

YEARLY STATUS REPORT - 2021-2022

Part A			
Data of the	Institution		
1.Name of the Institution	SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY		
Name of the Head of the institution	Dr. T. SASIPRABA		
• Designation	Vice Chancellor		
• Does the institution function from its own campus?	Yes		
Phone no./Alternate phone no.	04424503065		
Mobile no	9840133346		
Registered e-mail	registrar@sathyabama.ac.in		
Alternate e-mail address	vc@sathyabama.ac.in		
• City/Town	Jeppiaar Nagar, Rajiv Gandhi Salai, Sholinganallur, Chennai		
• State/UT	Tamil Nadu		
• Pin Code	600119		
2.Institutional status	,		
• University	Deemed		
Type of Institution	Co-education		
• Location	Urban		

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Name of the IQAC Co-ordinator/Director	Dr. ANIMA NANDA	
Phone no./Alternate phone no	6381879488	
• Mobile	9443786840	
• IQAC e-mail address	iqac@sathyabama.ac.in	
Alternate Email address	dean.iqac@sathyabama.ac.in	
3.Website address (Web link of the AQAR (Previous Academic Year)	https://www.sathyabama.ac.in/academics/igac/agar	
4. Whether Academic Calendar prepared during the year?	Yes	
• if yes, whether it is uploaded in the Institutional website Web link:	https://www.sathyabama.ac.in/student/academic-calendar	

5.Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 2	A	3.09	2017	13/09/2017	12/09/2022
Cycle 1	B++	Nil	2006	27/09/2006	26/09/2011

6.Date of Establishment of IQAC 03/07/2007

7.Provide the list of Special Status conferred by Central/ State Government-UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

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Institution/ Depart ment/Faculty	Scheme	Funding agency		Year of award with duration	Amount		
Centre for Nanoscience and Nanotech nology	CDRI-CSIR	MoES		2016 1825 days	5 4800000		
Centre for Ocean Research	ESTC	MoES		2016 1825 days	4000000		
Department of Chemical Engineering/ Electronics and Communicatio n Engineerin g/Centre for Waste Management	Science and Technology Innovation Hub	DST/SEED/SCS P				2022 1095 days	23605264
Department of Computer Science Engi neering/Info rmation Tech nology/Biote chnology/Bio medical Engineering	Agri Innovation Hub	DST/SEED/TSP		2022 1095 days	28341335		
8.Whether composition of IQAC as per latest NAAC guidelines			Yes				
Upload latest notification of formation of IQAC		View File					
9.No. of IQAC meetings held during the year		5					
 The minutes of IQAC meeting and compliance to the decisions have been uploaded on the institutional website. (Please upload, minutes of meetings and action taken report) 		Yes					

(Please upload, minutes of meetings and action taken report)	View File
10. Whether IQAC received funding from any of the funding agency to support its activities during the year?	Yes
If yes, mention the amount	Rs.30,000/-

11. Significant contributions made by IQAC during the current year (maximum five bullets)

• To review and evaluate the performance of the faculty in academics, research, and their contribution to outreach activities, the next version of the S Score (Sathyabama Score) was introduced . Cash prizes and certificates of appreciation were given to the top scorers. • We took part in the Times Impact Rankings 2021 for our SDGs and achieved remarkable rankings for each of the four SDGs (SDGs 1, 10, 13, and 17) for which we had applied. Among universities worldwide, we were ranked in places 201 to 300 for decreasing inequalities (SDG 10), addressing climate change (SDG 13), and and Partnership for goals (SDG 17). As a result of the institution's efforts to end poverty, it received a ranking of 301-400 for SDG01 - No Poverty. ● According to the Times Higher Education Impact Rankings, 2021, Sathyabama is ranked 601-800 overall among all universities worldwide. With the assistance of businesses and other experts, we started faculty development programmes in design thinking, augmented reality, and virtual reality for all of our faculties. • Several NEP 2020 awareness campaigns were held for the benefit of our academics and the larger academic community. To introduce digital technologies for teaching, learning, and assessments, several orientation workshops for staff and students were held. Numerous webinars for healthy living, mental wellness, yoga, gender sensitivity, food and nutrition, and other topics were organised in addition to technical activities. • Sathyabama has been ranked among the top 50 universities for the seventh year in a row thanks to its academic quality, research into realising the national mission, and implementation of sustainability measures. The Institution is ranked 43rd for the year 2022 according to the National Institutional Ranking Framework (NIRF) by the Government of India. Sathyabama is ranked fifth among private institutions in the Atal Ranking of Institutions on Innovation Achievements (ARIIA) 2020, placing it in the "Band Excellent" category for the year 2021. Sathyabama is one of the 41 institutions in India that the QS is taking into account for its World University

Rankings. The institution consistently achieves high rankings in the Times Higher Education Impact Rankings, which compares universities from all across the world in 2022.

12.Plan of action chalked out by the IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year

Plan of Action	Achievements/Outcomes		
Introducing new Programmes on the Specialisation areas	Five Specialisation programs in Computer Science and Engineering have started		
Enhancing the Innovation Ecosystem	24 Startups were incorporated by Staff and Students		
Establishment of new infrastructure	Centre for Advanced Studies was established which has facilities like Supercomputing, Additive Manufacturing, Drone, 3D printing, TEM, SEM, XRD etc		
Star of Excellence award for faculties	129 Staff were awarded Star of Excellence based on their contribution to the institution		
Initiation for Online Degree programmes	UGC has given approval to start online degree programmes in MBA, M.A (English), B.Com, M.Sc (Mathematics) and BBA.		
NBA Accreditation for the eligible Engineering programmes and MBA programme	11 programmes received NBA Accreditation		
Initiation for ABET accreditation	CSE, EEE and Biotech Programmes have successfully completed the ABET 2022-23 review cycle visit		
Participation in NIRF and ARIIA Rankings	Ranked in 43rd position among the Universities in India by National Institutional Ranking Framework. Ranked in Band Excellent by ARIIA Rankings2021.		
Participation in World Rankings -QS Rankings	Sathyabama is ranked in1001-1200 position by QS World University Rankings, 2023 and it is one of the 41 Institutions in India		

	ranked by QS
Participation in Times Higher Education World Rankings	The Institution is ranked in 1201+ position by Times Higher Education World University Rankings 2022 and with respect to Times Higher Education Asia University Rankings, 2022 it is ranked in 501+ position.
12 Whathan the AOAD was placed before	Voc

13. Whether the AQAR was placed before statutory body?

Yes

• Name of the statutory body

Name	Date of meeting(s)
Board of Management	16/08/2022
14.Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to Assess the functioning?	Yes

15. Whether institutional data submitted to AISHE

Year		Date of Submission	
	2021-2022	11/04/2022	

16. Multidisciplinary / interdisciplinary

With programmes in Engineering, Technology, Architecture,
Management, Dental sciences, Nursing, Pharmacy, Law, Physiotherapy,
Arts, Science, and Humanities, Sathyabama Institute of Science and
Technology has developed into a multidisciplinary institution. The
institution's mission is to become a renowned knowledge partner and
technological mentor on a global scale. The core and crossdisciplinary courses are combined in the curricula. The students'
increased understanding is facilitated by the flexibility of the
programme. Inter-disciplinary activities through knowledge
dissemination and sharing platforms including inter-departmental
seminars, club activities, and technical symposiums help students'
lateral thinking skills even further.

Students are offered open electives so that they can choose any course irrespective of their specialization. Students pursuing

degree in core programmes like Mechanical Engineering can choose courses from Management, Augmented and Virtual Reality, Forensic Science, Artificial Intelligence, Drug Delivery System, Neurology, Biology etc.,

As an effort towards the implementation of "Digital India" initiative, courses like Embedded Systems, Virtualization Techniques, Augmented and Virtual Reality (AR and VR), Industrial Robotics and Expert Systems and Drone Electronics etc., are taught to upskill the students. Institutional reforms were also carried out towards digitization in the areas of teaching and learning, examination and evaluation and also in research, wherever there is a feasibility to impart digitization in the system.

Semester Abroad programmes provide global exposure to students and they are given flexibility to study any additional course of their interest at a foreign university and earn extra credits. These extra credits earned are transferred to their regular course credits.

The Institution's preparedness towards the implementation of NEP 2020:

- 1. Introduction of multi-disciplinary and inter-disciplinary curricula with emphasis on skilling, entrepreneurship and employability by embedding value-added courses
- 2. Practicing Outcome based Education
- 3. Enhancement of curriculum flexibility
- 4. Adoption of Choice Based Credit System (CBCS)
- 5. Involvement in multi-disciplinary research
- 6. Curricula augmentation with environmental and human values

As we transform ourselves into a multidisciplinary institution, there is a necessity for integration of humanities and science with STEM (Science, Engineering Technology and Mathematics). The integrated courses in the institution are Media studies with Engineering, Medicine with Humanities, Biology with humanities and Science with Journalism. Other programmes being planned are Tamil, Music and Sociology.

Sustainable development is a core part of the curricula of all the branches, ensuring that all students are groomed to be individuals

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who follow sustainability principles in their professional life. The institution is working towards offering multidisciplinary flexible curricula that enables multiple entry and exit from the undergraduate and postgraduate programmesfor the students. It will allow students to continue their studies from where they left the programme and the credits earned will be transferred to the relevant modified courses of a programme to enable lifelong learning.

17. Academic bank of credits (ABC):

According to NEP 2020, institutions are aiming toward an education delivery system that is moderately flexible and allows students to earn, accrue, redeem, or transfer credits from any institution. When a student gets admitted to this 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 instructed by the relevant authority and is educating the students about it. Students received the step-by-step instructions while setting up their ABC ID logins. In order to enable this, the Institution has also registered with the NAD digi-locker service. By enrolling in MOOC courses like NPTEL, SWAYAM, etc., students can earn credits.

Semester abroad programme (SAP) and the internship abroad programme that offer credits are accommodated in the curriculum. Under the Semester Abroad Programs, students have the chance to spend one semester studying at foreign universities. They take three to six courses that count toward their transfer credits. In order to add more credits to their degree, students can enrol in supplementary courses and other language-related courses. In the fourth and sixth semester of the undergraduate programme, professional training and internships are also granted the proper credit.

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. Based on the courses they took while doing their internship, credits are transferred.

Students are encouraged to participate in outreach initiatives like tree planting, beach and lake cleaning, and other social-outreach related activities in order to promote students' involvement in community development activities and foster a feeling of social and civic responsibility. Additionally, these programmes increase students' social responsibility for caring about issues that pertain to society. The Women Empowerment Cell, NSS, NCC, and

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YRC are also assisting in the development of students' socio-centric thought processes and providing them with the necessary exposure to social challenges.

The institution has embraced the Choice Based Credit System (CBCS), which is in accordance with the guidelines of the University Grants Commission (UGC), where all the courses are changed and modified as advised by UGC in order to allow the easy adoption of the Academic Bank of Credits. The pupils have been given access to ability enhancement, skill enhancement, and general elective courses. An academic coordinator is designated for each department to help students register for courses smoothly. Any course from any programme may be selected by students in any semester.

The institution adheres to the credit systems' rules as laid down by legislative bodies. The focus points of the institutional credit system are the right procedures for introducing interdisciplinary, flexible, and lateral thinking courses.

18.Skill development:

Sathyabama Institute of Science and Technology has established a Centre for Skill Development in collaboration with National Skill Training Institute (NSTI), Micro, Small and Medium Enterprises (MSME) and Rubber Skill Development Council (RSDC) with the following objectives:

- To conduct various Skill development programmes to students and improve their employability
- To promote entrepreneurship
- To contribute to the Manpower Development of our Nation and to elevate the standards of youth socially and economically
- To endorse the knowledge exchange programmes
- To facilitate the industrial institutional interactions

The centre's goal is to improve students' skills through extensive industrial involvement. Students receive excellent academic instruction in addition to practical instruction in a variety of skill sets to aid with employability. In collaboration with the National Skill Training Institute (NSTI), Ministry of Skill Development & Entrepreneurship (MSDE), the Sathyabama Institute of Science & Technology's skill development centre offers a variety of skill-enrichment courses like 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.

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The skill development centre provides opportunities for the students to register themselves for the courses organized by the Centre. The centre is conducting skill gap analysis, identifying the suitable courses or designing these courses. It is mandatory for every student to take a Non-credit course/Vocational course during their study tenure. The course has to be completed before their final semester.

By offering training programmes to rural youth in professions like welding, electrical work, plumbing, lab work, etc., the Skill Development Centre also extends its responsibilities to the wider public. The institution is renowned for providing major assistance for women's empowerment. For impoverished and rural women, the centre also offers specialised skill-development programmes like training in beauty therapy, baking, and tailoring.

The Institution in association with NSQF offers 10 Courses at different Competency levels for the students with the aim of enhancing various skill components. The Institution offers Certificate, Diploma, PG Diploma, Advanced Diploma and Degree courses in varied areas. These courses are offered with the objective of strengthening the students' competency level in the relevant areas. Students from otherinstitutions and organizations also enrol for this skill development courses. Every initiative towards Re-skilling and up-skilling of students and faculty is carried out in order to meet the requirements of understanding and working in the cutting edge technologies.

The Institution offers certificate courses on Banking and Financial Service/Tally ACE Accounting Software, Course on Virtual reality and Augmented Reality, Instrumentation/Quality Control and Non-Destructive Testing technologies, Media and Entertainment/Digital film making techniques for beginners and 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.

19.Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course)

Institution believes in the Indian roots of offering education. Needed initiatives are taken to integrate the elements of Indian knowledge system (IKS). The Institution promotes cultural integration by celebrating Indian festivals and observing National

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days of Importance. Sathyabama conducts programmes to educate students on the country's culture and heritage. Special eventsare organized for International Students where they are introduced to the Indian culture, heritage and tradition.

In the annual cultural events, due representation and share is given for the promotion of Indian culture and fine arts. The institution also encourages seasonal fests showcasing the local and regional culture. The institution honours the exemplary work of famous personalities with the Indian cultural background with due recognition and respect. Every year institution conducts "Tamil Pattimandram" - A Tamil literature and art based debate competition. In this competition, students are encouraged to participate on the topics related to the culture, leadership, art and literature of the region. This motivates the students to incline themselves towards adoption of the regional and national culture.

The B.Sc. Fashion Design programme has introduced courses on Indian culture through the clothing history and traditions of different ethnicities and the varied geography, climate, and cultural traditions of the people of each region of India. The programme focuses on weaves, fibres, colours, and material of clothing as well as the vast examples of indian embroidery, prints, handwork, embellishment, styles of wearing clothes etc. Traditions relating to wearing of clothes of different hues based on the religion, dance performances and ritual concerned, is also a part of the curriculum.

The faculty of the School of Bio and Chemical Engineering are involved in research relating to the Indian Medicine system of Ayurveda and Siddha. They inculcate the results of their research through modern technology to overcome societal issues concerning human health. The institution is planning to introduce undergraduate programmes related to aforementioned areas. The Institution has proposal to offer courses on Traditional medicinal practices, Organic farming and digitalization of Indian traditional knowledge.

The B.Des. (Bachelor of Design) Programme designed for promoting ancient Indian architectural styles into the modern day structures. The students are encouraged to visit architectural site in order to understand the architectural history and traditions of India. Students are instructed on the traditional building methods used in the past and encouraged to utilized the knowledge and blend it with modern technology. Faculty from the Institution has been granted the research and the development fund by Science and heritage research India (SHRI), the Government of India. This research intent to protect the monuments based on the latest technology and to

transfer the technology globally.

Programmes offered by the Institution are taught in English at present. However, the Institution has plans to offer degree courses in bilingual mode in future, to implement the recommendations of NEP 2020, which will be favourable for the students from villages or socially-economically backward sections of the community who have completed higher secondary courses under regional mode and or have difficulty in learning in English.

20. Focus on Outcome based education (OBE): Focus on Outcome based education (OBE):

Outcome Based Education (OBE) is practiced by the institution. The stakeholders are involved 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 theprogramme. The Board of Studies members are guided to design multidisciplinary curricula, based on recent research and professional practices of the industry. The Board of Studies membersapproves the curriculum following the principles of OBE and plan for the effective delivery of the courses, which includes the preparation of study material, classroom activities and assignments and passed by the Academic Council.

All programmes are designed based on Program Outcomes (POs) and Programme Specific Outcomes (PSOs) as defined by NBA. Co-curricular and extra-curricular activities are designed to help students in achieving these POs and PSOs. The cumulative contribution of the design of curriculum, teaching pedagogies, learning models; evaluation metrics enable students to attain attributes of learning during and after completion of a particular programme or a course.

Each Programme is well structured using POs and PSOs. The POs and PSOs are displayed in the student mobility areas of the department. Each course is designed with definite course outcomes. These course outcomes are made well aware to the students before the inception of the classroom instruction.

Outcome based education model is incorporated in the examination process. Question papers are prepared following the bloom's taxonomy. Slow learners and advanced learners abilities are tested with considerable weightage in question paper setting. The attainment of course outcomes, programme outcomes are well analysed, remedial measures are taken by the departments. The results of this analysis are used as the potential source of input in redesigning curriculum and activities by the department. This also provides

another advantage of practicing of OBE that facilitate development of the curriculum based on the needs and outcomes that are expected from the students. Course Outcomes are assessed through Direct and Indirect methods which are unique to each type of course. Direct assessment is done based on the scores of the CAE and Assignments for theory courses and Model and End Semester Examinations for practical courses. Course exit survey, graduate exit survey, alumni survey and employer surveys are conducted to collect feedback on learning outcomes from students, parents, alumni and employer to assess the attainment of Course Outcomes (COs), Programme Outcomes (POs) and Programme Specific Outcomes (PSOs).Program Assessment Committee (PAC), Department Advisory Committee (DAC) assists and plays a crucial role in the calculation and analysis of outcomes attainment at the department level.

The successful implementation of OBE has resulted in the accreditation of ten undergraduate programmes and one postgraduate programme in management studies. The institution is well focussed and determined towards the implementation of outcome based education in all the programmes. Stakeholders' expectations are met at reasonable levels with the institutionalisation of OBE principles.

21.Distance education/online education:

The Centre for Distance and Online Education (CDOE) was established in 2020 with the objective of disseminating knowledge and imparting quality education in the open and distance learning mode. This is following the Online Learning (OL) and Online and Distance Learning (ODL) regulations of UGC 2020. This is working with a vision of providing a life-long learning platform for all aspiring learners in order to reskill and upskill their knowledge and become an industryready workforce through a systematic approach. The Centre strives to facilitate high quality learning for those who cannot avail themselves of higher education in the conventional mode and those who look upon learning as a life-long activity. Currently, the Centre offers various undergraduate and postgraduate programmes Humanities and Management. The centre provides online education in M.Sc. Mathematics, M.A. English, Master of Business Administration, Bachelor of Commerce and Bachelor of Arts as online programmes.

The Institution has started online programmes (OL) across the domains of Arts ,Commerce, Business Administration, Mathematics and English Literature from the year 2021. These programmes contribute to the diverse learners. The institution is also partnered with the Ministry of External Affairs in the eVBAB project from 2022. eVBAB

is a capacity building initiative by the Government of India to educate students of Africa on a full scholarship. The institution at present is educating 88 learners through online mode from various parts of Africa through the eVBAB project.

Sathyabama OL Programmesss 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 is its flexible format of program structure. All programs are designed to teach the students about how to adapt to new situations, and to take the lead and think differently.

To provide efficient online education, this centre 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 CDOE are given online in accordance with the UGC's four-quadrant strategy. Learners will 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 by the environment. The learners' academic interests are catered to by CDOE. The key elements in attaining the program's learning objectives are qualified faculty and learning materials.

Extended Profile

1.Programme		
1.1		75
Number of programmes offered during the year:		
File Description	Documents	
Data Template		View File
1.2		26
Number of departments offering academic programmes		
2.Student		

2.1		13094
Number of students during the year		
File Description	Documents	
Data Template		View File
2.2		2571
Number of outgoing / final year students during the	e year:	
File Description	Documents	
Data Template		<u>View File</u>
2.3		13099
Number of students appeared in the University examination during the year		
File Description	Documents	
Data Template		<u>View File</u>
2.4		224
Number of revaluation applications during the year		
3.Academic		
3.1	1711	
Number of courses in all Programmes during the year	ear	
File Description	Documents	
Data Template		<u>View File</u>
3.2	821	
Number of full time teachers during the year		
File Description	Documents	
Data Template		<u>View File</u>
3.3		821

Number of sanctioned posts during the year			
File Description	Documents		
Data Template		<u>View File</u>	
4.Institution			
4.1		98548	
Number of eligible applications received for admis Programmes during the year	sions to all the		
File Description	Documents		
Data Template		View File	
4.2		1361	
Number of seats earmarked for reserved category a Govt. rule during the year	as per GOI/ State		
File Description	Documents		
Data Template	<u>View File</u>		
4.3		282	
Total number of classrooms and seminar halls			
4.4		4174	
Total number of computers in the campus for acade			
4.5		12969.51	
Total expenditure excluding salary during the year (INR in lakhs)			
Par	rt B		
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 University			
Outcome Based Education (OBE) is practiced which facilitates in framing the course outcome statement for every course in all the			

programmes. Curriculum is designed based on the expected learning outcomes that covers the knowledge, skills and attitudes of the students. District Industrial Survey reports (from MSME) are considered to identify the local needs. Institution provides 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. The attainment of all the program outcomes ensures that the curriculum and the teaching learning process are aligned with the graduates attributes. Design thinking course is introduced to promote innovation culture.

Salient features of our curriculum

- Our curriculum is on par with International standards
- Curriculum accommodates credit transfer programs like Semester Abroad Programme, Internships Abroad etc
- Curriculum follows CDIO framework
- Universal Human Values, is offered as a 3 credit course in all our programmes emphasis on environmental education
- NSS/NCC/YRC form a part of our curriculum as Non Credit Course
- Industry tailored courses as electives for sixth, seventh and eighth semester students
- Curriculum enabling Experiential Learning Value added courses and employability- oriented certification courses are offered
- Students can earn credits by enrolling in MOOC courses like NPTEL, SWAYAM, Coursera etc
- A mandatory seminar course in Post Graduate Curriculum to enhance the interpersonal skill of the students

File Description	Documents
Upload relevant supporting document	<u>View File</u>

1.1.2 - Number of Programmes where syllabus revision was carried out during the year

40

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

1.1.3 - Total number of courses having focus on employability/ entrepreneurship/ skill development offered by the University during the year

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

1411

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

1.2 - Academic Flexibility

1.2.1 - Number of new courses introduced of the total number of courses across all programs offered during the year

166

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

1.2.2 - Number of Programmes in which Choice Based Credit System (CBCS)/elective course system has been implemented during the year

75

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

1.3 - Curriculum Enrichment

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

Sathyabama Institute of Science and Technology strongly believes in integrating cross cutting issues in curriculum relevant to professional ethics, gender, human values, environment, and sustainability with a view to ensure holistic development of the students. The Institution provides value-based education to students to inculcate values in them and making them better citizens. The Institution organizes workshops/ seminars/Conferences on Environment & Sustainability to make students aware about efficient use of

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natural resources. Courses such as Social Welfare and Social Legislation in India, Environmental Laws, International Relations, Professional Ethics and Professional Accounting, Women and Criminal Law, Penology and Victimology, Gender Justice and Feminist Jurisprudence, Offenses against Child and Juvenile offenses provide knowledge about the various legislations and make students understand the importance of human values and ethics in life. CMoral Values, Human Values and Professional Ethics are taught in the induction programme when the students join the Institution. Gender related course titled "Feministic Jurisprudence" is offered for students studying Law. Events like Quiz, Miss-Ethnic, Role-Play and Elocution Competitions on Women Empowerment are organized and Great Women Personalities are invited as guests to share their views and experience. Programmes on "Awareness of Sexual Harassment at Work Place", " Laws related to Women", "Cervical Cancer Awareness", Breast Cancer Awareness " "Behavior and Discipline of Girl Students", and "Violence against women, Safeguards and awareness of women laws" were conducted for the students.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

1.3.2 - Number of value-added courses for imparting transferable and life skills offered during the year

56

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

1.3.3 - Total number of students enrolled in the courses under 1.3.2 above

1.3.3.1 - Number of students enrolled in value-added courses imparting transferable and life skills offered during the year

5546

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

1.3.4 - Number of students undertaking field projects / research projects / internships during the year

4088

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

1.4 - Feedback System

1.4.1 - Structured feedback for design and review of syllabus – semester wise / is received from Students Teachers Employers Alumni

• All 4 of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>

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

 Feedback collected, analysed and action taken and feedback available on website

File Description	Documents
Upload relevant supporting document	<u>View File</u>

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Demand Ratio

2.1.1.1 - Number of seats available during the year

5727

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.1.2 - Total number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per applicable reservation policy during the year (Excluding Supernumerary Seats)

2.1.2.1 - Number of actual students admitted from the reserved categories during the year

1361

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

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

The institution has effective diagnostic process and remedial measures in place to support advanced learners and slow learners. The students are continuously monitored based on their performance in the CAE and ESE examinations every semester. Departments organize induction programmes for fresher's to make them understand the scope of subjects, facilities and other support systems available in the institution. Bridge courses are conducted for slowlearners and students who come from non-mathematics background in order to support them to meet thedemands of the curriculum.Mentor - Mentee system is in place to provide customized, one- to-one support to students. Advanced learners are encouraged to participate in hackathons, present tech talks on variouslatest technological advancements. The advanced learners are made to help slow learners in peer learningactivities. The advanced learners are encouraged to organize, conduct workshops, seminars for their peers, whichwill develop their managerial skills, leadership skills and their overall personality. The advancedlearners are encouraged to involve themselves in in-house project development teams, consultancy projectteams, etc. Advancedlearners are given rigorous training targeting dream companies and high packagecompanies. InterestedAdvanced learners are encouraged to take up higher education training, IAS training, Value added courses andcertification courses. Project Innovation and Development Centre (PRIDE) is an initiative to foster product building passion among all students. Both the slow learners and advanced learners are given different opportunities to getthemselves trained on specific domain knowledge.

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Link For Additional Information	hhttps://www.sathyabama.ac.in/Student_Development_Cell

2.2.2 - Student - Full time teacher ratio during the year

Number of Students	Number of Teachers
13094	821

File Description	Documents
Upload relevant supporting document	<u>View File</u>

2.3 - Teaching-Learning Process

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

Sathyabama Institute of Science and Technology strongly believes in "Learning by Doing". The curriculum is framed with this motto in mind.

Experiential learning

Our courses designed with Problem based Learning approach helps students in learning the concepts by understanding from the prototypes they have developed. Design Thinking course helps the students in identifying real world problems, designing a solution, implementing it and identifying the scope of development in the future.

Experimental Learning

60% of the courses have a related laboratory course and the programs are classified into closed, semi open, open ended and complex Engineering problems. The institution ensures that the students are able to understand and solve complex engineering problems and provide solutions to real world problems in an ethical manner.

Participatory Learning

Students are encouraged to actively participate in the learning process by exposing them to various activity based learning techniques. Internet Hunt, Reacting to situations, Role play, Group Discussions, Just a Minute, Quiz etc.

Problem Solving Methodologies

Students are provided with case studies to enhances the problem solving ability, this develop the ability to convert a real time problem into solvable problem statement. Institution TBI provides mentoring support as well as financial support in the form of seed money to students, to convert their innovative ideas into products, services and technologies.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

2.3.2 - Teachers use ICT enabled tools including online resources for effective teaching and learning processes during the year

The various ICT tools used in the campus are listed as follows

- 1.Overhead Projectors- Available at all classrooms, demonstration rooms and laboratories
- 2.Desktops and laptops- Available at department laboratories, faculty cabins and HOD cabins.
- 3.Smart boards- Smart boards are installed at all the Smart classrooms in the campus
- 4.Licenced Zoom logins- 149 nos
- 5.Sathyabama Learning Management System
- 6.Access to MOOC platforms like NPTEL, Coursera etc.,
- 7. Sathyabama YouTube Channel hosting prominent lectures of the faculty
- 8. Remote access to Digital library resources through Knimbus mobile application
- 9.Media lab facility to create video lectures

10. Online Examination Conduction through AMCAT service provider

The tools used for the teaching learning processes as follows:

E Platform -Sathyabama LMS:

Sathyabama Learning Management System uses the internet platform to maintain student attendance, maintain course material, teaching record, online tutorials, assignments, quizzes and internal examination etc.

E- resources- Digital Library

Faculty and students can access the online digital resources of all the subscribed journals, magazines, reference and text books through the Knimbus mobile app from anywhere.

E- lecture platform - Zoom

Viva voce examinations, video conferencing and discussions, placement training, formal meetings are held through Zoom platform. Polls and quizzes are conducted in Zoom to make the classes interactive and participative.

E- class room- Smart board

Few class rooms of every department is equipped with smart boards enabling the teaching learning process interactive and informative.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

2.3.3 - Ratio of students to mentor for academic and other related issues during the year

2.3.3.1 - Number of mentors

669

File Description	Documents
Upload relevant supporting document	<u>View File</u>

2.4 - Teacher Profile and Quality

2.4.1 - Total Number of full time teachers against sanctioned posts during the year

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821

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.4.2 - Total Number of full time teachers withPh.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D'Lit. during the year

445

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.4.3 - Total teaching experience of full time teachers in the same institution during the year

2.4.3.1 - Total experience of full-time teachers

6037

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.4.4 - Total number of full time teachers who received awards, recognition, fellowships at State, National, International level from Government/Govt. recognised bodies during the year

63

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.5 - Evaluation Process and Reforms

2.5.1 - Number of days from the date of last semester-end/ year- end examination till the declaration of results during the year

15

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 year

15

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.5.2 - Total number of student complaints/grievances about evaluation against total number appeared in the examinations during the year

224

File Description	Documents
Upload relevant supporting document	<u>View File</u>

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

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)". It is software developed by J B Software Systems, Chennai. The features and impacts of SETS 2015 is listed below:

Features

- Entry, verification, and correction of student information and 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

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- 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	Documents
Upload relevant supporting document	<u>View File</u>

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

A. 100% automation of entire division & implementation of Examination Management System (EMS)

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

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

Sathyabama Institute of Science and Technology has adopted Outcome Based Education and 10 of our Undergraduate programs are accredited by National Board of Accreditation. Generic Program Outcomes (POs) as defined by NBA and the Programme Specific Outcomes (PSOs) as expected by the professional bodies like IEEE, ISTE and ASME are defined for every programme. POs and PSOs are made public to the stakeholders and are available in the following:

- Institution's Newsletters
- Students' notebooks
- Faculty log books
- Department notice boards
- Laboratories

Syllabus books/ soft copies of the syllabus containing POs and PSOs of all programmes are made available in the website of the Institution

File Description	Documents
Upload relevant supporting document	<u>View File</u>

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

A systematic approach is followed for the attainment of COs and POs/PSOs. Department Advisory Committee and Program Assessment Committee periodically assess and set the threshold for CO and PO/PSO attainment and reviewed by the Internal and external audit. At the end of every semester and programme CO and PO/PSO attainment is calculated respectively. Discrete formulae are framed for CO attainment and PO/PSO attainment. 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. Assessment of Course Outcomes are through Direct and Indirect methods which are unique to each type of course.

Direct assessment tools are listed:

- CIE (CAE+ Assignments) and ESE for theory courses
- Model and End Semester Examinations for practical courses
- CIE and Project evaluation for PBLA courses
- Reviews and Viva voce for Design Thinking, Interdisciplinary projects and final year projects (Phase I and Phase 2)
- Oral presentation for Professional training
- Courses and credit mapping for NPTEL/Certification courses/Personality Development Tests

Indirect method for Course Outcome assessment involves Course End

Survey whereas indirect tools for PO/PSO assessment involve Graduate Exit Survey, Alumni survey and Employer survey

After collecting the data, CO attainment and PO/PSO attainment are then assessed, discussed in the committees, appropriate actions are taken and the impact is studied which acts a source for further improvement

File Description	Documents
Upload relevant supporting document	<u>View File</u>

2.6.3 - Number of students passed during the year

2.6.3.1 - Total number of final year students who passed the university examination during the year

2571

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a web link)

https://sist.sathyabama.ac.in/sist naac/documents/2.7.1/2.7.1 Additional.pdf

RESEARCH, INNOVATIONS AND EXTENSION

3.1 - Promotion of Research and Facilities

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

Sathyabama Institute of Science and Technology's activities are aimed at developing excellence in Science & Technology through competitive academic and research environment, linkages with the industry and leading academic and research institutions. 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. To address the global challenges with respect to social, economic and environmental issues, the Institution is involved in breakthrough research and innovation in

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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

File Description	Documents
Upload relevant supporting document	<u>View File</u>

3.1.2 - The institution provides seed money to its teachers for research (amount INR in Lakhs)

411.03

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

3.1.3 - Number of teachers receiving national/international fellowship/financial support by various agencies for advanced studies/ research during the year

31

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

3.1.4 - Number of JRFs, SRFs, Post-Doctoral Fellows, Research Associates and other research fellows enrolled in the institution during the year

46

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

3.1.5 - Institution has the following facilities to support research Central Instrumentation Centre Animal House/Green House Museum Media laboratory/Studios Business Lab

A. Any 4 or more of the above

Research/Statistical Databases Moot court Theatre Art Gallery

File Description	Documents
Upload relevant supporting document	<u>View File</u>

3.1.6 - Number of departments with UGC-SAP, CAS, DST-FIST, DBT, ICSSR and other recognitions by national and international agencies during the year

7

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

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 year (INR in Lakhs)

65.12

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.2.2 - Grants for research projects sponsored by the government agencies during the year (INR in Lakhs)

1975.71

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

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

1

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

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

Sathyabama has it fully functional incubation centre (http://www.sathyabamatbi.in/) with its preincubation facilities, mentoring support, Intellectual property management with periodical trainings. Dot2globe Solutions India Private Limited, CZ Smart mobility, Highavenue creative labs private limited, Imagine Trend, DataXtech Info System are few of the incubated companies under Sathyabama Technology Business Incubator. Periodical seminars, workshops and trainings are offered for a broader understandingand self discovery. To involve and increase the involvement of students and faculty in the innovation and entrepreneurial arena, National Innovation and Startup Policy was initiated and implemented (https://sathyabama startup.com/).Sathyabama Institute Innovation and Start Up policy for students and faculty, intends to strengthen the innovation and start up eco system in the campus, enhance institute partnership with eco system enablers, mentor and nurture the innovative ideas of students and faculty, provide networking for funding and transform them to successful start up entrepreneurs. An exclusive Institute startup policy for the students and faculty of Sathyabama, includes acquiring credits through start up activities, trainings and value added courses, creating the entrepreneurial eco system at the student and faculty level. Preincubation and incubation services including seed funding, legal and patent support, provision of physical space and logistic services, IP services are currently in place to support student and faculty innovations.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

3.3.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year

81

3.3.2.1 - Total number of workshops/seminars conducted on Research methodology, Intellectual

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Property Rights (IPR), entrepreneurship, skill development year wise during the year

81

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

- 3.3.3 Number of awards / recognitions received for research/innovations by the institution/teachers/research scholars/students during the year
- 3.3.3.1 Total number of awards / recognitions received for research/innovations won by institution/teachers/research scholars/students year wise during the year

143

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.4 - Research Publications and Awards

- 3.4.1 The institution ensures implementation of its stated Code of Ethics for research
- 3.4.1.1 The institution has a stated Code of Ethics for research and the implementation of which is ensured through the following
- A. All of the above
- 1. Inclusion of research ethics in the research methodology course work
- 2. Presence of institutional Ethics committees (Animal, chemical, bioethics etc)
- 3. Plagiarism check
- 4. Research Advisory Committee

File Description	Documents
Upload relevant supporting document	<u>View File</u>

3.4.2 - The institution provides incentives to teachers who receive state, national and international recognitions/awards

Commendation and monetary incentive at a

A. All of the above

University function Commendation and medal at a University function Certificate of honor Announcement in the Newsletter / website

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.4.3 - Number of Patents published/awarded during the year

3.4.3.1 - Total number of Patents published/awarded year wise during the year

232

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.4.4 - Number of Ph.D's awarded per teacher during the year

3.4.4.1 - How many Ph.D's are awarded during the year

215

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.4.5 - Number of research papers per teacher in the Journals notified on UGC website during the year

1439

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.4.6 - Number of books and chapters in edited volumes published per teacher during the year

3.4.6.1 - Total number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings during the year

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312

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.4.7 - E-content is developed by teachers For e- B. Any 4 of the above PG-Pathshala For CEC (Under Graduate) For **SWAYAM For other MOOCs platform For** NPTEL/NMEICT/any other Government **Initiatives For Institutional LMS**

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.4.8 - Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed

Scopus	Web of Science
40	25

File Description	Documents
Any additional information	<u>View File</u>
Bibliometrics of the publications during the year	<u>View File</u>

3.4.9 - Bibliometrics of the publications during the year based on Scopus/ Web of Science - h-**Index of the University**

Scopus	Web of Science
84	74

File Description	Documents
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	<u>View File</u>
Any additional information	<u>View File</u>

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

The policy permits revenue sharing between the staff and the Institution in the proportion of 90% and 10%, respectively, for advisory consultancy where the clients utilise the advice/consultancy services of the staff without using institutional infrastructure / facilities / equipment/consumables / materials. The policy allows revenue sharing between the staff and the Institution in the proportions of 60% and 40%, respectively, for service consulting where the client uses the consultancy of a staff and Institution's equipment alone without using the consumables and other materials.

- 1. There should be a demonstrable benefit to both Institution and the Principal investigator from the consultancy through income/enhanced reputation, and/or expanding the expertise of the staff member.
- 2. The consultancy must not be in conflict with the policies, functions, objectives, or interests of the institution or damage the institution's reputation.
- 3. All the consultancy projects operated at Sathyabama Institute of Science and Technology are required to include 5% overhead charges, due to the utilization of the infrastructure facilities offered by the institution.
- 4. 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 organizational level.
- 5. The principal consultant is responsible for ensuring the satisfactory progress and completion of the work once the consultancy project was approved.
- 6. On completion of the consultancy project, a detailed report has to be prepared and submitted to the Vice chancellor.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

3.5.2 - Revenue generated from consultancy and corporate training during the year (INR in Lakhs)

3.5.2.1 - Total amount generated from consultancy and corporate training during the year (INR in lakhs)

90.17

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

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 year

The institution encourages faculty, students, and staff to regularly interact with the neighbourhood community for their holistic development and achieves sustained community development through a variety of activities. Students and faculty participate in community based activities through social outreach initiatives of the institution.

Several programmes are run in the institution to educate the public and students about Sustainable Development Goals (SDGs).

The Community Development Club of the Institution functions to inculcate the spirit of service among students. Various awareness programs, workshops, rallies, and road-shows with themes like cleanliness, green environment, traffic rules awareness, and protection of rights of persons with disability are organized. Under Unnat Bharath Abhiyan, a Government of India's initiative to develop villages, the Institution has adopted 5 villages and helped them in solving their issues by providing technical solutions. Students visit these villages and involve in community development activities.

Awareness programs on various legal issues and legal rights, constitutional rights, and obligations are organized for students to educate them about their rights and responsibilities. Extension and outreach activities are conducted to sensitize the students towards social issues like domestic violence, dowry, child abuse, beggars, female child, victims of violence, old and infirm, refugees, and displaced persons. The Institution has National Service Scheme(NSS)

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and National Cadet Corps (NCC)Units actively involved in extension activities in the neighbourhood community. The NSS in collaboration with other organisations, trusts, NGOs, and hospitals coordinates outreach initiatives to address regional issues and sensitise students about social issues.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

- 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 year
- 3.6.2.1 Total number of awards and recognition received for extension activities from Government / Government recognised bodies during the year

25

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.6.3 - Number of extension and outreach programs conducted by the institution including those through NSS/NCC/Red cross/YRC during the year(including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs)

45

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.6.4 - Total number of students participating in extension activities listed at 3.6.3 above during the year

10935

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.7 - Collaboration

- 3.7.1 Number of collaborative activities with other institutions/ research establishment/industry for research and academic development of faculty and students during the year
- 3.7.1.1 Total number of Collaborative activities with other institutions/ research establishment/industry for research and academic development of faculty and students during the year

239

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

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 year

41

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

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.

The Institution has excellent teaching-learning facilities that provide the most satisfying learning experience to students. Our campus has an admirable academic ambience with adequate classrooms, laboratories, centres of excellence, library, seminar halls, mega classrooms; ICT enabled smart class rooms, auditoriums. We have

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modernized well equipped laboratories with state of the art infrastructure which are upgraded periodically, to facilitate experiential learning of the students. Program specific infrastructure like Aero Hanger, industry Robot, Windmill generation unit and MOOT court are available for students pursuing Aeronautical Engineering, Mechanical Engineering, Electricals and Electronics Engineering and law respectively. To cater to the needs of domain specific, tailor-made courses in curriculum, Centres of Excellence are established in association with leading Industries like CISCO, RIA, HCL Technologies, Siemens, Capgemini, Virtusa, GE, Infosys, QMax, NI Labview Academy and Vectorworks. Sathyabama Institute of Science and Technology has a massive computing infrastructure with latest software used in academia and industries. A 'NextGen Lab' has been established to explore cutting-edge computing technologies like Augmented Reality (AR), Virtual Reality (VR), Artificial Intelligence (AI), Internet of Things (IOT), block chain and Data science. Virtual Computing Lab, Data science lab and Cloud Computing labs are available for the students of Computer Science Engineering.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

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

Sathyabama gives equal importance in education and extracurricular activities. Sports facilities available in the campus include play courts, playgrounds for Volleyball, Basketball, Kabadi, Ball badminton, Tennis, Hand ball, Foot ball, Hockey, Kho-kho, Cricket and other outdoor games. Facilities for indoor games like chess, carom and table tennis are also available. We encourage students' participation in the National and International tournaments and students have won laurels to the institution by winning several trophies. In association with AIU (Association of Indian Universities), we host tournaments related to Chess, Taekwondo, Cricket, Squash and Basketball. Our sports grounds, courts and other facilities are used by corporate to conduct sports competitions. We have organized UBA Season-4 Pro Basketball League and 25th Dr.MGR Trophy-Inter Institutional T20 Cricket Tournament. We conduct mega sports competitions to Corporates and School Students. All India FIDE rating Chess tournament, South Zone Inter University Women Cricket Tournament, Wheel Chair Basket ball U-23 team training camp. Organizing Mega Sporting events is a way of nurture, a sign of our culture, adds value to the student efforts in realizing their aspirations. A well equipped Gymnasiums separately for Boys and

Girls are available and it utilised by our faculty members also during the free time. Yoga sessions are conducted by trained yoga professionals, for faculty and students to help them maintain healthy mind and body. Open air theatre and auditoriums are available for conducting mega cultural events and other events.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

4.1.3 - Availability of general campus facilities and overall ambience

Sathyabama Institute of Science and Technology provides high class facilities to cater to the educational, physiological and psychological needs of the students and faculty. Though located in the city limits, the campus has a fresh and green landscape throughout its area, with wide concrete internal roads connecting various departments and amenities. The campus is well connected within, through battery vehicles plying between departments, research centres and hostels. The entire campus is equipped with wifi facility enabling the students to learn and connect anytime anywhere. All the buildings in the campus are provided with ramps, lifts and toilets for differently abled students and faculty. The academic wing of the Institution has 11 Schools comprising of 25 departments offering 49 UG programmes and 25 PG programmes. While the Research wing of the Institution has 13 research centres with facilities on par with International standards, funded by various International and National Agencies. The Campus has 5 Boys Hostels spread across an area of approximately 10,00,000 square feet and 5 Girls Hostels spread over an area of approximately 5,50,000 square feet. Medical room and Emergency Vehicles are also available which provide 24/7 services. Sathyabama General Hospital which is located within the campus has advanced diagnostic facilities and specialist doctors to provide health care services to the students and faculty. 12 conference halls equipped with good sound system, air conditioning and seating facilities cater to the needs of occasions like conferences, seminars, symposiums, training and student performance events.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

4.1.4 - Total expenditure excluding salary for infrastructure augmentation during the year (INR in Lakhs)

12969.51

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

4.2 - Library as a Learning Resource

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

The library operations and services are fully computerized since the year 2006, using AutoLib Library Management Software with Barcode Technology, and was later upgraded with RFID Technology in the year 2016. Typical operations of library such as acquisition, cataloguing, circulation, serials, membership, reservation, overdue, Library visitors, Library statistics, and various report generations are computerized. The catalogue of the holdings is available 24X7 for online access through the Web OPAC.

LIBRARY PORTAL

Library portal facilitates all details about the Central Library in an elaborate and informative manner. It provides access to all subscribed scholarly content of 30,000+e-Journals and 2,00,000+ eBooks through all leading databases and also contains the URL link of major scholarly Open-source content.

E-RESOURCES

Central Library is a hub of information services and serves as a major learning and resource centre which supports teaching, learning, scholarship and research activities. With the fast-growing collection in digital forms, it provides major e-resources such as IEEE Journals, Science Direct, IEEE Proceedings, ASME, ASCE, ACM, Springer, ProQuest Academic Complete e-Book collection, ProQuest Central e-Journals and Web of Science to the user community.

KNIMBUS E-LIBRARY PLATFORM:

It is a customized e-Library portal which provides the users all the information available through the library on any device from anywhere. 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 - all on one cloud platform.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

4.2.2 - Institution has subscription for e-Library resources Library has regular subscription for the following: e – journals ebooks e-ShodhSindhu Shodhganga Databases

A. Any 4 or all of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>

4.2.3 - Annual expenditure for purchase of books/ e-books and subscription to journals/e-journals during the year (INR in Lakhs)

325

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

4.2.4 - Number of usage of library by teachers and students per day (foot falls and login data for online access)

3051

File Description	Documents
Upload relevant supporting document	<u>View File</u>

4.3 - IT Infrastructure

4.3.1 - Number of classrooms and seminar halls with ICT - enabled facilities such as LCD, smart board, Wi-Fi/LAN, audio video recording facilities during the year

282

	File Description	Documents
	Upload the data template	<u>View File</u>
1 1	Upload relevant supporting document	<u>View File</u>

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

In order to procure, maintain and service the IT infrastructure, Sathyabama Institute of Science and Technology has a strong IT Policy in place. This policy provides the procedure and guidelines that govern the responsible usage information technology resources of the Institution. Every member/user of the Institution's IT resource is expected to be familiar with and adhere to this policy, and ensure that it is used for promoting the mission of the Institution towards teaching, learning, research, and administration. The policy intends to maintain, secure, and ensure legal and appropriate use of IT infrastructure established by the Institution on the campus. It provides guidelines for protecting the confidentiality, integrity, and availability of the information assets that are accessed, created, managed, and/or controlled by theInstitution. Detailed policy can be found in www.sathyabama.ac.in. Sathyabama makes appropriate provision for IT facilities in the budget. 5-10% of the revenue is spent on strengthening the IT infrastructure. Catering to the teachinglearning needs of students, faculty and research scholars, 600 Mbps of internet bandwidth is provided through Reliance JIO and BSNL, connected to all the terminals throughout the Campus.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

4.3.3 - Student - Computer ratio during the year

Number of students	Number of Computers available to students for academic purposes
13094	4174
4.3.4 - Available bandwidth of internet connection in the Institution (Leased line)	• ?1 GBPS

File Description	Documents
Upload relevant supporting document	<u>View File</u>

4.3.5 - Institution has the following Facilities for e-content development Media centre Audio visual centre Lecture Capturing System(LCS) Mixing equipment's and softwares for editing

A. All of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Upload the data template	<u>View File</u>

4.4 - Maintenance of Campus Infrastructure

4.4.1 - Total expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the year

3566.62

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

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.

Sathyabama offers the opportunity of quality education and research to all its faculty and students by rendering top notch infrastructure facilities. The Institution houses 3500 computers in various laboratories deployed with all latest technology required for teaching and research. The institution has well equipped laboratories and equipment in all departments. There are well laid policies and procedures for the purchase, maintenance, utilization and disposal of all software, hardware, mechanical equipment and chemicals. Planning and Monitoring Committee, Purchase Committee, Finance Committee are involved in the process of procurement and maintenance of all facilities. An online Inventory Management System is maintained and reviewed by the Planning and Monitoring Committee periodically. The inventory requirements are routed to the committee through the heads of departments. Standard Operating Procedures, Laboratory safety measure, chemical handling procedures are periodically reviewed and circulated to the departments for proper

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usage and maintenance of the facilities. The Institution has well equipped computer laboratories with more than 3500 terminals with LAN networking. The entire campus is ICT enabled, with wi-fi connectivity and intranet facility. The Institution has laid down clear policy for the management of hardware and software assets that facilitate the usage of IT resources. There are well laid procedures for managing the purchase, maintenance, utilization and disposal of software and hardware applications within the Institution. The Institution has a Technical Team that takes care of the utilization and maintenance of computers, peripherals and other IT resources.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

5.1.1 - Total number of students benefited by scholarships and free ships provided by the institution, Government and non-government agencies (NGOs) during the year (other than the students receiving scholarships under the government schemes for reserved categories)

1135

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

5.1.2 - Total number of students benefited by career counselling and guidance for competitive examinations offered by the Institution during the year

6430

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

5.1.3 - Following Capacity development and skills enhancement initiatives are taken by the institution Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene)

A. All of the above

Awareness of trends in technology

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

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

• All of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>

5.2 - Student Progression

5.2.1 - Number of students qualifying in state/ national/ international level examinations during the year (eg:NET/SLET/GATE/GMAT/CAT/ GRE/TOEFL/Civil Services/State government examinations)

5.2.1.1 - Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year

992

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

5.2.2 - Total number of placement of outgoing students during the year

2124

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

5.2.3 - Number of recently graduated students who have progressed to higher education (previous graduating batch) during the year

817

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

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 year

36

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

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

Student Council: Student Council is serving as the effective communication medium between the administration and students. Student Council acts as the interactive body facilitating primary level of communication. Student Council also assists in planning and development of various cultural, sports, social, recreational and other educational interests of students in the institution. The Student council provides scope to contribute in the development of students' leadership skills, program planning and volunteering. Student council encourages student participation in various self-development, inter and intra college competitions. Student council disseminates information about the National level competitions such as HACKATHONs and MARATHONs and motivates students to perform well in these activities.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

5.3.3 - Number of sports and cultural events / competitions organised by the institution during the year

35

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

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 during the year

The Sathyabama Alumni Association was established by our Founder Chancellor Col. Dr. Jeppiaar in the year of 1993. Currently in its 21st year, it continues to foster meaningful relationships between Sathyabama alumni and the present Sathyabamites. The connections made in this program help prepare our students for a successful future and deliver a lasting impact on our campus community. One of the main purposes of alumni associations is to support a network of former graduates who will in turn help to enhance the profile of the university. Similar to the other student organizations in the University, alumni association aims to bring together like-minded individuals.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

5.4.2 - Alumni contribution during the year (INR in Lakhs) A. ? 5Lakhs

File Description	Documents
Upload relevant supporting document	<u>View File</u>

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

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

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 activitiesinemerging 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.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

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

The administrative leadership team of the Institution takes care of effective management of the Institution .The team functions under the guidance of Vice Chancellor . They involved in all the major activities of the Institution that directs the institution towards the achievement of strategic goals. The members of the Team are consulted and their opinion is given due weightage whenever important decisions are made. The main objective of the team is to support the stakeholders of the Institution in all the initiatives taken for the growth and development of the Institution. This Team is primarily responsible for leading everyone towards the achievement of the strategic goals and mission of the Institution. This Team will come out with new and innovative ideas to solve the problems that come while implementing the strategic plans of the institution.

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File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic plan is effectively deployed

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-up

File Description	Documents
Upload relevant supporting document	<u>View File</u>

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

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. 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 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 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.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.2.3 - Institution Implements e-governance in its areas of operations

6.2.3.1 - e-governance is implemented covering following areas of operation 1. Administration 2. Finance and Accounts 3. Student Admission and Support 4. Examination

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

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

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, - Sathyabama Score, which is basically a self-assessment tool. 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, like 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, are used in SScore to evaluate the faculty. 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. Nonteaching staff are evaluated by their respective Department Heads, who assess them on various factors like job knowledge and expertise, technical knowledge, 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).

File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.3.2 - Total number of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

618

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

6.3.3 - Number of professional development / administrative training Programmes organized by the institution for teaching and non-teaching staff during the year

69

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

6.3.4 - Total number of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the year(Professional Development Programmes, Orientation / Induction Programmes Refresher Course, Short Term Course)

755

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

6.4 - Financial Management and Resource Mobilization

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

The Institution is established under Section3 of the UGC Act, 1956. The funds required for the Institution is mobilized primarily from three sources, namely, Tuition Fee collection from the students, Consultancy work and the resources from the Sponsoring Trust, Sathyabama Institute of Science and Technology Trust. 98% to 99% of the total funds are mobilized through the Tuition Fee collections from the students. All the Departments of the Institution are required to submit the annual budgetary requirement in the month of February, every year. This Budgetary requirement should comprise of both Recurring and Non Recurring Expenditure. For all the Non Recurring Expenditure, each Department needs to give the details of equipment together with the Utilization rate and the revenue generation, if any. The purchase committee takes care that all the purchase are done in accordance with the purchased policy,

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requirements consolidated from departments, etc. These budgetary proposals are evaluated under the Chairmanship of Vice Chancellor in discussion with the members of the Finance committee. In case of need, the School Deans are required to give the explanation. These Budget proposals are placed before the Finance Committee for approval. The proposal should be comprised of the previous year Budget, Previous year actual expenditure and the proposed budget. This will ensure the proper utilization of the Budget and also to make a note of the major deviations, if any. The proper utilization of the funds in departments is monitored by the finance committee.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

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

53.98

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

6.4.3 - Funds / Grants received from non-government bodies, individuals, philanthropists during the year for development and maintenance of infrastructure (not covered under Criteria III and V)(INR in Lakhs)

65.154

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

6.4.4 - Institution conducts internal and external financial audits regularly

Sathyabama has an established mechanism to conduct periodical 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 University and meets twice a year to deliberate the financial planning of the Institution. Institution has a strategic plan and practices various financial best practices The Institution conducts

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Internal audit once in three months in order to verify the credentials recorded in the Tally software and the actual expenditure. Further, two internal audit reports are being placed before the Finance Committee for the purpose of periodical evaluation. The internal audits are done by the internal auditor annually. The observations, objections, 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 suggest remedial measures. The compliance report and the accounts are then validated by the external auditor. External audit is being carried by Ms.

Ramakrishnanand Company, Chartered Accountant for the purpose of consolidation and to file the Income Tax Returns. Copies of the Audited Statements are attached with this content. The annual report is discussed in the board of management meeting every year

File Description	Documents
Upload relevant supporting document	<u>View File</u>

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

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. IQAC develops and implements quality assurance strategies and processes, and promotes conscious and consistent improvement in the overall performance of the institution. The IQAC conducts workshops, seminars, orientation programmes and awareness programmes to sensitize the faculty and students on quality. It organises regular meetings to discuss and develop realistic and attainable quality benchmarks for all academic and administrative activities. 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

File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.5.2 - Institution has adopted the following for Quality assurance Academic Administrative Audit (AAA) and follow up action taken Confernces, Seminars, Workshops on quality conducted Collaborative quality initiatives with other institution(s) Orientation programme on quality issues for teachers and studens Participation in NIRF Any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

A. Any 5 or all of the above

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting documnent	<u>View File</u>

6.5.3 - Incremental improvements made for the preceding during the year with regard to quality (in case of first cycle) Post accreditation quality initiatives(second and subsequent cycles)

A number of post accreditation quality improvements have been taken during the last five years

- Governance
- Project Management System (PMS)
- Swachh Bharat Mission
- Skill India Mission
- Renewable Energy
- Make in India
- Digital India
- BetiBachao BetiPadhao Abhiyan
- Unnat Bharat Abhiyan
- Curriculum revision
- New Programmes
- MoUs with Universities and Institutes abroad
- Extension Activities
- Campus Development/Green Initiatives
- Tree Plantation
- Open Air Theatre
- Indoor Gymnasium

- Wifi Connectivity
- Battery operated Vehicles
- Research Centres/Laboratories
- Information Communication Technologies AssistedLanguage Lab
- Biomedical Laboratory
- Entrepreneurship and Virtual Incubation Cell
- Alumni Participation
- Action on the observations given by NAAC during the Assessment were taken by IQAC during the post accreditation period
- Complete Adoption of Choice Based Credit System

Institution offers all its Undergraduate, Postgraduate and PhD programmes (course works) in accordance with CBCS. In this regard the Heads of the Departments conducted Boards of Studies meetings and had all the courses revised and modified to bring these in line by and large with the course content and structure as recommended by UGC. The programme Coordinators were appointed who could facilitate in helping students to understand, choose and register the courses that they wish to opt for any programme in any given semester.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

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 year

To promote women education, the Institution is taking consistent efforts. Sathyabama has always proved its responsibilities towards social inclusion and respect for diversity. All Schools are with the objective to sensitize & equip students with issues related to gender sensitization, women empowerment, Culture & Technology, Ethics & Values. Some of the specific measures initiated by the institution to ensure the activities and benefits for the female students are:

- Women Employees are more in number and holding various highest positions, including Vice Chancellor
- Physical work out facilities for both boys and girl students residing in the hostel
- Exclusive professional Training for Placement and career counseling of female students
- There is significant number of women cadets in NCC unit
- Counseling is provided to the complainants and the respondents

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- independently by the ICC
- The Counselor of the University provides counseling to students of all departments
- Workshop on Prevention of Sexual Harassment in workplaces was organized
- The Women Empowerment Cell of the institution regularly organized numerous programs to enlighten the girls on cybercrimes and the defense mechanisms against crimes by inviting the advocates and personnel from police department
- The Women Empowerment Cell feels that the security of the students not only includes physical security; rather it includes emotional security of the students too
- The ICC ensures that posters promoting gender equity & sensitization are placed on the Notice Boards. A Complaint Box is placed outside the ICC office

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Annual gender sensitization action plan(s)	https://www.sathyabama.ac.in/sites/default/files/2022-12/GENDER%20ACTION%20PLAN.pdf
Specific facilities provided for women in terms of: a. Safety and security b. Counseling c. Common rooms d. Daycare Centre e. Any other relevant information	https://sist.sathyabama.ac.in/sist naac/documents/7.1.1/7.1.1 Specific%20facilities%20for%20girls%20and%20women.pdf

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power-efficient equipment

A. Any 4 or All of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management

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Solid waste management

Paper Waste like Newspaper, Magazines, Cardboard, Box Board were disposed by selling it to vendor inexchange of recycled papers. Average quantity of biodegradable wastes generated (Paper, dried leaves, vegetation, garden waste, except food waste) was 804 kg/year.

Liquid waste management

The main source of water for the Institution is the water taken from the lorry tankers. The campus has storm water drainage channels that collects the storm water and diverts it to rainwater harvesting pits. The Institution has also made facilities for roof to rainwater harvesting structures and rain water harvesting pits which is highly appreciable. Institution has own RO unit catering to drinking water requirement of the entire campus.

STP:

The functioning of the 1.5 MLD STP continued even during the pandemic situation, but not in full load conditions. The treated water was used for gardening and flushing purposes. Suggestions were given to install solar panels to operate the SBRs so enormous savings in energy could be witnessed. The recommendations will be taken up to power the STP partially with Solar energy.

Waste recycling system

Plastic waste like milk covers, plastic covers were segregated at the source and was disposed by selling it to the vendor. Other Solid waste like clothing, tetra cups, dried leaves were disposed by giving away to cups, and dried leaves were disposed by giving away to Corporation.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus

A. Any 4 or all of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for greening the campus are as follows:

- A. Any 4 or All of the above
- 1. Restricted entry of automobiles
- 2. Use of bicycles/ Battery-powered vehicles
- 3. Pedestrian-friendly pathways
- 4. Ban on use of plastic
- 5. Landscaping

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.6 - Quality audits on environment and energy are regularly undertaken by the institution

7.1.6.1 - The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:

A. Any 4 or all of the above

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

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.7 - The Institution has a disabled-friendly and barrier-free environment Ramps/lifts for easy access to classrooms and centres. Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology and facilities for persons

A. Any 4 or all of the above

with disabilities: accessible website, screenreading software,mechanized equipment, etc. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading materials, screen reading, etc.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e. tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities (within a maximum of 200 words)

The Institution's vibrant, cosmopolitan environment is supported and encouraged for all students, regardless of their language, religion, ethnicity, or socioeconomic status. Megacultural events are planned for the students each year, and during these events, students take part in a variety of events that highlight their culture and encourage harmony in diversity.

They come with different languages, 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. Students from various religions can access a number of prayer halls throughout the Institution. On every Friday, students of Muslim faith can offer prayers in a Mosque outside the campus. Sunday worship service is conducted in the chapel situated within the Campus.

The Institution observes all religious festivals like Ayudha Pooja (Dussehra), Diwali, Christmas, Ramzan, Bakrid, Pongal, with equal zeal and enthusiasm. Festivals such as Onam, Holi and Navaratri are also celebrated with much fervor.

The institutions' Anbu Foundation partnered with other NGOs admits students based on their merit after thorough application review and screening. 8% students receive freeship every year to pursue degree programmes. In addition to the aforementioned scholarships, the institution also awards merit scholarships to the top 25 scorers in the annual All India Sathyabama Entrance Examinations

Pupils who are physically challenged, hearing-impaired, visually-impaired, acid attack victims, or who have learning difficulties all have the chance to study with other students.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.9 - Sensitization of students and employees of the institution to constitutional obligations: values, rights, duties and responsibilities of citizens:

The institution aims to promote an environment where the students and staff understand their role in safeguarding the constitutional obligations.

The institution strives to propagate and increase the level of awareness and appropriate practices amongst the students on Fundamental Duties and Rights of Indian Citizens. The Institution conducts awareness campaigns, orientation programmes, training programmes, seminars and workshops to sensitize the students and staff on their Fundamental Rights and duties, and their moral responsibility as an upright citizen of the country.

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

Students are also educated on the importance of Human Rights. They are encouraged to recognize and protect themselves against injustice, exploitation and inequality.

Every year, 26th November Institution commemorates "Constitution Day" for the adaptation of the Constitution of India and to spread the Constitutional values and ideals amongst students. Departments in association with NSS unit of the Institution jointly organizes several programmes like Blood donation camps, awareness programmes and community outreach programmes to develop students into responsible citizens. Parades and other competitions on patriotic themes are organized to develop patriotism and love for the motherland. The National Flag is hoisted at the Institution on Republic Day and Independence Day.

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. The Code

All of the above

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

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

The Sathyabama Institute of Science and Technology observes and participates in memorable local, national, and international holidays. The institution has designated a group of faculty members as the coordinators of the campus's commemorative national and international days, festivals, and activities.

Religious Festivals

Festivals like Pongal, Ayudha Pooja, Diwali, Onam, Ramzan and Christmas are passionately celebrated in the Institution. Pongal is one of the important Tamil festivals and it is celebrated traditionally in the Campus in a grand manner.

National Days of Importance

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. Awards are given to faculty members with good academic and research achievements.

International Days of Importance

Nurses Day, Mathematics Day, World Meteorological Day, Sea Grass Awareness Week, Women's Day, World Tuberculosis Day, World Water Day, International Day of Forests are Celebrated by organising awareness programmes and Guest Talks.

International Dance Day is celebrated virtually in which the students from the partnering Universities across the world enthusiastically participate and perform their traditional dance. Competitions are held on World Theatre Day by the Department of Visual Communication in which students display their creative talents.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.2 - Best Practices

7.2.1 - Describe one best practice successfully implemented by the Institution as per NAAC format provided in the Manual

Title of the Best Practice - Internationalisation

Objectives

- To promote the 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 exchange of staff and students
- To improve the global Rankings

The Context

Internationalization is a very important development that is taking place in Higher Education. One of the recommendations of the National Education Policy, 2020 of India to Higher Education Institutions is, to make India a "global study destination".

The Practice

Our Institution is taking efforts to promote internationalization and following policies and practices to cope with and adapt to the global academic environment.

Evidence of success

Success of our effort towards internationalization is evident from the impact it had created and the outcomes which are listed below:

Impact on students

• Global exposure and learning experience

Impact on Faculty/staff

- They learnt different pedagogies followed in other countries
- Facilitated networking and knowledge sharing with the collegues working in foreign universities

Impact on the Institution

- International reputation
- Promoted international research
- Improved the global ranking

Outcomes

- International Rankings
- 150 MoUs
- 300 Joint Publications
- Mobility Programme

6. Problems encountered and resources required

The Institution allocates a separate fund for the International Activities which is increasing every year based on the expansion requirements. We are also applying for funding opportunities at International level for research programmes and exchange programmes likeErasmus Plus, Mevlana funding, ASEM DUO Fellowship, Fulbright Fellowship etc

7.3 - Institutional Distinctiveness

7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

Research at Sathyabama addresses the Sustainable Development Goals of Agenda 2030

- Research relating to the Sustainable Development Goal -SDG 7, addressing the issue of Affordable and Clean Energy is undertaken by the Centre of Excellence in Energy Research funded by MHRD, working towards finding sustainable solutions to the need for energy
- Centre for Climate Change Studies is involved in the research addressing the most important Sustainable Development Goal -SDG-13 on Climate Change along with SDG 14-Life below
- Research in the area of waste management, which works on the 3 R concepts: Reduce, Reuse and Recycle is undertaken by the Centre for Waste management at Sathyabama. This Centre, which

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is working towards the achievement of SDG 12-Responsible consumption and production and SDG13, has come out with a biodiesel form waste cooking oil and bio fertilizers from food waste

- Research to discover novel drugs to fight against life threatening infectious diseases including tuberculosis (TB), Acquired Immuno Deficiency syndrome (AIDS), Dengue and noninfectious diseases including cancer, diabetes etc, which is addressing the SDG-3 Good Health and Well-being
- 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
- 49 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

7.3.2 - Plan of action for the next academic year

Strategic plan 2021-2025 of Sathyabama Institute of Science and Technology envision being an Academic and Research Institution on par with international Universities. To realize the vision, the Institution has identified the following focus areas for the academic year 2022-23.

- Venturing into Open and Distance learning Degree programmes
- Strengthening the digital infrastructure of the Institution
- Designing flexible curriculum that focuses on skill development
- Establishment of Centres of excellence in various thrust areas of research
- Internationalization of Education
- Apply for National & International Accreditations for quality improvement
- Involvement in High Impact and Socially Responsible Research in areas like Nanomaterials Nanocomposite materials, Energy Storage Materials, Renewable Energy, Regenerative Medicine, Robotics & Automation, Cyber Physical System, Bioplastics & E

 Waste Management, Marine Biotechnology, Genetic Engineering, Space Technology, Drug Discovery & Delivery, Data Analytics and Artificial Intelligence
- Strengthening Industry-Institute Collaboration
- Development of the Innovation Eco System of the Institution and facilitate more start ups
- Development of Sustainable Infrastructure such as Sustainable laboratories and classrooms with clean energy

Annual Quality Assurance Report of SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY