.

4.7.5. Other Recognition

The Alagappa University has received Clarivate – India Research Excellence Citation Awards – 2023 for research in nano-particles.

4.8. MANONMANIAM SUNDARANAR UNIVERSITY

4.8.1. Manonmaniam Sundaranar University was established in 1990. The University caters to the needs of the four Southern Districts of Tamil Nadu, viz., Tirunelveli, Thoothukudi, Tenkasi and Kanyakumari with a campus area of 890 acres.

4.8.2. The University is re-accredited with 'A' Grade (CGPA-3.13) by NAAC and ranked the 83rd position in the University category by the National Institutional Ranking Framework (NIRF), 2023.

4.8.3. The University has 29 Departments, 10 Schools and One PG Extension Centre at Nagercoil. Five departments are working in a specialized centres namely, Sri Paramakalyani Centre of Excellence in Environmental Sciences at Alwarkurichi, Centre for Marine Science and Technology at Rajakkamangalam and Centre for

Study of Social Exclusion and Inclusive Policy (CSSE&IP), Centre for Information Technology and Engineering and Centre for Geotechnology at Main Campus, Abishekapatti. The University offers 52 UG/PG Integrated and PG programmes at different levels with the strength of 2,778 students pursuing their higher studies.

4.8.4. University is having 102 affiliated colleges (11 Government Colleges, 23 Government Aided Colleges, 58 Self-Financing Colleges, 09 Autonomous Colleges, 01 Self Finance with Autonomous)and 6 Manonmaniam Sundaranar University Colleges with 1,30,993 students are doing their studies.

4.8.5. University ranked according to total H index in India and Asia 97 & 525. There are five faculty members in the World top 10% Scientists in the year 2024. The University faculty members have filed 19 patents during the year 2023.The University has signed

29 MoUs with various institutions, fostering and knowledge exchange.

4.8.6. The Nann Mudhalvan upskilling courses are inducted in the course structure of all UG Programmes under II, IV & VI semesters for the academic year 2022–23.

4.8.7. New Academic Programmes like B.Sc. (AI & ML), Data Science and Cyber Security from the year 2023-24 in collaboration with MSU Departments and MK University and M.Sc. Applied Physics & M.Sc. Archaeology.

4.8.8. Manonmaniam Sundaranar University (MS University) has undertaken 19 funded research projects by various departments with a total funding of Rs.5.67 crore. Six Project Proposals have been sanctioned by the various funding agencies for an amount of Rs.1.10 crore.

4.8.9. The commitment to holistic education is evident through world-class sports facilities, sports meets, and student participation in national and international competitions. The University secured a Gold medal in the South Zone Inter University Hockey Tournament and a Silver medal in the South West Zone Inter University Athletic Championship.

4.8.10. The Department of Distance and Continuing Education (DD & CE) has got approval for 24 Arts and Science Programmes from the Distance Education Bureau (UGC-DEB) up to the academic year 2027-28.

4.9. PERIYAR UNIVERSITY

4.9.1. The Periyar University was established in the year 1997 at Salem. The University covers an area comprising four Districts namely, Salem, Namakkal, Dharmapuri, and Krishnagiri.

4.9.2. This University has five Science Schools and three Arts Schools comprising 27 Departments offering 35 Postgraduate programmes, 04 Undergraduate Programmes, 03 Diploma programme, 01 Certificate programme and 27 Research programmes. In the University Departments, 148 faculty members workunder various categories. Periyar University Centre for Postgraduate and Research Studies at Dharmapuri performs well, with eight departments and 20 faculty members.

4.9.3. Periyar University has taken a significant step to promote interdisciplinary

study and research. The Departments have been clustered into schools to identify and work on productive intersections between disciplines.

4.9.4. Achievements

❖ The University secured 59th Rank in NIRF in 2023 and consecutively ranked among 100 Universities in the past six years.

❖ Periyar University is the only State-run University ranked among the top 10 institutions in India for Atal Ranking for Institutions on Innovation Achievements.

❖ The only State-run University secured 4.00/5.00 stars at the National Level rating of the Institution's Innovation Council.

❖ Six faculty members from the Department of Computer Science, Biotechnology, Physics, Biochemistry, Nutrition and

Dietetics have recently obtained patents for their inventions.

❖ Opportunities for aspiring Entrepreneurs are created through regular training in the Incubation center, which functions with the help of State Government funds.

❖ Automatic machines to borrow the library books have been installed for the students easy access. Children's Library has been established with 5000 new books. A readers club has also been started to encourage the reading habit among the students.

❖ A separate Director has been appointed to extend the activities of Thanthai Periyar Chair, Peraringnar Anna Chair, and Muthamizh Aringnar Tamizhavel Kalaingnar M. Karunanidhi Research Centre.

- ❖ An electric vehicle is also purchased to promote awareness on environment and clean campus.

- ❖ Medicinal Plants Park, Mushroom cultivation farm, Vermicompost preparation unit, Bio-gas container, Energy Park, Decorative Floral Park, and Oxygen Park have been created.

- ❖ There are two ongoing multidisciplinary TANSCHE-funded research projects (Interdepartmental Collaboration) for Rs.95.00 lakh.

- ❖ The Government of Tamil Nadu has sanctioned Rs.2.00 crore to construct exclusive building for the Kailaignar Research Centre, which has been completed.

- As a part of Go Green initiatives, an 'Oxygen Park' with the collection of bamboos was created in the campus.

- The faculty members of the University have published 6,216 research papers in International and National Level journals and obtained 27 patents. The h-Index of the University is 91.

- The University Departments have organized 85 Conferences, Seminars, and Workshops to benefit the students and research scholars.

- The total funds to the tune of Rs.76.00 lakh were mobilized in the last academic year through funded projects from various funding agencies.

- The University Departments have inked Five MoUs with premier research institutes.

- ❖ Career Guidance and Placement Cell has organized eight campus drives.

- ❖ More than 1,000 collaborative activities have been undertaken with various institutions, research laboratories, and industries.

4.10. TAMIL NADU OPEN UNIVERSITY

4.10.1. The Tamil Nadu Open University (TNOU) was established in 2002 for introducing and promoting Open and Distance Learning System in the State and continually offering opportunities for upgrading knowledge, training, and skills in the context of innovations, research and discovery in all fields of human endeavours.

4.10.2. TNOU, since its inception, is providing cost effective, socially relevant Open and Distance Learning Programmes to the hitherto unreached as well as the disadvantaged groups such as those who mainly live in remote and rural areas including the working people, housewives, differently-abled, backward, most backward, scheduled caste and scheduled tribe as learners.

4.10.3. TNOU, at present, is offering Degree Programmes, Skill Development and

value Added Programmes, starting from Certificate, Diploma, Vocational Diploma, PG Diploma, Under Graduate Degree, Master Degree, and Ph.D. Research Programmes.

4.10.4. The University has achieved an impressive 'A+' Grade with a CGPA of 3.32 out of 4 in its very first cycle of accreditation from the National Assessment and Accreditation Council (NAAC), Bengaluru. TNOU is the second Open University in India to attain the highest score in NAAC Accreditation during its first cycle.

4.10.5. TNOU through its School of Education has secured two projects for conducting National Seminars on Significance of Medicinal Plants and its Impact on Educational System, and a National Campaign on Ashwagandha. These projects are funded by the National Medicinal Plants Board (NMPB), Ministry of AYUSH, New Delhi with a total value of Rs.24.90 lakh.

4.10.6. TNOU established a Universal Design for Learning (UDL) Studio at the Department of Special Education and Rehabilitation to enhance educational opportunities for students with various disabilities at the cost of Rs.13.24 lakh donated by the Philanthropist. The Studio serves for producing Accessible Multimedia and Digital Learning for the persons with disabilities.

4.10.7. TNOU made the Memorandums of Understanding (MoUs) with esteemed international institutions. One such partnership is with Ming Chi University of Technology in Taiwan, signed on October 17, 2023 and another one with the International Institute of Higher Studies and Tamil Research in Paris, France signed on July 29, 2023. These collaborations are the instrumental in facilitating faculty and student exchanges, as well as promoting joint research.

4.10.8. The University created "Thiruvalluvar Library" with the help of Mylai Thiruvalluvar Tamil Sangam to facilitate the Researchers, and the Literature Development.

4.10.9. The University has signed 5 MoUs with the leading Higher Education Institutions viz., (1) Jharkhand State Open University (JSOU), Ranchi, Jharkhand, (2) Krishna Kanta Handiqui State Open University, Assam (KKHSOU) (3) Ming Chi University of Technology, Taiwan, (4) Maharashtra National Law University, Nagpur and (5) International Institute of Higher Studies and Tamil Research, Paris, France for offering collaborative programmes.

4.10.10. The University conducted "First World Tamil Development Conference" with the support of Chennai Tamil Valarzhi Kalagam.

4.10.11. To celebrate the Birth Centenary of the former Hon'ble Chief Minister, Dr. Kalaignar Mu. Karunanidhi, the University hosted a two-day National Conference on "Translation of Dr. Kalaignar Mu. Karunanidhi's Writings: Linguistic and Cultural Perspectives."

4.10.12. A total of 1,420 Self Learning Materials (SLM) and 408 SLM in Tamil Medium have been produced and distribute to the learners.

4.10.13. Free education is ensured to transgender, jail inmates and persons with disabilities.

4.11. THIRUVALLUVAR UNIVERSITY

4.11.1. In 2002, the Government of Tamil Nadu established the Thiruvalluvar University. The University's campus comprises 13 departments, offering programs in Tamil, English, Economics, Mathematics, Zoology, Chemistry, Biotechnology, Commerce, Physics, Computer Science, Environmental Science, Microbiology and Sociology. Thiruvalluvar University is affiliated with 80 Arts and Science Colleges and collaborates with 8 research institutions across Vellore, Thiruvannamalai, Ranipet, and Tirupattur Districts.

4.11.2. Thiruvalluvar University Research Fellowship (TURF) for Research Scholars of University Departments was implemented successfully.

4.11.3. Thiruvalluvar University and Entrepreneurship Development and Innovation

Institute (EDII), Chennai have jointly organized 8 Programme on Awareness of Entrepreneurship & Innovation to the affiliated colleges namely IEDP-top management meet & awareness on innovation voucher programme, Faculty Development Programme, E-Leaders Workshop, Design Thinking Workshop, Awareness of Entrepreneurship & Innovation and Awareness of Social Entrepreneurship & Innovation. More than 5,000 students and 100 faculties are benefitted to this programme during the academic year 2023-24.

4.11.4. NASSCOM – SKILLSDA training course for the final year UG and PG students of Thiruvalluvar University was conducted. The mega placement was conducted in the year 2023 for the trained students. More than 3,000 students from this University were placed to the reputed companies.

4.11.5. A total number of 935 Research Papers of the Faculty Members of the University departments were published in Science Citation Indexed web of science journals and 1,338 Research papers of the Faculty Members of the University departments were published in Scopus indexed journals, as on date. The University Central Library has 16,340 volumes of books covering all disciplines besides having 1,795 Ph.D. Thesis and 5,883 M.Phil., Dissertations. The library has subscribed eight leading newspapers. Internet browsing facilities is also available inside the library to browse e-resources. The library has also subscribed 2,290 + full text e-journals from leading publishers (the product name is EBSCO – Academic Search Elite) and many link is provided to access to open access e-books and e-journals to improve the quality of research in the University. The University library

is a member in (1) DELNET (Developing Library Network) (2) Shodhganga.

4.11.6. Thiruvalluvar University has implemented centralized Online Digital Valuation System (ODVS) from November/December-2023 Semester Examinations, for Rs.8.00 crore funded by TANII, Government of Tamil Nadu.

4.12. TAMIL NADU TEACHERS EDUCATION UNIVERSITY

4.12.1. Tamil Nadu Teachers Education University was established in the year 2008 for promoting excellence in teachers education. At the time of inception, there were 491 Colleges of Education deemed to have been affiliated to this University and now the University is having 664 Colleges of Education including 7 Government, 14 Government Aided and 643 self-financing Colleges of Education. It has six Departments of Study and Research in the field of Education.

4.12.2. The University is offering 2-year M.Ed. Degree Programme and also Ph.D Degree Programme in the University campus. The University got recognition from the UGC under section 12(B) of the UGC Act, 1956. The University has submitted NIRF data for

ranking.The University got NAAC Accreditation of 'A' Grade with CGPA of 3.17 by NAAC.

4.12.3. The University monitors teachers education as approved by the National Council for Teachers Education at all levels in the State academically.

4.12.4. The University develops research facilities in teachers education and to find out the ways and means to identify innovative courses in teachers education.

4.12.5. The University institutes degrees, and other academic distinctions in teachers education as approved by the National Council for Teachers Education.

4.12.6. The University has introduced "Child Rights and Protection" in the B.Ed. Curriculum from the academic year 2023-24.

4.12.7. The University has entered an MOU with Tamil Virtual Academy and the curriculum have been developed to provide online teacher training to the volunteers who are teaching Tamil in Abroad.

4.12.8. The University has included two Online Courses, 1.Women Empowerment 2.Entrepreneurship Development for the M.Ed. Students and also two Online Courses, 1.Learner Psychology 2.Digital Learning for the B.Ed. students with similar option to SWAYAM courses for the benefit of the students.

4.12.9. The University has entered into approximately 98 MOUs with various Universities and institutions in India and Foreign countries to promote academic cooperation and collaboration through research and study.

4.12.10. The Orientation Programme for the faculty members of affiliated Colleges of

Education have been organized in collaboration with Thozhamai and UNICEF on the newly introduced syllabus "Understanding the Rights of Children and their Protection – The Role of Teachers" in zonal wise.

4.12.11. The University proposes to initiate the following action :

- ❖ For starting P.G Diploma Programmes and Certificate Programmes.

- ❖ To increase the research publications in National and International peer reviewed journals in UGC Care List and Scopus.

- ❖ To encourage teacher education students to take field exposure to Tamil Heritage and culture.

4.13. ANNAMALAI UNIVERSITY

4.13.1. Annamalai University was established as per Annamalai University Act 1928 (Tamil Nadu Act 1 of 1929) and the above Act was repealed and the University was brought under the control of Government of Tamil Nadu on 25.09.2013 by enacting the Annamalai University Act, 2013 (Tamil Nadu Act 20 of 2013). This University was made an "affiliating" one with Mayiladuthurai, Cuddalore, Villuppuram, and Kallakurichi Districts as its jurisdiction and at present, 81 colleges are affiliated to the University.

4.13.2. Annamalai University has also been a forerunner in making education accessible to countless citizens through distance education mode. The programmes offered in by the Directorate of Distance education (DDE) are approved and accredited by the Distance Education Board (DEB). The on-campus

programmes are duly approved / accredited by the competent bodies such as NAAC, NBA, ICAR, NCTE, AICTE, etc. One of India's largest and oldest Public University, it does yeoman service in taking education to people who are far from access to centres of higher learning.

4.13.3. The University got accredited by NAAC with A^+ Grade during July 2022 with the NAAC score of 3.38 out of 4.00 the university becomes eligible to operate Directorate of Distance Education (DDE).

4.13.4. In 2023, the Distance Education Bureau has approved 27-degree programmes offered by the DDE, Annamalai University.

4.13.5. India Today Ranking – 15th in India among Government Universities (2022).

4.13.6. Activities / Schemes Undertaken

- ❖ 68 patents are filed and 3 is granted.

- ❖ The University has signed 12 MoUs.

- ❖ 103 Value added Courses offered.

- ❖ Institution Innovation Council (IIC) has been established in the year 2022-23.

- ❖ A Student Support & Progression Directorate was instituted to augment the student support on issues related with scholarships / stipend / endowments.

- ❖ For visually Challenged students, a Bareilly Software and accessory tools was provided in Central Library.

- ❖ The University stands at the H–Index of 140 (Scopus) and 125 (Web of Science).

- *Dravidacris annamalaica*, a new grasshopper with its head held high, discovered in Annamalai University.

- In 2023–24, Rs.50.00 lakh has been allotted under DST PURSE II for Annamalai University under manpower.

4.13.7. Outreach Activities

- Annamalai Integrated Rice+Fish+Poultry Farming System Model was instituted in 50 small farm holdings at Bhuvanagiri Taluk.

- Tribal Empowerment through Science and Technology (TEST): Annamalai University has been continuously engaged in social outreach activities considering extension on a par with the academics. Neighbourhood Empowerment through Science and Technology (NEST) had been the best practice of the University during

2015-22 and it has blossomed into Tribal Empowerment through Science and Technology (TEST) for the next five years, from 2023 onwards a computer training for the tribal people is being offered.

4.13.8. Schemes

❖ As part of TEST, Annamaalai University in association with Tribal welfare Department, Government of Tamil Nadu has proposed to carry out a project for livelihood enhancement of the tribal community in Pachamalai and Kalvarayan Hills of Tamil Nadu.

5. TAMIL NADU ARCHIVES

5.1. Tamil Nadu Archives is functioning at Egmore, Chennai, housing records of Government and collections from various sources, dating back to more than three centuries. The records preserved here are of historical, administrative, economic and social importance. These materials are the outcome of administrative activities of the State Government which have accumulated in course of time. They are virtually the administrative memory of the State preserved in its entirety, in undisturbed continuity and unalloyed integrity. The existing building was opened in the year 1909 and therefore it has become a historical and heritage monument.

Records are preserved at the Archives for the use of various Government Departments and bonafide Research Scholars. The main activity of Tamil Nadu Archives is to centralize all

permanent records, preserve them on scientific lines, throw them open for historical research and make them readily available for official references.

5.2. LIBRARY

The Tamil Nadu Archives owns a separate Library and it has a collection of about 2,31,828 books from the year 1633 onwards. 43,106 books have been digitalized. These books are used by Research scholars.

5.3. DISTRICT GAZETTEERS

The District Gazetteers for Districts are being prepared and published by the Tamil Nadu Archives. The process of Tamil translation of the already published English version of District Gazetteers is nearing completion.

5.4. DISTRICT RECORD CENTRES

In order to spread out the activities of Tamil Nadu Archives, six District Record centres have been formed. The District Record Centres are functioning at Cuddalore, Salem, Coimbatore, Thanjavur, Tiruchirappalli and Madurai. The District record centres are engaged in preserving records of the Government.

5.5. RESEARCH HALL

From the year 1930, the bonafide researchers are being permitted to oversee the Archival records.   A modern Research Hall is available in the premises of Tamil Nadu Archives. In the year 2023, 258 scholars have been given permission to access Archival Records.

5.6. DETAILS OF ISSUE OF INFORMATION UNDER RTI ACT

From year 2011 onwards the Tamil Nadu Archives have started issuing copies of records directly to the Public, under Right to Information Act, 2005. In the year 2023, 14,080 applications have been received and processed.

5.7. TRAINING PROGRAM FOR RESEARCH SCHOLARS – (2022-23)

Under Tamil Nadu Innovation Initiatives (TANII) Programme, the Government issued orders for conducting research training programs from the year 2022-23 to the benefit of research students. In this connection, the Government have sanctioned a sum of Rs.48.62 lakh to the Tamil Nadu Archives and Historical Research for conducting research training programmes through Roja Muthiah Research Library, Taramani, Chennai, as a implementing agency successfully implemented the first phase of this scheme. An amount of Rs.48.62 lakh have been

sanctioned for the second year (2023-24) to conduct the above research training programme.

5.8. MENDING OF RECORDS USING JAPANESE TISSUE METHOD

The Government have sanctioned Rs.10.00 crore for mending the already scanned records using Tissue Lamination method. The above work is under progress.

5.9. DIGITIZATION AND E-ARCHIVES

An amount of Rs.1.50 crore has been sanctioned for "Implementation of e-Archives portal of Tamil Nadu in Tamil Nadu Archives". It becomes possible to easily store documents and access records. It also facilitates the easy search of records and the safe transmission of documents to future generations.

5.10. HERITAGE BUILDING RENOVATION AND RESTORATION

The Government have sanctioned a sum of Rs.10.00 crore for renovation and restoration work of Tamil Nadu Archives Buildings and for Re-wiring and strengthening of Electrical Installations to the Main Heritage Building and Annex Buildings of Tamil Nadu Archives. The works are being carried out by the Public Works Department.

5.11. STIPEND FOR STUDENTS

The Government have sanctioned a sum of Rs.4.80 lakh for Research scholarship scheme. Under this scheme 4 eligible research scholars have been enrolled for a maximum period of one year with a stipend of Rs.10,000/- per month for pursuing research fellowship in Tamil Nadu Archives and Historical research.

6. TAMIL NADU STATE COUNCIL FOR HIGHER EDUCATION

6.1. The Tamil Nadu State Council for Higher Education (TANSCHE) was established in 1992.

6.2. OBJECTIVES

- ❖ Coordinate and determine standards in higher education institutions.

- ❖ Evolve plans for the development of higher education in the State.

- ❖ Monitor the progress of developmental programmes in Universities, Colleges and Institutions of higher education.

- ❖ Promote coordination among colleges and Universities and explore the scope for interaction with industry and related establishments.

- ❖ Define guidelines for starting new higher education institutions.

- ❖ Work to evolve rating framework for the higher education in the State.

6.3. ACTIVITIES

6.3.1. Equivalence

Meetings of Chairpersons, Boards of Studies and subject experts have been conducted for obtaining equivalence to the courses offered by educational institutions for the purpose of employment in public services and for pursuing higher studies. The recommendations of the Board of Studies regarding equivalence issues have been placed in the Equivalence Committee Meetings for approval and issuing necessary Government orders. So far, 25 Equivalence Committee Meetings have been conducted. 868 courses for employment purpose and 142 courses for higher studies (Total 1,010

courses) have been certified as equivalent or not equivalent.

6.3.2. Naan Mudhalvan

Incorporation of the courses in the curriculum, recommended credits, timetable for FDPs and implementation, assessment and training provider details are discussed, minuted and disseminated for seamless implementation. The Council coordinates EOI scrutiny, course vetting for Arts and Science degree programmes. This scheme has been implemented in Government, Government Aided, Self-Financing Colleges, affiliated to 10 State Universities and 19 Government Autonomous Arts and Science colleges. TANSCHE coordinated the Faculty Development Programme in the State universities along with Tamil Nadu Skill Development Corporation team and the Director of Collegiate Education and

sensitization of affiliated college stakeholders in university regions.

6.3.3. This Council has taken efforts to include Higher Educational Institutions in Tamil Nadu in NIRF ranking.

6.4. PROPOSED ACTIVITIES

- ❖ Measures to ensure quality enhancement in the appointment of Assistant / Associate Professor's in self-financing colleges through qualification approval.

- ❖ Assessment reforms in outcomes based pedagogical approach in Higher Education Institutions.

- ❖ Workshops to encourage participation in National Institute of Ranking Framework, Times Higher Education and QS rankings and apply for NAAC accreditations.

- ❖ Improving efficacy of research programmes through structured duration for full-time and part-time.

- ❖ In-service training through workshops to enable transformation from evaluation to Learning Outcome based Curriculum Framework based assessment.

7. RASHTRIYA UCHCHATAR SHIKSHA ABHIYAN (RUSA)

7.1. RUSA scheme aims at providing strategic funding to eligible State Higher Educational Institutions (HEIs). It is a centrally sponsored scheme launched in 2013 and is jointly funded and executed by Central and State Governments with 60% and 40% share, respectively. The objectives of RUSA is to improve access, equity and quality in higher education through planned development of higher education at the State level. Such planning will include creating new academic institutions, expanding and upgrading the existing ones, developing institutions that are self-reliant in terms of quality education, professionally managed and characterized by greater inclination towards research and provide students with education that is relevant to them as well the Nation as a whole.

138

All funding under the RUSA scheme would be norm-based, with future funds dependent on outcomes. The beneficiaries of RUSA 1.0 and RUSA 2.0 include Tamil Nadu Government Arts and Science Colleges and State Universities, with the launch of a new scheme, PM-USHA, anticipated.

RUSA 1.0

7.1.1. RUSA 1.0 has been funded with 77 units totaling Rs.374.00 crore (including MMER). The upgraded infrastructure in classrooms, laboratories and sports facilities, as well as smart classrooms and technology-enabled learning in the State's higher education institutions, demonstrates RUSA 1.0's effective implementation and demonstrable outcomes. Furthermore, numerous Universities such as Anna University, Alagappa University, Annamalai University, Bharathiyar University, Bharathidasan University, Manonmaniam

Sundaranar University and University of Madras benefit from component-8 for research, innovation and quality improvement. Under this scheme, the Tamil Nadu Skill Development Corporation (TNSDC), Chennai and the Anna Administrative Staff College (AASC), Chennai additionally offered vocational training programmes for students benefits.

RUSA 2.0

7.2. The effective implementation of RUSA 1.0 created the path for the Ministry of Education, Government of India to sanction RUSA 2.0 with 23 units from 2018 to date for around Rs.500.96 crore. NAAC accreditation has been implemented as an eligibility criteria for SHEIs by RUSA 2.0.

Overall, Rs.874.96 crore (Central Share + State Share) has been approved for RUSA 1.0 and 2.0. Among them, Rs.61.53 crore is to be

released from the Central Government, including MMER funds, and Rs.41.02 crore (from Tamil Nadu State Government for the financial year, 2023-24.

7.2.1. ENHANCING QUALITY AND EXCELLENCE IN SELECTED STATE UNIVERSITIES

Alagappa University, Karaikudi has been approved Rs.100.00 crore under the component of Rs.85.00 crore was earmarked for research, innovation, quality enhancement and excellence and Rs.15.00 crore was allocated for creation of Entrepreneur, Innovation & Career hub. This has been ensured by infrastructural developments, knowledge upgradation, University-society linkage, student centric initiatives, theme based research projects in thrust areas.

7.2.2. RESEARCH, INNOVATION AND QUALITY IMPROVEMENT

RUSA 2.0 emphasises research and innovation in order to promote technologies that meet the Nation's needs. A total of Rs.300.00 crore has been granted for six State Universities, namely Anna University, Annamalai University, Bharathidasan University, Bharathiyar University, Madurai Kamaraj University and University of Madras, with each receiving Rs.50.00 crore. Entrepreneur Hub and Themed Research Projects have been awarded Rs.15.00 crore and Rs.35.00 crore, respectively. Skill development has received significant attention under each university's entrepreneur centres, with 10,012 students benefiting from 130 Skill Development courses.

The Universities are pioneering research projects under the below themes:-

Sl. No	State Universities funded by RUSA 2.0	Research Project theme
1	Anna University, Chennai	Electric vehicle charging station
2	Annamalai University, Chidambaram	Health & Environment
3	Bharathidasan University, Tiruchirappalli	Health, Energy & sustainable development
4	Bharathiyar University, Coimbatore	Cancer Theranostics research centre
5	Madurai Kamaraj University, Madurai	School of Biomedical sciences
6	University of Madras, Chennai	Bio medical applications

Till date Rs.184.88 crore has been released under this component

7.2.3. Infrastructural grants approved for Rs.80.00 crore to three State Universities and

ten Government colleges resulted in the creation and upgradation of infrastructural facilities like academic blocks, indoor stadiums, gymansium along with procurement of equipments to cater to the growing demands of the institutions.

7.3. ACTIVITIES UNDER RUSA

The RUSA as a wholistic approach ensure the steps towards enhancing the infrastructural facilities, quality and excellence, research and innovation and entrepreneur hubs of the State Universities and Government Arts and Science Colleges. The State Project Directorate of RUSA had conducted the following activities under RUSA 1.0 and 2.0 as a part of implementation of the schemes.

7.3.1. The TNSDC had conducted Vocationalization programmes in 19 Autonomous Government Arts and Science Colleges. Totally

13,159 students have benefitted by these programmes.

7.3.2. The Tamil Nadu Apex Skill Development Centre for Health Care, a SPV for healthcare under TNSDC, imparted vocational programmes for 4,930 students from 39 Government Arts and Science Colleges. The courses include Health care Management Executive, Hospital Admin Executive, Medical Coding and Medical Billing.

7.3.3. The AASC, a premier institute of the State Government conducted Life Skill Programmes under the vocationalization component of RUSA. It inculcated leadership, interpersonal skills, emerging technologies etc. to 2,800 students. And also, it conducted a three day training programme under the title "Faculty Empowerment Programme (FEP)" to the 150 Principals of the Government Arts and

145

Science Colleges in five batches. It helped to enhance the skills and remain updated.

7.3.4. Apart from the regular curriculum, a series of online sessions under the title of "Weekly Online Workshop (WoW)" are being conducted covering varied themes for all the State Government HEIs, one institution for each week. Eminent speakers from all the categories viz. Bureaucrats, Administrators, Entrepreneurs, Top officials of the Corporates, Proven Academicians and Industrialists, share their valuable inputs with students.

These programmes were conducted as LIVE sessions and nearly 500 students participated in each sessions. The recorded sessions were also published in the YouTube Channel of the TN-RUSA. As on date, 70 sessions have been conducted through which 40,000 students have benefitted from the programme.

7.3.5. NAAC is a mandate for the HEIs for applying RUSA 2.0. Those Government Arts and Science Colleges, which intend to apply for Assessment and Accreditation were given handhold training in the workshops in collaboration with NAAC. The University of Madras, Bharathidasan University, Bharathiar University and Madurai Kamaraj University extended their infrastructural facilities to conduct this programme. The workshops were conducted in four batches for a total number of 300 participants from 115 Government Arts and Science Colleges. This programme became a guidance to the depriving institutions to go for Assessment and Accreditation.

8. SCIENCE CITY

8.1. Science City was established in the year 1998 by a policy decision taken by the Government to integrate all the Educational and Research Institutes in Taramani area and also all the Technical Institutes of South Chennai area.

8.2. Promotion of science and technology is the primary objective of Science City involving existing and new institutions, encouraging technology transfer component involving industrial houses and venture capital agencies, promoting global technology monitoring and forecasting and establishing a fully equipped science complex (convention centre) for the benefit of member institutes of the Science City are the important goals of Science City.

8.3. AWARDS

Science City has instituted following awards which are being selected by an expert committee.

8.3.1. BEST SCIENCE TEACHER AWARD

In order to recognize Science Teachers from Government and Government Aided Schools, the Science City instituted the "Best Science Teacher Award". Knowledgeable and sincere Science teachers who have contributed immensely for the overall development of their students are duly honoured with this award. 8 Best Science Teachers were honoured with the "Best Science Teacher Award" in the year 2023.

8.3.2. RURAL INNOVATOR AWARD

Indigenous innovations are being developed by the rural people using cost effective technology for the benefit of the

society. Two such innovators are identified and honoured with the Rural Innovator Award.

8.4. POPULARISATION OF SCIENCE AND TECHNOLOGY

8.4.1. SCIENCE PROGRAMMES FOR SCHOOL STUDENTS

Science City organises Science based programmes for Government schools in and around Chennai in their own campus. The programmes include Science lectures and Science demos. 250 students from Government schools participated and benefitted in the programmes on "Introduction to Heat and Thermodynamics and Problem Solving" and "Fundamental Concepts of Magnetism and Applications of Magnets in the day to day life" organised in September - October 2023.

8.4.2. SEMINARS ON SCIENCE AND TECHNOLOGY

Science City organizes seminars in various disciplines of Science, Interdisciplinary Science and Technology such as Physics, Chemistry, Life Sciences, Biotechnology, Nanoscience and Nanotechnology and Water Resources Management for the benefit of students studying in colleges in and around Chennai, Kanchipuram and Thiruvallur Districts. Topics on frontier technologies such as Genetic Engineering, Stem Cell, Information Technology are also being organized. Around 1,050 students participated and benefitted from the various seminars organised by Science City.

8.4.3. HANDS-ON TRAINING PROGRAMME ON "LABORATORY TECHNIQUES"

Science City organizes Hands-on Training Programmes on "Laboratory Techniques" for students studying in colleges in and around Chennai, Kanchipuram and Thiruvallur Districts.

The Handson training programmes are organised during the first week of February. 402 students / farmers benefitted from the hands-on training programmes / workshops organised by Science City during 2023.

8.5. SUMMER TRAINING PROGRAMMES

Science City organizes 21 days Summer Training Programmes in Basic Sciences viz., Physics, Biology and Mathematics. 75% of the participants are selected from students studying post graduation in Rural Tamil Nadu. 150 postgraduate students benefitted from the Summer Training Progammes that was organised through online mode during the months of May – June, 2023.

8.6. CHENNAI SCIENCE FESTIVAL

Science City has been organizing annually a Science Festival with the aim of inculcating interest in Science among the school and college

students. The festival involves a Mega Science Exhibition, Panel Discussions, Popular Lectures, Science Demos, Scientific Entertainment such as Puppetry and Competitions for school and college students like quiz, essay, elocution, drawing etc.

During the Chennai Science Festival organised in February – March, 2023 Institutes such as Indira Gandhi Centre for Atomic Research (DAE), Departments of Anna University and University of Madras, all sections of Directorate of Indian Medicine, Tamil Nadu Veterinary and Animal Sciences University, etc., put up exhibit stalls to educate the visitors. Around 10,000 people benefitted by visiting the Chennai Science Festival organised from 28th February to 1st March, 2023

9. TAMILNADU SCIENCE AND TECHNOLOGY CENTRE

9.1. Tamil Nadu Science and Technology Centre was established in the year 1983. Science centres are essential to build a society that is knowledgeable about Science. Tamil Nadu Science and Technology Centre has established Science Centres to illustrate the principles and powers of science and technology in everyday life. Periodically, it organises promotional activities to bring science closer to the people of Tamil Nadu.

Tamil Nadu Science and Technology Centre has established Periyar Science and Technology Centre with B.M. Birla Planetarium in Chennai, Anna Science Centre-Planetarium in Tiruchirappalli, Dr.Kalaignar Karunanidhi District Science Centre in Vellore and Regional Science Centre in Coimbatore. Planetariums in Chennai

and Tiruchirappalli are engaged in Astronomy education.

9.2. With a noble vision to create a scientifically motivated society, the Hon'ble former Chief Minister of Tamil Nadu inaugurated the Periyar Science and Technology Centre, Chennai on September 17, 1990 and Anna Science Centre, Tiruchirppalli on June 10, 1999. The Dr.Kalaignar Karunanidhi District Science Centre in Vellore was dedicated to the Nation on January 25, 2011 by the Hon'ble then Deputy Chief Minister of Tamil Nadu. The Regional Science Centre, Coimbatore was inaugurated on May 6, 2013.

9.3. ACTIVITIES

❖ Tamil Nadu Science and Technology Centre (TNSTC) is engaged in the activities of establishment of Science Centres, Science Galleries, Planetariums, research

on development of interactive science exhibits and State-wide Science Popularisation activities.

❖ To keep pace with modern technology, in the planetarium at Periyar Science and Technology Centre the most advanced Hybrid Projection System and a new hemispherical dome for high quality images are being used. This is a new generation planetarium system, combining the beautiful starry sky projected by opto-mechanical projectors with full dome digital video systems that bring dynamic colorful images to the dome such as apparent motion of stars, space, flight, planets, nebulae, galaxies and other astronomical images.

❖ Science On a Sphere is an astonishing piece of technology that uses computers and video projectors to display dynamic,

animated images of the atmosphere, oceans and land on an illuminated sphere of 6 feet in diameter. The spherical projection system known as Science On a Sphere (SOS) created by the United States National Oceanographic and Atmospheric Administration (NOAA) is being used at Periyar Science and Technology Centre, Chennai to explain complex environmental processes to the visitors in an innovative way that is both educational and interactive.

❖ During the year 2023-24, over 6,22,000 people, mostly students have visited the Science galleries and Science parks of the Science Centres and the Planetariums and got benefitted.

❖ Tamil Nadu Science and Technology Centre strives to communicate Science and educate masses by its Mobile Science

Exhibition, Lectures and Demonstrations, Training and Workshops, Publications etc.

❖ Short-term courses, Astronomy Camp and Quiz competitions are conducted periodically to reach out several thousands of students and general public yearly.

❖ TNSTC has also developed Science Park exhibits and established Science parks in various cities of Tamil Nadu.

❖ Sky Observation programmes are also conducted during astronomical events as well as on a regular basis for the Public to observe the night sky through Telescopes. These programmes are very popular among the students.

9.4. ACHIEVEMENTS

9.4.1. Modernisation of Anna Science Centre-Planetarium, Tiruchirappalli

Anna Science Centre – Planetarium was established in the year 1999. To present the astronomical images with clarity and to show animated astronomical phenomena, to the visitors, the existing Planetarium was modernized with a digital planetarium system at a cost of Rs.3.00 crore. The Digital Planetarium was inaugurated by the Hon'ble Chief Minister on 14.08.2023.

9.4.2. Establishment of "Miniature Nuclear Gallery" in Anna Science Centre, Tiruchirappalli

To make people aware and educate the various positive aspects of nuclear energy, the Tamil Nadu Science and Technology Centre in coordination with Nuclear Power Corporation of India Limited, had set up a "Miniature Nuclear

Gallery" and was opened to the general Public and school students on 21.12.2023 at Anna Science Centre, Tiruchirappalli

9.4.3. Establishment of "Miniature Nuclear Gallery" in Dr.Kalaignar Karunanidhi District Science Centre, Vellore

To make people aware and educate the various positive aspects of nuclear energy, the Tamil Nadu Science and Technology Centre in coordination with Nuclear Power Corporation of India Limited, had set up a "Miniature Nuclear Gallery" and it was opened to the general public and school students on 22.12.2023 at Dr.Kalaignar Karunanidhi District Science Centre, Vellore.

9.5. ONGOING ACTIVITIES

9.5.1. Technology Training for School Students

To provide opportunity to the students to learn and understand Science and Technology concepts and to innovate, Tamil Nadu Science and Technology Centre has established Innovation Hubs at a cost of Rs.1.80 crore at Regional Science Centre, Coimbatore and Rs.1.50 crore in Anna Science Centre- Planetarium, Tiruchirappalli.

Both Centres conducted 9 months STEM Robotics camp in the Innovation hub for the students on the topics of Coding, 3D Printing, Robotics, Drones, and Electronics. In this camp 120 students got benefitted. In continuation of the STEM Robotics programme, an advanced level 3 months programme is proposed to be conducted during this year.

9.5.2. INSPIRE MANAK Award Scheme for School Students

Tamil Nadu Science and Technology Centre, is implementing INSPIRE Award – MANAK from the year 2009 onwards (Million Minds Augmenting National Aspiration and Knowledge) programme in Tamil Nadu. Implemented in coordination with Department of Science & Technology and National Innovation Foundation (NIF)-India. This Programme is being implemented for the attraction of talent amongst students to study science and pursue career in research. An award of Rs.10,000/- is given to the selected students and deposited in their bank accounts for the preparation of project displaying idea and for participation in the contests. In Tamil Nadu, during the past 14 years 83,987 students were honored with this award and cash awards worth Rs.47.77 crore were distributed.

During October 2023, INSPIRE Award - National Level Exhibitions and Project Competitions were held at New Delhi. Throughout India, 441 students participated in the competition. In this competition, 13 exhibits were displayed from Tamil Nadu. Out of 60 exhibits, 3 exhibits were selected from Tamil Nadu in the Competition and won prizes & awards.

9.5.3. SAKURA Exchange Programme

Under the invitation of the Government of Japan, the students, who won Awards in the past INSPIRE Award - National Level Exhibitions and Project Competitions held in New Delhi were taken to Japan to visit Research Institutions. So far, 16 students from Tamil Nadu have visited Japan under this programme through Tamil Nadu Science and Technology Centre.

In the year 2022, a student from Government Girls Higher Secondary School, Valapadi Taluk, Salem District got selected for the Award and visited scientific Institutions of Japan during November 2023.

10. TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

10.1. The Tamil Nadu State Council for Science and Technology was formed in the year 1984 as an autonomous apex body by Government of Tamil Nadu, to develop the Science and Technology sector of our State. Towards this mandate, the Council is implementing various schemes related to research and development, extension and field related programmes.

10.2. The Council has implemented various Science and Technology Schemes to develop Research and Development, trained manpower development, Technology Development, Technology Demonstrations, Popularization of science and Intellectual property rights.

10.3. SCHEMES SUPPORTED BY STATE GOVERNMENT

10.3.1. STUDENT PROJECTS SCHEME

The program's goal is to use the exceptional student talent for the advancement of science and technology. Financial aid up to Rs.10,000/- is given to final year UG/PG (Engineering), PG (Agricultural Sciences, Biological Sciences, Chemical Sciences, Medical Sciences, Physical Sciences, Social Sciences, and Veterinary Sciences) students to conduct socially conscious projects.

10.3.2. SCIENCE AND TECHNOLOGY PROJECTS

Major fields of research and development projects in sectors such as Agriculture, Biology, Chemical, Medicine, Environment, Engineering and Technology, Physical, Social and Veterinary Sciences are funded with Rs.3.00 lakh to Rs.5.00 lakh under this scheme. Financial

assistance is given to scientists and researchers to enable them to carry out research work that of beneficial to our State and have social significance. During the year 2023-24, action has been taken to support 15-20 projects.

10.3.3. YOUNG STUDENT SCIENTIST PROGRAMME

This programme motivates school students to take up Science Research in future as their career. 40 students studying in IX standard from each District participate in this programme. Selected students from various District are housed in a reputed College / University with research facilities. During the year 2023–24, action has been taken to conduct this programme in 9 Centers covering 18 Districts for the benefit of 720 school students.

10.3.4. YOUNG SCIENTISTS FELLOWSHIP SCHEME

Young researchers and scientists of our State who are under 40 are given the opportunity to familiarize themselves with the most recent methods in science, research, and development. The Council gives them a fellowship worth Rs.10,000/- per month for a duration of two to six months. They participate in training programs, pick up advanced instrumentation skills, study contemporary research procedures, or do joint research with top scientists at the host research centers.

10.3.5. PARTIAL ASSISTANCE FOR SEMINAR / SYMPOSIUM / WORKSHOP

The scheme provides financial assistance to institutions in our state for organizing Workshop / Seminar / Symposia and Conferences at National and International Level in various fields. Further, the scheme is

providing a forum for sharing knowledge and research experience. During the year 2023-24, action was taken to provide financial support to 125 programmes at a cost of Rs.25.00 lakh to benefit 9,500 researchers and scientists.

10.3.6. POPULARISATION OF SCIENCE AND TECHNOLOGY

Popularization of Science and Technology is carried out through Higher Educational and Research institutions as well as through NGO's throughout the State. Every year about 40-50 organizations are supported. The beneficiaries are school children, farmers, self-help group members and general public. About 5,000 people are directly benefitted.

10.3.7. TRAVEL GRANT FOR YOUNG SCIENTISTS

This programme is to encourage young scientists, researchers and faculties at Colleges, Universities and various Research Institutions in

our State to get to know the recent developments in frontier areas of Science and Technology, by their contribution to research findings at National / International Seminars and Conferences with partial financial assistance for Travel. Youngsters below 40 years of age are provided with 50% of airfare for International conferences and 100% train fare for National conferences (maximum Rs.30,000/-). During the year 2023-24, 05 researchers and faculties were supported.

10.3.8. ASSISTANCE FOR SCIENCE AND TECHNOLOGY PUBLICATIONS

Financial support is given to (a) science periodicals for the benefit of children; (b) scientists to publish textbooks for the benefit of students / public to facilitate science and technology publications in Tamil.

10.3.9. TAMILNADU SCIENTISTS AWARD (TANSA)

Scientists and Researchers making significant contribution in their field of research are selected for TANSA Award in 10 disciplines such as (i) Agricultural Sciences (ii) Biological Sciences (iii) Chemical Sciences (iv) Engineering and Technology (v) Environmental Sciences (vi) Medical Sciences (vii) Mathematical Sciences (viii) Physical Sciences (ix) Social Sciences and (x) Veterinary Sciences. The award carries a cash prize of Rs.50,000/- and a citation.

10.3.10. INNOVATION AND PRODUCT DEVELOPMENT

The objective is to recognize the creative, novel and innovative ideas from grass root level. The student and other member of society as innovators are to be connected to industries, educational and research institutions. The identified innovation is supported by technical / infrastructural and financial support.

Action has been taken to support 10-15 innovations during the year 2023-24.

10.3.11. QUALITY IMPROVEMENT OF SCIENCE EDUCATION IN RURAL SCHOOLS

To enhance their knowledge on the current syllabus and new areas, quality improvement training is provided to school science teachers who are handling the Science subjects of VI, VII and VIII standards. This programme is conducted for a period of five days which includes curriculum and practical. During the year 2023-24, action has been initiated to cover 10 Districts for the benefit of 500 teachers.

10.3.12. DISSEMINATION OF INNOVATIVE TECHNOLOGY

Innovative technologies useful to enhance employment prospects are disseminated by academics and scientists through training programmes and workshops. Under this scheme,

action has been taken to organize 18 programmes during the year 2023-24, that will help the 900 farmers, Self Help Group members, women and other stakeholders.

10.3.13. SCIENCE AND TECHNOLOGY CAPACITY BUILDING FOR INDUSTRIAL NEEDS

This Programme helps the final year Engineering and Polytechnic students from rural areas to get their employment, to become entrepreneurs and also to start the small scale industry. The programme will enable the student community to acquire skill sets relevant to industries and motivate them through orientation, Training and motivational programmes. In the year 2023-24, action was taken to organize this programme in 15 Districts at a cost of Rs.22.50 lakh for the benefit of 4,500 students and with the active collaboration of colleges and industries.

10.3.14. PROGRAMME FOR BRIDGING THE GAP IN RESEARCH FUNDING FOR RESEARCH SCHOLARS IN COLLEGES

The programme is to provide opportunities and research funding for Research Scholars of colleges to do significant research which is useful and relevant to Tamil Nadu, since there is a need to bridge the research funding gap particularly at college level. Research students from colleges conducting research in areas relevant are supported with funding. Action has been taken to support 10 research scholars during the year 2023-24 with a cost of Rs.30.00 lakh.

10.3.15. IMPROVEMENT OF S&T INFRASTRUCTURE FACILITIES AT GOVERNMENT COLLEGES

The Scheme "Improvement of S&T Infrastructure in Government Colleges" is intended to provide S&T infrastructure and enabling facilities for promoting R&D activities in

new and emerging areas and attracting talents in government colleges, so that the research output improves particularly in terms of its quality. Action has been taken to support 3 Government Colleges at a cost of Rs.15.00 lakh during the year 2023-24.

10.4. SCHEMES SUPPORTED BY CENTRAL GOVERNMENT

10.4.1. PATENT INFORMATION CENTRE

For the benefit of students, research scholars, faculties, scientists, entrepreneurs and grass-root innovators, a Patent Information Centre (PIC) is functioning in the Council with the support of DST, Government of India. It provides facilitation services for Intellectual Property (IP) protection. Patent Information Centre, has established 40 IPR cells in various institutions to act as nodal centres for facilitating IP protection. During the year 2023-24, the Centre has conducted about 19 awareness

programs and 39 workshops on Intellectual Property Rights in our state. PIC also facilitated 139 patents, 48 Industrial designs, 8 copyrights, from various strata of our State. "Udangudi Panangkarupatti" has been registered as Geographical Indication (GI) in association with Tirunelveli District Palmyra Products Co-operative Federation Ltd. and Mother Teresa University. The application for registration of "Jawadhu Puli" as GI has been filed at the GI registry, to protect the interests of the producers, on behalf of the Jawadhu Malaival Makkal Membattu Sangam, Jawadhu Hill, in association with Sacred Heart College, Tirupattur (No.:1141 dated 11/09/2023).

Patent Information Centre has been awarded with **"National Intellectual Property Award 2023"** under the category of "*Special Citation for PIC*" conferred by the Ministry of Commerce and Industry, Government of India.

11. TAMIL NADU STATE URDU ACADEMY

11.1. The Government of Tamil Nadu established Tamil Nadu State Urdu Academy for promotion of Urdu language in the State in the year 2000. The objective of functioning of the Tamil Nadu State Urdu Academy (TNUA) is to promote the Urdu Language and Literature in the State of Tamil Nadu and encourage the Urdu Scholars, Poets and Urdu Language students

11.2. The Tamil Nadu State Urdu Academy has conducted functions and seminars jointly with University of Madras (Department of Urdu, Arabic and Persian) to encourage the Urdu students, Scholars and Urdu poets and given certificates, prizes and awards to them.

11.3. The Tamil Nadu State Urdu Academy has successfully organized number of Urdu Mushaires (Urdu Pattimandram) Programmes in the eve of Republic Day and Independence Day

Programmes and there by inviting great Urdu poets and scholars and given awards to them for their performances.

11.4. The Tamil Nadu State Urdu Academy helped in translation from English version of the books of 11th and 12th standard to Urdu language successfully.

12. TAMIL NADU STATE COUNCIL FOR TECHNICAL EDUCATION

12.1. To oversee the development of Technical Education with perspective planning, the Tamil Nadu State Council for Technical Education was established by Tamil Nadu State Council for Technical Education Act, 2010 on 17.06.2010.

12.2. Conducted "Train the Trainers Programme" for Engineering College teachers by NAASCOM on "Foundation Skills in Integrated Product Development (FSIPDP)".

12.3. Organized an International Seminar on the present trend of Hybrid Pedagogy in English Language coordinated by Professors from Cambridge University.

12.4. Proposes to conduct an online workshop on "Electrical Vehicle Technology" and

"Electrical Vehicle Policy" for the faculty of Polytechnic colleges.

12.5. Proposes to extend Partial Financial Assistance for revamping the Curriculum of Polytechnic Education.

13. TAMIL NADU UNMANNED AERIAL VEHICLES CORPORATION

13.1. "Tamil Nadu Unmanned Aerial Vehicles Corporation" in partnership with Madras Institute of Technology, Anna University has been established in order to cater the drone-based needs of various departments of Government of Tamil Nadu through drone-based solutions and services. The Tamil Nadu Unmanned Aerial Vehicles Corporation has been registered under the Companies Act as 100% Government owned private ltd company. The corporation apart from designing, manufacturing and trading in all types of drones will also provide a large number of drone-based services like agricultural pesticide spraying monitoring, mapping, surveillance, search and rescue, volumetric analysis for the user department. The Corporation through its solutions / service and products to various

181

agencies will generate employment opportunities in the State.

13.2. In the year 2023, Tamil Nadu Unmanned Aerial Vehicles Corporation has completed Pallikkaranai Wetlands Mapping using Drone RGB and LiDAR technology for the Tamil Nadu State Wetlands Authority Department, supplied 6 numbers of Drone pilots to Greater Chennai Corporation for Anti Larval Sparying activity, delivered one number of Delivery Drone to Coastal Security Group and Data Scrutiny of the deliverables submitted by the Mine Surveying Agency for the mines POC mapping work from the Department of Geology and Mining and Mapping of Anna Nagar area as a pilot study for Chennai Unified Metropolitan Transport Authority (CUMTA).

13.3. Presently, Tamil Nadu Unmanned Aerial Vehicles Corporation have undertaken Data Scrutiny of the deliverables submitted by

the Mine Surveying Agency mines mapping work from the Department of Geology and Mining, Supply of Mobile Command Control Station to Tamil Nadu Government Forest Department and Mapping of Mahabalipuram area as a pilot study for CUMTA. Meanwhile, the Corporation has proposed Tamil Nadu Wetlands Department for mapping selected 12 Ramsar Sites using Drone RGB and LiDAR technology in Tamil Nadu, Supply of Delivery and Surveillance Drones to Tamil Nadu Coastal Security Group and Supply of Unmanned Aerial Vehicle to Special Task Force.

Dr. K. Ponmudy
Minister for Higher Education

TECHNICAL EDUCATION

DETAILS OF STUDENTS ADMITTED TO FIRST YEAR B.E. / B.TECH. / B.ARCH. DEGREE COURSES IN ENGINEERING COLLEGES FOR THE YEAR 2023-24

TYPE OF INSTITUTIONS	No. of Institutions	Sanctioned Intake	OC		BC (Others)		BC (Muslim)		MBC / DNC		SC		SC (A)		ST		TOTAL		Total Admitted
			BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	
Government Colleges	11	4,320	28	21	973	828	109	61	679	466	383	222	78	48	26	8	2,276	1,654	3,930
Government Aided Colleges	3	3,263	107	75	1,080	735	79	40	409	254	224	150	55	31	17	7	1,971	1,292	3,263
Anna University and Constituent Colleges	20	8,350	171	105	1,598	1,268	187	90	1,174	723	592	424	80	58	26	13	3,828	2,681	6,509
Self Financing Colleges	472	2,05,593	6,434	3,147	43,818	27,690	5,285	1,916	26,879	14,353	13,493	8,621	2,053	1,541	580	375	98,542	57,643	1,56,185
TOTAL	506	2,21,526	6,740	3,348	47,469	30,521	5,660	2,107	29,141	15,796	14,692	9,417	2,266	1,678	649	403	1,06,617	63,270	1,69,887
GRAND TOTAL			10,088		77,990		7,767		44,937		24,109		3,944		1,052		1,69,887		

In the year 2023-24, totally 9 Transgender Students got admission in Self-financing Engineering Colleges

TECHNICAL EDUCATION

DETAILS OF STUDENTS ADMITTED TO FIRST YEAR DIPLOMA COURSES IN POLYTECHNIC COLLEGES FOR THE YEAR 2023-24

TYPES OF INSTITUTIONS	No. of Institutions	Sanctioned intake	OC		BC (Others)		BC (Muslim)		MBC/DNC		SC		SC(A)		ST		TOTAL		Total Admitted
			BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	
Government Institutions	54	18,669	83	30	3,472	471	508	43	4,341	349	2,183	308	241	51	96	7	10,924	1,259	12,183
Government Aided Institutions	32	13,490	203	21	3,197	308	590	36	2,160	188	872	112	170	19	31	16	7,223	700	7,923
Affiliated Institutions	4	253	13	1	33	1	5	0	27	0	23	1	0	0	2	0	103	3	106
Self Financing Institutions	401	1,21,947	1,171	194	10,311	948	1,903	109	9,794	756	13,752	1,849	1,609	355	473	108	39,013	4,319	43,332
Hotel Management & Catering Technology Institutions	1	30	0	0	2	0	0	0	3	0	12	0	0	0	0	0	17	0	17
Total	492	1,54,389	1,470	246	17,015	1,728	3,006	188	16,325	1,293	16,842	2,270	2,020	425	602	131	57,280	6,281	63,561
Grand Total			1,716		18,743		3,194		17,618		19,112		2,445		733		63,561		

In the year 2023-24, 1 Transgender student got admission in Self-financing Polytechnic College

COLLEGIATE EDUCATION

DETAILS OF STUDENTS ADMITTED IN ARTS AND SCIENCE COLLEGES AND COLLEGES OF EDUCATION DURING THE YEAR 2023-24

TYPES OF COLLEGES	NO. OF INSTITUTIONS	ADMITTED STRENGTH												GRAND TOTAL
		UG		PG		M.Phil.		B.Ed.		Ph.D.		TOTAL		
		BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	
GOVERNMENT COLLEGES	171	45,817	59,441	5,630	11,933	21	73	326	584	321	450	52,115	72,481	1,24,596
GOVERNMENT AIDED COLLEGES	162	27,692	36,921	4,563	10,017	42	76	71	1,384	146	593	32,514	48,991	81,505
SELF FINANCING COLLEGES	1,293	81,318	1,12,988	11,422	25,905	210	322	7,740	49,516	192	582	1,00,882	1,89,313	2,90,195
TOTAL	1,626	1,54,827	2,09,350	21,615	47,855	273	471	8,137	51,484	659	1,625	1,85,511	3,10,785	4,96,296
GRAND TOTAL		3,64,177		69,470		744		59,621		2,284		4,96,296		