SELF STUDY REPORT

FOR

3rd CYCLE OF ACCREDITATION

SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY, JEPPIAAR NAGAR, RAJIV GANDHI SALAI,CHENNAI
600119
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Submitted To

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL**

BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Sathyabama Institute of Science and Technology is one of India's premier Higher Education Institutions with a high reputation for teaching and research. Sathyabama Institute of Science and Technology, formerly known as Sathyabama Engineering College, was established in the year 1988 by **Col. Dr. Jeppiaar** to promote technical education in the State of Tamil Nadu. In 2001, Sathyabama Engineering College was granted Deemed University status by the Ministry of Human Resources Development under **Section 3 of UGC Act,1956**. The Institution has been accredited with "A" Grade by the National Assessment and Accreditation Council (NAAC) in its second cycle in 2017. Sathyabama has been conferred **12B status by the University Grants Commission** in the year 2020.

Sathyabama is a diverse Institution with students from different States and Union Territories in India. Expert teaching, industry-linked courses, state-of-the art infrastructure, and the world-class research facilities available at the Institution make it an attractive destination for students. The Institution offers 49 undergraduate and 25 postgraduate Programmes in various fields, including Engineering, Technology, Architecture, Management, Law, Dental Sciences, Pharmacy, Nursing, Allied Health Sciences, Arts, Science and Humanities. The Institution has received Programme level accreditation from the **National Board of Accreditation (NBA) for ten UG Engineering programmes and one PG programme (MBA).**
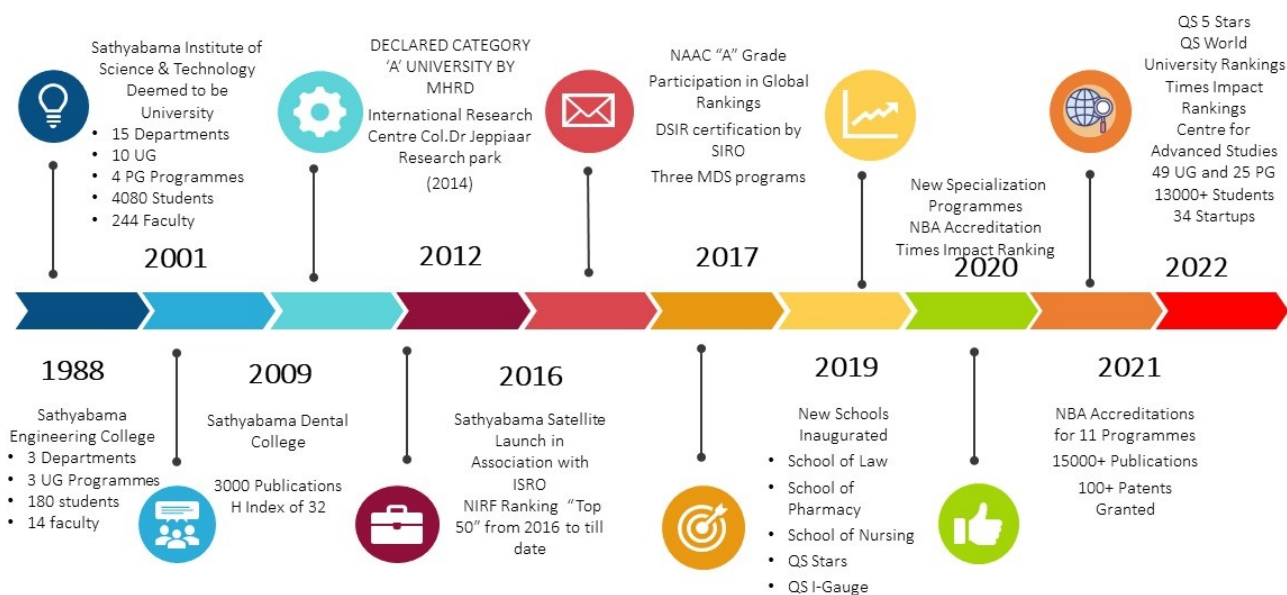
Situated in the IT Corridor of Chennai city, the Institution is well connected with the Industries and other Research Organizations for effective collaborations. Meeting the standards and being competent have been the motto with which Sathyabama functions. The academic excellence, research toward meeting the national mission, and implementation of initiatives towards sustainability have enabled Sathyabama to be in the top 50 Universities in the rankings by the National Institutional Ranking Framework (NIRF), Government of India,

for the seventh consecutive year. NIRF has ranked the Institution in 43rd place under University category for the year 2022. Atal Ranking of Institutions on Innovation Achievements (ARIIA) has positioned Sathyabama in the "Band Excellent" for the year 2021 and ranked it in 5th place among the Private Institutions in India for the year 2020.

Sathyabama is one among the 41 Institutions in India featured in the QS World University Rankings 2023. The Institution also holds good position in the Times Higher Education Impact Rankings, 2022 competing the universities worldwide. Currently, the Institution has 11 Schools, 26 Departments, 15 Research Centres, 13094 students and 821 faculty members. Sathyabama has written a special page in the history of space research with the launch of nanosatellite, "**SATHYABAMASAT**" in association with ISRO.

The Institution persistently seeks and adopts innovative methods to improve the quality of higher education and is responsive to the changes taking place in the field of education on a global scale. Under the dynamic leadership of the **Chancellor Dr. Mariazeena Johnson** and the **President Dr. Marie Johnson** , the Institution has emerged as a leading university and achieved excellence in higher education and is growing as a benchmark Institution in the country meeting international standards.

Vision

VISION OF THE INSTITUTION

"Be a leading multi disciplinary University producing world class talents to address global challenges"

Sathyabama is attentive to the changes occurring in the field of education worldwide and consistently seeks and employs novel approaches to improve the quality of higher education. It adapts to the latest developments through internationalisation, industry-linked courses, and a curriculum on par with global standards, establishing Centres of Excellence focusing on innovation, research, and development. The Institution is conducting ground-breaking research and innovation in the thrust areas of science and technology to address global challenges related to social, economic, and environmental issues. Academic research is thought to be crucial for providing solutions to the problems faced by industries. Having understood the need for sharing knowledge between industries and universities, Sathyabama collaborates with many of the industries, and the fruits of the synergistic effort are enjoyed by the Institution, industry, and society. Sathyabama works with a wide range of industries, and the interaction often involves the exploration of the knowledge gap between the expectations of societal demand and industry about the possible academic output. The Institution has made significant investments in developing research infrastructure, demonstrating its dedication to the field.

Research at Sathyabama focuses on the Sustainable Development Goals of Agenda 2030 of the United Nations, which calls for participation from all individuals, organisations, nations, and governments in creating a better world free from poverty, hunger, health problems and inequalities by providing access to quality education, clean water, and clean energy.

Mission

MISSION OF THE INSTITUTION

- To attain excellence in education and research through effective collaboration with industries and other

international/national organisations
- To consistently remain an attractive ecosystem for students and employees, a hub of innovation for researchers and an incubating platform for entrepreneurs
- To create an inclusive environment that caters to all forms of diversity
- To engage in outreach and community development activities, creating an impact on the society

CORE VALUES

I N S P I R E
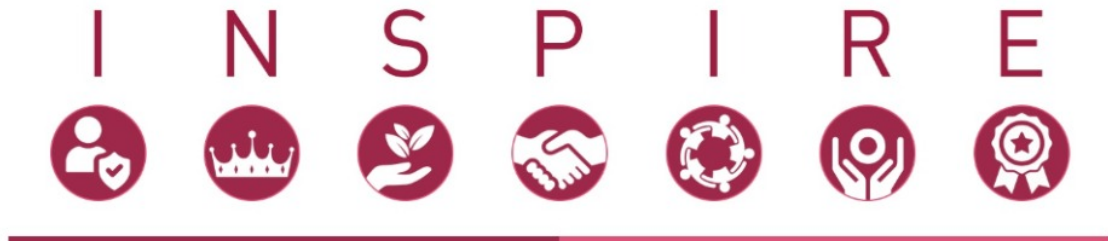
Integrity

We emphasise on high ethical standards in our actions and are committed in being transparent, responsible and accountable.

Nobility

We inculcate ethical values parallel to the curriculum enrichment to the student community, so that they outstand amongst their peers irrespective of the environment in which they are placed.

Sustainability

We develop, practise and emphasize protocols in academics and research enabling ourselves to be competitive, ensuring environmental and social sustainability.

Partnership and Collaboration

We encourage academic and research partnerships with organisations and Universities at National and International level. We value and applaud the relationships we have with our partners.

Inclusion and Diversity

We are committed to facilitate diverse student and Faculty culture and encourage multi-cultural learning in the University. We provide opportunity to work, learn and embrace the diversity of every individual irrespective of race, gender, religion, nationality, age, social background, physical ability and mental competence.

Responsibility

We believe in Education for all. We take pride in owning responsibility and commitment towards society by supporting the education of students from rural, economically backward communities, differently abled and acid attack victims with full Financial Assistance.

Excellence

We focus on excelling in all our academic and research activities, ensure best academic quality in our programmes, encourage innovations and receptive to the ever-changing needs of our stake holders.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Committed management with a clear vision towards societal development

- Qualified, dedicated and competent faculty
- State-of-the-Art infrastructure with world-class research facilities
- Research Centres in thrust areas of research working towards Sustainable Development Goals
- Diverse student and faculty populations with multicultural learning environment
- Strong international connect through MoUs with 150+ foreign Universities
- Technology Business Incubator / Startup Cell facilitating productive entrepreneurship
- Industry-oriented, inter-disciplinary curriculum
- Emphasis on student-centric learning.
- Consistent placement record
- Excellent student support systems
- Excellent Industry-Institute interaction-MoUs with 90+ Industrial organizations
- Centres of excellence in association with Industries
- Funded Research Projects
- Collaborative and joint research in association with National and International Partners, resulting in a good number of joint publications
- International exposure to students and teachers through exchange programmes
- Digitalized learning environment enabling dual teaching mode and blended-learning
- Wide range of Programmes with academic flexibility
- Good position in National and International Rankings

Institutional Weakness

- Percentage of international faculty and students
- Emphasis on industry consultancy
- Limited public funding for infrastructure enhancement
- Fund mobilisation from international research organisations/bilateral calls
- Technology licensing and commercialization

Institutional Opportunity

- Introduction of new Programmes in the areas of Medical Sciences and traditional Indian Medicine such as Ayurveda, Siddha and Homeopathy
- Scope for expanding partnerships and international collaborative activities
- Opportunities to offer twinning programmes, Joint degree and dual Degree Programmes with international partnering Universities
- There is an enormous scope for attracting funds for research under various bilateral research programmes
- The Industry-Institution link can be strengthened through more Joint Academic Programmes in association with Industries, which not only provide opportunities for students to learn vocational skills but also to be trained and mentored by industrial experts
- More Centres of Excellence in association with industries can be set up to provide new and innovative solutions to the industrial problems
- Scope to be recognised as an Institution of Eminence through academic and research excellence
- Opportunity to participate in regional and national Government initiatives aimed at improving rural communities and nation building
- Digitalization has made it possible to transcend geographical boundaries. With the digital infrastructure

available, the Institution will be able to offer more Online/Open and Distance programmes to cater to the needs of students across the world

- Attracting funds from angel investors and venture capitalists for the startups
- Partnerships with leading Universities, Industries, and Experts
- Contribution to the technological needs of the nation

Institutional Challenge

- Building international visibility and meeting the global competition
- Being in the league of Top Universities in the Global Rankings
- Technology Transfer and Commercialization
- Channelizing the entrepreneurial drive to Start-ups
- Devising strategic planning and implementing it in the dynamic system
- Meeting Regulatory conditions

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The programmes are offered based on the global, national, and regional needs. The curriculum is designed based on the expected learning outcomes—the knowledge, skills, and attitudes the students should possess after completing their degree. Both direct and indirect methods are used to evaluate the attainment of Course Outcomes (COs), Programme Outcomes (POs), and Programme Specific Outcomes (PSOs). The attainment of all the programme outcomes ensures that the curriculum and the teaching-learning process are aligned with the graduate attributes. Curriculum flexibility is increased by promoting an interdisciplinary curriculum to broaden students' knowledge. **94% of the programmes offer courses through the Choice Based Credit System (CBCS)**. The students can acquire credits through the semester abroad programme, internships, and extracurricular activities. Nearly **36 % of the courses are newly introduced** in the recent 5 years. Approximately **85% of the courses are designed to improve students' employability, entrepreneurship, and skill development**. Inputs from alumni working in industries, prospective employers, industry experts, and other stakeholders are considered with due weightage while designing or revising the curriculum. Every student is required to undergo an industry internship, which is made mandatory in the Programmes's curriculum. Environmental education is adequately emphasised in our curriculum. Value-added courses that focus on employability and lifeskill are offered to students. The Institution is recognised for having the highest number of students enrolled in NPTEL courses. In the last five years, **85% of the students had taken value-added courses**. Courses on professional ethics, gender, human values, environment, and sustainability are part of the curriculum to ensure the holistic development of the students. The curriculum accommodates credit transfer through Semester Abroad Programmes, Internships Abroad Programmes and MOOCs courses. Universal Human Values is offered as a 3-credit course in all engineering programmes. For students in their sixth, seventh, and eighth semesters, industry-specific electives are offered. Industry linked courses are offered through the Centres of Excellences established in association with the Industries.Feedback is regularly collected from students, faculty, employers, and alumni to improve and enrich the curriculum. Presently the Institution offers 49 Undergraduate programmes , 25 Postgraduate programmes and Doctoral programmes in 11 disciplines.

Teaching-learning and Evaluation

The Institution has an effective diagnostic process and remedial measures to support Advanced and slow learners. Slow learners are provided support in the form of remedial classes, counselling, additional teaching hours, the provision of learning materials, and doubt clearing sessions to improve their performance. The Institution uses a mentoring system to assist pupils. Each faculty member provides individual attention to twenty students in the form of mentorship. IQAC takes feedback from students about the teaching and learning process and takes corrective action. A student-centric learning environment is created through group discussions, projects, and group presentations. A problem-based learning approach is adopted, where the students are exposed to complex real-world problems and encouraged to find solutions. More than 60% of the courses have a laboratory course, allowing students to learn by doing. Interactive online tools were used to improve students' involvement and engagement. Students are provided international learning experience through Student exchange and Semester Abroad programmes at international partnering universities.

Students are trained on technical skills, soft skills, and aptitude for placements and are given rigorous training targeted at dream companies and high-profile companies. Interested advanced learners are encouraged to take up higher education training, Civil Services coaching, value-added courses, and certification courses. **The Institution has 821 faculty members, with about 60% holding doctoral degrees and being NET or SLET qualified.** To stay current with changes in their profession, faculty members often take refresher courses or participate in faculty development programmes. Through fellowship programmes and faculty exchange programmes, faculty members have the opportunity to work in partner universities abroad. Additionally, they sign up for NPTEL, SWAYAM, Coursera, and other courses offered in MOOC platform. All newly hired faculty members participate in faculty induction programme. Classrooms are equipped with ICT, and instructional methods such as flipped classrooms and blended learning are widely used. The in-house Sathyabama Learning Management System helps in managing the courses, assessment and evaluations. The OBE framework for assessment has been incorporated into our examination system. Grievances of students on evaluation are addressed properly. IT integration in the examination system makes the process faster and error-free.

Research, Innovations and Extension

Research Centres are established in areas of Nanoscience and Nanotechnology, Energy Research, Ocean Research, Earth and Atmospheric Sciences, Remote Sensing and Geoinformatics, Additive Manufacturing, Drones and Robotics, Artificial Intelligence,Waste Management, Molecular and Nanomedical Sciences, Laboratory Animal Research, Non destructive testing and evaluation, Earth and atmospheric Sciences, Climate Change Studies, Aquaculture , Drug Discovery and Development. The Institution has a well-crafted research policy to foster a research culture and provide an environment that supports research. The Artificial Intelligence Laboratory with Supercomputing Facilities, the Advanced Characterization Facility ,the Metaverse Studio with AR/VR kits, and the Makerspace with 3D printers are among the recently added Research Facilities.

The Institution aims to strengthen the Institution-Industry interaction through its involvement in consultancy-based research projects. **11848 research papers have been indexed in Scopus with a H-index of 84 and 5791 papers have been indexed in Web of Science with a H-index of 74.** More than **1600 joint publications** have been made as an outcome of collaborative research. The Institution has filed **474 patents in the last five years and has 227 granted patents to its name, including design patents, 16 German and 19 Australian patents.** Our faculty members have acquired **228 projects worth 59 crores in the last 5 years, of which 93 projects have been successfully completed and 135 are ongoing.**The Institution's Research ethics

committee ensures the adoption of good research practices and compliance with ethical requirements.

A robust innovation ecosystem in Sathyabama has supported numerous start-ups. The Institution also manages a **Technology Business Incubator** established with the support of NSTEDB-DST for the growth and promotion of entrepreneurship. The Institution Innovation Council (IIC), the **MSME Business Incubator**, the **Start-up Cell**, and the **Centre for Innovation and Technology Transfer** are the supporting systems in the Institution to promote a culture of innovation.

Seed grant is being provided to facilitate the conversion of innovative research and development ideas into products and services. The Institution promotes regular engagement of faculty, students, and staff with the neighbourhood community for their holistic development. Awareness programs, workshops, rallies, and road shows are regularly organized to sensitize the students towards social issues.

Infrastructure and Learning Resources

Sathyabama has a well-established academic and research infrastructure, a Wi-Fi-enabled campus, and 282 classrooms and Seminar halls with ICT facilities spread across 134 acres of land with a built-up area of 3,11,657 square meters. An indigenous Learning Management System and a licensed Zoom platform enable the smooth conduct of classes for 4000 students at a time. The campus's 1,50,156 square feet Central Library is home to a collection of 302131 books from 49435 titles. The user community has access to important e-resources such as IEEE Proceedings, IEEE Transactions, Science Direct, ASME, ASCE, ACM, Springer, Web of Science journals, and the Proquest Academic Complete e-Book collection. The library has a Knimbus 3.0 subscription, which provides 24/7 remote access to library e-resources.

Centres of Excellence are established in association with CISCO, HCL Technologies, Stratasys, Capgemini, Virtusa, GE, Infosys, National Instruments, and Vectorworks to keep the students updated with the latest developments . NEXTGEN Lab facilitates students to explore and learn advanced technologies, including Artificial Intelligence, Augmented Reality, Virtual reality, Block Chain technology and Data Science. **An open-air theatre with 1,000 seating capacity, 11 auditoriums, 12 conference halls, and 6 seminar halls** are available to conduct various student-centric activities.

On-campus housing includes five hostels for boys and five hostels for girls, totaling 16,75,000 square feet. Accommodations include standard and air-conditioned rooms, prayer halls, 24/7 medical assistance, fitness centres, dining halls, ATMs, laundry facilities, and general stores. Excellent facilities for both indoor and outdoor sports have been built by the university. Play courts and playgrounds for volleyball, basketball, kabaddi, badminton, tennis, handball, football, hockey, kho-kho, and cricket are available on campus. A yoga centre is on campus for faculty and students to support them in maintaining a healthy mind and body. A childcare centre, a 100-bed general hospital, transportation services, a centralized kitchen, 10 dining halls with a capacity for 700 people each, canteens, a stationery store, a sewage treatment plant, a biogas plant, a biodiesel plant, rainwater harvesting, a 24-hour CCTV facility for safety, and eco-friendly vehicles for commuting within the campus are the other significant amenities available on the campus.

Student Support and Progression

The Institution provides an excellent student support system with a comfortable and joyful learning environment during their period of study. The Institution annually admits 8 percent of its enrolled students

with **100% scholarships through the Anbu Scholarship Scheme.** 9.03% of all students in the last 5 years have benefited from various scholarship schemes. Students who want to participate in competitive tests are given career counselling and guidance. The Advisory Bureau of Higher Studies offers guidance to students who wish to enroll for higher studies in reputed universities worldwide.

Students are trained for the GRE, GMAT, TOEFL, IELTS, GATE, and CAT examinations, which has increased the number of students going for higher studies in various renowned Institutions at the national and international level. The placement cell prepares students for the corporate sector and equips them with the skill sets necessary for contemporary work. Career development and personality development programmes are conducted by leading trainers in the industry. Training programmes and workshops on critical thinking, design thinking, and communication skills are organised for the students. The Skill Development Centre provides a range of value-added skill development courses in association with the National Skill Training Institute and the Ministry of Skill Development and Entrepreneurship. The Institution allows Student Council representatives to participate in the decision-making process on various student-related issues. The student council promotes student involvement in intra- and inter-institutional competitions for self-improvement and organises cultural, sporting, social, recreational, and other educational events. Mega Sports and cultural events are organised by the Institution every year, in which hundreds of students enthusiastically participate. Students are encouraged to participate in hackathons, conferences, workshops, symposiums, and seminars with partial financial support. Sathyabama has a strong alumni association with more than 20,000 members. Alumni support the Institution through participation in curriculum development and assistance in training and placement. Anti-ragging, sexual harassment, anti-discrimination, and Grievance Redressal Cell are some of the cells formed to protect the students' interests and provide them with a safe learning environment within the campus.

Governance, Leadership and Management

The realisation of the Institution's vision and mission is greatly aided by its strong, devoted institutional leadership and well-established governance structure. The Board of Management is the principal executive body of the Institution, which formulates all policies and procedures and provides academic and administrative leadership. The Academic Council is the principal academic body. The Planning and Monitoring Committee is responsible for monitoring the effective implementation of the strategic plan. The Finance Committee, Academic Council, and the Internal Quality Assurance Cell are the other governing bodies that facilitate the effective functioning of the Institution.

The Vice Chancellor is the Principal Executive Officer of the Institution and exercises general supervision and control over the affairs of the Institution. The Institution promotes a participative culture and the top management rightly delegates the authority to employees in the middle and lower levels and focuses on the major developmental decisions related to the vision and mission of the Institution. The IQAC develops procedures and mechanisms to ensure quality in all aspects of the teaching-learning-evaluation process, measures the institution's academic performance, and ensures continuous improvement. The Academic and Administrative Audit are conducted by the internal and external members to institutionalize the quality culture, and evaluate the efficiency and effectiveness of various academic and administrative processes. Well-laid policies are in place to provide guidelines for the smooth functioning of the Institution.

Sathyabama is known for the welfare facilities it offers to its employees. Employees enjoy a range of facilities, including free food and transportation, sponsored faculty exchange programme, sponsored holy trips, etc. Through staff mobility programmes, Sathyabama offers its faculty members the opportunity to work at partnering universities around the world and learn from their international counterparts. Faculty Development

Programmes and Training Programmes are organized by the Institution for teaching and non-teaching staff. Faculty members are provided with financial support to attend conferences and workshops. The Finance Committee and the Planning and Monitoring Committee coordinate and monitor the institution's fund mobilisation and utilisation activities, ensuring transparency and accountability. Internal and external finance audits are conducted periodically, and audit objections are properly addressed.

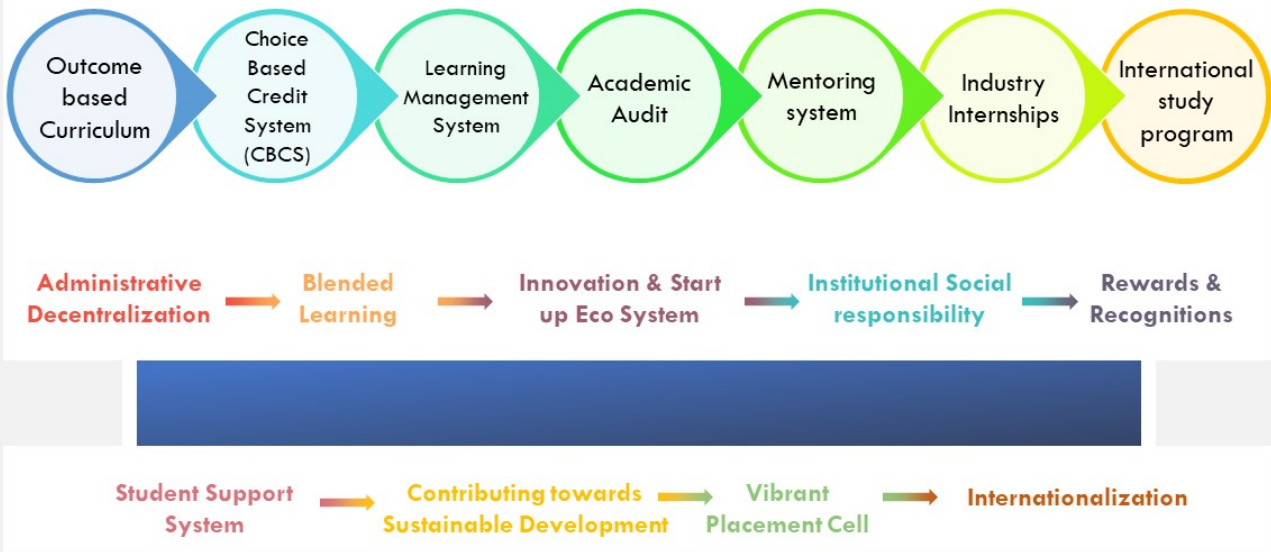**Institutional Values and Best Practices**

Sathyabama is built on the values of inclusivity, equity, and discipline. Men and women have equal access to opportunities and equally participate in policymaking and administration. The Institution has a gender equity policy, framed on the basic principles of respect and tolerance for everyone. The Women Empowerment Bureau functioning in the Institution organises training programmes, seminars and workshops for students and staff on gender equity.

The Internal Complaints Committee (ICC) is constituted in the Institution to prevent discrimination and sexual harassment against girls and female staff. Being an environmentally conscious institution, Sathyabama follows the best waste management practices. Solid waste, liquid waste, e-waste, biomedical waste, and other wastes of organic and inorganic origin are appropriately managed in an eco-friendly manner. Inclusion and diversity are the core values that the Institution upholds through its anti-discrimination policy and minority protection policy.

Sathyabama promotes a secular environment in which the practices of all religions are given due respect. Students from various religions have separate prayer halls, and the Institution celebrates all religious festivals. All the Indian Festivals including Pongal, Ayudha Puja/ Dussera, Diwali, Onam, Ramzan, and Christmas are passionately celebrated in the Institution. Sathyabama has always been an Institution that respects constitutional rights and provides an environment where students and employees understand their role in safeguarding constitutional duties. The Institution conducts awareness campaigns, orientation programmes, training programmes, seminars, and workshops to sensitize the students and employees about their constitutional rights and obligations. Commemorative national and international days are celebrated and observed.

Sathyabama promotes internationalisation through international academic and research cooperation. It has formed partnerships with more than 150 Universities across the world and is engaged in collaborative activities which includes joint research, joint academic programmes and the exchange of staff and students. Sathyabama is an inclusive Institution and works with the motto "Education for all". Through the Anbu Scholarship Scheme, it allows deserving students to pursue higher education on a full scholarship. Through this scheme, students from marginalised communities, economically weaker sections, children of destitute women, children of war widows, children of prison inmates and acid attack victims are given scholarships.

Best Practices

Outcome based Curriculum → Choice Based Credit System (CBCS) → Learning Management System → Academic Audit → Mentoring system → Industry Internships → International study program

Administrative Decentralization → **Blended Learning** → **Innovation & Start up Eco System** → **Institutional Social responsibility** → **Rewards & Recognitions**

Student Support System → **Contributing towards Sustainable Development** → **Vibrant Placement Cell** → **Internationalization**

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the University	
Name	SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY
Address	SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY, JEPPIAAR NAGAR, RAJIV GANDHI SALAI,CHENNAI
City	CHENNAI
State	Tamil Nadu
Pin	600119
Website	www.sathyabama.ac.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Vice Chancellor	Sasipraba T	044-24503065	9840133346	044-2450301 8	vc@sathyabama.ac .in
IQAC / CIQA coordinator	Anima Nanda	044-24502344	9443786840	044-2450324 3	iqac@sathyabama. ac.in

Nature of University	
Nature of University	Deemed University

Type of University	
Type of University	Unitary

Establishment Details	
Establishment Date of the University	05-10-1988
Status Prior to Establishment,If applicable	

Recognition Details			
Date of Recognition as a University by UGC or Any Other National Agency :			
Under Section		**Date**	**View Document**
2f of UGC		10-06-2020	[View Document](#)
12B of UGC		10-06-2020	[View Document](#)

University with Potential for Excellence	
Is the University Recognised as a University with Potential for Excellence (UPE) by the UGC?	No

Location, Area and Activity of Campus							
Campus Type	**Address**	**Location***	**Campus Area in Acres**	**Built up Area in sq.mts.**	**Programmes Offered**	**Date of Establishment**	**Date of Recognition by UGC/MHRD**
Main campus	SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY, JEPPIAAR NAGAR, RAJIV GANDHI SALAI,CHENNAI	Urban	134	311657	Engineering, Architecture, Arts, Science , Humanities, Allied Health Sciences, Management, Dental Sciences, Pharmacy, Nursing, Law ,		

2.2 ACADEMIC INFORMATION

Furnish the Details of Colleges of University

Type Of Colleges	Numbers
Constituent Colleges	0
Affiliated Colleges	0
Colleges Under 2(f)	0
Colleges Under 2(f) and 12B	0
NAAC Accredited Colleges	0
Colleges with Potential for Excellence(UGC)	0
Autonomous Colleges	0
Colleges with Postgraduate Departments	0
Colleges with Research Departments	0
University Recognized Research Institutes/Centers	0

Is the University Offering any Programmes Recognised by any Statutory Regulatory Authority (SRA)		: Yes

SRA program	Document
AICTE	103643_8768_1_1662381522.pdf
DCI	103643_8768_5_1663662965.pdf
BCI	103643_8768_8_1663662666.pdf
PCI	103643_8768_6_1662381839.pdf
DEB-UGC	103643_8768_21_1663991308.pdf
COA	103643_8768_18_1663990425.pdf
INC	103643_8768_7_1663655128.pdf

Details Of Teaching & Non-Teaching Staff Of University

Teaching Faculty											
	Professor				**Associate Professor**				**Assistant Professor**			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned				106				185				530
Recruited	53	53	0	106	92	93	0	185	203	299	0	502
Yet to Recruit				0				0				28
On Contract	0	0	0	0	0	0	0	0	6	22	0	28

Non-Teaching Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned				1176
Recruited	740	436	0	1176
Yet to Recruit				0
On Contract	0	0	0	0

Technical Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned				213
Recruited	130	76	0	206
Yet to Recruit				7
On Contract	5	2	0	7

Qualification Details of the Teaching Staff

Permanent Teachers									
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**		
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	41	43	0	79	76	0	99	107	0	445
M.Phil.	0	0	0	0	0	0	4	5	0	9
PG	12	10	0	13	17	0	100	187	0	339
UG	0	0	0	0	0	0	0	0	0	0

Temporary Teachers									
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**		
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	6	22	0	28
UG	0	0	0	0	0	0	0	0	0	0

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Part Time Teachers										
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

Distinguished Academicians Appointed As

	Male	**Female**	**Others**	**Total**
Emeritus Professor	0	0	0	0
Adjunct Professor	12	3	0	15
Visiting Professor	14	4	0	18

Chairs Instituted by the University

Sl.No	**Name of the Department**	**Name of the Chair**	**Name of the Sponsor Organisation/Agency**
1	Information Technology	Col Dr Jeppiaar	Sathyabama Institute of Science and Technology
2	Management Studies	Thiru Gopalakrishnan	Sathyabama Institute of Science and Technology
3	Architecture	Design Chair	Sathyabama Institute of Science and Technology

Provide the Following Details of Students Enrolled in the University During the Current Academic Year

Programme		From the State Where University is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	2557	5273	18	5	7853
	Female	2100	1820	6	0	3926
	Others	0	0	0	0	0
PG	Male	376	285	0	0	661
	Female	365	269	0	0	634
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	36	43	10	0	89
	Female	81	52	6	0	139
	Others	0	0	0	0	0
Diploma	Male	8	0	0	0	8
	Female	12	0	0	0	12
	Others	0	0	0	0	0

Does the University offer any Integrated Programmes?	No

Details of UGC Human Resource Development Centre, If applicable

Year of Establishment	Nill
Number of UGC Orientation Programmes	0
Number of UGC Refresher Course	0
Number of University's own Programmes	0
Total Number of Programmes Conducted (last five years)	0

Accreditation Details

Cycle Info	Accreditation	Grade	CGPA	Upload Peer Team Report
Cycle 1	Accreditation	B++	81.5	naac_report_2006.pdf

| Cycle 2 | Reassement | A | 3.09 | naac_report_2017.pdf |
| Cycle 2 | Accreditation | B | 2.50 | naac_report_2015.pdf |

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Online Porgrammes	View Document
School Of Bio And Chemical Engineering	View Document
School Of Building And Environment	View Document
School Of Computing	View Document
School Of Dental Sciences	View Document
School Of Electrical And Electronics	View Document
School Of Law	View Document
School Of Management Studies	View Document
School Of Mechanical	View Document
School Of Nursing	View Document
School Of Pharmacy	View Document
School Of Science And Humanities	View Document

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	Sathyabama Institute of Science and Technology, formerly known as Sathyabama Engineering College, was founded to offer Programmes in the field of Engineering. The Institution has evolved into a multidisciplinary Institution with Programmes in Architecture, Management, Dental, Nursing, Pharmacy, Allied Health Sciences, Law, Science and Humanities. The vision of the Institution is to become a leading multi-disciplinary University producing world-class talents to address global challenges. Through the addition of other new programmes in the fields of Agricultural Sciences, Medical Sciences,

Traditional Medicine and Paramedical Sciences, Sathyabama hopes to establish itself as a fully multidisciplinary Institution. The Institution has a multi-disciplinary and inter-disciplinary curriculum with more emphasis on skill-oriented, industry-linked, employment-oriented, entrepreneurship-oriented/apprenticeship-embedded, and value-added courses. Academic flexibility is enhanced by promoting an interdisciplinary curriculum and the adoption of a Choice Based Credit System (CBCS). Sathyabama is also involved in multidisciplinary/interdisciplinary research. The core and cross-disciplinary courses are combined in the curricula. Students are offered open electives so that they can choose any course regardless of their specialization. A student studying Mechanical Engineering can choose courses in Management, Augmented and Virtual Reality, Forensic science, Artificial Intelligence, Drug delivery systems, Neurology, and Biology. Some interdisciplinary courses are offered as compulsory courses. As an effort towards imparting the interdisciplinary curricula, courses on Embedded Systems, Virtualization Techniques, Augmented and Virtual Reality (AR and VR), Industrial robotics and Expert Systems , Artificial Intelligence, 3D Printing and Drone electronics are taught to upskill the students. Institutional reforms were carried out towards digitalization in the areas of teaching and learning, examination and evaluation and in Research. At Sathyabama, students are provided the opportunity to pursue Semester Abroad Programmes to give them global exposure. Credits are transferred for the courses studied at a foreign university. Students are free to study any additional course of their interest at a foreign university and earn extra credits. To transform into a multidisciplinary Institution, there is a necessity for the integration of humanities and science with STEM to facilitate the holistic development of students. Sathyabama wish to offer Media with Engineering, Medicine with Humanities, Biology with humanities and Science with Journalism. The Institution is planning to introduce programmes on Linguistics, Multilingual Studies, Liberal Arts, Music and Sociology. As intended by the NEP 2020 the Institution is planning to bring complete flexibility to the curriculum with no strict division between Arts, Science, Humanities,

	Language, Maths, and Engineering curriculum, in order to give equal importance to all subjects and promote mastery across all disciplines. The liberty to choose the domain of programmes, length of study, and variety of courses would be bestowed on the students. The Institution is also planning to introduce integrated UG and PG degrees in evolving domains of study. The Institution is working towards offering industry-led academic programmes with adequate weightage on recent advances such as Additive manufacturing, Industry 4.0, Smart Manufacturing, Cloud Computing and Manufacturing, Artificial Intelligence, Cyber physical systems with an interdepartmental, integrated approach.
2. Academic bank of credits (ABC):	According to NEP 2020, Institutions are aiming toward an education delivery system that is fully flexible and allows students to earn, accrue, redeem, or transfer credits from any institution. When a student gets admitted to the Institution, credits obtained in a different institution will be recognised and transferred. The Institution has registered in the Academic Bank of Credits (ABC) portal, as directed by the competent authority. Students are provided with information regarding the Academic Bank of Credits and its relevance to our curriculum. The step-by-step guideline on how to create the ABC ID is given to the students. The Institution has also registered in the National Academic Depository's Digi Locker portal. Curriculum flexibility is enhanced by promoting an interdisciplinary curriculum, and interdisciplinary courses are offered to broaden the knowledge of the students. The curriculum accommodates credit transfer through MOOCs courses, Semester Abroad Programme, and Internship Abroad Programme. Semester Abroad Programs (SAP) allows our students to spend one semester studying at foreign universities. Students can study 3 to 6 courses for which credits are transferred. They are also allowed to enrol in additional subjects and other language subjects and earn extra credits that are accounted for. Credits for Project Based Learning are accounted in the fourth and sixth semester of the undergraduate programme, through professional training and internships. In addition to the courses listed on their curriculum, students are given the chance to undertake internships at foreign institutions where they take some specialist

	courses. The curriculum is flexible to account credits accrued through international internships and training through MOOCs courses including NPTEL, SWAYAM. Students are encouraged to participate in tree planting, beach cleaning, lake cleaning, and other social outreach related activities to promote students' involvement in community development activities and foster a feeling of social and civic responsibility. The Institution has planned to introduce Community Internships or Rural Internships to students to increase students' social responsibility and propensity for caring about issues that pertain to society. The Institution has embraced the Choice Based Credit System (CBCS), which is in accordance with the guidelines of the University Grants Commission (UGC) , that will allow the easy adoption of the Academic Bank of Credits. The Departmental level Coordinators were appointed to help students understand, choose, and register for the courses that they wish to study. Apart from the program core courses, students are allowed to choose the open electives irrespective of the programme or semester. At the end of every semester, Department Heads announces their open electives to be offered in the next semester for the complete implementation of CBCS. The adoption of an interdisciplinary curriculum, a choice based credit system, multiple entry and exit options for students, and opportunities for students to study courses in foreign universities and earn credits will facilitate the smooth adoption of the Academic Bank of Credits for the Institution.
3. Skill development:	Sathyabama Institute of Science and Technology has established a Centre for Skill Development in collaboration with the National Skill Training Institute (NSTI), Micro, Small, and Medium Enterprises (MSME), and Rubber Skill Development Council (RSDC). The Centre conducts various skill development programmes for students with the objective of improving their employability skills and promote entrepreneurship. The Centre aims to contribute to the human resource development of our nation and to elevate the standards of youth socially and economically. The Centre for Skill Development facilitates industry institute interactions. Students are trained through theory sessions and practical sessions on a variety of skill sets to aid employability. In collaboration with the National Skill Training

Institute (NSTI), Ministry of Skill Development & Entrepreneurship (MSDE), the centre offers a variety of skill-enrichment courses in AI Programming, Machine Learning, Cyber Security, Internet of Things, Embedded Programming, Data Acquisition, CATIA V5, Robotics, and Printed Circuit Board (PCB) Design courses to help students improve their technical skills. The skill development centre provides opportunities for the students to register themselves for the courses organized by the Centre. The centre analyses skill gaps and designs appropriate courses for students. Every student is required to take a non-credit or vocational course during their academic career. The course has to be completed before their final semester. By offering training programmes to rural youth in skill development courses including welding, electrical work, plumbing and lab technician. Skill Development Centre also extends its responsibilities to the wider public. The centre also offers specialized skill-development programmes in beauty therapy, baking, and tailoring to underprivileged women in the neighbouring community. The UGC has approved 10 courses/programmes under UGC NSQF (National Skills Qualifications Framework), at different levels for the students, with the aim of enhancing various skill components. The Institution offers Certificate, Diploma, PG Diploma, Advanced Diploma and Degree programmes in varied areas. These courses are offered with the objective of strengthening the students' competency level in the relevant areas. Students from other institutions and organizations also enrol in these skill development courses. "Meeting the Standards" and "being competent" are the aims of skill enrichment. Every initiative towards the re-skilling and up-skilling of students and faculty is carried out in order to meet the requirements of the industry and work in cutting edge technologies. The Institution offers certificate courses on Banking and Financial Services, Tally ACE Accounting Software, a course on Virtual reality and Augmented Reality, Instrumentation, Quality Control and Non-Destructive Testing technologies, a course on Media and Entertainment, Digital Film Making Techniques for Beginners, Construction Management, Diploma courses in "Hands on Experience in Remote Sensing and GIS" and "MEP Technology," a PG Diploma course in Computational Biology, an Advanced

	Diploma course in Robotics & Autonomous Machines, and a degree course in Translational Physiology and Public Health Nutrition.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	Our Institution is working towards the integration of the Indian Knowledge System into teaching with the objective of teaching life skills and ancient Indian knowledge, which emphasises the creation of knowledge and the acumen to use the knowledge. The Institution believes in the Indian roots of offering education. Initiatives are being taken to incorporate elements of the Indian Knowledge System (IKS) into curricula and to launch new programmes on Indian arts and culture. The Institution promotes cultural integration by celebrating Indian festivals and observing national days of importance. Sathyabama conducts various programmes to educate students on the country's culture and heritage. Special events are organised for international students to introduce Indian culture, heritage, and tradition. In the annual cultural events, due representation is given for the promotion of Indian culture and fine arts. The Institution also encourages seasonal festivals showcasing local and regional cultures. The Institution honours the exemplary work of famous personalities of Indian cultural background. Every year, the Institution conducts "Tamil Pattimandram", a Tamil literature and art-based debate competition. In this competition, students are encouraged to participate on topics related to the culture, art, and literature of the region. This motivates the students to incline themselves toward adopting regional and national cultures. The B.Sc. Fashion Design programme has introduced courses on Indian culture through the clothing history and traditions of different ethnic groups and the varied geography, climate, and cultural traditions of the people of each region of India. The programme focuses on the weaves, fibres, colours, and materials of clothing as well as the vast examples of Indian embroidery, prints, handwork, embellishment, styles of wearing clothes, etc. Traditions relating to wearing clothes of different hues based on religion, dance performances, and rituals concerned are also part of the curriculum. The B. Arch. (Bachelor of Architecture) Programme is designed to promote ancient Indian architectural styles into modern-day structures. The students are encouraged to visit architectural sites to understand

	India's architectural history and traditions. Students are instructed on the traditional building methods used in the past and encouraged to utilise the knowledge and blend it with modern technology. Faculty from the Institution have been granted the research and development fund by Science and Heritage Research India (SHRI), the Government of India. This research intends to protect the monuments based on the latest technology and to transfer the technology globally. The Institution has a proposal to offer courses on Traditional medicinal practices, organic farming, and the digitalization of Indian traditional knowledge.
5. Focus on Outcome based education (OBE):	Outcome Based Education (OBE) is practiced by the Institution. The feedback from stakeholders is considered in the curriculum design, which is based on the expected learning outcomes—the knowledge, skills, and abilities the students are expected to possess after completion of the programme. The Board of Studies members guide the design of multidisciplinary curricula based on recent research and professional practices in the industry. The Board of Studies approves the curriculum following the principles of OBE and plans for the effective delivery of the courses. The course coordinator prepares the study material and plans the classroom activities and assignments based on the course outcomes defined. The curricula of all programmes are designed based on Program Outcomes (POs) and Programme Specific Outcomes (PSOs). All teaching and learning activities in the programme are designed to help students achieve these POs and PSOs. The cumulative contribution of the design of curriculum, teaching pedagogies, learning models, assessment mechanisms, and evaluation metrics enables students to attain learning attributes during and after completion of a particular programme or course. Each Programme curricula is well mapped with the POs and PSOs. The POs and PSOs are displayed in prominent places in the department, which are accessible to students. Each course is designed with definite course outcomes. These course outcomes are made clear to students prior to the start of classroom instruction. Outcome based education model is incorporated in the examination process. Question papers are prepared following Bloom's taxonomy. Learner-specific teaching pedagogy is adopted to

	cater to the needs of slow learners and advanced learners. The attainment of course and programme outcomes is well analyzed, and remedial measures are taken by the departments. The results of this analysis are used as a potential source of input in redesigning the curriculum and activities of the department. Attainment of Course Outcomes (COs), Programme Outcomes (POs) and Programme Specific Outcomes (PSOs) is assessed by direct and indirect methods. The direct method includes the assessment in Continuous Assessment Examinations (CAE) , End Semester Examinations (ESE), Assignments, Case Studies, Quizzes, and Mini-projects. The indirect method of assessment is done through course exit surveys, graduate exit surveys, alumni surveys, and employer surveys. The Programme Assessment Committee (PAC) and Department Advisory Committee (DAC) assist and play a crucial role in the assessment and evaluation of outcomes at the programme level. The successful implementation of OBE has resulted in the accreditation of ten Undergraduate Engineering Programmes and one Postgraduate Programme in Management Studies by the National Board of Accreditation(NBA). The Institution is well focused and determined towards the implementation of outcome based education in all the programmes. Stakeholders' expectations are met at reasonable levels with the institutionalization of OBE principles.
6. Distance education/online education:	The Centre for Distance and Online Education (CDOE) was established in 2020 to disseminate knowledge and impart quality education in the open and distance learning modes. The Centre was established in accordance with the UGC Online and Distance Learning (ODL) programmes and Online Learning (OL) programmes regulations, 2020. CDOE is working with a vision of providing a life-long learning platform for all aspiring learners and up skill their knowledge and become an industry-ready workforce. The Centre strives to facilitate high quality learning for those who cannot avail themselves of higher education in the conventional mode and for those who look upon learning as a life-long activity. Through this Centre, Sathyabama offers Online Learning (OL) programmes in Commerce, Business Administration, Mathematics and English literature contributing to the requirements of higher

education for diverse learners. UGC has given approval for offering M.Sc. Mathematics, M.A. English, Master of Business Administration (MBA), Bachelor of Commerce (B.Com) and Bachelor of Business Administration (BBA) under Online Learning (OL) mode from 2021. In 2022, UGC has given approval for the above programmes in ODL mode. The Institution has also partnered with the Ministry of External Affairs on the e-VBAB project from 2022 onwards. e-VBAB is a capacity building initiative by the Government of India to educate students from Africa on a full scholarship. At present, 88 students are studying in online mode from various parts of Africa through the e-VBAB project. Sathyabama's ODL/OL programmes are an encouraging and interactive assortment of virtual learning platforms that reflect a classroom experience. The aim is to facilitate direct, real-time engagement with faculty, professional peers, and course facilitators. The strength of Sathyabama ODL/OL is its flexible programme structure. All programmes are designed to teach the students how to adapt to new situations, take the lead, and think differently. To provide efficient online education, the Centre for Distance and Online Education makes use of digital and software tools. The Centre also aims to serve the needs of communities of students who have dropped out of school by offering them technology- and skill-based vocational courses that will quickly qualify them for employment. Programmes from the Centre for Distance and Online Education are offered online in accordance with the UGC's four-quadrant strategy. Learners get access to the degree programmes through a virtual learning environment with relevant and integrated support services. The dissemination of content in the form of recorded films, educational materials, and discussion forums is made possible with the support of Sathyabama Learning Management System and Zoom platform.

Extended Profile

1 Program

1.1

Number of programs offered year-wise for last five years

2021-22	2020-21	2019-20	2018-19	2017-18
85	77	68	66	52

File Description	Document
Institutional data in prescribed format	[View Document](#)

1.2

Number of departments offering academic programmes

Response: 26

2 Students

2.1

Number of students year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
13094	12482	11966	12219	12948

File Description	Document
Institutional data in prescribed format	[View Document](#)

2.2

Number of outgoing / final year students year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
2571	2787	3531	2903	3069

File Description	Document
Institutional data in prescribed format	[View Document](#)

2.3

Number of students appeared in the University examination year-wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
13099	12558	12035	12250	12897

File Description	Document
Institutional data in prescribed format	[View Document](#)

2.4

Number of revaluation applications year-wise during the last 5 years

2021-22	2020-21	2019-20	2018-19	2017-18
224	52	180	25	92

3 Teachers

3.1

Number of courses in all programs year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1711	1598	1214	906	827

File Description	Document
Institutional data in prescribed format	[View Document](#)

3.2

Number of full time teachers year-wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
821	725	1063	1059	837

File Description	Document
Institutional data in prescribed format	[View Document](#)

3.3

Number of sanctioned posts year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
821	725	1063	1059	837

File Description	Document
Institutional data in prescribed format	[View Document](#)

4 Institution

4.1

Number of eligible applications received for admissions to all the programs year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
98548	138793	83135	72564	153361

File Description	Document
Institutional data in prescribed format	[View Document](#)

4.2

Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1361	1526	1503	1624	1312

File Description	Document
Institutional data in prescribed format	[View Document](#)

4.3

Total number of classrooms and seminar halls

Response: 282

4.4

Total number of computers in the campus for academic purpose

Response: 4174

4.5

Total Expenditure excluding salary year-wise during last five years (INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
12969.51	11032.33	11889.86	14917.57	16313.32

17-01-2023 01:47:39

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

1.1.1 Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the Institution.

Response:

The Curricula of every programme lay great emphasis on a deep understanding of the fundamental principles of the respective field of study and the current advancements. Sathyabama aspires to create talented young minds who are socially responsible and have a creative approach to address societal challenges through its meticulously prepared versatile curriculum. Curricula of all the Programmes are designed based on the local, national, regional and global needs and is reflected in the POs, PSOs and COs. The Curriculum is designed based on the expected learning outcomes that cover the knowledge, skills and attitudes, the students should possess after the completion of a course or a Programme. Outcome Based Education (OBE) is practiced in the Institution which allows to define the course outcomes for each course and is mapped with the Programme Outcomes. Courses related to sustainable development are included in the curricula to develop socially responsible students with a concern for society. Curricula of every programme are framed with emphasis on imparting 21st Century skills such as critical thinking, communication, creativity, design thinking, decision making, leadership and collaboration.

The IQAC supports the Institution in identifying the needs of the Industry and other stakeholders for developing the Programme curriculum. District Industrial Survey reports from Micro, Small and Medium Enterprise (MSME) are considered to identify the local needs. New programmes are introduced based on the comprehensive survey done by the IQAC. The core competencies to be imparted for every programme are identified and the curriculum is revised periodically. The Curriculum is designed in such a way that it is the right mix of core and interdisciplinary courses. New elective courses are introduced based on the current needs. Needed flexibility is included in the structure of the curricula in view of the implementation of NEP 2020.

The attainment of all the programme outcomes ensure that the curricula and the teaching-learning process are aligned with the graduate attributes. Industry 4.0 was introduced to all the engineering programs to provide exposure to Industrial IoT (IIoT), Artificial Intelligence, Cyber Security, Data science and Blockchain technologies.

The Programme Educational Objectives (PEOs) relevant to the profession and the curriculum are set and revised based on the feedback of the stakeholders.

To meet the expectation of our stakeholders, major changes in the curriculum are carried out, concerning Industry 4.0 and Society 5.0.

Salient features of the curricula

- Curricula on par with global standards

- Curricula focus on skill development, employability and entrepreneurship
- Internships and Industrial Visits are included as part of the curricula
- Adoption of Choice Based Credit System
- Curricula accommodates credit transfer through Semester Abroad Programme, Internships Abroad, Industry Internships and others
- Curricula follow Conceive-Design-Implement-Operate (CDIO) framework
- NSS, NCC and YRC activities form part of our curricula as Non-Credit Course
- Emphasis on environmental education
- Industry-tailored courses are offered as electives
- Curricula focus on Experiential Learning
- Value-added courses and employability-oriented certification courses are offered
- Students can earn credits by enrolling in MOOCs courses including NPTEL and SWAYAM
- Interdisciplinary Learning through open electives
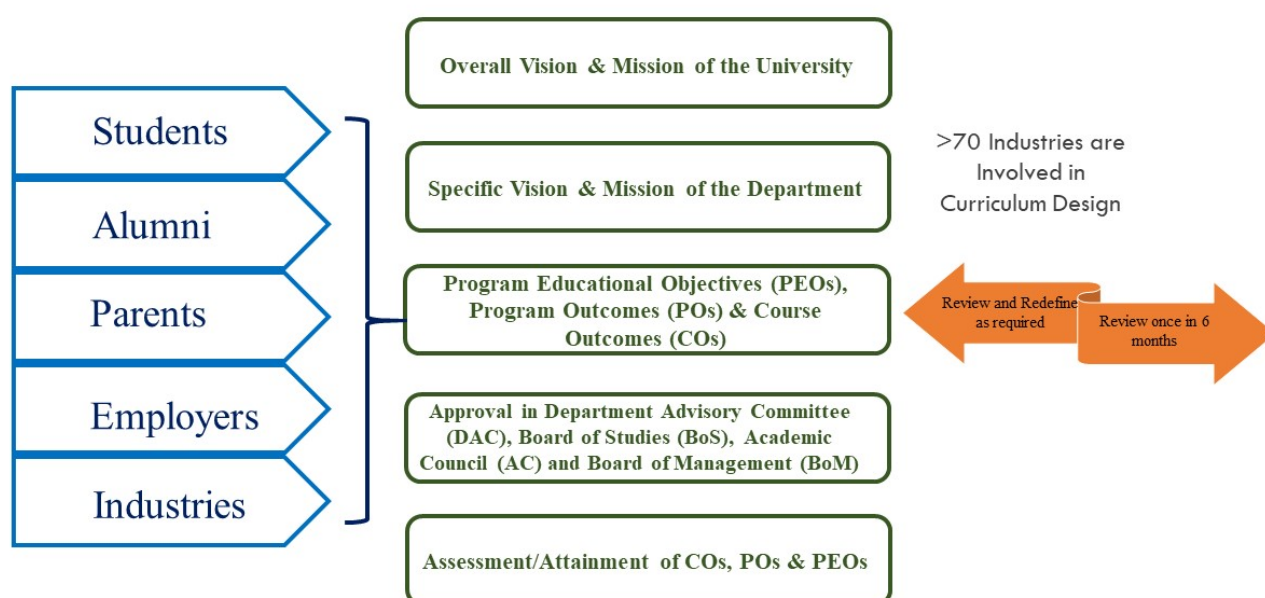
File Description	Document
Upload Additional information	[View Document](#)
Link for Additional information	[View Document](#)

1.1.2 Percentage of Programmes where syllabus revision was carried out during the last five years.

Response: 98.97

1.1.2.1 **How many Programmes were revised out of total number of Programmes offered during the last five years**

Response: 96

1.1.2.2 Number of all Programmes offered by the institution during the last five years.

Response: 97

File Description	Document
Minutes of relevant Academic Council/BOS meeting	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Details of Programme syllabus revision in last 5 years	[View Document](#)
Any additional information	[View Document](#)
Link for additional information	[View Document](#)

1.1.3 Average percentage of courses having focus on employability/ entrepreneurship/ skill development offered by the institution during the last five years

Response: 85.2

1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development year-wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1411	1272	1055	756	774

File Description	Document
Programme/ Curriculum/ Syllabus of the courses	[View Document](#)
MoU's with relevant organizations for these courses, if any	[View Document](#)
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

1.2 Academic Flexibility

1.2.1 Percentage of new courses introduced of the total number of courses across all programs

offered during the last five years.

Response: 36.06

1.2.1.1 **How many new courses were introduced within the last five years.**

Response: 824

1.2.1.2 **Number of courses offered by the institution across all programmes during the last five years.**

Response: 2285

File Description	Document
Minutes of relevant Academic Council/BOS meeting	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

1.2.2 Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course system has been implemented (Data for the latest completed academic year).	
Response: 94.12	
1.2.2.1 **Number of Programmes in which CBCS / Elective course system implemented.**	
Response: 80	
File Description	**Document**
Minutes of relevant Academic Council/BOS meetings	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

1.3 Curriculum Enrichment

1.3.1 Institution integrates crosscutting issues relevant to Professional Ethics ,Gender, Human Values ,Environment and Sustainability into the Curriculum

Response:

The programmes offered at Sathyabama Institute of Science and Technology include courses related to ethics, gender, human values, environment and sustainability to ensure a holistic learning experience for the students. In line with the guidelines of the regulatory bodies, courses on Professional Ethics and Universal Human Values are offered. Inclusivity is the model of education followed by the Institution, and

the curriculum is designed to incorporate the essence and elements of this model and value-based education. The courses are offered to inculcate values and develop ethical competence among the students. Courses on ethics are included in the curriculum, which teaches students to follow ethical practices and make them more responsible in their profession. The IQAC of the Institution periodically organizes workshops and orientation programmes for the faculty and students towards addressing the crosscutting issues such as Human Values, Gender equity, Research Ethics, Environment and Sustainability. Universal Human Values (UHV) is offered with 3 credits in all engineering programmes

Courses such as Sustainable Architecture, Environmental Ethics, Green Computing, Environmental Impact Assessment, Environmental Science and Engineering, Environmental Pollution Control, Environmental Impact Assessment, Environmental Science and Engineering, and Environmental Biotechnology are part of the curriculum. These courses are offered to create awareness about the environment among the students and instill a sense of responsibility toward environmental protection. To educate students about the best use of natural resources, the Institution organises workshops, seminars, and conferences on the environment and sustainability.

Courses such as Environmental Law, Biosafety, Bioethics, IPR, Industrial Relations, Professional Ethics and Professional Accounting, Women and Criminal Law, Penology and Victimology, Gender Justice are offered to provide knowledge about various legislations and make students understand the importance of human values and ethics in life. The curriculum is designed to provide an integrated and multi-disciplinary approach to understand various social and cultural dimensions of society.

Gender sensitization programmes are held at the Institution to help students deal with gender discrimination. These programmes also educate students about the ill effects of gender bias and other related social consequences. The Institution has a policy for promoting gender equality. In collaboration with the institution's Women's Empowerment Bureau, the departments regularly conduct programmes on gender discrimination, women empowerment, and women entrepreneurship.

Moral values, human values, and professional ethics are taught in the first-year induction programme for the students. Great female personalities are invited to share their perspectives and experiences, and discuss real-life issues affecting women. Programs on "Awareness of Sexual Harassment at the Workplace", "Laws related to Women", "Cervical Cancer Awareness" , "Breast Cancer Awareness" ,"Violence against Women" , "Self defence" and "Awareness of Women's Laws" were conducted for the students.

The Institution celebrates days of national and international importance, such as Republic day, Women's Day, Independence day, Teacher's day, Human Rights day, World Environment day, International Yoga day and Constitution day to nurture moral, ethical, and social values among the faculty and students.

The curriculum covers various crosscutting issues across the disciplines, which empowers the student to become a better professional with interpersonal skills and social intelligence.

File Description	Document
Upload the list and description of the courses which address the Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum	[View Document](#)
Any additional information	[View Document](#)

1.3.2 Number of value-added courses for imparting transferable and life skills offered during last five years.

Response: 356

1.3.2.1 **How many new value-added courses are added within the last five years.**

Response: 356

File Description	Document
Institutional data in prescribed format	[View Document](#)
Brochure or any other document relating to value added courses	[View Document](#)
Any additional information	[View Document](#)

1.3.3 Average Percentage of students enrolled in the courses under 1.3.2 above.

Response: 85.13

1.3.3.1 **Number of students enrolled in value-added courses imparting transferable and life skills offered year-wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
12971	11252	10139	7919	11255

1.3.4 Percentage of students undertaking field projects / research projects / internships (Data for the latest completed academic year).

Response: 32.43

1.3.4.1 **Number of students undertaking field projects or research projects or internships.**

Response: 4246

File Description	Document
List of Programmes and number of students undertaking field projects research projects/ / internships (Data Template)	[View Document](#)
Any additional information	[View Document](#)
Link for additional information	[View Document](#)

1.4 Feedback System

1.4.1 Structured feedback for design and review of syllabus – semester-wise / year-wise is received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni

Response: A. All 4 of the above

File Description	Document
URL for stakeholder feedback report	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)
Action taken report of the University on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management (Upload)	[View Document](#)

1.4.2 Feedback processes of the institution may be classified as follows:

Response: A. Feedback collected, analysed and action taken and feedback available on website

File Description	Document
URL for feedback report	[View Document](#)
Upload any additional information	[View Document](#)
Institutional data in prescribed format	[View Document](#)

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Demand Ratio (Average of last five years)

Response: 27.52

2.1.1.1 **Number of seats available year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
5727	4282	4046	3919	3136

File Description	Document
Demand Ratio (Average of Last five years) based on Data Template upload the document	[View Document](#)
• Any additional information	[View Document](#)

2.1.2 Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per applicable reservation policy during the last five years (Excluding Supernumerary Seats)

Response: 100

2.1.2.1 **Number of actual students admitted from the reserved categories year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
1361	1526	1503	1624	1312

File Description	Document
Average percentage of seats filled against seats reserved (Data Template)	[View Document](#)
Any additional information	[View Document](#)

2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners

Response:

Students across India, hailing from different states, speaking different languages, and from different social and economic backgrounds, study at Sathyabama. The Institution has an effective diagnostic process and remedial academic measures to support **advanced** learners and **slow** learners, respectively. The students are analysed based on their performance in the entry-level exams, and diagnostic tests conducted in the first year. The students are continuously monitored based on their performance in the Continuous Assessment Examinations (CAE) and the End Semester Examinations (ESE) every semester.

Departments organize induction programmes for first year students to make them understand the scope of subjects, facilities, and other support systems available in the Institution. Bridge courses in Computer Science, English and Mathematics are conducted for slow learners and students who come from non-mathematics background to support them in meeting the demands of the curriculum.

Advanced learners are encouraged through merit awards and scholarships. Star of Excellence Award is awarded to the meritorious student of every programme. Col. Dr. Jeppiaar Remibai scholarships are awarded to the academic year's top performers. The toppers are refunded a percentage of their tuition fees. This motivates the advanced learners to perform better every time and maintains healthy competition among students. Advanced learners are encouraged to participate in hackathons, and present tech-talks on various technological forums. Through peer learning activities, advanced learners assist slow learners. The advanced learners are encouraged to organize workshops and seminars for their peers, which will develop their managerial skills, leadership skills and overall personality. The students are also provided with the opportunity to pursue semester abroad programmes and attain global exposure. The advanced learners are encouraged to involve themselves in in-house projects, funded projects and consultancy projects.

Students of the Institution are trained on technical skills, soft skills and aptitude for placements and are given rigorous training targeted at dream companies and high-profile companies. Interested advanced learners are encouraged to take higher education training, Civil Services coaching, value-added courses and certification courses. The students are provided with additional focus to make them potentially employable.

The slow learners are provided support through remedial classes, tutorial classes, counselling and additional teaching hours. Mentor–Mentee system is in place to provide customized academic support to students. Additional support is provided through learning materials, doubt removal classes, and student help forums to improve their performance. Compensatory classes are conducted for students cannot adapt to the pace of regular classes. The individual skill sets of students are identified, and the mentors encourage students to participate in various activities, social outreach activities, and symposiums. All these measures help in improving the self-confidence of slow learners resulting in better performance in subsequent semesters.

Project Innovation and Development Centre (PRIDE), a pre-incubation Centre is an initiative to foster a passion for product building among students. Slow learners and advanced learners are given different opportunities to train themselves on specific domain knowledge. Students with product ideas are encouraged to build prototypes by supporting them with mentorship, financial assistance and technical assistance.

File Description	Document
Upload Any additional information	View Document
Paste link for additional information	View Document

2.2.2 Student - Full time teacher ratio (Data for the latest completed academic year)

Response: 16:1

File Description	Document
Any additional information	View Document

2.3 Teaching- Learning Process

2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

Response:

The curriculum places a strong emphasis on imparting practical knowledge through personal observation and interaction with real-world work. The curriculum is framed in such a way that the student learns from practice, in contrast to the conventional methodology of uncovering the concepts. The teaching pedagogy and the curriculum ensure that the students are able to understand and solve complex engineering problems and provide solutions to real-world problems in an ethical manner.

Experiential learning methods, such as discussion forums, technical and club events allow students to gain necessary knowledge about curricular aspects , economic, social, and environmental aspects of life.

Experiential Learning

Students are involved in project work, which imparts practical knowledge through personal observation and interaction with the actual workplace. **Student groups are involved in solving real engineering problems under the guidance of project supervisors and experts from the industry.** Internships and industrial visits are included to enable experiential learning in all the programmes. Mandatory industrial training at the end of the fourth semester for engineering students makes them industry ready and paves the way for deciding their careers. Every student gets an opportunity to gain industry exposure during their course of study.

The Institution focuses on research-based education, and students learn actively through research and inquiry. Students connect with researchers within the Institution and are given opportunities to engage in research within the curriculum. They conduct research, interact with researchers in their field, co-author papers, make joint publications, and present at national and international conferences.

More than 60% of the courses have a related laboratory course, which enables the students to learn through experimental learning and gain a clear understanding of the theory of working principles.

Participatory Learning

Students are encouraged to actively participate in the learning process by involving them in activity-based learning. A student-centric learning environment is created through group discussions, projects, and presentations. Classroom activities are planned in such a way that they involve discussions, quizzes, and presentations that improve the creative talents of the students. Role play, group discussions, Just a Minute, and quizzes are some of the activities used by the teachers to enhance the learning abilities of the students through participation. Case study-based learning is being used for teaching wherever possible and applicable. Students develop the ability to understand a problem, analyse and find alternative solutions, select the most feasible solution, and implement it.Participating in club activities is one way to engage in participatory learning that fosters leadership, communication, and team building skills.

Problem-based learning

A problem-based learning approach is adopted, where the students are exposed to complex real- life problems and encouraged to find solutions. Group activities are assigned to the students to enable them to work together to understand the issues and solve them as a team. The design thinking course offered by the Institution helps the students in identifying real world problems, designing a solution, implementing it and identifying the scope of development in the future. Students have actively participated in **hackathons and robotics contests** and won several prizes.
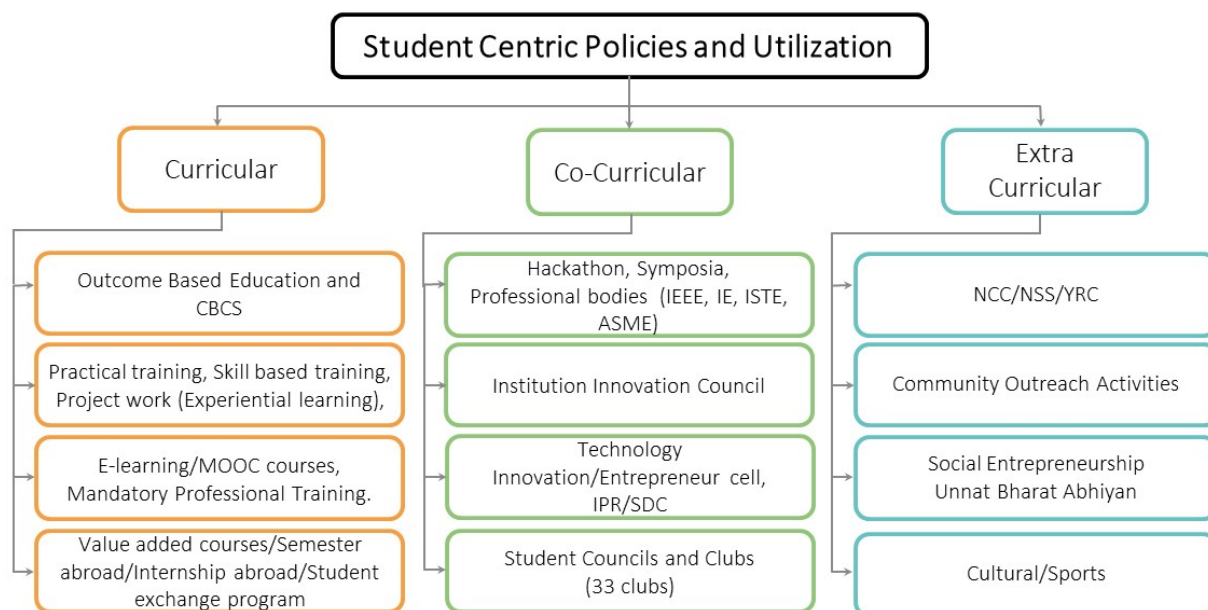
File Description	Document
Upload any additional information	**View Document**
Link for Additional Information	**View Document**	

2.3.2 Teachers use ICT enabled tools including online resources for effective teaching and learning process.

Response:

The Institution's digital infrastructure facilitates "blended learning". Classrooms are designed to meet the personal learning needs of every student, allowing the faculty members to formulate personalised educational strategies and instructions. The teaching and learning processes are further empowered by including online learning resources for the students.

The proactive approach of the Institution has resulted in a paradigm shift in teaching and learning during and after the pandemic phase. From 2020, the Institution is offering ODL programmes in the domains of Science, Commerce, Business Administration, Mathematics and English literature.

The Institution has understood the importance of adopting other pedagogical initiatives, such as virtual labs for laboratory simulation and refining the pedagogy for courses where higher-order analytical thinking skills are required. The Institution is geared up to move towards a digitized learning environment. Students are encouraged to participate in software and hardware hackathons to improve their problem-solving skills, where they solve some of the pressing problems identified by businesses and government organizations

LCD projectors are available in classrooms, demonstration rooms, and laboratories. Computing facilities are available for students and faculty in the department's laboratories and offices.

E-Platform for learning and Evaluation – Sathyabama LMS

The Institution has a Learning Management System which supports blended learning. LMS helps in delivering and managing courses, communicating with students, and evaluating and tracking their performance. The assessment tool in-built into the LMS allows the faculty members to provide assignments, quizzes, and tests to assess the students' performance and provide feedback. The LMS provides access to course materials and supports a virtual learning environment. Class presentations and e-books are shared in the LMS, which can be accessed by the students and faculty from anywhere.

E-Resources: Digital Library

Faculty and students can access the online digital resources of all subscribed journals, magazines, references, and textbooks through the Knimbus mobile applications, from anywhere, at any time, on any device. Faculty and students have 24/7 remote access to the Central Library's e-resources, which include lakhs of e-books, thousands of e-journals, and other learning resources, via a mobile app.

Online teaching facility - Zoom

The Institution has licensed more than 150 Zoom users to facilitate blended learning. Viva-voce

examinations, video conferencing and discussions, placement training, and formal meetings (academic and administrative) are conducted through the Zoom platform.

E-Classroom- Smartboard

Smartboards are available in classrooms to make the teaching and learning process interactive and highly informative.

Virtual Laboratories

The Virtual Computing Lab (VCL) allows faculty and students to remotely access software applications that are not installed on their personal computers. The main benefit of this facility is the ability to run these programmes anywhere, with 24/7 access to laboratory resources.

Media Centre

A Media Centre with state-of-the- art infrastructure has been set up to facilitate the preparation of E-content. This Centre helps the faculty create high-quality video lectures and e-content to support the online teaching-learning process.

Sathyabama Youtube Channel

The Institution has its own YouTube channel, which hosts lectures by the faculty on various subject areas and trending topics.

File Description	Document
Upload any additional information	**View Document**
Provide link for webpage describing the " LMS/ Academic management system"	**View Document**

2.3.3 Ratio of students to mentor for academic and other related issues (Data for the latest completed academic year)

Response: 20:1

2.3.3.1 **Number of mentors** ?????????????? ???????

Response: 669

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll.	[View Document](#)
mentor/mentee ratio	[View Document](#)
Circulars pertaining to assigning mentors to mentees	[View Document](#)

2.4 Teacher Profile and Quality

2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

Response: 100

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years	[View Document](#)
List of the faculty members authenticated by the Head of HEI	[View Document](#)
Any additional information	[View Document](#)

2.4.2 Average percentage of full time teachers with Ph.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D'Lit. year-wise during the last five years

Response: 60.2

2.4.2.1 **Number of full time teachers with *Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt.* year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
445	472	690	623	485

File Description	Document
List of number of full time teachers with Ph D/D M/M Ch/D N B Superspeciality/DSc/D Lit and number of full time teachers for 5 years	[View Document](#)
Any additional information	[View Document](#)

2.4.3 Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years)

Response: 7.35

2.4.3.1 **Total experience of full-time teachers**

Response: 6037

File Description	Document
List of Teachers including their PAN, designation, dept and experience details	[View Document](#)
Any additional information	[View Document](#)

2.4.4 Average percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government/Govt. recognised bodies during the last five years

Response: 28.97

2.4.4.1 **Number of full time teachers receiving awards from state /national /international level from Government/Govt. recognized bodies year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
65	43	44	63	46

File Description	Document
Institutional data in prescribed format	[View Document](#)
e-copies of award letters (scanned or soft copy)	[View Document](#)
Any additional information	[View Document](#)

2.5 Evaluation Process and Reforms

2.5.1 Average number of days from the date of last semester-end/ year- end examination till the declaration of results year-wise during the last five years

Response: 13.8

2.5.1.1 **Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
15	13	14	13	14

File Description	Document
List of Programmes and date of last semester and date of declaration of results	View Document
Any additional information	View Document

2.5.2 Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years

Response: 0.91

2.5.2.1 **Number of complaints/grievances about evaluation year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
224	52	180	25	92

File Description	Document
Number of complaints and total number of students appeared year wise	View Document
Any additional information	View Document

2.5.3 IT integration and reforms in the examination procedures and processes (continuous internal assessment and end-semester assessment) have brought in considerable improvement in examination management system of the institution

Response:

A self-service portal has been configured to facilitate the complete ICT-enabled examination process. As directed by the competent authority, the Institution has registered in the Academic Bank of Credits (ABC) portal. It has also registered in the National Academic Depository Digi locker portal to facilitate the implementation of NEP 2020.

Examination reforms by the Institution:

The exam reforms are formulated in accordance with the recommendations of AICTE and UGC. The OBE framework for assessment has been incorporated. The question papers are set based on Bloom's taxonomy levels, covering all the course outcomes relevant to the particular course. Rubrics are developed for evaluating the student's performance in theory, practical, internship, and viva-voce examinations. Sathyabama is implementing reforms in its examination procedure through the integration of IT.

Sathyabama has a well-established and efficient Examination Tracking System Called **'Sathyabama Examination Tracking System (SETS 2015)"**.   The calculation of marks, grades, percentages, Grade Point Average (GPA) and Cumulative Grade Point Average (CGPA), preparation, and analysis of results are automated using SETS2015. This software is helpful in publishing the results within 13–15 working days from the last day of the examination.

The website has a provision for submitting a soft copy of certificates for online verification, which helps reduce the time for verifying the genuineness of certificates. Credit transfers are introduced to support students who earn credits apart from the regular credits earned in their course of study. The mark statement has hidden word, hologram, QR code, security border design, and bar code as security features. The COE office takes the necessary steps to operationalize the reforms in the examination and evaluation process. Academic integrity is ensured with the use of plagiarism software to evaluate theses and dissertations and prevent plagiarism.

The office of the Controller of Examinations is equipped with a CCTV (Closed-Circuit Television) surveillance system to ensure vigilance and security..

SETS2015 has been entirely developed with the following features:

- Entry, verification, and correction of student information
- Entry, verification, and correction of courses
- Course mapping for both semester and non-semester systems
- Entry of Time table both CAE and ESE
- Hall ticket data generation
- Exam attendance and cover page printing for both CAE and ESE
- Entry of attendance after the examination
- Adding dummy numbers after the ESE examination
- Publication of results
- Submission of applications for revaluation and online fee payment
- Supports the credit system, grade system and mark system
- Printing the semester grade sheet, consolidated statement of grades, Transfer Certificate, Provisional Certificate, Degree Certificate, transcripts, and duplicate certificates
- Credit transfer facility for transfer students from other institutions/Semester Abroad Programme/ Student Exchange Programme

Impact of the Reforms

- Declaration of results within the stipulated time
- The malpractices in the examination have been considerably reduced
- Encoding and decoding of answer booklets ensures confidentiality and unbiased evaluation
- Improvements in reliability, efficiency, security, transparency, confidentiality, and accuracy of the exam process
- A timely issue of certificates helps final year students in their placements and higher studies
- The inclusion of enhanced security features has nullified the chances of manipulation and duplication

File Description	Document
Year wise number of applications, students and revaluation cases	[View Document](#)
Any additional information	[View Document](#)
Link for additional information	[View Document](#)

2.5.4 Status of automation of Examination division along with approved Examination Manual

Response: 100% automation of entire division & implementation of Examination Management System (EMS)

File Description	Document
Current manual of examination automation system and Annual reports of examination including the present status of automation	[View Document](#)
Current Manual of examination automation system	[View Document](#)
Any additional information	[View Document](#)
Annual reports of examination including the present status of automation	[View Document](#)

2.6 Student Performance and Learning Outcomes

2.6.1 The institution has stated learning outcomes (generic and programme specific)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents

Response:

Sathyabama Institute of Science and Technology has adopted Outcome Based Education, ten undergraduate engineering programmes, and one postgraduate management programme are accredited by the National Board of Accreditation.

The curriculum is designed and revised based on the programme outcomes , programme specific outcomes and the requirements of the stakeholders. The draft curriculum is developed by the Programme Assessment Committee (PAC), which includes the department head and senior faculty members. Subsequently, the draft curriculum is submitted to the Department Advisory Committee (DAC) for suggestions. After incorporating the suggestions, the curriculum is submitted to the Board of Studies (BOS) for further discussions and recommendations. The curriculum is vetted before the academic council and then submitted to the Board of Management for approval.

Both direct and indirect methods are used to evaluate the attainment of Course Outcomes (COs), Programme Outcomes (POs), and Programme Specific Outcomes (PSOs). The direct method includes the

assessment of Course Outcomes in Continuous Assessment Examinations (CAE) , End Semester Examinations ,Assignments, Case Studies, Quizzes, and Mini-projects. The indirect method of assessment is done through course exit surveys, graduate exit surveys, alumni surveys, and employer surveys.

The End Semester Examination is the tool used to assess all the Course Outcomes of theory and laboratory courses. The percentage of marks obtained by the students in the End Semester Examination in each course is taken as a measure to evaluate Course Outcomes. To develop the in-depth subject knowledge, assignments are given for each course. Marks earned in model practical examinations and end-of-semester practical examinations, are used to calculate CO attainment. Marks obtained by the student in project reviews and viva voce examinations are also taken into account for CO attainment.

Graduate attributes (GA), also known as programme outcomes, are the characteristics and skills the University expects students to develop during their time at the Institution. It also includes attitudes towards society, environment and ethics, apart from the technical and domain specific knowledge that a student will acquire.

POs and PSOs are made public to the stakeholders and are available in the following:

- POs and PSOs are published on the Institution's website and also in the curriculum to educate the students
- Programme outcomes are also published in the Institution's Newsletters
- The course outcomes of every course are mentioned in the faculty log books maintained by the faculty
- The Vision and Mission of the Institution, the vision and mission of the department, the Programme Educational Objectives (PEO), Programme Outcomes (PO)s and Programme Specific Outcomes (PSO)s of every department are displayed in prominent places
- Notice boards kept in the laboratories also provide information on the Programme Outcomes, Programme Specific Outcomes and the Course Outcomes
- The lab manuals include programme outcomes, program-specific outcomes, and course outcomes
- The course file maintained by the faculty for each course highlights the Programme Outcomes, Programme specific Outcomes along with the Course Outcomes
- Department brochures contain information on POs and PSOs
- The course outcomes will be discussed in the first lecture class of each course

File Description	Document
Upload COs for all courses (exemplars from Glossary)	[View Document](#)
Upload any additional information	[View Document](#)
Paste link for Additional Information	[View Document](#)

2.6.2 Attainment of Programme outcomes, Programme specific outcomes and course outcomes are evaluated by the institution

Response:

Outcome Based Education is practiced by the Institution for the delivery of the programmes. The knowledge, skills, and attitudes that students gain at the completion of a programme are given the utmost importance, and the curriculum, pedagogy, and assessment practices are designed accordingly. Activities for the students are designed in a manner that helps them achieve these outcomes. Programme Educational Objectives and Programme Specific Outcomes are formulated in line with the mission of the Institution, with due consideration to the feedback obtained from the stakeholders.

Course Outcomes are framed and finalized after deliberations with various department-level committees, discussed in the Board of Studies and specified in the syllabus of every course of a programme. All the questions in the Continuous Assessment Examinations (CAE) and End Semester Examinations (ESE) are mapped with the Course Outcomes. Program Assessment Committee meets twice in each semester and reviews the CO mapping with the questions in CAEs and in assignments. Higher order thinking skills are mapped with assignments in theory courses, complex engineering problems with Laboratories. Skills and Attitudes are mapped at relevant places in the assessment strategies. Rubrics are formulated and communicated to the students before the commencement of the examinations. These rubrics reflect the performance indicators as found in the Examination Reforms Policy manual.

A systematic approach is followed to evaluate the attainment of COs, POs and PSOs. The Department Advisory Committee and Program Assessment Committee periodically review and set the threshold for the attainment of COs, POs, and PSOs. Attainment of COs, POs and PSOs are calculated, and discussed in these committees. Internal and external audit committees meet once a year to review the levels of COs, POs and PSOs attainment. Measures are taken against the non-attainment of COs, POs and PSOs and an impact analysis is carried out, which is a potential component for further improvement of content/curriculum design and delivery. At the end of each semester, CO attainment is calculated for the courses using direct and indirect methods. At the end of the programme, PO and PSO attainment is calculated using a specially developed formulae for the attainment of the COs, POs and PSOs.

The direct method includes the assessment of the attainment of Course Outcomes in Continuous Assessment Examinations (CAE) and End Semester Examinations, Assignments, Case Studies, Quizzes, and Mini-projects.

Indirect assessment and the weight given to each stakeholder survey is described below:

The weight given to each stakeholder survey is described below:

- Graduate Exit Survey is given a weightage of 60%
- Alumni Survey is given 30% weightage
- Employer Survey is given 10% weightage

Calculation of POs/PSOs Attainment through indirect methods - The formula for calculating is given below

- **PO/PSO Indirect Attainment = 0.60*exit survey + 0. 10* employer survey+ 0.30* alumni survey**

The final attainment for a PO/PSO is calculated by considering 80% of direct attainment and 20% of indirect attainment.

- **The formula used for calculating the overall attainment of PO/PSO is = 0.8 * direct attainment + 0.2 * indirect attainment**
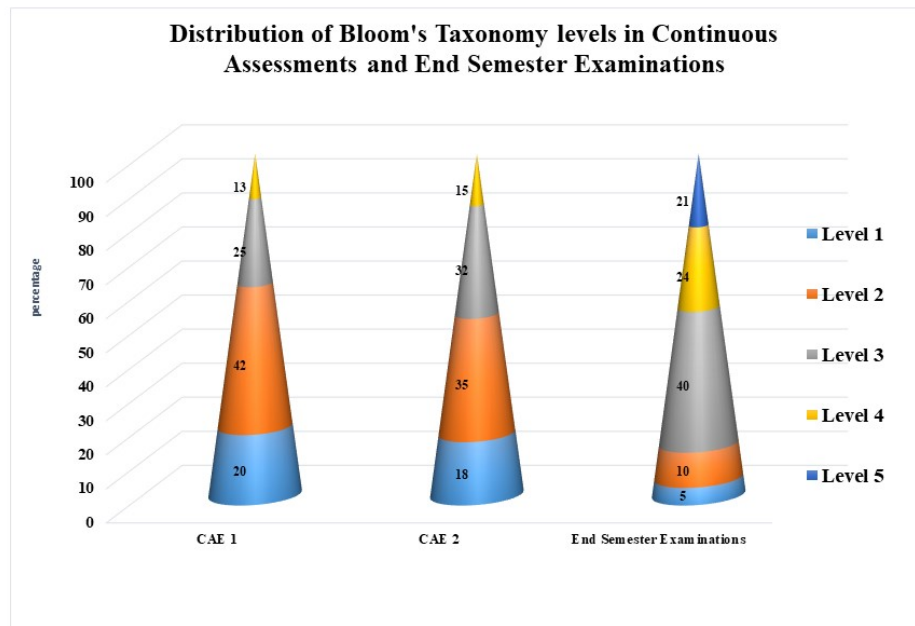
Distribution of Bloom's Taxonomy levels in Continuous Assessments and End Semester Examinations

File Description	Document
Upload any additional information	View Document
Paste link for Additional Information	View Document

2.6.3 Pass Percentage of students(Data for the latest completed academic year)

Response: 96.62

2.6.3.1 Total number of final year students who passed the examination conducted by Institution.

Response: 2571

2.6.3.2 **Total number of final year students who appeared for the examination conducted by the Institution.**

Response: 2661

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination	[View Document](#)
Upload any additional information	[View Document](#)
Paste link for the annual report	[View Document](#)
Link fo any additional information	[View Document](#)

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response:

File Description	Document
Upload database of all currently enrolled students	[View Document](#)
Upload any additional information	[View Document](#)

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

3.1.1 The institution's Research facilities are frequently updated and there is a well defined policy for promotion of research which is uploaded on the institutional website and implemented

Response:

Sathyabama Institute of Science and Technology gives more emphasis to research as it is aware of the significance of research for sustainable growth and development. It is committed to the promotion of quality research, innovation, and entrepreneurship.

To address the global challenges concerning social, economic, and environmental issues, the Institution is involved in breakthrough research and innovation in the thrust areas of Science and Technology. The Institution has world-class research facilities that complement and augment the research strength of the Institution. Research facilities, including laboratories and advanced equipment, are regularly upgraded. There is a policy in place for the promotion of research in the Institution and it is uploaded on the institution's website.

To instill a research culture and establish a research promoting environment in the Institution, it has a policy to provide guidelines for the research activities at Sathyabama. It spells out the importance of the efforts towards research, the rules as to the timely upgradation of the research infrastructure, involvement in sponsored research focusing on societal needs, Institutional seed funding, and incentives for the research outcomes in terms of publications, patents, and products. Sathyabama has instilled a culture of research and innovation among the faculty and students. Faculty are engaged in various research assignments through sponsored and consultancy projects, and the outcomes are evident in publications, patents and products.

The policy for the promotion of research provides rules regarding the research

- All faculty members shall conduct research in the thrust areas of research
- Faculty members shall regularly publish research articles in reputed journals
- Research publications of faculty members have to be original and comply with publication ethics
- Students' projects shall lead to research publications in a journal indexed in SCOPUS or the Web of Science
- Faculty will be given the opportunity to conduct research at prestigious national and international institutions
- Sabbaticals leave are provided to faculty members who wish to pursue postdoctoral research at international universities

SPONSORED RESEARCH:

- Faculty members shall identify interdisciplinary research in their chosen field of research .The faculty of all the departments of the university shall tie-up with industries and corporate bodies to undertake funded research in emerging and industry relevant areas
- Every faculty member with a doctorate shall apply for projects funded by national and international agencies

- Every faculty member in the professor cadre shall have a minimum of one government-funded project
- The Institution is responsible for providing the basic infrastructure needed to conduct either internally or externally funded research

To promote a culture of research and innovation among faculty and students, Sathyabama provides Seed Grants. Innovative ideas that provide solutions to societal problems in areas such as Agriculture, Healthcare, Energy and Waste Management are given more importance and funded by the Institution. The Institution innovation Council at Sathyabama plays an active role in directing the efforts of the Institution towards imparting a culture of innovation on the campus.

The policy provides for the constitution of a Research Committee to review the research and development activities of the Institution.

File Description	Document
Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	View Document
Any additional information	View Document
URL of Policy document on promotion of research uploaded on website	View Document

3.1.2 The institution provides seed money to its teachers for research (average per year, INR in Lakhs)

Response: 285.11

3.1.2.1 **The amount of seed money provided by institution to its faculty year-wise during the last five years (INR in lakhs).**

2021-22	2020-21	2019-20	2018-19	2017-18
411.03	381.63	273.89	215.54	143.48

File Description	Document
Minutes of the relevant bodies of the University	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	[View Document](#)
Any additional information	[View Document](#)

3.1.3 Percentage of teachers receiving national / international fellowship / financial support by various agencies for advanced studies / research during the last five years.

Response: 3.8

3.1.3.1 **The number of teachers who received national / international fellowship / financial support by various agencies for advanced studies / research year-wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
45	12	34	41	39

File Description	Document
Institutional data in prescribed format	[View Document](#)
e-copies of the award letters of the teachers	[View Document](#)
Any additional information	[View Document](#)

3.1.4 Number of JRFs, SRFs, Post Doctoral Fellows, Research Associates and other research fellows enrolled in the institution during the last five years.

Response: 237

3.1.4.1 **The Number of JRFs, SRFs, Post Doctoral Fellows, Research Associates and other research fellows enrolled in the institution year-wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
66	30	34	51	56

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

3.1.5 Institution has the following facilities to support research

1. Central Instrumentation Centre
2. Animal House/Green House
3. Museum
4. Media laboratory/Studios
5. Business Lab
6. Research/Statistical Databases
7. Mootcourt
8. Theatre
9. Art Gallery
10. Any other facility to support research

Response: A. 4 or more of the above

File Description	Document
Upload the list of facilities provided by the university and their year of establishment	[View Document](#)
Upload any additional information	[View Document](#)
Paste link of videos and geotagged photographs	[View Document](#)

3.1.6 Percentage of departments with UGC-SAP, CAS, DST-FIST, DBT, ICSSR and other recognitions by national and international agencies (Data for the latest completed academic year)

Response: 38.46

3.1.6.1 **The Number of departments with UGC-SAP, CAS, DST-FIST , DBT, ICSSR and other similar recognitions by national and international agencies.**

Response: 10

File Description	Document
Institutional data in prescribed format	[View Document](#)
e-version of departmental recognition award letters	[View Document](#)
Any additional information	[View Document](#)

3.2 Resource Mobilization for Research

3.2.1 Extramural funding for Research (Grants sponsored by the non-government sources such as industry, corporate houses, international bodies for research projects) endowments, Chairs in the University during the last five years (INR in Lakhs).

Response: 90.34

3.2.1.1 **Total Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year-wise during the last five years (INR in Lakhs).**

2021-22	2020-21	2019-20	2018-19	2017-18
24.56	1.03	60.900	2.60	1.250

File Description	Document
Institutional data in prescribed format	[View Document](#)
e-copies of the grant award letters for research projects sponsored by non-government	[View Document](#)
Any additional information	[View Document](#)

3.2.2 Grants for research projects sponsored by the government agencies during the last five years (INR in Lakhs).

Response: 5143.78

3.2.2.1 **Total Grants for research projects sponsored by the government agencies year-wise during the last five years (INR in Lakhs).**

2021-22	2020-21	2019-20	2018-19	2017-18
1973.81	337.09	600.62	362.35	1869.91

File Description	Document
Institutional data in prescribed format	[View Document](#)
e-copies of the grant award letters for research projects sponsored by government	[View Document](#)
Any additional information	[View Document](#)

3.2.3 Number of research projects per teacher funded by government and non-government agencies

during the last five years

Response: 1.33

3.2.3.1 **Number of research projects funded by government and non-government agencies during the last five years.**

Response: 219

3.2.3.2 **Number of full time teachers worked in the institution year-wise during the last five years..**

Response: 821

File Description	Document
Supporting document from Funding Agency	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)
Paste Link for the funding agency website	[View Document](#)

3.3 Innovation Ecosystem

3.3.1 Institution has created an eco system for innovations including Incubation centre and other initiatives for creation and transfer of knowledge.

Response:

The Sathyabama Institute of Science and Technology has a strong innovation ecosystem that has facilitated many start-ups. Sathyabama has established a Technology Business Incubator supported by NSTEDB-DST and a MSME Business Incubator for developing and promoting entrepreneurship. Sathyabama TBI supports startups across the country working in the areas of the blue economy and sustainability. The Institution has also established a Centre for Innovation and Technology Transfer to nurture deep tech start-ups and facilitate product and technology commercialisation.

The Technology Business Incubator extends the following services to the incubatees:

- Training and mentoring
- Prototype Development and Testing
- Networking with bankers, venture capitalists, and angel funding agencies
- Venture Financing
- Facilitating Technology Commercialization
- Technology related IPR issues, legal and quality assurance services
- Assistance in the marketing of products and services

Students with entrepreneurial drive are encouraged to develop new and innovative business ideas. The viable ideas are chosen, and all of the aforementioned supports are provided until the incubatee matures into a fully self-sustaining entity. A seed fund is provided for all the feasible ideas of faculty and students.

The Sathyabama TBI, in collaboration with DST-TIFAC, has been designated as the TIFAC TAP CENTRE for academic collaboration and technological intervention in support of faculty members' expertise in engineering, aquaculture, and plastic cluster.

The incubatees receive pre-incubation and incubation services such as seed funding, legal and patent support, physical space, and logistical support. The incubatees can use all the resources and facilities available on campus.

Start-up summits are organised to attract funding from angel investors and venture capitalists. Awareness programmes on entrepreneurship, innovation, and start-ups are conducted for students, faculty and research scholars to promote start-up culture in the Institution.
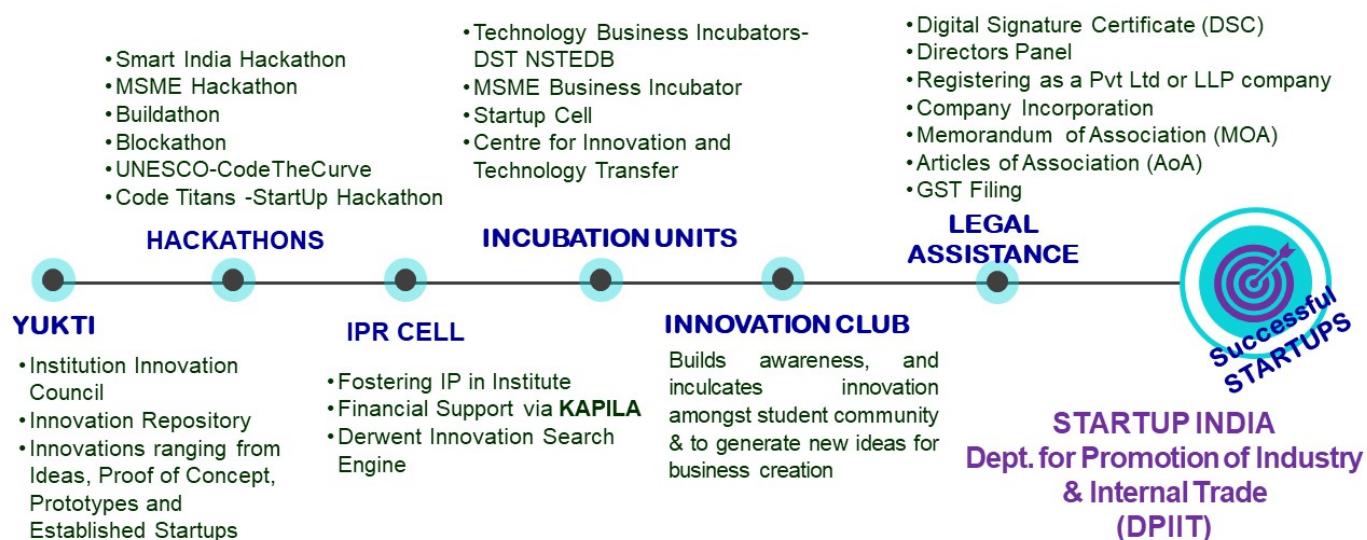
The National Innovation and Startup Policy (https://sathyabama-startup.com/wp-content/uploads/2021/01/startup_policy_2019-NISP.pdf) is being implemented to engage students and faculty in the realms of innovation and entrepreneurship.

The Institution has adopted and customised a National Innovation and Startup Policy (https://sathyabama-startup.com/wp-content/uploads/2022/11/SIST-Innovation-and-Startup-Policy-2022.pdf)for fostering innovation and start up culture among students and faculty. Sathyabama intends to strengthen the innovation and start-up eco system on the campus, enhance institute partnerships, mentor and nurture the innovative ideas of students and faculty, provide networking for funding, and transform them to successful entrepreneurs.

The incubation and pre-incubation facilities for the faculty and students are available at the campus through the Centre for Innovation and Technology Transfer. The Institution's start-up policy for students and faculty encourages students to participate in start-up-related activities, training, and value-added courses.

The Sathyabama Institution Innovation Council (IIC), established in 2018, is functioning as per the guidelines of the Ministry of Education Innovation Cell (MIC). The innovation ecosystem is further strengthened with the coordinated efforts of Sathyabama IIC, TBI, and Start-up Cell of the Institution. Sathyabama IIC holds workshops on ideation, intellectual property, and entrepreneurship in accordance with the MIC calendar. Recently, a regional meet of IICs in the Southern Zone was hosted, where around 600 participants from various colleges and universities participated in the deliberations. Currently, the Institution has incubated 34 start-ups, few of which have received DPIIT recognition.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

3.3.2 Number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development during the last five years.

Response: 366

3.3.2.1 **Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development year-wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
95	80	136	42	13

File Description	Document
Report of the event	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

3.3.3 Number of awards / recognitions received for research/innovations by the institution / teachers / research scholars / students during the last five years.

Response: 480

3.3.3.1 **Total number of awards / recognitions received for *research /* innovations won by institution / teachers / research scholars / students year-wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
143	53	106	108	70

File Description	Document
Institutional data in prescribed format	View Document
e- copies of award letters	View Document
Any additional information	View Document

3.4 Research Publications and Awards

3.4.1 The Institution ensures implementation of its stated Code of Ethics for research through the following: 1. Inclusion of research ethics in the research methodology course work 2. Presence of Ethics committee 3. Plagiarism check through software 4. Research Advisory Committee

Response: A. All of the above

File Description	Document
Code of ethics for Research document, Research Advisory committee and ethics committee constitution and list of members on these committees, software used for Plagiarism check, link to Website	View Document
Any additional information	View Document

3.4.2 The institution provides incentives to teachers who receive state, national and international recognitions/awards 1.Commendation and monetary incentive at a University function 2.Commendation and medal at a University function 3. Certificate of honor 4.Announcement in the Newsletter / website

Response: A.. All of the above

File Description	Document
Institutional data in prescribed format	View Document
e- copies of the letters of awards	View Document
Any additional information	View Document

3.4.3 Number of Patents published / awarded during the last five years.

Response: 451

3.4.3.1 **Total number of Patents published / awarded year-wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
232	80	93	21	25

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

3.4.4 Number of Ph.D's awarded per teacher during the last five years.

Response: 7.48

3.4.4.1 **How many Ph.D's are awarded within last five years.**

Response: 718

3.4.4.2 **Number of teachers recognized as guides during the last five years**

Response: 96

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)
URL to the research page on HEI web site	[View Document](#)

3.4.5 Number of research papers per teachers in the Journals notified on UGC website during the last five years

Response: 6.55

3.4.5.1 **Number of research papers in the Journals notified on UGC website during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
1439	1306	1357	924	875

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

3.4.6 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years

Response: 5.5

3.4.6.1 **Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year-wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
1068	927	998	1057	901

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

3.4.7 E-content is developed by teachers :

1. For e-PG-Pathshala
2. For CEC (Under Graduate)
3. For SWAYAM
4. For other MOOCs platform
5. Any other Government Initiatives
6. For Institutional LMS

Response: B. Any 4 of the above

File Description	Document
Institutional data in prescribed format	[View Document](#)
Give links or upload document of e-content developed	[View Document](#)
Any additional information	[View Document](#)

3.4.8 Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed

Response:

File Description	Document
Bibliometrics of the publications during the last five years	[View Document](#)
Any additional information	[View Document](#)

3.4.9 Bibliometrics of the publications during the last five years based on Scopus/ Web of Science - h-index of the Institution

Response:

File Description	Document
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	[View Document](#)
Any additional information	[View Document](#)

3.5 Consultancy

3.5.1 Institution has a policy on consultancy including revenue sharing between the institution and the individual and encourages its faculty to undertake consultancy.

Response:

The Institution aims to strengthen the Institute-Industry interaction through active involvement in consultancy services. Consultancy projects are undertaken to identify and solve the problems of software and manufacturing industries and research organizations. The Institution values the efforts of faculty undertaking consultancy activities and encourages them by rewarding them appropriately. The consultancy activity provides an opportunity for knowledge transfer and expertise sharing between the Institution and industries, resulting in productive and successful relationships. Major consultancy activities undertaken by our faculty and scientists include material characterization studies, synthesis of new and advanced materials, fabrication of dielectric materials, animal studies, research surveys, mentoring services, algorithm development, software testing, mobile/web application development, sensor development, model development, structural design, quality assessment, molecular studies, analysis and interpretation of microscopic/Non Destructive Testing images, and weld/casting flaw/defect characterization.

The Consultancy Policy document has detailed guidelines on the various aspects covered by consultancy projects/activities. This policy provides a framework for the faculty who are involved in, or wish to be involved in, consultancy either through Institutional consultancy as "Service and/or complete service Consultancy" or in a personal capacity or in an individual capacity as "Advisory Consultancy". The policy primarily encourages the faculty to establish alliances with the industry and engage in research and consultancy activities.

The policy permits revenue sharing between the faculty and the Institution in the proportions of 90% and

10%, respectively, for advisory consultancy where the clients utilise the advice and consultancy services of the faculty without using Institutional infrastructure/facilities/equipment/consumables/materials. The policy allows revenue sharing between the faculty and the Institution in the proportions of 60% and 40%, respectively, for service consulting where the client uses the consultancy of a faculty or Institution's equipment alone without using consumables or other materials.

The following guidelines govern all research and non-research consultancies conducted at the Institution:

- There should be a demonstrable benefit to both Institution and the Principal investigator from the consultancy through increased income, enhanced reputation, and/or expanding the expertise of the faculty member
- The consultancy must not be in conflict with the policies, functions, objectives, or interests of the Institution or damage the Institution's reputation
- All the consultancy projects operated at Sathyabama Institute of Science and Technology are required to include 5% overhead charges, due to the utilisation of the infrastructure facilities offered by the Institution
- Approval of consultancy activity: Permission must be obtained prior to carrying out the consultancy work during the regular working days. The decision concerning whether an individual faculty member is allowed to perform consultancy work is to be taken at the Institution level
- The principal consultant is responsible for ensuring satisfactory progress and completion of the work once the consultancy project is approved
- On completion of the consultancy project, a detailed report has to be prepared and submitted by the concerned faculty

File Description	Document
Upload soft copy of the Consultancy Policy	[View Document](#)
Upload minutes of the Governing Council/ Syndicate/Board of Management related to consultancy policy	[View Document](#)
Upload any additional information	[View Document](#)
Paste URL of the consultancy policy document	[View Document](#)

3.5.2 Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).

Response: 366.97

3.5.2.1 **Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).**

2021-22	2020-21	2019-20	2018-19	2017-18
90.172449	119.0979	75.8745	17.5835	64.2385

File Description	Document
Institutional data in prescribed format	View Document
Audited statements of accounts indicating the revenue generated through consultancy	View Document
Any additional information	View Document

3.6 Extension Activities

3.6.1 Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years.

Response:

Sathyabama has always been a socially responsible Institution and works towards societal welfare. The Institution promotes regular engagement of faculty, students, and staff with the neighbourhood community for their holistic development. Every year, outreach programmes are organised in which students and staff participate voluntarily.

Sensitization programmes are conducted for students and the public on various issues relating to the Sustainable Development Goals (SDGs) which includes gender equality, poverty, clean water and sanitation, health and well-being, clean energy, reducing inequalities, quality education, environment protection, and climate change. Training programmes are provided to students to develop awareness on environmental issues and encourage responsible behaviour to adopt a sustainable way of life and create a sustainable community.

The Community Development Club of the Institution is functioning with the objective of inculcating the spirit of service among students. Various awareness programs, workshops, rallies, and road shows on "green environment" ,"gender", "traffic rule awareness" ,"welfare of the elderly" and "protection of the rights of persons with disabilities" are organized. Under the Unnat Bharath Abhiyan, a Government of India initiative to develop villages, the Institution has adopted six villages and is helping them solve some of their issues through technological interventions. Students visit these villages and participate in community development activities.

The Institution's ECO Club is dedicated to raising environmental awareness and protecting the environment. Students of this club regularly organise programmes relating to harmful activities that affect the environment and their effect on and prevention of the same.

Students are engaged in continuous voluntary activities which includes beach cleaning, lake restoration activities, and beautification of public places in the city to maintain cleanliness in and around the community. The students create awareness about the role of a clean environment in human health and contribute to the National Swachh Bharat Abhiyan. Awareness programmes on various legal issues, constitutional rights, and obligations are organised for students to educate them about their rights and responsibilities.

Extension and outreach activities are conducted to sensitize the students towards social issues on domestic violence, dowry, child abuse, gender stereotypes, and female infanticide.

The Institution has a National Service Scheme and National Cadet Corps Units. The NSS Cell, in collaboration with different agencies, trusts, NGOs, and hospitals, leads extension activities to address local issues and sensitize students.

Several programmes are conducted to promote health and wellness among students, faculty, and the nearby community. Awareness programmes are conducted on various physiological and psychological health issues and lifestyle diseases including hypertension, anxiety, diabetes, stress, and depression. Awareness programmes on cancer, particularly breast cancer and cervical cancer, are conducted for women. Dental camps and medical camps are organised for the benefit of the people in the neighbouring community. Students and faculty from Sathyabama Dental College and Hospital organise dental check-ups in the adopted villages and peripheral centres. They also organise public awareness programmes about oral hygiene.

Students and teachers are motivated to come up with innovative projects and solutions to societal challenges. The Institution funds such projects.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

3.6.2 Number of awards received by the Institution, its teachers and students from Government /Government recognised bodies in recognition of the extension activities carried out during the last five years

Response: 34

3.6.2.1 **Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
2	22	3	2	5

File Description	Document
Institutional data in prescribed format	[View Document](#)
e-copy of the award letters	[View Document](#)
Any additional information	[View Document](#)

3.6.3 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

Response: 203

3.6.3.1 **Number of extension and outreach programs conducted by the institution those through NSS/NCC, Government and Government recognised bodies during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
68	21	41	36	37

File Description	Document
Reports of the event organized	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

3.6.4 Average percentage of students participating in extension activities listed at 3.6.3 above during the last five years

Response: 33.89

3.6.4.1 **Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
6203	4133	3155	4560	3275

File Description	Document
Report of the event	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

3.7 Collaboration

3.7.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship per year

Response: 137

3.7.1.1 **Total number of Collaborative activities with other institutions / research establishment / industry for research and academic development of faculty and students year-wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
239	209	110	57	70

File Description	Document
Institutional data in prescribed format	[View Document](#)
Copies of collaboration	[View Document](#)
Any additional information	[View Document](#)

3.7.2 Number of functional MoUs with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

Response: 201

3.7.2.1 **Number of functional MoUs with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research year-wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
41	49	24	63	24

File Description	Document
Institutional data in prescribed format	[View Document](#)
e-copies of the MoUs with institution/ industry	[View Document](#)
Any additional information	[View Document](#)

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The institution has adequate facilities for teaching - learning. viz., classrooms, laboratories, computing equipment, etc.

Response:

Sathyabama Institute of Science and Technology has world-class infrastructure facilities to cater to the needs of the students and faculty. The Institution spreads over 134 acres of green campus, housing state-of-the-art facilities.

Classrooms and other infrastructure for teaching-learning support

The Institution has exceptional teaching facilities that provide students with the most satisfying learning experience. The campus has an admirable academic ambiance with adequate classrooms, laboratories, centres of excellence, libraries, seminar halls, mega classrooms, ICT-enabled smart classrooms, and auditoriums. The Institution has 276 classrooms, 6 seminar halls, 11 auditoriums, 12 conference halls, 2 indoor stadiums, 1 open-air theatre, and more than 200 laboratories in varied areas of Science, Engineering, and Technology.

Laboratories

The laboratories are equipped with advanced facilities to promote experiential learning for the students. The state-of-the-art laboratories with the most recent facilities allow our students and faculty to perform cutting-edge research and studies. Program-specific infrastructures like Aero Hanger, Industry Robot, Windmill generation unit, and MOOT Court are available for students pursuing Aeronautical Engineering, Mechanical Engineering, Electricals, Electronics Engineering, and Law, respectively. To cater to the needs of the courses in the curriculum, Centres of Excellence are established in association with CISCO, HCL Technologies, Capgemini, Virtusa, GE-Healthcare, Infosys, Stratasys, NI Labview Academy, and Vectorworks. Research facilities available at the research centres are also used by faculty and students to pursue their research and project work.

The Sathyabama Centre for Advanced Studies is a state-of-the-art facility established with advanced facilities that bring together both academic and research expertise. The Centre houses the following facilities (https://sist.sathyabama.ac.in/sist_naac/4.1.1/VID-20221212-WA0010.mp4):

- **Artificial Intelligence Laboratory** with supercomputing facilities to train and engage students and researchers in cutting-edge AI algorithms and their applications. The facility houses a 95-node supercomputer with 9.6 petaFLOPS of AI performance
- **The Drone and Robotics Experimentarium (DARE) Lab** consists of Robotics Workstations, swarm drones, quadruped robots, humanoid robots, and autonomous rovers that are fully programmable. The workstations come with Wi-Fi and Bluetooth communication to interface with the drones and robots
- **Advanced characterization facilities-** X-ray Diffractometer (XRD), Field Emission Scanning Electron Microscope (FESEM), and High-Resolution Scanning Transmission Electron Microscope (HRSTEM) are used for understanding the structure, composition, shape, size, and morphology of

different kinds of materials at the nanoscale
  - **Metaverse Studio** transforms creativity and imagination into interactive and immersive experiences. The studio supports XR designers, XR engineers, and game developers with cutting-edge, high-performance development systems and head-mounted displays. The studio also houses an immersion zone to fully engage the designers and developers in the metaverse
  - **Media Centre** with state-of-the-art infrastructure has been set up to facilitate the preparation of e-content. This centre helps the faculty create high-quality video lectures and e-content to support the online teaching-learning process
  - **Makerspace** is a state-of-the-art additive manufacturing facility established in association with Stratasys to foster innovations in young engineers, facilitate design thinking, and develop prototypes
  - **The Centre for Innovation and Technology Transfer** supports students, scientists, faculty, alumni, and external entrepreneurs in creating successful deep-tech startups

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

4.1.2 The institution has adequate facilities for cultural activities, yoga, games and sports (indoor & outdoor); (gymnasium, yoga centre, auditorium, etc.,)

Response:

Sports play a very vital role in the growth and development of students. Sports are not only good for the mental health and fitness of the students, they also help them learn numerous life skills and develop their overall personality. Sathyabama gives equal importance to sports and academics for the all-round development of students and greatly supports the career of students who are interested in sports. Students are provided with excellent sports facilities and are trained and motivated to participate in state and national level competitions. Sports facilities available on campus include play courts and playgrounds for volleyball, basketball, kabaddi, tennis, handball, football, hockey, kho-kho, cricket, and other athletic games. Indoor game facility are also available for chess, carom, badminton and table tennis.

The adorable sports infrastructure on campus serves as a vital support system that motivates students towards sports. Recently, an air-conditioned indoor stadium was constructed with state-of-the-art facilities to host several indoor tournaments.

Our students are encouraged to participate in national and international tournaments, and they have brought laurels to the Institution by winning several trophies. In association with the Association of Indian Universities, Sathyabama has hosted several tournaments related to chess, taekwondo, cricket, squash, and basketball. Our sports grounds, courts, and other facilities are used by organisations in the nearby locality to conduct their sports events and competitions. All-India FIDE-rated chess tournaments, the South Zone Inter-University Women's Cricket Tournament, the Wheel Chair Basketball U-23 Team Training Camp, and the All-India Inter-Squash Rackets Men and Women's Tournaments are some of the major events hosted by the Institution.

 A full-time Sports Director and other Physical Directors are appointed to coach students in various sports. Students with an excellent track record in sports are given admission under the "Sports Quota".

Gymnasium

Sathyabama has well-equipped gymnasiums separately for boys and girls, which can be utilised in the morning and evening. Faculty members are also allowed to use the facility. Trainers and dieticians are available to guide the students and staff with proper training and workouts to maintain their health and diet.

Yoga Centre

There is a Yoga Centre, in which yoga sessions are conducted by trained yoga professionals for faculty and students, to help them maintain a healthy mind and body. Yoga classes are conducted in association with the World Community Centre as a measure to promote health and wellness among students. Yoga Day is celebrated every year to create awareness about the importance of yoga in maintaining our physical and mental health.

Sports and Cultural Facilities (https://www.sathyabama.ac.in/campus-life/sports)

Institution has 11 Auditoriums with excellent thermal and acoustic facilities ,12 Conference halls with admirable facilities and a Open Air Theatre with 1000 seating capacity.

 Spacious auditoriums with good audio-visual facilities provide a better ambiance for conducting various events for students throughout the year.(https://www.sathyabama.ac.in/photo-gallery/Sathyabama_Indoor_Stadium),(https://www.sathyabama.ac.in/campus-life/auditoriums-conference-facility),(https://www.sathyabama.ac.in/campus-life/arts-and-culture)

File Description	Document
Upload any additional information	[View Document](#)
Geotagged pictures	[View Document](#)
Paste link for additional information	[View Document](#)

4.1.3 Availability of general campus facilities and overall ambience

Response:

Sathyabama Institute of Science and Technology offers world-class facilities to meet the needs of students as well as the institution's development. The campus has a beautiful landscape with trees planted all around it, plants of different species, and a small water body that serves as a home for birds of different species during their seasonal migration.

 The Institution has a sprawling campus spread over 134 acres and has the following infrastructure

facilities (https://sist.sathyabama.ac.in/sist_naac/facilities/SIST_Facilities.pdf) to meet academic needs:

- The Institution has 282 classrooms and seminar halls equipped with ICT facilities
- Central Library with 1,50,156 sq. ft construction area, with the latest books, journals, technical E-books, and E-journals
- Every department in the campus has well-equipped laboratories with advanced facilities
- The Institution provides transportation facilities for students and faculty. More than 120 buses are provided for the commute of students and faculty to the campus, which covers almost all parts of the city and nearby suburbs
- Separate hostels for boys and girls are spread over an area of 16,75,000 square feet with air conditioners, prayer halls, 24/7 medical aid, fitness centres, mess, dining halls, ATMs, laundry, and general stores
- A Centralised kitchen with 10 dining halls, each accommodating 700 people at a time. A biogas plant is installed near the kitchen, which converts the food waste to biogas that is used for cooking
- A fitness studio and gym with modern equipment
- On campus, a child care centre with CCTV facility for monitoring the children is available
- Medical rooms with doctors and nurses are available in hostels for emergency medical requirements. The Institution also has a general hospital with facilities for the medical needs of the students and faculty.
- Bank and ATMs are available on campus
- Canteens with a variety of cuisines, including South Indian, North Indian, Chinese, Italian, and French
- Research Centres in varied thrust areas, including nanoscience and nanotechnology, energy research, climate change studies, waste management, ocean research, aquaculture, remote sensing, drug discovery, and animal research, are established on the campus to carry out basic and applied research
- The Institution has 11 auditoriums, 2 indoor stadiums, and 1 open-air theatre to meet the sports and cultural requirements
- Stationery shop to cater to the needs of students and faculty
- Sewage Treatment Plant to recycle the wastewater
- Sports facilities- Play courts, playgrounds, and an air-conditioned indoor play court
- Rainwater harvesting facility
- Common rooms for students and faculty
- 24/7 CCTV facility to ensure safety on campus
- Eco-friendly vehicles to commute within the campus
- Prayer halls

The infrastructure is designed to accommodate differently-abled students and staff. Almost all buildings have facilities such as ramps, rails, lifts, and special toilets to accommodate the special needs of differently abled people. Though located within city limits, the campus has a fresh and green landscape throughout its area, with wide concrete internal roads connecting various departments and amenities.

The entire campus is equipped with a Wi-Fi facility, enabling the students to learn and connect anytime, anywhere.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

4.1.4 Average percentage of expenditure for infrastructure augmentation excluding salary during the last five years (INR in Lakhs)

Response: 41.8

4.1.4.1 **Expenditure for infrastructure augmentation, excluding salary during the last five years (INR in lakhs)**

2021-22	2020-21	2019-20	2018-19	2017-18
5317.4991	4633.5786	4637.0454	7309.6093	6199.0616

File Description	Document
Upload audited utilization statements	[View Document](#)
Upload any additional information	[View Document](#)
Institutional data in prescribed format	[View Document](#)

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS) and has digitisation facility

Response:

The Central Library serves as a major learning hub for the Institution, supporting teaching, learning, and research activities. The central library has a spacious area of 1,50,156 sq. ft. The pleasant, well-furnished and well-lighted library creates a congenial learning atmosphere.

The services and operations of the library are entirely automated with RFID technology. Common library operations which includes acquisition, cataloging, circulation, serials, membership, reservation, overdue, library visitors, library statistics, and the compilation of various reports are are computerized. Web OPAC is used by students and staff to access the catalogue online. The Institution has been using fully automated AutoLib Library Management Software, version 8.2.

LIBRARY PORTAL

The library portal provides all information about the Central Library. It offers access to all scholarly

literature that has been subscribed to, including 30,000+ e-journals, 2,00,000+ eBooks, and the Uniform Resource Locators (URLs) provided to the majority of scholarly open-source content.

DIGITAL LIBRARY

The Digital Library comprises 120 systems with Internet and multimedia facilities to access e-resources for the benefit of the users and is also stocked with 3500 CDs and DVDs.

E-RESOURCES

Central Library has a vast collection of resources in digital forms, it provides major e-resources such as IEEE Journals, Science Direct, IEEE Proceedings, ASME, ASCE, ACM, Springer, ProQuest and Web of Science to the user community. The Library has full access to the Derwent innovation patent search engine which allows faculty and students to search and check the originality of their inventions through AI-powered analytics before filing patents.

REMOTE ACCESS AND MOBILE APPLICATION - KNIMBUS e-LIBRARY

Central Library provides services through KNIMBUS Remote Access and a mobile app. It facilitates users' secure remote access to e-resources with federated search from any device, anywhere, at any time. The collection of content is upgraded continuously to meet the needs of the users. The e-Library aggregates all the library subscriptions, e-Book collections, open-access resources, multimedia learning content, and electronic document repositories. Users can use their smartphones to access the library's e-resources through the m-Library Mobile App.

INSTITUTIONAL MEMBERSHIP

- DELNET – Developing Library Network
- MALIBNET – Madras Library Network
- Anna University Library Membership
- British Council Library Membership

OTHER MEMBERSHIP

- NDLI – National Digital Library of India
- Shodhganga
- E-ShodhSindhu

ICT-BASED SERVICES IN THE LIBRARY

- E-Gate entry system is available with an automatic scanner
- Previous year's E-Question papers are available for reference (past 10 years)
- Usage of RFID Technology for circulation of books and anti-theft
- The library is under CCTV surveillance cameras
- Web OPAC facility provides information on library holdings
- Reservation facility for users
- NPTEL video lectures hard disc connected with the institutional repository
- Clarivate-Derwent Innovation PRO Patent Index data for R&D

- The Institution's e-theses are available in the Shodhganga Repository Portal
- JAWS software for visually challenged users
- User feedback system is encouraged to get valuable suggestions

User awareness programmes are conducted for faculty and students to acquire knowledge of various databases subscribed by the central library. Orientation programmes are conducted for first year students to educate them about the resources available in the Central library.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

4.2.2 Institution has access to the following: 1. e-journals 2. e-ShodhSindhu 3. Shodhganga Membership 4. e-books 5. Databases 6. Remote access to e-resources

Response: A. Any 4 or more of the above

File Description	Document
Upload any additional information	[View Document](#)
Institutional data in prescribed format	[View Document](#)

4.2.3 Average annual expenditure for purchase of books/ e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

Response: 289.02

4.2.3.1 Annual expenditure for the purchase of books and journals including e-journals year-wise during last five years (INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
325	260	266.45	340	253.63

File Description	Document
Institutional data in prescribed format	[View Document](#)
Audited statements of accounts	[View Document](#)
Any additional information	[View Document](#)

4.2.4 Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the latest completed academic year

Response: 21.93

4.2.4.1 **Number of teachers and students using library per day over last one year**

Response: 3051

File Description	Document
Details of library usage by teachers and students (Library accession register, online accession details to be provided as supporting documents)	[View Document](#)
Any additional information	[View Document](#)

4.3 IT Infrastructure

4.3.1 Percentage of classrooms and seminar halls with ICT - enabled facilities such as LCD, smart board, Wi-Fi/LAN, audio video recording facilities. (Data for the latest completed academic year)

Response: 100

4.3.1.1 **Number of classrooms and seminar halls with ICT facilities**

Response: 282

File Description	Document
Upload any additional information	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Paste link for additional information	[View Document](#)

4.3.2 Institution has an IT policy, makes appropriate budgetary provision and updates its IT facilities including Wi-Fi facility

Response:

The Institution has a comprehensive IT Policy for the purpose of purchasing, maintaining, and servicing the IT infrastructure. This policy outlines the process and principles that control the Institution's information technology resources in a responsible manner. Every member/user of the Institution's IT resources is expected to be familiar with and adhere to this policy. The policy intends to maintain, secure, and ensure the legal and appropriate use of IT infrastructure established by the Institution on the campus. The Institution does not violate copyright laws and uses only licensed software. The objective of the policy is to ensure that the institution's IT infrastructure is used legally and appropriately. It offers

recommendations for safeguarding the availability, confidentiality, and integrity of the information assets that the Institution accesses, produces, manages, and controls.

The IT security system of the Institution has anti-virus and anti-spam software for securing the flow of internet and intranet-based traffic in the campus to protect users from security threats. Anti-virus updates and security updates are regularly done for the protection of computing resources. To protect the entire network from cyber and phishing attacks, the most recent version of network security software is installed.

Sathyabama allocates 5% of its total revenue in its yearly budget for strengthening the IT infrastructure. Catering to the teaching-learning needs of students, faculty, and research scholars, 2.2 Gbps of internet bandwidth is provided through BSNL(1Gbps), Airtel (1Gbps) and TATA(200 Mbps) connected to all the terminals throughout the campus.

Every department on campus has an adequate number of computers with high-end configurations for the use of staff and students for academic and research work. All major documents of the Institution are digitalized, and good cloud storage capacity is available to store all documents of the Institution. The online storage of documents helps with easy access to view and share online documents.

National Cyber Defence Resource Centre (NCDRC) is established in association with National Cyber Safety and Security Standards , New Delhi to create awareness of Cyber security , Cyber threats and Cyber Laws among the faculty and students through workshops and training programmes .

A tailor-made ERP system is available for the automation of all key management processes at the Institution.

The following IT and ICT facilities are available on campus:

- Virtual laboratories that provide convenient and remote access to laboratory facilities
- An effective Learning Management System for online course delivery
- Online admission portal for a quick and easy admission process
- Online fee portal for hassle-free payment
- Media centre for video lecture recording and e-content development
- CCTV is available in all blocks and corridors to ensure campus safety
- Reports are easily accessible via the online student information system and attendance tracking system
- Online staff information system with comprehensive data on every employee of the Institution Staff attendance tracking system via biometrics and face recognition
- e-Publication of results
- Online counselling to assist students with their academic and psychological needs
- e-hall ticket generation
- Information on bus routes is available online
- The canteen menu is available online
- Online Discussion Forums

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

4.3.3 Student - Computer ratio (Data for the latest completed academic year)

Response: 3:1

File Description	Document
Upload any additional information	View Document
Student – computer ratio	View Document

4.3.4 Available bandwidth of internet connection in the Institution   (Leased line)

Response: A. ?1 GBPS

File Description	Document
Upload any additional information	View Document
Details of available bandwidth of internet connection in the Institution	View Document

Other Upload Files	
1	View Document

4.3.5 Institution has the following Facilities for e-content development

1. **Media centre**
2. **Audio visual centre**
3. **Lecture Capturing System(LCS)**
4. **Mixing equipments and softwares for editing**

Response: A. All of the above

File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format	View Document
Links of photographs	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Average percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the last five years

Response: 30.73

4.4.1.1 **Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year-wise during the last five years (INR in lakhs)**

2021-22	2020-21	2019-20	2018-19	2017-18
3566.62	3566.62	4042.55	4326.10	5024.50

File Description	Document
Upload any additional information	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Audited statements of accounts	[View Document](#)

4.4.2 There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

Response:

The Institution has laid down a clear policy for the maintenance of hardware and software assets that facilitate access to IT resources. The Institution has a Project Team that takes care of the utilisation and maintenance of computers, peripherals, and other IT resources. Computers are properly maintained through the Annual Maintenance Contract with the vendors.

Central Library

The Institution has a Central Library with well-furnished reading rooms, books, journals, and e-library resources. The central library is managed by a Librarian and Assistant Librarians to look after the functioning of the library.

Librarian and supporting staff are entrusted with the following responsibilities towards the better functioning of the library:

- Continuous monitoring of the library's stack room
- Discipline-wise and year-wise arrangement of books, magazines, theses, and project reports
- Maintaining the cleanliness and order of the shelves and stacking rooms
- Displaying new books on the display rack, Shelving and reshelving
- Dusting and cleaning library resources at periodic intervals

- Conservation and preservation of materials by proper binding
- Stock taking and weeding to remove the old and obsolete documents from the stacks
- Protection from insects, moisture, and heat
- Overall maintenance of the library

Students and faculty have individual logins to use the online library facilities. The library books and reprography facilities are accessed using the access code.

The Maintenance department takes care of the procurement in consultation with the Purchase Committee and the maintenance of the equipment, such as electrical, civil, and accessory equipment supporting the good academic facilities. In the event of failure or malfunctioning of any of the IT accessories, a requisition from the respective Departmental Head shall be forwarded to the maintenance department. After determining the nature of the problem, the accessories are repaired or replaced.

The maintenance department takes care of the classrooms in the Institution. The classroom blocks are painted at regular intervals. The condition of furniture and fixtures in the classrooms is inspected frequently to ensure a comfortable learning environment for students.

The auditoriums, seminar halls, and conference halls are maintained and checked for acoustic and thermal conditions on regular intervals. In cases of concern, the maintenance department rectifies or replaces the required equipment to ensure an effective audiovisual facility.

All laboratories of the departments and research centres are equipped with excellent modern equipment as required. The maintenance department takes care of the maintenance of the infrastructure and other essential facilities in the Institution. Maintenance and upkeep of the laboratory equipment are taken care of by the respective Technical Staff appointed as lab-in-charges for the labs.

The necessary sporting goods are ordered by the Purchase Committee, recommended by the Physical Director, following the due purchase procedure.

A maintenance register is kept in the maintenance department, which contains information on issues and concerns raised, scheduled repairs/maintenance, replacement of assets/accessories, responsible person for repair and maintenance, the date and time of maintenance, and a report of the repairs and maintenance activities. An estate manager is appointed to take care of the overall maintenance of the campus.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the institution, Government and non-government agencies (NGOs) during the last five years (other than the students receiving scholarships under the government schemes for reserved categories).

Response: 9.03

5.1.1.1 **Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)**

2021-22	2020-21	2019-20	2018-19	2017-18
1135	1173	1249	1143	942

File Description	Document
Upload self attested letter with the list of students sanctioned scholarship	[View Document](#)
Upload any additional information	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Link for additional information	[View Document](#)

5.1.2 Average percentage of students benefited by career counseling and guidance for competitive examinations as offered by the Institution during the last five years.

Response: 36.69

5.1.2.1 **Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
6430	4360	4297	3984	3998

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)
Link for additional information	[View Document](#)

5.1.3 Following Capacity development and skills enhancement activities are organised for improving students capability 1. Soft skills 2. Language and communication skills 3. Life skills (Yoga, physical fitness, health and hygiene) 4. Awareness of trends in technology

Response: A. All of the above

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)
Link to Institutional website	[View Document](#)
Link for additional information	[View Document](#)

5.1.4 The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases 1. Implementation of guidelines of statutory/regulatory bodies
2. Organisation wide awareness and undertakings on policies with zero tolerance
3. Mechanisms for submission of online/offline students' grievances
4. Timely redressal of the grievances through appropriate committees

Response: A. All of the above

File Description	Document
Upload any additional information	[View Document](#)
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	[View Document](#)
Details of student grievances including sexual harassment and ragging cases	[View Document](#)
Link for additional information	[View Document](#)

5.2 Student Progression

5.2.1 Average percentage of students qualifying in state/national/ international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

Response: 61.73

5.2.1.1 **Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations,** *etc.*)**) year-wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
992	284	353	337	257

5.2.1.2 **Number of students appearing in state/ national/ international level examinations (eg: IIT/JAM/ NET / SLET/ GATE/ GMAT/CAT,GRE/ TOEFL/ Civil Services/ State government examinations) year-wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
1024	524	516	832	528

File Description	Document
Upload supporting data for the same	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)
Link for additional information	[View Document](#)

5.2.2 Average percentage of placement of outgoing students during the last five years

Response: 60.94

5.2.2.1 **Number of outgoing students placed year - wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
2124	2162	1685	1504	1380

File Description	Document
Upload any additional information	[View Document](#)
Self attested list of students placed	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Link for additional information	[View Document](#)

5.2.3 Percentage of student progression to higher education (previous graduating batch).

Response: 31.78

5.2.3.1 **Number of outgoing student progressing to higher education.**

Response: 817

File Description	Document
Upload supporting data for student/alumni	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)
Link for additional information	[View Document](#)

5.3 Student Participation and Activities

5.3.1 Number of awards / medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (award for a team event should be counted as one) during the last five years.

Response: 605

5.3.1.1 **Number of awards/medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (award for a team event should be counted as one) year - wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
118	87	71	202	127

File Description	Document
Institutional data in prescribed format	[View Document](#)
e-copies of award letters and certificates	[View Document](#)
Any additional information	[View Document](#)
Link for additional information	[View Document](#)

5.3.2 Presence of Student Council and its activities for institutional development and student welfare.

Response:

The Student Council at Sathyabama is a dynamic representative body where the students involve themselves in the finest activities of the Institution. The Student Council facilitates the sharing of information between administrative officials and the students and serves as a communication bridge.

The Student Council of Sathyabama works with the following objectives:

• To promote an environment conducive to educational and personal development

• To support the management, administrative officials and faculty in the development of the Institution by sharing opinions and feedback

• To represent the students' opinions and views on matters of common concern

The Student Council comprises a President, Vice President, Secretary, Joint Secretary, Sports Secretary, Cultural Secretary, one student representative from each School, and a senior faculty member. The Student Council meets twice a year to discuss various student-related issues and suggestions. However, if the circumstances call for it, the student representatives are always welcome to contact the administrators.

The Student Council promotes student involvement in a spectrum of intra- and inter-institutional competitions and self-development activities. The Student Council is involved in planning, organizing, and conducting various cultural, sports, social, recreational, and other educational programmes for the students. The Student Council disseminates information about national-level competitions such as hackathons and marathons and motivates students to perform well in these activities. Students' direct involvement in organising and conducting various events contributes to developing leadership and managerial skills.

The Student Council seeks to improve student welfare and create a pleasant and fulfilling student experience on campus. The Institution gives representatives of the student council the opportunity to take part in decisions on various student-related matters. Students bring their grievances regarding curriculum, facilities, mess, library, sports, and support services to the knowledge of management through this council. Members of the Student Council are appointed in disciplinary committee and the anti-ragging committee.

The student council provides input on various activities, which helps the Institution to take the necessary measures in due time. The Student Council works in liaison with the 33 active student clubs that encourage and motivate students to organise and conduct various events in and around the Institution.

A Student Affairs Dean is appointed to support students and address their concerns and issues. The functioning of the entire student support system comes under the purview of the Dean of Student Affairs. The Office of the Dean of Student Affairs receives complaints and issues from the student council and takes the required steps to support the students.

Student Council is highly supported by the Institution and recognized as the top student representative body. Students are properly guided and mentored by the faculty to act responsibly for the mutual benefit of students and the Institution.

File Description	Document
Upload any additional information	[View Document](#)
Link for additional information	[View Document](#)

5.3.3 Average number of sports and cultural events / competitions organised by the institution per year

Response: 32.4

5.3.3.1 **Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
36	38	19	26	43

File Description	Document
Upload any additional information	[View Document](#)
Report of the event	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Link for additional information	[View Document](#)

5.4 Alumni Engagement

5.4.1 The Alumni Association / Chapters (registered and functional) contributes significantly to the development of the institution through financial and other support services.

Response:

Sathyabama has a robust Alumni Association, which was established by the Founder Chancellor, Col. Dr.

Jeppiaar, in the year of 1993. The alumni are the representatives and brand ambassadors of the Institution at the national and international levels. The Alumni Association of Sathyabama has grown over the years and has significantly contributed to the growth and development of the Institution.

The Alumni Association has over 55,000 members in its database. One of the purposes of the Alumni Association is to strengthen the network of former graduates, which mutually benefits the Alumni and the Institution .Our alumni, working with industries and leading multinational companies, contribute to the curriculum development process, and their inputs are considered while designing or revising the curriculum. Our alumni also serve as members of the Board of Studies (BOS) of various departments, and participate in the BOS meetings. They support us in designing the curriculum on par with international standards.

The Alumni creates awareness among the students about career prospects through healthy interactions. Alumni are frequently invited to the Institution to meet with and mentor students. They provide career guidance and help students to prepare for a successful career. They support the placement cell in preparing the students for placements in renowned companies by conducting mock interviews. Our Institution organises an "Alumni Talk Series," a series of lectures from our alumni from different walks of life, where the students get an opportunity to interact with the alumni.

The Alumni Association assists the Institution in organising and coordinating alumni gatherings or reunions. The Institution invites nominations from prospective alumni for the "Distinguished Alumni Award" to recognise their professional accomplishments.

The alumni network facilitates continuous engagement with alumni spread across the world. Alumni working across the globe, create brand visibility for the Institution. They hold noteworthy positions and voluntarily extend their support to the progress of their alma mater. Alumni significantly support the Institution in the students' placements. When there is a need for human resources in their organisation or start-up, alumni help our university by providing preference to our students and choosing the students who fit their requirements.

The Institution practices outcome-based education, and feedback from the alumni is sought to evaluate the indirect attainment of Programme Outcomes (PO), which account for 30% of the evaluation process. Sathyabama conducts surveys at regular intervals from Alumni to get their suggestions on curriculum improvement, mentoring, career development, event planning and recruitment

On its official website, Sathyabama has an online alumni page where alumni can register themselves. This online alumni forum facilitates the participation of the alumni in discussions on the various activities of the Institution.

File Description	Document
Any additional information	View Document
Link for additional information	View Document

5.4.2 Alumni contribution during the last five years (INR in Lakhs)

Response: A. ? 100 Lakhs

File Description	Document
Any additional information	View Document
Link for any additional information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The institution has a clearly stated vision and mission which are reflected in its academic and administrative governance.

Response:

VISION

Be a leading multi-disciplinary University producing world class talents to address global challenges

MISSION

To attain excellence in education and research through effective Collaboration with industries and other international/national organisations

To consistently remain an attractive ecosystem for students and employees, a hub of innovation for researchers and an incubating platform for entrepreneurs

To create an inclusive environment that caters to all forms of diversity

To engage in outreach and community development activities, creating an impact on the society

Sathyabama Institute of Science and Technology has well-defined vision and mission statements reflecting its commitment to producing holistically developed graduates to serve the community at large. The vision of the Institution envisioned by the founder provides clear guidance to the Institution and directs its efforts in a focused manner to achieve its mission. Sathyabama Institute of Science and Technology strives to produce world-class talents, attain excellence by undertaking research and development activities in emerging thrust areas, and serve the community at large. Strong and committed institutional leadership with an established system of governance is highly instrumental in the realisation of the vision and mission.

Strategic committees are in place to look after academic and administrative activities. The committees that guide and monitor the growth engine of the Institution are the Board of Management, Finance Committee, Academic Council, Board of Studies, Department Advisory Committee, and Program Assessment Committee. The Academic Council comprises highly qualified and seasoned academicians from renowned universities and industries. Their expertise contributes to improving the academic standards of the Institution, which reflects the Institution's mission to attain excellence in education. The responsibilities of administrative and academic bodies are clearly defined, and the work culture prevalent in the Institution is entirely transparent. The Board of Management is the principal organisation of management and the principal executive body of the institution. The Academic Council is the principal academic body of the Sathyabama Institute of Science and Technology and responsible for the maintenance of standards of teaching, research, and training, the approval of syllabus, the coordination of research activities, and examinations within the Institution. It also exercises such powers and performs other duties and functions

as may be prescribed or conferred upon it by the rules of the Institution.

In order to promote the Institution as a research-intensive Institution, Sathyabama has established research centres promoting research in the specialised areas of science and technology. Director of Research is appointed to look after the Research Centres. The Institution earmarks 7% of its annual budget for research to upgrade the research infrastructure and research facilities. Seed grants are provided to students and faculty to promote research. Innovative ideas that provide solutions to the societal problems in the areas such as agriculture, healthcare, energy and waste management are funded by the Institution. The Institution has a Research Committee that facilitates research that addresses societal needs and reflects the mission of the Institution to serve the community.

The Institution has linkages with Industries and offers joint academic courses to students to make them industry-ready. Sathyabama has also established Centers of Excellence in association with industries to set up advanced laboratories.

File Description	Document
Any additional information	[View Document](#)
Link for additional information	[View Document](#)

6.1.2 The effective leadership is reflected in various institutional practices such as decentralization and participative management.

Response:

Sathyabama promotes a participative culture that motivates everyone to work towards the achievement of the Institution's vision. The Institution functions in a well-structured manner to ensure participation in decision-making at all levels of hierarchy. A required level of autonomy is provided to everyone, enabling them to contribute to the growth of the Institution effectively. Top management rightly delegates the authority to employees in the middle and lower levels and focuses on the major developmental decisions related to the vision and mission of the Institution.
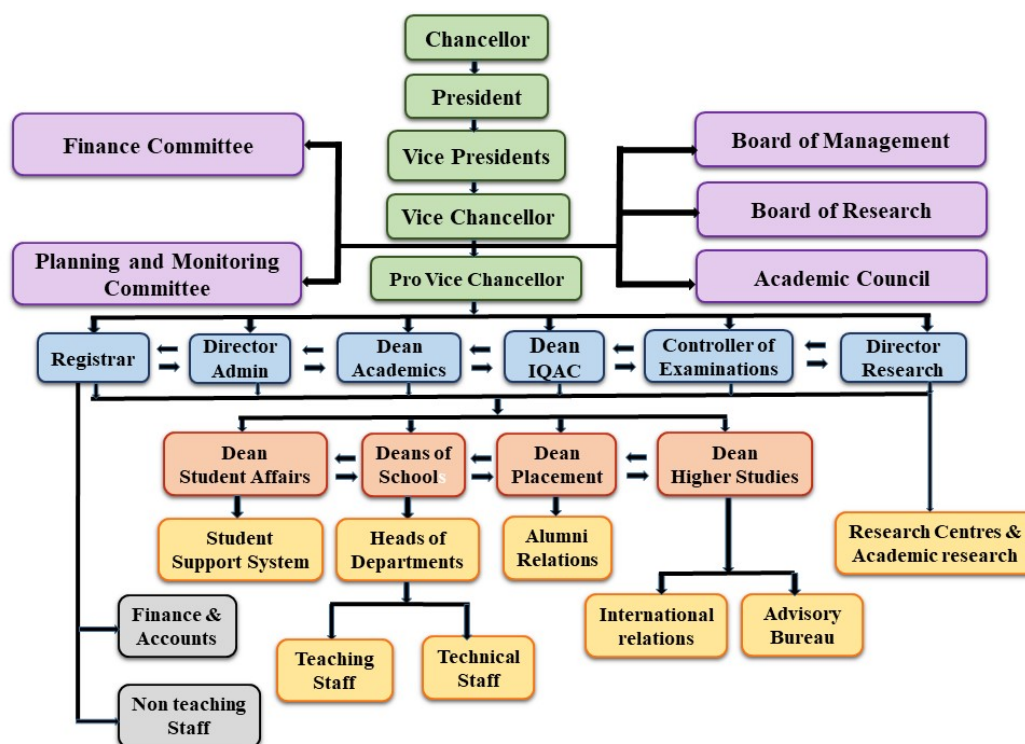
The Board of Management is the principal executive body of the Sathyabama Institute of Science and Technology. The Vice Chancellor is the Principal Executive Officer of the Institution and exercises general supervision and control over the affairs of the Institution and is mainly responsible for the implementation of the decisions concerning the Institution's functioning. The Vice Chancellor exercises all other powers as delegated by the Board of Management and leads the Institution toward achieving the Institution's goals, contributing to the effective governance of the Institution. The Vice Chancellor is supported by the Pro Vice Chancellor, who may undertake certain duties on behalf of the Vice Chancellor. The Registrar is the administrative head of the Institution. The controller of examinations manages the overall process of examinations at the Institution.

The Director of Administration and the Director of Research look after the academic and research activities of the Institution, respectively. The Dean for Academics coordinates and manages academic activities which includes curriculum development and revision, programme accreditation, and strategic planning. The Dean for IQAC co-ordinate and document all the quality initiatives and ensure its effective implementation. All the academic Departments are grouped under different Schools. The Schools are headed by Deans and the Departments under each School are headed by Heads of the Departments. Deans are delegated with adequate academic and administrative powers to look after the Departments, and the Department Heads, in turn, are vested with adequate authority to take care of the functioning of their respective Departments. Deans are responsible for developing the budgets of the Departments with the support of the heads of the Departments. Deans are provided authority to coordinate the process of selection, coordinate professional development, and lead the teaching and non-teaching staff. Deans enjoy advisory powers and provide input to the top management on various policies and procedures, especially in the academic and research areas. Faculty members are involved in various academic and administrative roles. To promote participatory management in the administration, various committees are formed, and faculty members are given the opportunity to fairly represent themselves in such committees. In order to give everyone exposure to academic and professional development, the positions are filled on a rotating basis.

The Institution has established various Research Centres across multiple thrust areas of Science and Technology. The Research Centres work under the Director of Research of the Institution. Every Centre has a Head who takes care of the functioning of the Centre with the powers delegated by the Board of Management.

File Description	Document
Any additional information	**View Document**
Link for Additional Information	**View Document**

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic plan is effectively deployed.

Response:

Sathyabama's Five Year Strategic Plan for 2016-2020 focused on the achievement of the following objectives (https://sist.sathyabama.ac.in/download/iqac/Strategic_Plan_2016_20.pdf):

- To be accredited by NAAC with a high grade and achieve international visibility through international rankings and ratings.
- To promote internationalisation
- To contribute toward space research and space technology
- To develop Centres of Excellence in the thrust areas of research
- To promote a culture of innovation and entrepreneurship by fostering the innovation ecosystem of the Institution
- To establish an IPR facilitation Cell to support and promote innovation and to protect intellectual property
- To launch the Master's Program in Dental Surgery and introduce new programmes and courses in other disciplines
- To focus on advanced technologies in Artificial Intelligence, Virtual Reality, Augmented Reality, Blockchain Technology, and Data Science

The Strategic Plan was successfully translated into action, and the Institution has excelled in many areas and grown as a premier Institution.

- The Institution was accredited with "A" Grade by the NAAC in 2017 following a rigorous accreditation process.
- Memorandums of Understanding have been signed with many international universities, and the Institution has successfully initiated several collaborative activities
- The Institution has developed a nanosatellite "SATHYABAMASAT " in collaboration with ISRO
- The Institution has established Earth Science Technology Cell sponsored by MoES in association with NIOT and CMLRE for Marine Biotechnological Studies
- Intellectual Property Cell has been established and 168 patents filed and 44 patents granted
- A Master's Programme in Dental Surgery was introduced

- New Programmes which includes Bachelor of Design, 3-year L.L.B, B. Pharm and D. Pharm, B.Sc. Bioinformatics and Data Sciences were introduced in the academic year 2019-2020
- The number of publications and the funds generated for the research increased over the 5 years
- A NextGen Lab with advanced technologies including, Artificial Intelligence, Augmented Reality, Virtual reality, Block Chain technology and Data Science, was established

Strategic plan 2021-2025

- Venturing into Online Learning(OL) / Open and Distance Learning (ODL) Degree programmes
- Strengthening the digital infrastructure of the Institution
- Designing a flexible curriculum that focuses on skill development
- Establishment of Centres of excellence in various thrust areas of research
- Internationalization of Education
- Apply for national and international accreditations for quality improvement.
- Involvement in high-impact and socially responsible research in areas such as nanomaterials and nanocomposite materials, energy storage materials, renewable energy, regenerative medicine, robotics and automation, and intelligence
- Strengthening Industry-Institute collaboration
- Development of the institution's innovation eco-system and facilitation of more start-ups
- Development of sustainable infrastructure, such as sustainable laboratories and classrooms with clean energy

Effective Deployment of the Plan

- Five OL programmes were started in the year 2021-22 and got the approval to start five ODL programmes from 2022-23
- Sathyabama Centre for Advanced Studies was established
- Centre of Excellence for Additive Manufacturing in association with Stratasys was setup
- The Institution has 11 of its programmes accredited by the NBA and has completed the ABET evaluation process for 3 programmes for the review cycle 2022-23
- The Institution has signed agreements to initiate twinning and dual degree programmes
- Established a Centre for Technology Transfer and Commercialization to promote start-ups

File Description	Document
Any additional information	[View Document](#)
Strategic Plan and deployment documents on the website	[View Document](#)
Link for Additional Information	[View Document](#)

6.2.2 The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules and procedures, etc.

Response:

The Board of Management, the Finance Committee, the Planning and Monitoring Board, and the Academic Council are the three committees established to guide and monitor the growth of the Institution. The responsibilities of the administrative and academic bodies are clearly defined. The functional responsibilities and reporting are transparent and facilitate the implementation of the policies of the Institution. The committees that facilitate the Institution's effective are the Board of Management, Finance Committee, Planning and Monitoring Committee, Academic Council, and Internal Quality Assurance Cell. Decision making bodies and Committees are formed at all levels, starting from the highest to the lowest levels in the administration hierarchy, to facilitate the effective and efficient functioning of the Institution.

The Board of Management is the principal executive body of Sathyabama Institute of Science and Technology, which formulates all policies and procedures and provides academic and administrative leadership. The composition of the Board of Management is in accordance with the Section 10.05 of the Memorandum of Association (MoA) as per the UGC regulation for Deemed to be University as on 19th July 2019.

The Vice Chancellor is the principal executive officer of the Institution, appointed by the chancellor, and is the chairperson of the Board of Management, the Academic Council, the Planning and Monitoring Committee, the Finance Committee, and the Selection Committee.

The Planning and Monitoring Committee is involved in strategic planning and monitors the implementation of the same. The Planning and Monitoring Committee provides suggestions to the Board of Management and academic council on any matters that it considers necessary for the fulfillment of the objectives of the Institution. The finance committee headed by the Vice Chancellor has the power to consider the annual accounts and financial estimates of the Institution. The finance committee recommends the annual budget and estimates to the Board of Management. The committee sets limit on the total recurring and nonrecurring expenditures based on the income and resources of the Institution.

The Academic Council is the primary academic body of Sathyabama Institute of Science and Technology. The Academic Council exercises general supervision over the academic activities of the Institution, reviews the academic regulations, prescribes courses, proposes revisions to the curriculum, and makes recommendations to the Board of Management.

The Internal Quality Assurance Cell (IQAC) is responsible for the adherence of quality assurance processes, the preparation of policies, and the implementation of tools and techniques for quality improvement. IQAC is in charge of coordinating and monitoring the overall quality assurance activity of the Institution. The Director of IQAC is responsible for ensuring that all the activities and programmes of the Institution are conducted according to the standards of the Quality System. Service rules clearly explain the procedure relating to the appointment of administrative staff, faculty, and technical staff, pay scale, allowances, increments, performance appraisal, promotion, severance, leave rules, social security benefits, duties and responsibilities and code of conduct for staff.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)
Link to Organogram of the University webpage	[View Document](#)

6.2.3 Institution Implements e-governance covering following areas of operation

1. Administration
2. Finance and Accounts
3. Student Admission and Support
4. Examination

Response: A. All of the above

File Description	Document
Screen shots of user interfaces	[View Document](#)
ERP (Enterprise Resource Planning) Document	[View Document](#)
Details of implementation of e-governance in areas of operation, Administration etc (Data Template)	[View Document](#)
Any additional information	[View Document](#)
Link for additional information	[View Document](#)

6.3 Faculty Empowerment Strategies

6.3.1 The institution has a performance appraisal system, promotional avenues and effective welfare measures for teaching and non-teaching staff .

Response:

Sathyabama has a standard performance appraisal system that evaluates the performance of the faculty on various parameters. The performance of the staff is objectively evaluated at the end of each academic year using the SScore. SScore assesses the performance of faculty based on their contributions to academics, research, and societal outreach. Dimensions that allow faculty members to be assessed were identified and included in the SScore. The most important indicators used in SScore to evaluate the faculty are teaching pedagogy adopted, teaching materials prepared, student feedback, publications in high impact factor journals, research grants received, patents, books authored, consultancy provided, participation in workshops and faculty development programmes, fellowships received, editor or reviewer of journals, participation in outreach programmes, additional responsibilities, and membership in professional bodies. Faculty who excel in publications and research activities are appropriately rewarded. Feedback from the students about the individual faculty members' quality of teaching is given more credence in the evaluation process.

Non-teaching staff are evaluated by the respective Department Heads, who assess them based on their knowledge and expertise, attendance, and punctuality.

A review committee constituted by the Vice-Chancellor reviews the performance of every staff member and recommends annual increments, promotions, and career advancement (as per UGC norms).

Welfare Measures

Happy and motivated employees achieve great heights and take the Institution to the next level. The Institution provides the following welfare measures to its teaching and non-teaching staff:

- Provident Fund
- Gratuity to employees with a minimum of five years of service
- Group Insurance
- Free health check-ups and treatment in the Institution's general hospital
- Medical leave
- Maternity leave
- Two weeks' leave for marriage for employees
- Sabbatical leave to pursue research and higher studies
- Seed funding to promote the innovative ideas of the faculty
- Sponsoring the faculty to participate in national and international conferences
- Cash awards for research publications in high-impact journals
- Faculty Development Programmes
- Training programmes and skill development programmes for non-teaching staff
- Financial assistance is provided to faculty members who wish to participate in a faculty exchange at a foreign university
- Total or partial waiver of tuition fees for the children of employees
- Award to the children of employees who excel in Board Exams
- Holy Trip to employees
- Child Care Centre for the children of employees to promote work-life balance of employees
- Free food and free transportation services for employees

The Institution has a structured approach to rewarding employees and driving performance. It encourages and recognises the outstanding performance of the employees and rewards them appropriately.

Faculty members will be rewarded for the following achievements:

- Receiving funded research projects
- Publication in journals with high-impact factors
- Highly cited publications
- High score in performance evaluation-SScore
- Securing the Best Paper Award for papers presented at conferences
- Receiving an award from any other agencies for the contribution to teaching and research
- Any other contribution to the benefit of the Institution
- Any other contribution to teaching and research

Faculty members are rewarded in the following ways:

- Commendation and monetary incentive
- Medal and commendation
- Certificate of honour
- Announcement in the newsletter/website
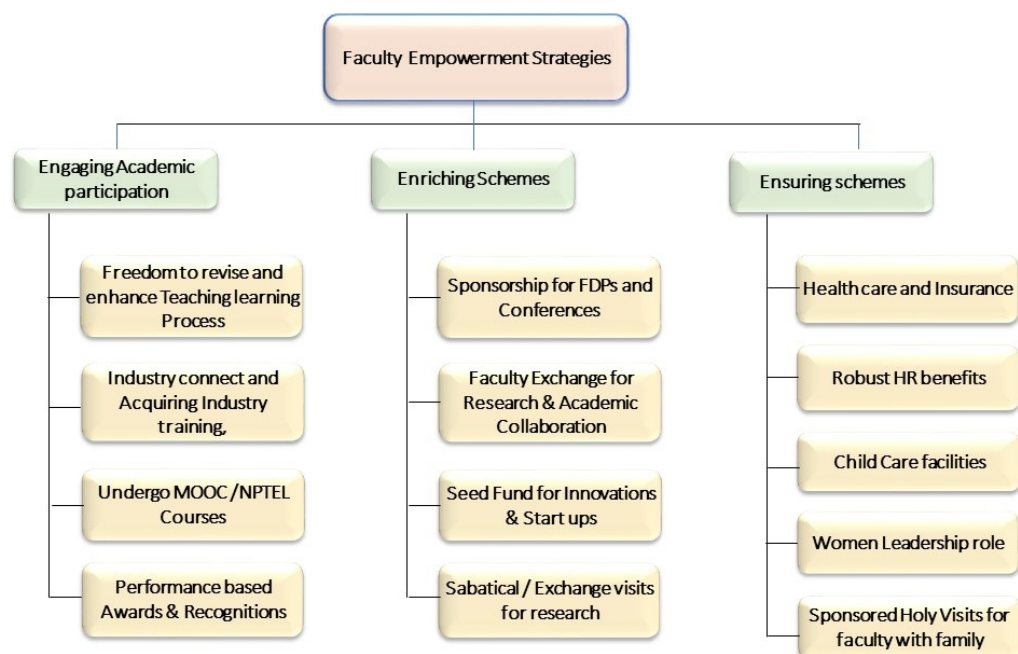
File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

6.3.2 Average percentage of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the last five years.

Response: 61.31

6.3.2.1 **Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
618	468	411	607	592

File Description	Document
Details of teachers provided with financial support to attend conferences, workshops etc. during the last five years (Data Template)	[View Document](#)
Link for Additional Information	[View Document](#)

Other Upload Files	
1	[View Document](#)

6.3.3 Average number of professional development / administrative training Programmes organized by the institution for teaching and non-teaching staff during the last five years.

Response: 60.6

6.3.3.1 **Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff year-wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
69	124	35	35	40

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centres)	[View Document](#)
Reports of Academic Staff College or similar centers	[View Document](#)
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	[View Document](#)
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).

Response: 57.17

6.3.4.1 **Total number of teachers attending professional development Programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes year wise**

during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
582	642	427	321	468

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	[View Document](#)
IQAC report summary	[View Document](#)
Details of teachers attending professional development Programmes during the last five years (Data Template)	[View Document](#)
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

6.4 Financial Management and Resource Mobilization

6.4.1 Institutional strategies for mobilisation of funds and the optimal utilisation of resources

Response:

The Institution is established under Section3 of the UGC Act, 1956. The funds required for the Institution are mobilised primarily from three sources: tuition fees, consulting work, and resources from the Sponsoring Trust (Sathyabama Institute of Science and Technology Trust).

The institutional strategies for fund mobilisation are as follows:

- Collection of tuition fees from the students who pursue full-time programmes, part-time programmes and OL Programmes. Fees are collected either online or through a demand draft.
- Collection of fees for on-campus housing provided to students
- Applying for various funded research projects from various Government Agencies
- Applying for funds for infrastructure development under the various schemes
- Applying for funds for conducting conferences, workshops, and seminars
- Providing consultancy services to clients in industry and academia
- Commercializing the intellectual property rights (patents) into market viable products
- Collection of fees from incubatees/start-ups incubated at the Sathyabama innovation Council / Sathyabama Technology Business Incubator
- Consultation services offered for the utilisation of the infrastructure
- Organising Training Programmes and workshops on various thrust areas for people from the industry, academia, and students

Optimal utilisation of resources

The fund is utilized for the following activities of the Institution

- Food and transportation facilities extended to the staff and students
- Improving the teaching and learning process
- Provision of student support services
- Scholarships for students under various schemes
- Compensation for the employees
- Training and Development
- Faculty Development Initiatives
- Provision of welfare facilities for faculty and students
- Industry academia interactions
- Maintenance and upgradation of ERP
- Infrastructure development - Physical
- Development of Digital Infrastructure
- Upgradation of library facilities
- Technology upgradation, based on the requirements projected by the departments
- Upgradation of laboratory infrastructure
- Construction and renovation of faculty rooms, classrooms, and smart classrooms
- Setting up the Centres of Excellence
- Establishing advanced laboratories
- Establishing state-of-the- art research infrastructure
- Repairs and maintenance of infrastructure
- Institutional Social Responsibility activities
- Seed fund
- Faculty Exchange programme
- Internationalisation activities
- Branding and promotion
- Promoting the innovation ecosystem of the Institution by supporting incubatees and their transformation into successful entrepreneurs by funding the innovative ideas of students

Every year in February, departments are required to submit their annual budgetary requirements. The budget proposal should comprise the previous year's sanctioned budget and the actual expenditures to ensure proper utilisation of the budget. This budgetary requirement includes recurring and non-recurring expenses. For the non-recurring expense such as equipment purchase, each Department submits the requirement for equipment and its utility for the department. The budget proposals placed before the Finance Committee are evaluated by the Vice Chancellor in consultation with the members of the Finance Committee. The finance committee monitors the utilisation of the funds by the departments. Internal finance audits are conducted once a quarter to ensure proper fund utilization.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

6.4.2 Funds / Grants received from government bodies during the last five years for development and maintenance of infrastructure (not covered under Criteria III and V) (INR in Lakhs).

Response: 591.86

6.4.2.1 *Total Funds / Grants received from government bodies for development and maintenance of infrastructure (not covered under Criteria III and V) year wise during the last five years (INR in Lakhs).*

2021-22	2020-21	2019-20	2018-19	2017-18
0	250	341.8559	0	0

File Description	Document
Details of Funds / Grants received from government bodies during the last five years (Data Template)	[View Document](#)
Any additional information	[View Document](#)
Annual statements of accounts	[View Document](#)
Link for Additional Information	[View Document](#)

6.4.3 Funds / Grants received from non-government bodies, individuals, philanthropists during the last five years (not covered in Criterion III and V) (INR in Lakhs)

Response: 74.21

6.4.3.1 Total Grants received from non-government bodies, individuals, Philanthropers year wise during the last five years (INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
65.1541	0	0	4.8780	4.1828

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)
Annual statements of accounts	[View Document](#)
Link for Additional Information	[View Document](#)

6.4.4 Institution conducts internal and external financial audits regularly

Response:

The Institution has a well-designed Financial Management System that ensures transparency and accountability in the mobilisation and utilisation of funds. The Finance Committee coordinates and monitors the fund mobilisation and utilisation activities of the Institution.

Sathyabama has an established mechanism to conduct periodic internal and external financial audits. It has an accounts department that ensures the regular maintenance of annual accounts and audits. The Finance Committee is headed by the Vice Chancellor of the Institution and the committee meets twice a year to deliberate the financial planning of the Institution. Other members of the committee include the Pro Vice Chancellor, Accounts Officer, Registrar and Finance Manager. The Finance Committee is responsible for planning and monitoring the Institution's financial position. The Finance Committee has a key role to play in ensuring that the Institution's governing body carries out its financial responsibilities correctly and remains financially sustainable. The Institution has a strategic plan and practices various financial best practices.

The Institution has a two-level audit process, which includes an internal audit by registered Auditors and an external audit by Registered Practicing Auditors. A thorough audit is conducted on the institution's major financial activities, such as payroll, income and expenditure, fee receipts and settlements, etc. The internal team of auditors, headed by Mr. Thiayagarajan, a renowned auditor, inspects and monitors all the financial transactions and meets once every three months to audit them. The shortcomings observed in the internal audit are rectified before initiating the external audit process. The external audit of the Institution is conducted by Auditor Mr. S. Ramakrishnan of Ramakrishna Associates , a prestious Auditing firm in Chennai. The internal audit team submits the consolidated report to the external audit team at the end of the year. The external audit team conducts a thorough and objective audit following the guidelines and submits the report to the Accounts office.

Mechanism for settling audit objections

The observations, objections, and suggestions are communicated to the department heads, IQAC, and administrative head of the Institution. The Finance Committee, headed by the Vice Chancellor, examines these observations and suggests remedial measures. The finance committee addresses the clarifications sought by the audit team, and justifications are provided to the satisfaction of the audit team. The compliance report and the accounts are then validated by the external auditor. The annual report is discussed in the board of management meeting every year. Copies of the audited statements are attached to this content.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes by constantly reviewing the teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals.

Response:

Internal Quality Assurance Cell (IQAC) was established in 2007 immediately after the first cycle of NAAC accreditation and is continuously functioning for the Institution's quality enhancement. The members of the IQAC are appointed as per the guidelines of NAAC.

The IQAC conducts workshops, orientation programmes and awareness programmes to sensitize the faculty and students on quality.

The initiatives undertaken by IQAC are:

- Adoption of Outcome Based Education (OBE)
- Revision of curriculum based on industrial and societal needs
- Organizing Faculty Development Programmes to keep the faculty updated and enriched
- Encouraging the participation of the Institution in NIRF, ARIIA, Times Rankings, QS Rankings
- Conduct Academic and Administrative Audit to evaluate the processes and the effective implementation of quality initiatives
- Apply for national and international accreditation at Programme and Institution level
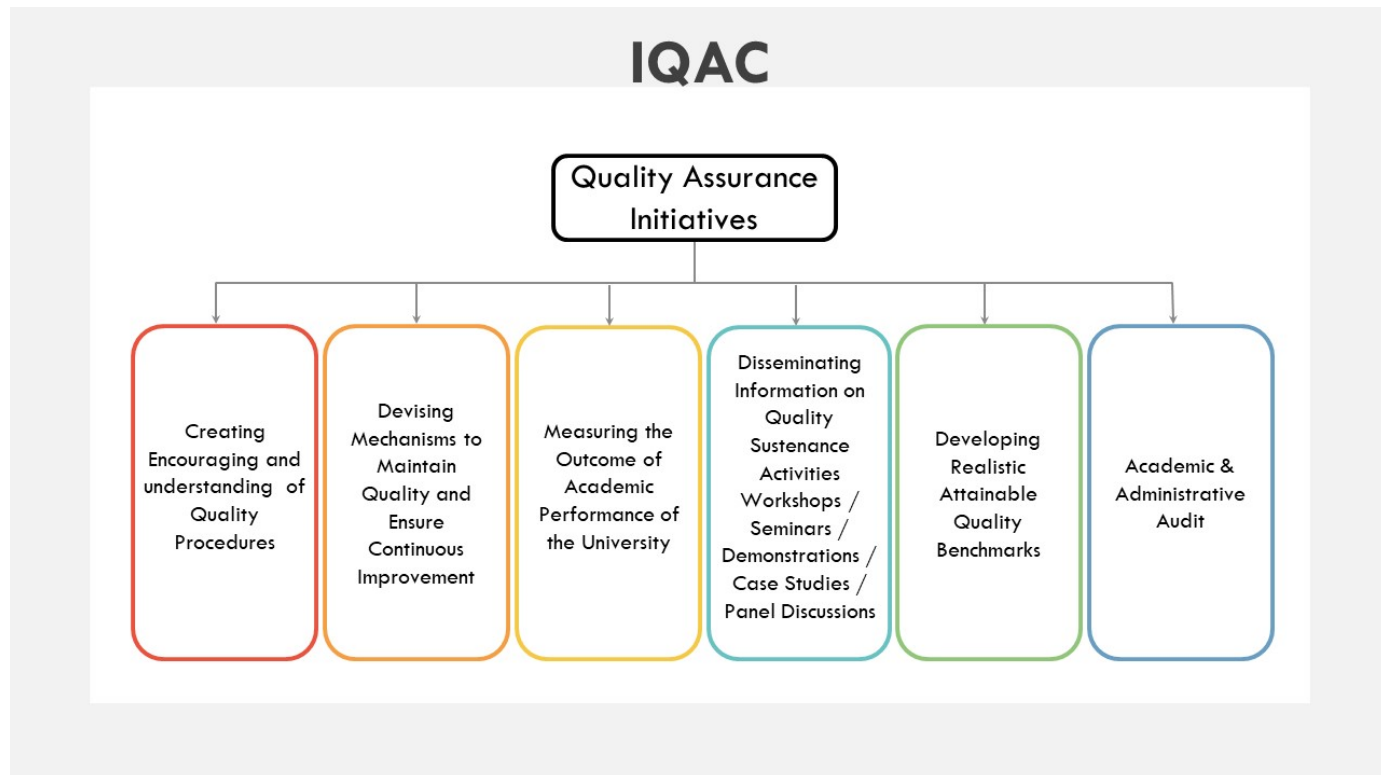
Teaching- Learning Strategies and Methodologies:

IQAC of Sathyabama reviews the teaching-learning process and methodologies of operations and learning outcomes at regular intervals.

Following are the initiatives of IQAC to institutionalize quality with regard to teaching learning process, structures and methodologies of operations

- Organising workshops and awareness programmes on Outcome Based Education (OBE) to educate and sensitize the students and faculty in order to ensure the effective practice of OBE in every department
- Collection and analysis of feedback from the stakeholders and implementation of appropriate corrective measures at the department and Institutional levels
- Introduction of Design thinking course in all the Engineering and Architecture Programmes to provide the avenue for the students to design, conceive and implement their innovative ideas by developing prototypes
- Participation in the Times Impact Rankings 2021 under seven Sustainable Development Goals (SDG- 1,3,10,13,14,15 ,17) which secured notable ranks in all the seven SDGs for which the Institution had applied. Sathyabama's overall position is 601-800 among the world Universities, according to the Times Higher Education Impact Rankings, 2022
- Organising awareness programs on NEP 2020 to educate our faculty and other academic fraternity
- Conducting programmes on Intellectual property rights, Innovations and Entrepreneurship
- Organising orientation programmes for faculty and Students towards adopting digital tools for teaching, learning and Assessments.
- Organising webinars on yoga, food and nutrition, gender sensitivity, healthy living and mental wellness
- Periodical revision of curricula based on the core competencies to be imparted for every Programme
- Promotion of a good research and innovation ecosystem for the students by involving them in research projects, supporting them in developing new and innovative products for the benefit of the society and community
- Initiation of academic and research collaborations with International institutions to facilitate academic and research activities
- Organising awareness programs to the faculty to contribute to the 17 SDGs of the UN's Agenda 2030
- Establishment of the Centre for Distance and Online Education to offer online degree Programmes and open and distance learning programmes
- Encouraging the practice of Blended learning in the Institution for teaching
- Establishment of Virtual labs to help students learn practically anytime and anywhere
- Introduction of a new performance appraisal tool- S Score (Sathyabama Score), to rate and assess the performance of the faculty in academics, research and outreach activities

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

6.5.2 Institution has adopted the following for Quality assurance 1. Academic Administrative Audit (AAA) and follow up action taken 2.Confernces, Seminars, Workshops on quality conducted 3. Collaborative quality initiatives with other institution(s) 4.Orientation programme on quality issues

for teachers and students 5. Participation in NIRF 6.Any other quality audit recognized by state, national or international agencies (ISO Certification, NBA).

Response: A. Any 5 or more of the above

File Description	Document
Upload e-copies of the accreditations and certifications	[View Document](#)
Upload details of Quality assurance initiatives of the institution (Data Template)	[View Document](#)
Any additional information	[View Document](#)
Paste web link of Annual reports of University	[View Document](#)
Link for Additional Information	[View Document](#)

6.5.3 Incremental improvements made for the preceding five years with regard to quality (in case of first cycle), Post accreditation quality initiatives (second and subsequent cycles).

Response:

IQAC develops and implements quality assurance strategies and processes, and promotes conscious and consistent improvement in the overall performance of the Institution. It organises regular meetings to discuss and develop realistic and attainable quality benchmarks for all academic and administrative activities.

Several post-accreditation quality improvement initiatives have been taken in the following areas during the last five years:

Governance- In the area of governance the following measures were initiated

- Creation of new dean and director positions, as well as the appointment of a Pro Vice Chancellor
- Adoption of e-Governance
- Compliance with the quality standards of ISO

Participation in National Missions-The IQAC has facilitated the Institution's participation in the following national mission

- Swachh Bharat Mission
- Skill India Mission
- Renewable Energy
- Make in India
- Digital India
- BetiBachaoBetiPadhao Abhiyan
- Unnat Bharat Abhiyan

Initiatives with respect to Curriculum- The IQAC has facilitated the following initiatives concerning curriculum

- Introduction of new Programmes - Nursing, Pharmacy, Law, Paramedical
- Curriculum focusing on skill development
- Curriculum focusing on value-based education
- Outcome Based Education
- Multidisciplinary curriculum
- Complete Adoption of Choice Based Credit System
- Major Curriculum Revisions in 2019 and 2022

Partnerships and International Collaborations

The Institution has entered into Memorandum of Understanding with several International and National Institutions for academic and research collaboration. Various collaborative activities such as student exchange, faculty exchange, joint research, joint publications, and joint conferences were initiated through the partnerships. MoUs entered into with Industries to initiate joint academic programmes and training programmes. The IQAC emphasized the need for internationalization and international academic and research cooperation.

Green Initiatives-The Institution's IQAC was instrumental with respect to the adoption of the following environmental-friendly initiatives

- Use of battery-operated vehicles to commute within the campus
- Use of solar energy
- Green Audit
- Preparation of a sustainability report
- Policies on SDGs
- Participation in rankings relating to sustainable development
- Alternative sources of energy

Infrastructure Development

- Open Air Theatre
- Indoor Gymnasium
- Sathyabama Indoor Stadium
- Research Centres/Laboratories
- Information Communication Technologies Assisted Language Lab.
- Centres of Excellence
- Digital Infrastructure: Learning Management System, Remote access to libraries, remote laboratories, and virtual laboratories
- Sathyabama Centre for Advanced Studies

The IQAC took actions during the post-accreditation period based on the observations of NAAC during the assessment.

ICT Initiatives

e- Governance has been introduced. A dedicated in-house Project Team developed the Learning Management Systems for the Institution by Customizing the MOODLE LMS. LMS assists us in managing curriculum, delivering and managing courses, providing e-learning materials, communicating with students, maintaining attendance, evaluating and tracking their performance.

Digital Initiatives

Post-pandemic, the Institution has strengthened its digital infrastructure. The Media Centre has been at the forefront of digital initiatives in the Institution. It supports the preparation of e-content, educational videos, and providing access to quality study material. The Institution has its own YouTube channel, the-Sathyabama YouTube channel for higher education.

Biometric Attendance

One of the important initiatives of the Institution was the implementation of biometric attendance, including facial recognition and finger impressions.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Measures initiated by the Institution for the promotion of gender equity during the last five years.

Response:

Sathyabama makes consistent efforts to promote gender equity. It provides an enabling environment for female students and employees. The Institution has a Gender equity policy devised on the basic principles of respect and tolerance for everyone and facilitates gender equality . Women are encouraged to participate at all levels of the organization, including the highest levels of administration and management. Sathyabama treats everyone with respect and provides equal opportunities for growth and development.

Following are some of the measures taken to promote gender equity:

- Ensuring no discrimination in the hiring and promotion process. Sathyabama is proud to acknowledge its large pool of women employees currently serving in leadership roles as Heads of Departments, Deans, Directors, and Vice Chancellor
- Pay decisions are based on merit, performance, and grade, not gender
- Ensuring that there is no discrimination while accessing various facilities provided by the Institution
- Exclusive career counselling for female students has resulted in a significant increase in the number of girl students being offered job placements
- Conducting workshops on the prevention of sexual harassment to raise awareness among all students and staff ,and to promote a safe and conducive atmosphere
- Sensitization programmes were conducted on issues related to gender equity and women's empowerment
- The Women's Empowerment Bureau organises training programmes, seminars, and workshops on gender equity for students
- The Institution's Women Empowerment Bureau has organised several programmes for female staff and students on cybercrime and crime defence mechanisms, inviting advocates and police department personnel
- Awareness programmes on the legal protections available to girls were organised for the students
- Female employees are provided maternity leave, child care leave and are also entitled to avail leave on the adoption of children
- There are a significant number of women cadets in the NCC unit
- Indoor and outdoor games for men and women, students, and staff were held on various occasions
- Internal Complaints Committee (ICC) is constituted in the Institution to deal with the complaints of sexual harassment of women staff and students. ICC works for the prevention of sexual harassment against girls by providing a support system for women employees and girls
- The daycare centre was established to support women with children and improve the work-life balance of women employees
- The Institution has installed CCTV cameras at key places in the campus for round-the-clock vigilance and to ensure the safety of women on campus
- Committees such as the Anti-Ragging Committee, Students Grievance Redressal Committee, and Internal Compliants Committee respond quickly to female students' grievances and ensure the

> campus maintains a decent and safe environment

- The Institution has female counsellors who provide counselling services to support the students with their psychological issues
- The Institution has introduced a "mentor-mentee" system to provide emotional support to students with low self-esteem

- Association for Computing Machinery-Women Chapter (ACM-W Student Chapter) was started to support the professional career of Girls and Female faculty working in the field of Computing. Seminars, Workshops and invited lectures on computer Science related topics are organised for the faculty and students through this Chapter.

File Description	Document
Specific facilities provided for women in terms of: a.Safety and security b. Counselling c. Common Rooms d. Day care center for young children e. Any other relevant information	[View Document](#)
Annual gender sensitization action plan	[View Document](#)

7.1.2 The Institution has facilities for alternate sources of energy and energy conservation measures

1. **Solar energy**
2. **Biogas plant**
3. **Wheeling to the Grid**
4. **Sensor-based energy conservation**
5. **Use of LED bulbs/ power efficient equipment**

Response: A. 4 or All of the above

File Description	Document
Geotagged Photographs	[View Document](#)
Any other relevant information	[View Document](#)

7.1.3 Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- **Solid waste management**
- **Liquid waste management**
- **Biomedical waste management**
- **E-waste management**
- **Waste recycling system**

- **Hazardous chemicals and radioactive waste management**

Response:

Being an environmentally conscious Institution, Sathyabama follows the best waste management practices, and solid waste, liquid waste, e-waste, and other wastes are properly managed and disposed of in an eco-friendly manner. The Centre for Waste Management in the Institution conducts a waste audit annually.

Solid waste management

Food waste, apart from being diverted as food for cattle and pigs, 750-1000 kgs per day is processed to yield 60-80 cubic metres of biogas per day. This quantity is equivalent to approximately 2 commercial LPG cylinders. A portion of the food waste was experimented with and converted into activated carbon to treat biodiesel plant-generated wastewater. Apart from food waste, paper waste, including newspaper, magazines, cardboard, and boxboard, are disposed of by selling it to the vendor in exchange for recycled papers.

Liquid waste management

On campus, a 1.5 MLD sewage treatment plant is being built for the proper treatment, disposal, and reuse of wastewater. The treated water is reused for gardening purposes and in toilets for flushing.

The Institution has been making a great effort to decrease its water footprint by relying on recycled wastewater and water harvested during the rainy season. The Centre for Waste Management has a pilot biodiesel plant that produces biodiesel from the waste cooking oil generated from the Institution's mass kitchen facility. Some of the Institution's buses run on biodiesel.

Biomedical waste management

The **Biomedical Waste** (BMW) guidelines are adhered to, at every level of waste management, including cleaning up the waste storage area and labelling the trash cans. The necessary documentation has been carried out by the doctors and support workers who have received the required training.

Before being securely sealed in color-coded bags, the biomedical waste is first separated, and the method of safe disposal is given to the authorised company/dealer. The Institution has signed an MOU with GJ Multiclave (India) Pvt. Ltd., a biomedical waste management company, for the collection, transportation, treatment, and disposal of biomedical waste.

E-waste management

E-waste is managed in compliance with the E-waste Management Rules 2016. E-waste generated is channelled through an authorised recycler for treatment, dismantling, and disposal. M/S Earth Sense Recycle Pvt. Limited, Chennai, is the authorised recycler who collects the E-waste.

The Institution has also signed an MoU with VANS Chemistry PVT. Ltd., an E-Waste Management Company and AER Worldwide, India, to teach students the safe dismantling of E-waste. The records of E-waste generated are well maintained as per Form 2.

Waste recycling system

Plastic waste such as milk packets, plastic bags, and plastic covers are segregated at the source and handed over to vendors in exchange for recycled papers. Metal wastes from steel chairs, cupboards, etc. are sold to scrap dealers. Other solid wastes, like clothing, tetra cups, dried leaves, etc., are handed over to the Greater Chennai Corporation.

Hazardous chemicals and radioactive waste management

Hazardous chemicals are being treated at laboratory levels and disposed of through a wastewater pipeline connected from the laboratory to the pit to protect the soil micro flora.

File Description	Document
Relevant documents like agreements/MoUs with Government and other approved agencies	[View Document](#)
Geotagged photographs of the facilities	[View Document](#)
Any other relevant information	[View Document](#)

7.1.4 Water conservation facilities available in the Institution:

1. **Rain water harvesting**
2. **Borewell /Open well recharge**
3. **Construction of tanks and bunds**
4. **Waste water recycling**
5. **Maintenance of water bodies and distribution system in the campus**

Response: A. Any 4 or all of the above

File Description	Document
Geotagged photographs / videos of the facilities	[View Document](#)
Any other relevant information	[View Document](#)

7.1.5 Green campus initiatives include:

1. **Restricted entry of automobiles**
2. **Use of Bicycles/ Battery powered vehicles**
3. **Pedestrian Friendly pathways**
4. **Ban on use of Plastic**
5. **landscaping with trees and plants**

Response: A. Any 4 or All of the above

File Description	Document
Various policy documents / decisions circulated for implementation	[View Document](#)
Geotagged photos / videos of the facilities	[View Document](#)
Any other relevant documents	[View Document](#)

7.1.6 Quality audits on environment and energy are regularly undertaken by the Institution and any awards received for such green campus initiatives:

1. **Green audit**
2. **Energy audit**
3. **Environment audit**
4. **Clean and green campus recognitions / awards**
5. **Beyond the campus environmental promotion activities**

Response: A. Any 4 or all of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	[View Document](#)
Certification by the auditing agency	[View Document](#)
Certificates of the awards received	[View Document](#)
Any other relevant information	[View Document](#)

7.1.7 The Institution has disabled-friendly, barrier free environment

1. **Built environment with ramps/lifts for easy access to classrooms.**
2. **Divyangjan friendly washrooms**
3. **Signage including tactile path, lights, display boards and signposts**
4. **Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment**
5. **Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading**

Response: A. Any 4 or all of the above

File Description	Document
Policy documents and information brochures on the support to be provided	View Document
Geotagged photographs / videos of the facilities	View Document
Details of the Software procured for providing the assistance	View Document
Any other relevant information	View Document

7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words).

Response:

The Institution's vibrant and cosmopolitan environment supports and encourages everyone, regardless of their language, religion, ethnicity, or socioeconomic status. Sathyabama is an inclusive Institution dedicated to delivering high-quality education to all students from different racial, ethnic, and religious backgrounds without prejudice. Institution believes in a positive workplace culture and does not allow any kind of harassment or discrimination based on gender. The Institution upholds the idea of unity in diversity and has anti-discrimination and minority protection measures to safeguard the rights of underrepresented groups.

Mega cultural events are planned for the students each year, during which, students take part in various of events that highlight their culture and encourage harmony in diversity.

Sathyabama is home to students and faculty from across India who speak different languages and have different religious beliefs, cultures, and traditions. The Institution takes pride in promoting a secular and inclusive environment. The religious beliefs, rituals, and practices of all religions are given due respect. Every Friday, students of the Muslim faith can offer prayers in a mosque outside the campus. On Sundays, worship services are held in the campus chapel.

The Institution celebrates all religious festivals such as Ayudha Pooja (Dussehra), Diwali, Christmas, Ramadan, Bakrid, and Pongal, with equal zeal and enthusiasm. Festivals such as Onam, Holi, and Navaratri are celebrated with much enthusiasm. Students are encouraged to showcase their traditional costumes, attire, and accessories on these occasions by dressing up in their ethnic wear. Such events provide opportunity for students to understand, appreciate and celebrate diversity. Cultural festivals celebrating the music, dance, or theatre of different ethnic groups are organised periodically.

The financial burden of higher education has grown to the extent that many students from underprivileged families are being left out of the system. The Institution offers scholarships to socially and economically backward students. The Institution, in association with other NGOs, admits students based on merit after review and screening under the Anbu scholarship scheme. 8% of students receive 100% scholarships every year to pursue degree programmes. The Institution also awards merit scholarships to the top 25 scorers in the annual Sathyabama All India Entrance Examinations, which are held in April and May. This merit

scholarship includes a full tuition fee waiver during the entire course of the study. The Institution offers a 30% tuition fee scholarship under Dr. Jeppiaar Remibai scholarship scheme for the top student in the semester, 20% scholarship for the second topper, and 10% scholarship for the third topper in the semester in every department.

The Institution works to give students with special needs access to a welcoming environment. The Institution provides infrastructural and learning support to Divyang students, acid attack victims, and students with learning difficulties. The students are provided with equal opportunities on par with other students. The policy of education for all is practised by collaborating with NGOs to support the disadvantaged, underrepresented, and marginalised sections of the community.

File Description	Document
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document
Any other relevant information	View Document

7.1.9 Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).

Response:

Respecting the constitutional rights and obligations of the students and staff is one of the core ideologies of the Institution. The Institution aims to promote an environment where the students and staff understand their role in safeguarding constitutional obligations.

The Institution strives to educate and increase the level of awareness, and appropriate practises among the students on the fundamental duties and rights of Indian citizens. The Institution conducts awareness campaigns, orientation programmes, training programmes, seminars, and workshops to sensitise the students and staff on their fundamental rights and duties and their moral responsibility as upright citizens of the country. Seminars, workshops, debates, essay competitions, and elocution competitions are organised on ethical values, fundamental duties, and the rights and obligations of Indian citizens. The Institution encourages students to participate in conferences, expert talks, poster competitions, and other activities on various contemporary legal issues. Sathyabama makes constant efforts to nurture the students as better citizens of the country through various curricular and extracurricular activities.

 Programme curricula are designed to include courses such as Introduction to the Constitution of India, Professional Ethics, Women and Criminal Law, Value Education, etc., to teach constitutional obligations, values, rights, duties, and responsibilities of citizens amongst students.

Students are also educated on the importance of human rights, and are encouraged to recognise and protect themselves against injustice, exploitation, and inequality. The School of Law invites dignitaries from the legal and judiciary fields to address students on these themes.

Institution celebrates Constitution Day on 26th November to commemorate the adaptation of the Constitution of India and to spread constitutional values and ideals amongst students. Departments in association with the NSS unit of the Institution jointly organise several programmes such as blood donation camps, awareness programmes and community outreach programmes to develop students into responsible citizens. Republic Day is celebrated on 26th January in a grand manner. Parades and other competitions on patriotic themes are organised to develop patriotism and love for the motherland. The national flag is hoisted at the Institution on Republic Day and Independence Day. Celebrations with a student parade, Flag Salutation and National Anthem are part of the programme.

Students are taught about the dignity and honour of the national flag as an important symbol of our democratic nation's independence, and the fundamental duty to uphold the Constitution and respect the national flag and national anthem. The Institution designs various activities to create awareness about the national identity and symbols. Cultural programmes and events are organised to celebrate equality, justice, and brotherhood.

Vigilance Awareness Week is observed in the Institution every year between 31st october and 6th November to spread the message of integrity in all spheres of life and build a corruption free nation. Azadi Ka Amrit Mahotsav was observed to commemorate 75 years of Indian Independence. Throughout the year, many programmes and events were organised to commemorate our country's 75th anniversary of independence.

7.1.10 The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

1. The Code of Conduct is displayed on the website
2. There is a committee to monitor adherence to the Code of Conduct
3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff
4. Annual awareness programmes on Code of Conduct are organized

Response: A. All of the above

File Description	Document
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	[View Document](#)
Code of ethics policy document	[View Document](#)
Any other relevant information	[View Document](#)

7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).

Response:

The Sathyabama Institute of Science and Technology observes local, national, and international days of importance and religious festivals.

Religious Festivals

Pongal, Ayudha Pooja, Onam, Ramzan, and Christmas are passionately celebrated in the Institution. Pongal is an important Tamil festival that is traditionally celebrated with great zeal on campus. Sweet pongal, sugarcane, and other ethnic sweets are distributed to everyone who participates in the celebration. Every year, a Tamil debate competition on various topics relating to Tamil culture and tradition is held as part of the celebration.

Diwali is celebrated by distributing sweets, lighting lamps, and burning crackers. Dussehra or Ayudha Pooja is celebrated with great pomp during the month of October. As part of the festivities, the Institution buildings, buses are given a facelift with fresh coats of paint and colourful decorations. Gifts are given to the non-teaching staff.

Ganesh Chaturthi, Krishna Jayanthi, Ugadhi, and Vishu are declared holidays. Personalized wishes from the top management are sent to all students and staff.

Christmas celebrations start with the inauguration of the Christmas Crib and Christmas tree in the first week of December. A special lunch is served, and sweets and cakes are distributed to all staff and students. As part of the celebration, everyone is invited to a prayer service on the last working day before the holiday breaks. Everyone enjoys cake, sweet delicacies, and a special lunch.

During the month of Ramadan, all Muslim students and staff are provided with Suhoor and Iftar meals in accordance with the Ramadan tradition. Eid is also celebrated with a special dinner.

National Days of Importance

Independence day and Republic day are celebrated in a very grand manner at Sathyabama. The celebration involves a parade by the NCC wings, including the Army, Navy and Airforce cadets of the Institution, flag hoisting, cultural programmes followed by sweet distribution and a special breakfast for all students and staff of the Institution.

Teachers' Day is celebrated on 5th September every year, commemorating the birth of Dr. Sarvepallai Radhakrishnan. Faculty members are felicitated for their contribution to the field of teaching and research on this day. Cash awards and appreciation certificates are given to faculty members with good academic and research accomplishments.

Days such as Madras day, National Science day, and Engineers day are commemorated in the Institution through seminars, lecture series, and student competitions.

International Days of Importance

Awareness programmes and guest talks are conducted to celebrate International Nurses day, International ay of Mathematics. World Meteorological Day, Sea Grass Awareness Week, International Women's day, World Tuberculosis day, World Water day, and International day of Forests.

International Dance day is celebrated, in which students from partnering universities across the world enthusiastically participate virtually and perform their traditional dance. Our students display our country's traditional dance forms during the event. On World Theatre day, competitions are held by the Department of Visual Communication in which students display their creative talents.

Sensitization programs and demonstration sessions are conducted to celebrate International Yoga day and Human Rights day.

File Description	Document
Geotagged photographs of some of the events	[View Document](#)
Any other relevant information	[View Document](#)
Annual report of the celebrations and commemorative events for the last five years	[View Document](#)

7.2 Best Practices

7.2.1 Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

Response:

1. Title of the Best Practice – 1: Internationalisation

2. **Objectives of the Practice**

- To promote internationalization and create a favourable impact on the institution's international reputation.
- To promote international academic and research cooperation and engage in collaborative activities like joint research, joint academic programmes and the exchange of staff and students.
- To improve the global rankings

3. **The Context**

Over the past 10 years, India has become an increasingly attractive study destination for students across the globe. Every country is trying to attract more and more international students as they significantly contribute to the growth of the country's economy. To cater to the growing demands of the Internationalization of education, Indian Universities are undergoing transformations that transcend national boundaries. With its admirable academic ambiance and excellent research facilities, Sathyabama Institute of Science and Technology has all the features of a world-class University that has the potential to become an attractive destination for Higher Education for students across the globe. One of the recommendations of the National Education Policy, 2020 of India to Higher Education Institutions is to make India a "global study destination". Indian Higher Educational Institutions are striving to promote internationalization and make India an attractive destination for students all over the world for Higher Education. Indian Universities are undergoing transformation into international Universities that provide

education at global standards and exhibit research excellence.

4. The Practice

Sathyabama Institute of Science and Technology is promoting internationalization and is following policies and practices to cope with and adapt to the global academic environment. Efforts have been made to build partnerships with foreign universities to engage in collaborative activities like joint research, joint academic programmes, and the exchange of faculty and students.

To promote academic alliances with Universities and Institutes at National and International level, the Centre for Academic partnership and International Relations is created in 2014.

Functions of the Centre

- Facilitating academic and research collaboration with partners
- organizing and participating in International Education Fairs, participating in networking events and Summits
- Responsible for coordinating Faculty Exchange Programmes, Student Exchange Programmes, Semester Abroad Programmes, Internship Abroad Programmes and Summer Schools with Partnering Universities
- Applying for various funded Programmes and International Credit Mobility Projects for Faculty and Students
- Coordinating International Joint seminars/symposiums/conferences
- Taking care of international students on campus

Sathyabama has alliances with leading Universities and research establishments across the globe. Institution has more than 150 partner universities across the world. It is involved in the following collaborative activities with international partners:

- Student exchange
- Faculty exchange
- Twinning programmes
- Semester abroad programmes
- Internships and summer schools
- Joint research
- Joint publication
- Joint conference, symposium and workshop, webinars
- Participation in bilateral research calls announced by India and the partner country to promote academic and research collaborations

Centre for Academic Partnership & International Relations (CAP & IR) is an initiative of Sathyabama devoted to promote academic alliances with Universities and Institutes at National and International level.
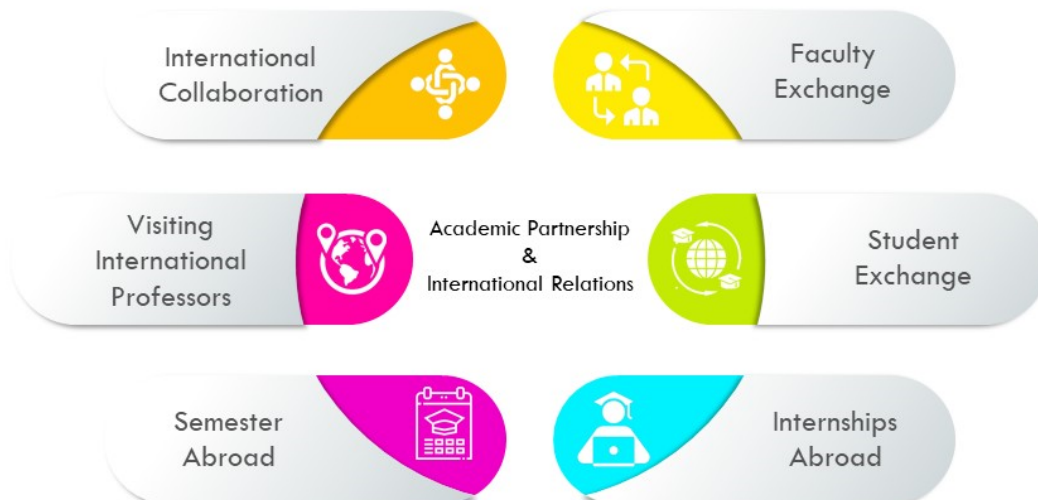
5. Evidence of success

The Success of our effort towards internationalization is evident from the impact and outcomes, which are listed below:

Impact on students

- Students gain international exposure and international learning experience
- Students gain international competence and are well-prepared for job requirements, which increase their employment opportunities
- Students get opportunities to meet diverse people and hence improve their network
- The students learn about new cultures and perspectives
- The students become independent and self-reliant
- International exposure gives them confidence
- The students learn different languages when they study at universities in foreign countries
- The students get a lifetime experience with the study abroad opportunities

Impact on Faculty

- The international experience was highly useful in improving their teaching skills
- The faculty is exposed to various pedagogies used in other countries
- Knowledge exchange with colleagues at foreign universities
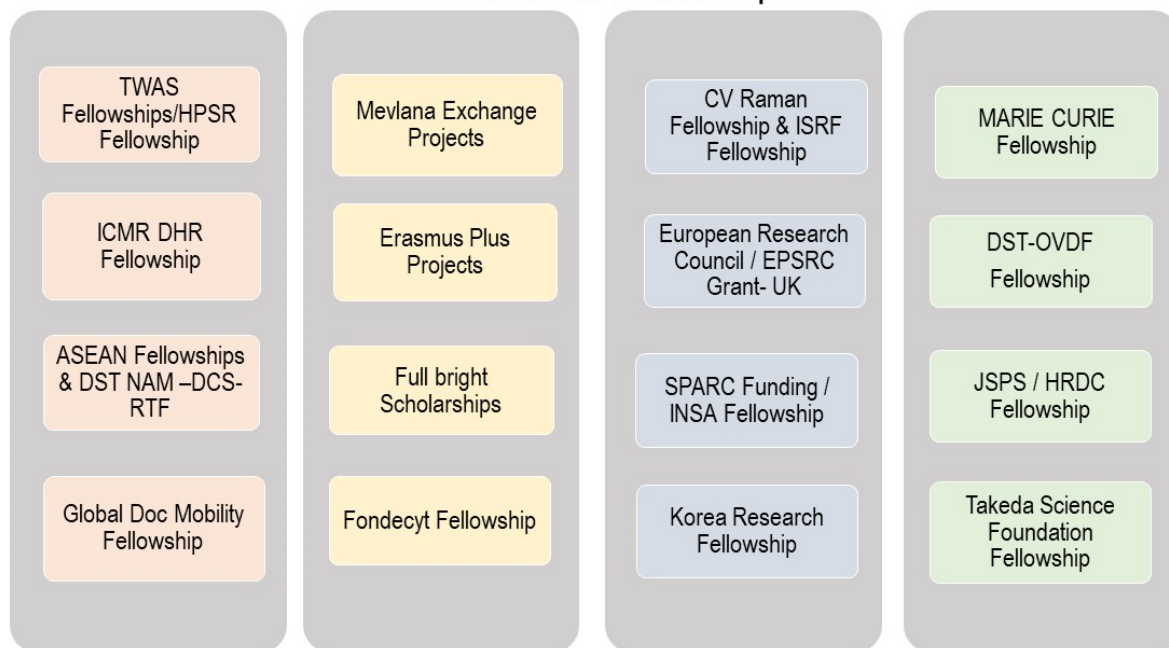- Faculty get opportunities to meet diverse people and hence improve their network

Impact on the Institution

- Creates a favourable impact on the institution's international reputation
- Promotes international research co-operations with partner Institutions
- Improves the global ranking of our Institution
- Improves research strengths through collaborative research and international publications
- Joint Research calls and fellowships

Outcomes

- The QS World University Rankings 2023 has placed Sathyabama in the 1001-1200 band. It is one of the 41 Institutions from India ranked by QS
- Ranked in the 1201–1500 band by the Times Higher Education World University Rankings, 2023
- Positioned in the 301-350 rank according to the QS Asia University Rankings, 2023
- The Institution has signed more than 150 MoUs with international Universities across the world
- As a result of collaborative research with international research organisations and universities, more than 1600 joint publications have been produced
- Faculty members have gone on Mobility Programmes to Universities in European Union under the Erasmus Plus Programme funded by the European Union
- Students have gone on Mobility Programmes to Universities in the European Union under the Erasmus Plus Programme funded by the European Union
- Faculty members went on the Mobility Programme to Turkish University under the Mevlana Exchange Programme funded by the Turkish Higher Education Council
- Students participated in the Mevlana Exchange Program at Turkish University, which was funded by the Turkish Higher Education Council
- The Institution has organized 50 joint International Conferences/workshops/symposiums with partnering Universities across the globe in the past 5 years
- More than 500 students, faculty and researchers have gone on semester abroad, exchange and fellowship programmes
- Around 350 students from our Partnering Universities on student exchange programmes, Internships and semester abroad programmes
- Faculty from the partner universities abroad have come to Sathyabama on exchange programmes to teach our students
- Professors from International Universities have visited our Institution as Visiting International Professors
- Virtual student exchange and faculty exchange programmes were organised during the lockdown in collaboration with the partnering universities
- Participated in bilateral research calls announced by the Indian Government and Organisations abroad, collaborating with our partners across the world. Exchange of faculty with our Partner universities for academic and research activities is one of the key outcomes under various schemes such as SPARC, DST-OVDF under Indo-Purdue Fellowship, Fulbright Fellowship, ASEAN Fellowship, HPSR Fellowship, Marie Curie Fellowship, Korean Research Fellowship. JSPS, ICMR -DHR Fellowship, FONDECYT Fellowship and European Research Council Fellowship etc.
- Our Institution has been recognized as an Upcoming University in Internationalization at Global India Education Forum by Discovery Media Network. The award is presented in Geneva, Switzerland

Research Fellowships

TWAS Fellowships/HPSR Fellowship	Mevlana Exchange Projects	CV Raman Fellowship & ISRF Fellowship	MARIE CURIE Fellowship
ICMR DHR Fellowship	Erasmus Plus Projects	European Research Council / EPSRC Grant- UK	DST-OVDF Fellowship
ASEAN Fellowships & DST NAM –DCS-RTF	Full bright Scholarships	SPARC Funding / INSA Fellowship	JSPS / HRDC Fellowship
Global Doc Mobility Fellowship	Fondecyt Fellowship	Korea Research Fellowship	Takeda Science Foundation Fellowship

6. Problems encountered and resources required

- It was difficult to establish liaisons and partnerships with international universities
- Challenge of attracting international students and faculty from developed countries
- The Institution allocates a separate fund for International activities, which is increasing every year based on expansion requirements
- Limited international funding opportunities for research and exchange programmes such as Erasmus Plus, Mevlana funding, Fulbright Fellowship, etc.
- Resource required for expansion of the International Relations Office and manpower increase to support the growing internationalization activities and mobility of students and faculty

1. Title of the Practice – 2: Reshaping Life through Scholarships

The Institution has initiated many schemes towards achieving the Sustainable Development Goal one and ten (SDG01- No Poverty & SDG10 - Reducing inequalities). Sathyabama is an inclusive Institution and works with the motto "Education for all." The Anbu scholarship scheme was initiated by our Chancellor Dr. Mariazeena Johnson to help the poor and needy pursue higher education. This initiative gives hundreds of deserving students the opportunity to continue their education through the Anbu Scholarship. Another scholarship initiated by the Institution for the benefit of meritorius students is the Dr. Jeppiaar Remibai Merit Scholarship, which is initiated for students who score the top three ranks in the end-semester examinations. The Institution also provides free coaching to students who aspire to work in the civil service. Admissions are given to the children of non-teaching and teaching staff who are deserving and meritorious, with 100% and 50% scholarships, respectively.

2. Objectives of the Practice:

- To make Sathyabama an inclusive Institution
- To provide deserving students from low-income families with the opportunity to pursue higher

education on a full scholarship
  - To reduce economic inequality among the younger generation eager to gain knowledge through education
  - To appreciate and reward students with the good academic records

3. The Context

Sathyabama aims to create a society where equal opportunities are available to everyone, and everyone has the right to a decent living. The Institution believes education is an instrument to improve the socioeconomic status of people living in poverty and develop rural economies. The Sathyabama Institute of Science and Technology's mission is to provide quality education to students while developing qualified manpower for the nation.

The core ideology of the Institution is inclusivity, and this scholarship programme intends to reflect the value system of the Institution. The initiative's concept is to provide opportunities for growth to underserved groups who want to advance in life.

The Institution offers courses in engineering, science, technology, arts, management, dentistry, nursing, and law and develops professionals. It offers education opportunities for underprivileged, underrepresented, and marginalised people living in poverty, children of destitute women, children of war widows, children with special needs, children of prison inmates and girl children who are victims of acid attacks.

Apart from the scholarship for underrepresented groups, the Institution also appreciates and rewards students with excellent performance in their academics. 10-30% of Scholarship is given to meritorious students based on their ranks in end semester examinations.

The Institution has established Jeppiaar IAS academy to provide free coaching for civil service aspirants. This academy enables students to pursue civil services coaching by expert trainers, retired civil servants and bureaucrats. Our alumni in the civil services are also invited to create awareness and motivate students to become civil servants.

4. The Practice

a) Anbu Scholarship

The Anbu Scholarship is offered to meritorious children who lack financial support to continue their education. The Institution is associated with many trusts and peer foundations to offer this scholarship with a higher degree of transparency and productivity. Agaram Foundation, World Vision, India vision, Ability Foundation, Banyan, NAAM, Maatram, and Tamilnadu Blind Association are some foundations through which meritorious students apply for scholarships.

Beneficiaries of the Anbu Scholarship are

- Students from rural backgrounds and those who are economically backward
- Students with an excellent academic record who could not continue education due to financial constraints, differently abled students
- Victims of violence
- Students with sports excellence
- Students with a strong desire and demonstrated ability to continue their studies but no parents to support their academic dreams or goals

b) Dr. Jeppiaar Remibai Merit Scholarship

Dr. Jeppiaar Remibai Merit Scholarship is given to students who excel in academics and emerge as toppers in exams in each branch. This scholarship is provided to motivate and encourage the students to work hard and perform well in academics so that they are entitled to the reward in the form of a scholarship. Every year, the toppers are awarded the Dr. Jeppiaar Remibai merit scholarship. The first, second, and third toppers are given a 30%, 20% and 10% discount on their tuition fees, respectively. This scholarship is based only on performance and does not depend on the student's background. It encourages students to give their best and work towards achieving the best in their lives.

c) Scholarships for the Children of staff

Children of non-teaching staff, who are deserving and meritorious, are given the opportunity to study with full scholarship. Children of teaching staff receive a 50% scholarship for their studies.

d) Merit Scholarships for the toppers in All India Sathyabama Entrance Examinations

 Besides the above mentioned scholarship, the Institution also offers merit scholarships for the first 25 Rank holders in All India Sathyabama Entrance Examinations conducted in April or May every year. This scholarship includes a full tuition fee waiver during the entire period of the study.

e)Jeppiaar IAS Academy

Every year nearly 400 students are trained for UPSC examination at free of cost. The students can enroll themselves for coaching right from the year of joining in the Institution. Special coaching for the preliminary examination is given to students who are in their final year.

5. Evidence of success

Sathyabama has evolved as an inclusive university that provides education to children from all strata of society. This initiative has created an impact in society through the upliftment and empowerment of underrepresented and underprivileged children.

 Outcomes

- The scholarships provide students with the opportunity to undertake further education opportunities that may have otherwise been hard for them to access. This culture of supporting and encouraging students reshapes students' lives by enhancing their skills and education. Scholarships change student lives with increased career opportunities
- 8% of students are annually benefited, and 5642 students have been benefited from this initiative in the last 5 years
- Around 300 Students with special needs have graduated from the Institution in the last 5 years
- This initiative has transformed the lives of thousands of children from marginalised and underrepresented groups
- Hundreds of deserving students benefited from merit scholarships
- The children of employees who join our Institution to pursue their higher education are given 50% scholarship

6. Problems Encountered and Resources Required:

Identifying and selecting truly deserving students is a challenge. The Institution receives more than two thousand applications every year under this initiative. To select the deserving candidates, the Institution has partnered with several non-governmental organisations (NGOs) across the state to identify deserving students from rural and economically disadvantaged backgrounds.

File Description	Document
Best practices in the Institutional web site	[View Document](#)
Any other relevant information	[View Document](#)

7.3 Institutional Distinctiveness

7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

Response:

Sathyabama Institute of Science and Technology is one of the academic Institutions that emphasizes research as it is aware of the significance of research for sustainable growth and development. Teaching and research are inseparable components of education, and quality research is the most important characteristic of a world-class university.

The Institution has the following Research Centres, which are carrying out research on almost all the major areas of Science and Technology:

- Centre for Nanoscience and Nanotechnology
- Centre of Excellence for Energy Research
- Centre for Ocean Research
- Centre for Earth and Atmospheric Sciences
- Centre for Remote Sensing and Geoinformatics
- Centre for Non-Destructive and Evaluation
- Centre for Waste Management
- Centre for Molecular and Nanomedical Sciences
- Centre for Laboratory Animal Technology and Research
- Centre for Climate Change Studies
- Centre for Drug Discovery and Development
- Centre of Excellence for Additive Manufacturing
- Centre for Aquaculture
- Centre for Space technology
- Centre for Innovation and Technology Transfer

Research addressing the Sustainable Development Goals

Research at Sathyabama addresses the Sustainable Development Goals of Agenda 2030, which requires the participation of individuals, institutions, countries and Governments in creating a better world free from poverty, hunger, health issues, inequalities, and providing access to quality education, access to clean water and sanitation, access to affordable and clean energy.

The Research Centres are focusing on the following SDGs:

- **The Centre for Drug Discovery and Development and the Centre for Molecular and Nanomedical Sciences** are working towards **SDG-3 Good Health and Well-being**. They are focusing on research to discover novel drugs to fight against life-threatening infectious diseases, including tuberculosis (TB), Acquired Immuno Deficiency syndrome (AIDS), Dengue and non-infectious diseases including, Alzheimer's disease, cancer and diabetes
- **The Centre of Excellence for Energy Research and the Centre for Waste Management** are involved in research projects and initiatives that address **SDG 7- Affordable and Clean Energy**.

The MHRD-funded Center of Excellence in Energy Research is working to find sustainable solutions to the need for energy while minimising environmental impact and reducing carbon footprint. Centre for waste management is involved in finding alternative energy through biosources. It has come out with biodiesel from waste cooking oil and bio fertilizers from food waste

- **The Centre for Waste Management** is working towards achieving **SDG 12- Responsible Consumption and Production.** The Centre carries out research in the area of waste management and promotes the 3 R concepts Reduce, Reuse and Recycle to minimize waste generation. This Centre organizes programmes to create awareness about the consequences of consuming more and more products without considering the concepts of repair, reuse and recycling

- **The Centre for Climate Change Studies and the Centre for Ocean Research** are involved in research addressing **SDG 13- Climate Action.** The Centre monitors marine organisms associated with various ecosystems such as coral reefs, seagrass meadows, intertidal zones and mangrove ecosystem in selected coastal sites to study the impact of global climate change on aquatic ecosystems

- **The Centre for Remote Sensing and Geoinformatics** is involved in research facilitating resilience and adaptive capacity to climate-related hazards, disaster preparedness against flood-related disasters, **addressing SDG 13**

- **The Centre for Ocean Research** and **Centre for Aquaculture** are working towards **SDG 14- Life Below Water** which addresses issues on conservation and sustainable use of oceans, seas and marine resources for sustainable development. Research in Mariculture, Marine Technology and Engineering, Marine Ecology, Marine Nanotechnology, Marine Biotechnology, and Marine Education are the focus areas of research of this Centre. The Centre is involved in research in areas including resilience and adaptive capacity to climate-related hazards, disaster preparedness against flood-related disasters through Remote Sensing and Geoinformatics

- **The Centre for Climate Change Studies is working towards SDG 15 - Life on Land,** which addresses issues related to the management of land and water resources and biodiversity conservation

- **Marine Research Station**- Apart from the Research Centres within the campus, Sathyabama Institute of Science and Technology has established a new Marine Research Station at Rameswaram to encourage research on conservation of marine ecosystems, marine ecology and climate change. The research station is helpful in research related to coastal and marine biodiversity conservation and in understanding the impact of anthropogenic stressors on marine ecosystems
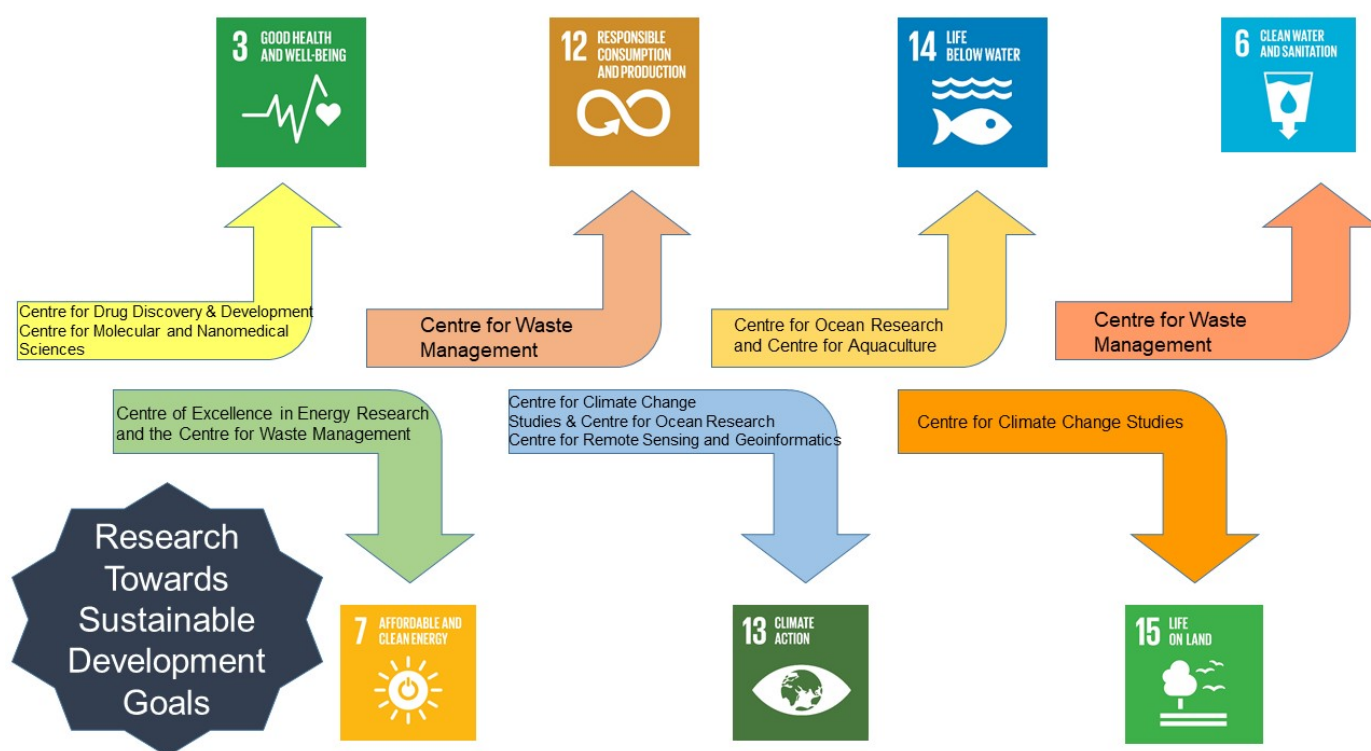
Sponsored Research

The Institution has undertaken various sponsored and collaborative research and development projects worth 59 crores in the last 5 years funded by international organizations and national organisations such as ISRO, DST, DBT, IGCAR, DRDO, DAE, MoEF etc,.

New sponsored research projects, including STI Hubs and Agri Innovation Hubs worth 15 crores, were sanctioned by various agencies in the academic year 2021-2022

Major Research Facilities

Sathyabama Institute of Science and Technology has world-class research facilities that complement and augment the research strength of the Institution. Research facilities include laboratories and equipment with advanced technologies. Advanced characterization facility with HRSTEM, FESEM and XRD, Makerspace with 3D printers, scanners and replicators, AFM and Raman spectroscopy are available in the Institution, which facilitates high quality research.

Research Outcomes

- The Institution has shown remarkable performance with respect to publications by bringing out internationally acclaimed research publications. Overall, the Institution has around 12,000 Research publications indexed in Scopus with a H index of 84 and around 6000 publications indexed in Web of Science databases with a H index of 74. More than 1600 Joint Publications are made as the outcome of joint research with International Research Organizations and Universities. In the year 2021-2022 , the Institution had around 250 publications with high impact factor.
- Sathyabama's commitment to research can also be well understood by the number of patents granted for innovative products and designs. Sathyabama is highly active in applied research with 474 patents filed and 227 patents granted which includes 11 German patents and 19 Australian .

24 patents have been successfully converted into products this year
- The outcomes of the research activities are propagated to society and industry by way of publications, symposiums and other academic forums
- Participated in bilateral research calls such as SPARC, DST-OVDF Fellowship, Fulbright Fellowship, ASEAN Fellowship, HPSR Fellowship, Marie Curie Fellowship and Korean Research Fellowship
- Centres of Excellence are established in association with leading Industries

File Description	Document
Any other relevant information	[View Document](#)
Appropriate web in the Institutional website	[View Document](#)

5. CONCLUSION

Additional Information :

- In the QS World University Rankings 2023 , Sathyabama is ranked in the 1001–1200 band
- Sathyabama is ranked in 301-350 band by QS Asia University Rankings 2023
- Sathyabama has received FIVE STAR RATINGS from QS Stars for its excellence in teaching and research.
- Times Higher Education (THE) has also ranked the Institution in its World University Rankings and Asia University Rankings since 2017
- Times Higher Education Impact Rankings 2022 has placed the Institution in good positions for the initiatives taken in meeting 7 Sustainable Development Goals(SDGs). For SDG 14, "Life below water", Sathyabama is the only Institution to be ranked from India and secured 87th position globally
- Sathyabama has received Erasmus Plus funds from the European Union and Mevlana funds from the Turkish Higher Education Council for Faculty and student mobility
- Sathyabama has bagged four FICCI awards under the categories of Excellence in Faculty, Excellence in Employability, Excellence in Enabling a Research Environment, and University of the Year
- The innovative ideas are converted successfully into products, and currently, 22 products are ready for commercialization.
- Sathyabama has established an Agri Innovation Hub at Javadu Hills, Annaicut Block, Vellore District, funded by the Department of Science and Technology (DST) for the development of Scheduled Tribes, and has also established a Science and Technology Innovation Hub in Kattumanarkoil, Cuddalore District, funded by DST for the development of Scheduled Castes in 3 villages
- The Institution is participating in the e-VBAB (e-Vidhya Bharathi and e-Arockia Bharathi) Programme, an initiative of the Ministry of External Affairs for offering online programmes for students from African countries. Sathyabama offers 5 Online degree Programmes for MBA, M.A (English), B.Com, M.Sc (Mathematics) and BBA

Earth Science Technology Cell (ESTC) was established in association with NIOT Chennai and CMLRE Cochin, and was Funded by Ministry of Earth Sciences for Marine Biotechnological studies .

The Institution has an excellent placement record, and the students are placed in core companies and Multi-National Companies. More than 300 companies participate in the placement drive every year to recruit students on campus**.**

Concluding Remarks :

Sathyabama Institute of Science and Technology has made tremendous progress in terms of academics, research and innovation, internationalization, employability and outreach.

Sathyabama is working towards:

- Attaining excellence in education
- Achieving excellence in research, focusing on transdisciplinary research.
- Promoting an environment that facilitates creativity, innovation, and entrepreneurship

- Establishing a track record for creation of innovative technologies for industry, and transformational solutions for meeting national needs, particularly through the incubation of startups

- Creating an impact in society by engaging in societal outreach and community development activities

Sathyabama's strategic plan for the next five years expresses the commitment to get involved in multidisciplinary research that can provide solutions to the problems faced by society and promote sustainable development. Through a significant research contribution, Sathyabama intends to support our nation in its commitment to achieving the UN's Sustainable Development Goals.

The Institution has partnerships with more than 150 leading Universities across the globe. Students' participation in international study programmes would promote global awareness, develop cross-cultural perspectives, broaden career skills, and help the students become internationally competent and well-prepared to meet the industrial demands . Sathyabama promotes entrepreneurship to contribute to the human resource development of our nation. Seed grant is provided to faculty and students to support them in converting their innovative business ideas into products or services. The Institution also supports the patenting and commercialization of the products.

The Institution prioritises Industry 4.0 and has implemented several programmes and conducted research combining the digital transformation of manufacturing, production and value creation processes.

Initiatives are taken towards imparting 21st century skills to the students and creating an industry-ready student community in the fields of Additive manufacturing, Robotics and Automation, Cyber Security, Artificial Intelligence, Data Analytics, Augmented Reality and Virtual Reality. Sathyabama will uphold its traditions and peculiarities while empowering the students to become tomorrow's leaders. The Institution will continue to have an eye for excellence and will remain a catalyst in transforming lives.

Sathyabama aims to be recognised as an Institution of Eminence through academic and research excellence and become an attractive destination for students, researchers, and employees across the globe.