# Yearly Status Report - 2019-2020

| 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 own campus | **Yes** |
| Phone no/Alternate Phone no. | **04424503065** |
| Mobile no. | **9840133346** |
| Registered Email | **registrar@sathyabama.ac.in** |
| Alternate Email | **vc@sathyabama.ac.in** |
| Address | **Jeppiaar Nagar, Rajiv Gandhi Salai** |
| City/Town | **CHENNAI** |
| State/UT | **Tamil Nadu** |
| Pincode | **600119** |

## 2. Institutional Status

| | |
|---|---|
| University | **Deemed** |
| Type of Institution | **Co-education** |
| Location | **Urban** |
| Financial Status | **private** |
| Name of the IQAC co-ordinator/Director | **Dr. Anima Nanda** |
| Phone no/Alternate Phone no. | **04424502344** |
| Mobile no. | **9443786840** |
| Registered Email | **registrar@sathyabama.ac.in** |
| Alternate Email | vc@sathyabama.ac.in |

## 3. Website Address

| | |
|---|---|
| Web-link of the AQAR: (Previous Academic Year) | https://www.sathyabama.ac.in/academics/iqac/aqar |

## 4. Whether Academic Calendar prepared during the year

| | |
|---|---|
| **4. Whether Academic Calendar prepared during the year** | **Yes** |
| if yes,whether it is uploaded in the institutional website: Weblink : | https://www.sathyabama.ac.in/academics/iqac/calendar |

## 5. Accrediation Details

| Cycle | Grade | CGPA | Year of Accrediation | Validity | |
|---|---|---|---|---|---|
| | | | | Period From | Period To |
| **2** | **A** | **3.09** | **2017** | **13-Sep-2017** | **12-Sep-2022** |

## 6. Date of Establishment of IQAC

| | |
|---|---|
| **6. Date of Establishment of IQAC** | **03-Jul-2007** |

## 7. Internal Quality Assurance System

| Quality initiatives by IQAC during the year for promoting quality culture | | |
|---|---|---|
| Item /Title of the quality initiative by IQAC | Date & Duration | Number of participants/ beneficiaries |
| **Curriculum revision for** | **10-Jul-2019** | **3092** |

| | | |
|---|---|---|
| all the engineering programmes as per AICTE model curriculum | 60 | |
| Introduced Industry 4.0 | 05-Jun-2019 120 | 2687 |
| Compulsory industry internship | 05-Jun-2019 15 | 2687 |
| Introduced mini projects during the 7th semester | 05-Jun-2019 90 | 3092 |
| Introduction of new specialized programmes on Artificial Intelligence, Internet of Things, Data Science, | 05-Jun-2019 90 | 600 |
| Faculty participation in programme on Universal Human Values organized by AICTE | 10-Jul-2019 6 | 300 |
| View File | | |

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

| Institution/Department/Faculty | Scheme | Funding Agency | Year of award with duration | Amount |
|---|---|---|---|---|
| Centre for Nanoscience and Nanotechnology | CDRI-CSIR | MoES | 2016 1825 | 4800000 |
| International Research Centre | SPDC | AICTE | 2020 1095 | 1400000 |
| Centre for Ocean Research | FIST | DST | 2018 1825 | 3300000 |
| Department of Computer Science | FIST | DST | 2015 1825 | 2200000 |
| Department of Physics | FIST | DST | 2015 1825 | 7800000 |
| Centre of Excellence for energy Research | FAST | MHRD | 2014 2190 | 40000000 |
| Department of Computer Science | FIST | DST | 2018 1825 | 5600000 |
| Centre for Earth Sciences and Technology Cell, (South nodal zone Marine Resources) | MARINE TECHNOLOGY | MoES | 2019 1825 | 33000000 |

| | | | | |
|---|---|---|---|---|
| Centre for Ocean Research | CTEP | DBT | 2019 1095 | 100000 |
| Technology Business Incubator | NSTEDB | DST | 2015 1825 | 43000000 |
| No Files Uploaded !!! | | | | |

| | |
|---|---|
| **9. Whether composition of IQAC as per latest NAAC guidelines:** | **Yes** |
| Upload latest notification of formation of IQAC | [View File](#) |
| **10. Number of IQAC meetings held during the year :** | **4** |
| The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website | **Yes** |
| Upload the minutes of meeting and action taken report | [View File](#) |
| **11. Whether IQAC received funding from any of the funding agency to support its activities during the year?** | **No** |

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

1. Supported in the establishment of academic collaborations between European institutions thereby Initiated Student and Faculty exchange Program through Erasmus plus and Mevlana Exchange Programs.

2. Undergone NBA accreditation for 5 UG programs (CSE, Biotech, ECE, EEE, Mechanical) out of which 3 programs (CSE, Biotech and EEE) were accredited for 3 years.

3. In order to venture into Next generation technologies IQAC has recommended in establishing state of the art laboratories comprising Augmented Reality, Virtual Reality, Block Chain Technology, Data Science and Artificial Intelligence and was inaugurated in July 2019.

4. IQAC is instrumental in developing the innovation ecosystem in the institution by providing Seed money for the development of various innovative products for the benefit of the society.

5. In line with the United Nations Sustainable Development Goals, IQAC started initiating various awareness programs with the faculty and scientists in contributing to the 17 goals of UNs Agenda 2030. The focus of research centres were also directed towards addressing the goals like Centre for Climate Change Studies is SDG 13.

**13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year**

| Plan of Action | Achivements/Outcomes |
| --- | --- |
| Proposed to revise the curriculum of all the programmes | The new curriculum was designed and implemented from the 2019 batch onwards. |
| Proposed to start new specialized programmes in Computer Science and Engineering | Approval sought from AICTE to start the following programmes. Bachelors in Engineering for Computer Science specialization in Bachelors in Engineering for Computer Science specialization in Data Science Bachelors in Engineering for Computer Science specialization in Internet of Things Bachelors in Engineering for Computer Science specialization in Artificial Intelligence. B.Sc. Computer Science specialization with Artificial Intelligence |
| Proposed to start programs in Allied Health Sciences | The following programmes were introduced: B.Sc. Nursing B.Sc Medical Lab Technology B.Sc Clinical and Nutrition Technology |
| [View File](#) | |

| **14. Whether AQAR was placed before statutory body ?** | **Yes** |
| --- | --- |

| Name of Statutory Body | Meeting Date |
| --- | --- |
| Board of Management | 03-Aug-2020 |

| **15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?** | **No** |
| --- | --- |

| **16. Whether institutional data submitted to AISHE:** | **Yes** |
| --- | --- |

| Year of Submission | **2019** |
| --- | --- |

| Date of Submission | **06-May-2019** |
| --- | --- |

| **17. Does the Institution have Management Information System ?** | **Yes** |
| --- | --- |

| If yes, give a brief descripiton and a list of modules currently operational (maximum 500 words) | The institution has a seamless, well integrated Management System with comprehensive integrated modules for both academics and administrative functions of the Institution. The modules of the Management Information System include the following. • Student Management System • Staff Management System • Admission Management • Online Fee Payments • Administration Management System • Library Management System • Learning Management System • Examination Management • Placement The solution has been built keeping in mind the requirements from the various departments. Regular feedback on the functionality of the Institution's Management Information System is sought from various stakeholders and periodical updates and upgrades are made to the system. |
|---|---|

## Part B

## CRITERION I – CURRICULAR ASPECTS

### 1.1 – Curriculum Design and Development

1.1.1 – Programmes for which syllabus revision was carried out during the Academic year

| Name of Programme | Programme Code | Programme Specialization | Date of Revision |
|---|---|---|---|
| BTech | 24 | Biomedical Engineering | 03/04/2019 |
| Mtech | 48 | Medical Instrumentation | 03/04/2019 |
| BE | 15 | Mechanical engineering | 03/05/2019 |
| ME | 32 | Computer aided design | 03/05/2019 |
| BArch | 21 | Architecture | 03/06/2019 |
| [View File](#) | | | |

1.1.2 – Programmes/ courses focussed on employability/ entrepreneurship/ skill development during the Academic year

| Programme with Code | Programme Specialization | Date of Introduction | Course with Code | Date of Introduction |
|---|---|---|---|---|
| BE | Aeronautical Engineering | 03/06/2019 | SAE1 305-Experimental Aerodynamics | 03/06/2019 |
| BE | Aeronautical Engineering | 03/06/2019 | SAE1 403-Aviation Management | 03/06/2019 |
| BE | Aeronautical Engineering | 03/06/2019 | SAE1201-Avionics | 03/06/2019 |

| BE | Aeronautical Engineering | 03/06/2019 | SAE1205-Aerodynamics - I | 03/06/2019 |
| --- | --- | --- | --- | --- |
| BE | Aeronautical Engineering | 03/06/2019 | SAE1206-Aircraft Control Engineering | 03/06/2019 |
| | | View File | | |

**1.2 – Academic Flexibility**

1.2.1 – New programmes/courses introduced during the Academic year

| Programme/Course | Programme Specialization | Dates of Introduction |
| --- | --- | --- |
| BE | SCSA3006- GREEN COMPUTING- COMPUTER SCIENCE | 03/06/2019 |
| BSc | Fashion Design | 03/06/2019 |
| BDes | Interior Design | 03/06/2019 |
| MSc | Bioinformatics and DataScience | 03/06/2019 |
| BSc | Bioinformatics and DataScience | 03/06/2019 |
| | View File | |

1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective Course System implemented at the University level during the Academic year.

| Name of programmes adopting CBCS | Programme Specialization | Date of implementation of CBCS/Elective Course System |
| --- | --- | --- |
| ME | APPLIED ELECTRONICS | 06/06/2019 |
| Mtech | VLSI DESIGN | 06/06/2019 |
| ME | EMBEDDED AND IOT | 06/06/2019 |
| ME | Power Electronics & Industrial Drives | 06/06/2019 |
| BE | ELECTRONICS AND COMMUNICATION ENGINEERING | 06/06/2019 |
| BE | ELECTRONICS AND TELECOMMUNICATION ENGINEERING | 06/06/2019 |
| BE | ELECTRICAL AND ELECTRONICS ENGINEERING | 06/06/2019 |
| BE | ELECTRONICS AND INSTRUMENTATION ENGINEERING | 06/06/2019 |
| ME | EMBEDDED AND IOT | 02/01/2020 |
| BE | COMPUTER SCIENCE AND ENGINEERING | 06/06/2019 |
| BTech | INFORMATION TECHNOLOGY | 06/06/2019 |
| BTech | BIOTECHNOLOGY | 06/06/2019 |
| BE | COMPUTER SCIENCE AND ENGINEERING | 02/01/2020 |

| | | |
|---|---|---|
| MSc | PHYSICS | 06/06/2019 |
| MSc | PHYSICS | 02/01/2020 |
| BTech | INFORMATION TECHNOLOGY | 02/01/2020 |
| BE | Mechanical Engineering | 06/06/2019 |
| BSc | Chemistry | 06/06/2019 |
| MSc | Chemistry | 06/06/2019 |
| BE | Mechanical & Production Engineering | 06/06/2019 |
| BE | Civil Engineering | 06/06/2019 |
| ME | Structural Engineering | 06/06/2019 |
| BE | Computer Science | 02/01/2020 |
| BTech | Information Technology | 06/06/2019 |
| BE | ELECTRONICS AND COMMUNICATION | 02/01/2020 |
| BTech | Bio Technology | 06/06/2019 |
| BSc | Physics | 06/06/2019 |
| BE | ELECTRONICS AND INSTRUMENTATION | 06/06/2019 |
| BA | ENGLISH | 06/06/2019 |
| BSc | PSYCOLOGY | 06/06/2019 |
| BSc | CHEMISTRY | 06/06/2019 |
| BE | ELECTRONICS AND INSTRUMNETATION | 02/01/2020 |
| BE | Automobile Engineering | 06/06/2019 |
| BArch | Architecture | 06/06/2019 |

## 1.3 – Curriculum Enrichment

1.3.1 – Value-added courses imparting transferable and life skills offered during the year

| Value Added Courses | Date of Introduction | Number of Students Enrolled |
|---|---|---|
| MODELLING OF REMOTE CONTROL AIRCRAFTS | 25/06/2019 | 40 |
| MICROSTRIP COMPONENT DESIGN USING ANASYS HFSS AND TESTING WITH VNA(IEEE WORKSHOP) | 11/07/2019 | 235 |
| PCB DESIGN AND REWORKING | 08/07/2019 | 122 |
| IOT USING RASPBERRY PI | 15/07/2019 | 236 |
| MICROWAVE COMPONENT DESIGN USING ANASYS HFSS AND CST MICROWAVE STUDIO | 22/07/2019 | 235 |
| [View File]() | | |

1.3.2 – Field Projects / Internships under taken during the year

| Project/Programme Title | Programme Specialization | No. of students enrolled for Field |
|---|---|---|

| | | Projects / Internships |
|---|---|---|
| BTech | BIOTECHNOLOGY | 120 |
| BTech | BIOMEDICAL ENGINEERING | 60 |
| BTech | BIOINFORMATICS | 60 |
| BTech | CHEMICAL ENGINEERING | 60 |
| BE | CIVIL ENGINEERING | 120 |
| [View File](View File) | | |

## 1.4 – Feedback System

### 1.4.1 – Whether structured feedback received from all the stakeholders.

| Students | Yes |
|---|---|
| Teachers | Yes |
| Employers | Yes |
| Alumni | Yes |
| Parents | Yes |

### 1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

Feedback Obtained

The feedback received from various stakeholders of the Institution viz. students, faculty, Alumni, Recruiters, collaborators, parents form a major part of input for the development of the Institution. The ideas, views and suggestions obtained are analyzed in detail and are considered for improving the quality of the Institution as a whole. This year significant change was incorporated to the curriculum based on the feedback received from the Industrial experts and Alumni. Non Credits courses are given under Professional Development to the students. The credits are given for internship and semester abroad program undergone by the students at national and International level. Assignments, open ended problems, Quiz, Seminar, Presentation, and Case Studies pertaining to Complex Engineering Problems were introduced to students. The Students were provided access to all the research facilities in the Research Centres and encouraged to do the internships in the Centres too. Based on the feedback received from research collaborators a Research committee was formed, which regularly meet to discuss about the latest developments across the world in research. Such initiatives have facilitated the prevalence of research climate in the Institution. The board of research meets 6 months once to implement significant actions based on the feedback received. Joint Academic Programmes were offered to students in association with Virtusa, Infosys, IBM, Oracle and Cisco as a result of feedback received from the recruiters to enhance the employability skills of the students. The students were much benefited from the joint academic programmes and the initiative was an eye opener for the students to learn Industry oriented courses. Our teaching and learning strategies are based on the objective to make the students highly employable graduates. The various committees at the Institution viz. Board of Studies, Board of Management, Board of Research, Academic Council accepts constructive suggestions from the stakeholders and considers suggestions that contributes towards the betterment of the quality of the Institution.

## CRITERION II – TEACHING- LEARNING AND EVALUATION

## 2.1 – Student Enrolment and Profile

### 2.1.1 – Demand Ratio during the year

| Name of the Programme | Programme Specialization | Number of seats available | Number of Application received | Students Enrolled |
|---|---|---|---|---|
| BE | Mechanical Engineering | 300 | 5826 | 198 |
| BE | Electronics and Instrumentation Engineering | 60 | 298 | 60 |
| BE | Electrical and Electronics Engineering | 120 | 1876 | 63 |
| BE | Electronics and Communication Engineering | 600 | 16592 | 536 |
| BE | Computer Science and Engineering | 900 | 29289 | 934 |
| [View File]() | | | | |

## 2.2 – Catering to Student Diversity

2.2.1 – Student - Full time teacher ratio (current year data)

| Year | Number of students enrolled in the institution (UG) | Number of students enrolled in the institution (PG) | Number of fulltime teachers available in the institution teaching only UG courses | Number of fulltime teachers available in the institution teaching only PG courses | Number of teachers teaching both UG and PG courses |
|---|---|---|---|---|---|
| 2019 | 3026 | 483 | 673 | 390 | 1063 |

## 2.3 – Teaching - Learning Process

2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)

| Number of Teachers on Roll | Number of teachers using ICT (LMS, e-Resources) | ICT Tools and resources available | Number of ICT enabled Classrooms | Numberof smart classrooms | E-resources and techniques used |
|---|---|---|---|---|---|
| 1063 | 1063 | 18 | 160 | 44 | 650 |
| [View File of ICT Tools and resources]() | | | | | |
| [View File of E-resources and techniques used]() | | | | | |

2.3.2 – Students mentoring system available in the institution? Give details. (maximum 500 words)

For every 15 students a faculty is appointed as a mentor. The mentors meet his/her students every fortnight and discuss the issues related to them. The mentor maintains the academic record of the students and keeps track of the attendance and overall progress of the students. The information is reported to Head of the department once in a month, along with necessary measures taken. The mentor counsels the students with respect to academic and personal issues. A comprehensive record of academic performance, Co-curricular, Extra Curricular activities and the details of parent interactionare maintained. Efficacy of the system • The comprehensive record of mentees has been effective in the analysis of student performance. The mentees' records are maintained in the respective Departments. • The close monitoring of students' progress helps in improving the academic performance • Any deviation in behavioral and academic aspects of a student will be provided as a feedback to the parent Apart from the mentors, there is a student supporting system in place for assisting the student at

various levels. Students shall reach out through email for any queries or assistance to the different supporting systems, like:Student Help Desk, Internal Examination Cell, Student Development Cell, Student Grievance Cell, Student counseling and psychological centre, Anti ragging Cell, Placement Cell, Women Empowerment Cell, Anti-Discrimination Cell, Centre for Skill Development. Students who maintain 100 attendance during their course of study are encouraged with the "100 attendance award" and Students based on curricular, co-curricular, extracurricular activities are given with "outgoing student excellence award" every year with the cash prize of Rs.10,000 each. "Dr. Jeppiaar Remibai Scholarship award" is given to meritorious students who excel in academics. Top three rank holders receive 30, 20 and 10 fee waive in the consecutive academic year.

| Number of students enrolled in the institution | Number of fulltime teachers | Mentor : Mentee Ratio |
| :---: | :---: | :---: |
| 11884 | 1063 | 1:11 |

## 2.4 – Teacher Profile and Quality

2.4.1 – Number of full time teachers appointed during the year

| No. of sanctioned positions | No. of filled positions | Vacant positions | Positions filled during the current year | No. of faculty with Ph.D |
| :---: | :---: | :---: | :---: | :---: |
| 1063 | 1032 | 31 | 31 | 390 |

2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year )

| Year of Award | Name of full time teachers receiving awards from state level, national level, international level | Designation | Name of the award, fellowship, received from Government or recognized bodies |
| :---: | :---: | :---: | :---: |
| 2020 | Dr. T. Sasipraba | Vice Chancellor | IEEE Senior Member |
| 2019 | Dr J Karthikeyan | Associate Professor | Erasmus Exchange Fellowship, Powislanski University, Poland |
| 2019 | Dr Kishore Sonti | Associate Professor | Erasmus Exchange Fellowship, Powislanski University, Poland |
| 2019 | Mr Manikandan | Nill | short term internship, from Ministry of Taiwan and Kaohsiung medical university |
| 2019 | Mr. MADHAN KUMAR | Nill | Faculty exchange fellowship from University Technology Malaysia, Malaysia |
| View File | | | |

## 2.5 – Evaluation Process and Reforms

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

| Programme Name | Programme Code | Semester/ year | Last date of the last semester-end/ year-end examination | Date of declaration of results of semester-end/ year- end examination |
| :---: | :---: | :---: | :---: | :---: |

| BE | 11 | 7 | 25/10/2019 | 17/01/2020 |
|---|---|---|---|---|
| BE | 20 | 7 | 30/10/2019 | 17/01/2020 |
| BE | 86 | 7 | 22/10/2019 | 17/01/2020 |
| BE | 26 | 7 | 22/10/2019 | 17/01/2020 |
| BArch | 21 | 9 | 18/11/2019 | 17/01/2020 |
| View File | | | | |

2.5.2 – Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year

| Number of complaints or grievances about evaluation | Total number of students appeared in the examination | Percentage |
|---|---|---|
| 180 | 13620 | 1.32 |

## 2.6 – Student Performance and Learning Outcomes

2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

| https://www.sathyabama.ac.in/academics/schools/school |
|---|

2.6.2 – Pass percentage of students

| Programme Code | Programme Name | Programme Specialization | Number of students appeared in the final year examination | Number of students passed in final year examination | Pass Percentage |
|---|---|---|---|---|---|
| 11 | BE | Computer Science Engineering | 1200 | 1141 | 95.08 |
| 13 | BE | Electronics and Communication Engineering | 611 | 598 | 97.87 |
| 14 | BE | Electrical and Electronics Engineering | 120 | 112 | 93.33 |
| 18 | BE | Electronics & Instrumnetation Engineering | 60 | 55 | 91.67 |
| 25 | BE | Electronics and Telecommunication Engineering | 60 | 56 | 93.33 |
| View File | | | | | |

## 2.7 – Student Satisfaction Survey

2.7.1 – Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

## CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

### 3.1 – Promotion of Research and Facilities

3.1.1 – Teachers awarded National/International fellowship for advanced studies/ research during the year

| Type | Name of the teacher awarded the fellowship | Name of the award | Date of award | Awarding agency |
| --- | --- | --- | --- | --- |
| International | Mr Manikandan | short term internship | 01/10/2019 | Ministry of Taiwan and Kaohsiung medical university |
| International | Mr. MADHAN KUMAR | Faculty exchange fellowship | 25/08/2019 | University Technology Malaysia, Malaysia |
| International | Dr. R. SUBASHINI | Faculty exchange fellowship | 20/06/2019 | Nottingham Trent University, Uk |
| International | Dr. BEVISH JINILA | Faculty exchange fellowship | 20/06/2019 | Nottingham Trent University, Uk |
| International | Dr. G MATHIVANAN | Faculty exchange fellowship | 10/08/2019 | Daffodils International University |
| [View File](#) | | | | |

3.1.2 – Number of JRFs, SRFs, Post Doctoral Fellows, Research Associates and other fellows in the Institution enrolled during the year

| Name of Research fellowship | Duration of the fellowship | Funding Agency |
| --- | --- | --- |
| Junior Research Fellowship | 1095 | DST |
| Junior Research Fellowship | 1095 | DST |
| Junior Research Fellowship | 1095 | DST |
| Junior Research Fellowship | 1095 | LPSC-IRSO |
| Junior Research Fellowship | 540 | SHAR-ISRO |
| [View File](#) | | |

### 3.2 – Resource Mobilization for Research

3.2.1 – Research funds sanctioned and received from various agencies, industry and other organisations

| Nature of the Project | Duration | Name of the funding agency | Total grant sanctioned | Amount received during the year |
| --- | --- | --- | --- | --- |
| Minor Projects | 365 | TBI | 45000 | 45000 |

| | | | | |
|---|---|---|---|---|
| Minor Projects | 365 | TBI | 30000 | 30000 |
| Minor Projects | 365 | Jeppiaar Milk | 65000 | 65000 |
| Minor Projects | 180 | UBA-MHRD | 50000 | 50000 |
| Major Projects | 2190 | DST FIST | 2200000 | 2200000 |
| View File | | | | |

**3.3 – Innovation Ecosystem**

3.3.1 – Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

| Title of workshop/seminar | Name of the Dept. | Date |
|---|---|---|
| HACK4GOOD | Computer Science Engineering | 09/06/2019 |
| Create and Operate Apps for Business using ZOHO Creator | Computer Science Engineering | 16/09/2019 |
| How to apply for a Design Patent | Computer Science Engineering | 25/10/2019 |
| Predictive Analytics of Artificial | Computer Science Engineering | 16/12/2019 |
| Programming "R" | Computer Science Engineering | 16/07/2019 |
| View File | | |

3.3.2 – Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

| Title of the innovation | Name of Awardee | Awarding Agency | Date of award | Category |
|---|---|---|---|---|
| Best publication award | Mr.J.Aravindkumar | Indian Society for surface science Technology | 20/10/2019 | Innovation |
| Lock-down Innovation competition | Karthika | IEI-Sathyabama | 29/09/2019 | Innovation |
| Lock-down Innovation competition | Abinaya | IEI-Sathyabama | 29/09/2019 | Innovation |
| Lock-down Innovation competition | Dhanushka | IEI-Sathyabama | 29/09/2019 | Innovation |
| High Impact factor Publication | Thaj Mary Delsy | Sathyabama Institute of Science and Technology | 09/05/2020 | Innovation |
| View File | | | | |

3.3.3 – No. of Incubation centre created, start-ups incubated on campus during the year

| Incubation Center | Name | Sponsored By | Name of the Start-up | Nature of Start-up | Date of Commencement |
| --- | --- | --- | --- | --- | --- |
| TBI | Mr. Mohammed Resath | (DST-NSTDEB) | Imagine Trend | E-commerce | 01/11/2019 |
| TBI (DST-NSTDEB) | Mr. Chandramouli | (DST-NSTDEB) | Dot2Globe | SAAS | Nill |
| [View File](#) | | | | | |

**3.4 – Research Publications and Awards**

3.4.1 – Ph. Ds awarded during the year

| Name of the Department | Number of PhD's Awarded |
| --- | --- |
| Science and Humanities | 1 |
| Computer Science Engineering | 31 |
| Electronics | 29 |
| Electrical | 9 |
| Mechanical | 12 |
| Civil | 2 |
| Bio Engineering | 7 |
| Chemical | 2 |
| Business Administration | 10 |
| Maths | 2 |
| Physics | 1 |
| Chemistry | 1 |
| Computer Science | 4 |
| Life Science | 3 |

3.4.2 – Research Publications in the Journals notified on UGC website during the year

| Type | Department | Number of Publication | Average Impact Factor (if any) |
| --- | --- | --- | --- |
| International | Psychology | 1 | Nill |
| International | Pharmacy | 1 | Nill |
| International | Information Technlogy | 50 | 0.2 |
| International | Electronics and Communication Engineering | 57 | 1.84 |
| International | Electronics and Telecommunication Engineering | 49 | 1.96 |
| [View File](#) | | | |

3.4.3 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

| Department | Number of Publication |
| --- | --- |

| | |
|---|---|
| Electronics and Telecommunication Engineering | 15 |
| Electronics and Instrumentation Engineering | 3 |
| Electrical and Electronics Engineering | 22 |
| Electronics and Communication Engineering | 31 |
| Information Technology | 6 |
| View File | |

3.4.4 – Patents published/awarded/applied during the year

| Patent Details | Patent status | Patent Number | Date of Award |
|---|---|---|---|
| Nanoparticles Drug Delivery for Ovarian Cancer | Filed | 202041006393 | 14/02/2020 |
| Design and synthesis of few noval Benzimidazole and Pyridine derivatives as Antitubercular agents | Filed | 202041008290 | 27/02/2020 |
| Synthesis of noval heterocyclic derivatives as anticancer agents | Filed | 202041023565 | 27/02/2020 |
| Voice controlled Automated smart wheel chair | Published | 20194104765 | 04/12/2019 |
| Design and method for automatic pet watering and food feeding system using IoT | Published | 201940151992 | 17/12/2019 |
| View File | | | |

3.4.5 – Bibliometrics of the publications during the last academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

| Title of the Paper | Name of Author | Title of journal | Year of publication | Citation Index | Institutional affiliation as mentioned in the publication | Number of citations excluding self citation |
|---|---|---|---|---|---|---|
| Data analytics to find out the effect of firework emissions on quality of air: A | Subhashini, R., Keerthi Samhitha, B., Mana, S.C., Jose, J. | AIP Conference Proceedings | Nill | Nill | Sathyabama Institute of Science and Technology | Nill |

| Title of the Paper | Name of Author | Title of journal | Year of publication | h-index | Number of citations excluding self citation | Institutional affiliation as mentioned in the publication |
|---|---|---|---|---|---|---|
| Organic-free indium-doped cesium lead iodide perovskite for solar cell application | Murugadoss, G., Thangamuthu, R., Rajesh Kumar, M., Ravishankar, R. | Micro and Nano Letters | Nill | Nill | | Sathyabama Institute of Science and Technology | Nill |
| Feasibility of filters in processing facial images | Deepa, A., Sasipraba, T. | International Journal of Advanced Science and Technology | 2019 | Nill | | Sathyabama Institute of Science and Technology | Nill |
| Segmenting medical image data set with inhomogeneous intensities by using level sets | Adithya Pothan Raj, V., Mohan Kumar, P. | International Journal of Advanced Science and Technology | 2019 | Nill | | Sathyabama Institute of Science and Technology | Nill |
| Performance and emission analysis of waste cooking oil biodiesel added with AL2O3 nano additive using VCR engine | Uttam, G.P., Senthilkumar, G., Bobade, S.N. | International Journal of Advanced Science and Technology | 2019 | Nill | | Sathyabama Institute of Science and Technology | Nill |

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3.4.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

| Title of the Paper | Name of Author | Title of journal | Year of publication | h-index | Number of citations excluding self citation | Institutional affiliation as mentioned in the publication |
|---|---|---|---|---|---|---|
| An Improved Differential Privacy-Preserving Truth Discovery | Vadavalli, A., Subhashini, R. | 2019 IEEE 10th Annual Information Technology, Electronics and | 2019 | Nill | Nill | Sathyabama Institute of Science and Technology |

| approach in Healthcare | | Mobile Communication Conference, IEMCON 2019 | | | | | |
|---|---|---|---|---|---|---|---|
| A Survey about WSN and IoT Based Health Care Applications and ADPLL Contribution for Health Care Systems | DInesh, R., Marimuthu, R. | 2019 IEEE 10th International Conference on Awareness Science and Technology, iCAST 2019 - Proceedings | 2019 | Nill | Nill | | Sathyabama Institute of Science and Technology |
| Analysis and implementation of flexible microstrip antenna of soft substrates with different feeding techniques for ISM band | Rexiline Sheeba, I., Jayanthy, T. | 2019 IEEE International Conference on System, Computation, Automation and Networking, ICSCAN 2019 | 2019 | Nill | Nill | | Sathyabama Institute of Science and Technology |
| Iris Recognition Using Local and Global Iris Image Moment Features | Patil, P., Vasanth, K. | 2019 Innovations in Power and Advanced Computing Technologies, i-PACT 2019 | 2019 | Nill | Nill | | Sathyabama Institute of Science and Technology |
| Energy Aware Localized Routing in Rendezvous Point Based Mobile Sink Strategy for Wireless Sensor Networks | Kumar, A.R., Sivagami, A. | 2019 Innovations in Power and Advanced Computing Technologies, i-PACT 2019 | 2019 | Nill | Nill | | Sathyabama Institute of Science and TechnologySathyabama Institute of Science and Technology |

### 3.4.7 – Faculty participation in Seminars/Conferences and Symposia during the year

| Number of Faculty | International | National | State | Local |
|---|---|---|---|---|
| Attended/Seminars/Workshops | 121 | 286 | 83 | 40 |
| Presented papers | 51 | 15 | 8 | 6 |
| Resource persons | 16 | 33 | 5 | 1 |

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## 3.5 – Consultancy

### 3.5.1 – Revenue generated from Consultancy during the year

| Name of the Consultan(s) department | Name of consultancy project | Consulting/Sponsoring Agency | Revenue generated (amount in rupees) |
|---|---|---|---|
| Centre for Nanoscience and Nanotechnology | Electrochemcial Impedance Spectroscopy | External Users (Students/faculties of Sathyabama and other outside RD laborotories) | 21288 |
| Centre for Nanoscience and Nanotechnology | Out sourcing by sample analysis and Characterization | Industries/Institutions | 161200 |
| Dr.Kamalan Kirubaharan | Frictional test for liquid lubricant | GP Petroleum Ltd | 46230 |
| Dr.Shyju | High temperature tribology study of bulk materials | BAE Systems India Services Pvt Ltd | 53900 |
| Dr.Dinesh Kumar | Tribology testing of automobile engine components under liquid environment | Ducom Instruments, Bangalore | 118450 |

### 3.5.2 – Revenue generated from Corporate Training by the institution during the year

| Name of the Consultan(s) department | Title of the programme | Agency seeking / training | Revenue generated (amount in rupees) | Number of trainees |
|---|---|---|---|---|
| Dr. R. Aroul Canessane,CSE | Content Model Development | BITS PILANI-WIPRO Technologies | 100000 | 100 |
| CHEMISTRY | Workshop on interpretation of Instrumental Methods (WIIM-2020) | Self | 700000 | 250 |
| Centre for Molecular and | Online workshop on | Online training | 7600 | 139 |

| Nanomedical Sciences | Basic In vitro Cell Culture Techniques | | | |
|---|---|---|---|---|
| Centre for Molecular and Nanomedical Sciences | Techniques in decoding DNA | Online training | 24300 | 81 |
| Centre for Molecular and Nanomedical Sciences | Role of nanotechnology in overcoming multidrug resistance for cancer therapy | Online webinar | 0 | 414 |

[View File](#)

## 3.6 – Extension Activities

3.6.1 – Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

| Title of the activities | Organising unit/agency/ collaborating agency | Number of teachers participated in such activities | Number of students participated in such activities |
|---|---|---|---|
| Vayu Sainik Camp -Training, Pondy | NCC AIR WING | 2 | 1 |
| Inter Group Competition, Trichy | NCC AIR WING | 1 | 3 |
| Annual Training Camp, VTMT, Avadi | NCC AIR WING | 2 | 23 |
| Combined Annual Training Camp conducted by 1(TN) Medical Unit NCC | NCC Army Wing | 2 | 4 |
| Combined Annual Training Camp conducted by 1(TN) Medical Unit NCC | NCC Army Wing | 1 | 17 |

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3.6.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

| Name of the activity | Award/Recognition | Awarding Bodies | Number of students Benefited |
|---|---|---|---|
| Innovation | SIH-Hard ware Hackathon | MHRD/AICTE | 6 |
| Innovation | SRISTI-Gandhiyan Young Technology Innovation Awards(GYATI) | DBT-Birac | 3 |
| Extension | global student solar ambassadors workshop | AICTE/IITB | 170 |
| Village Developement | Unnat Bharat Abhiyan | MHRD-AICTE | 480 |

3.6.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

| Name of the scheme | Organising unit/Agency/collaborating agency | Name of the activity | Number of teachers participated in such activites | Number of students participated in such activites |
|---|---|---|---|---|
| Beach Cleanup Program | WEB Team | The Women Empowerment Bureau of had organized a Beach Cleanup Program on 13.02.2020 at Besant Nagar Beach along with FICCI FLO and Chennai Volunteers. | 3 | 50 |
| Inauguration of Govt. Primary Health Centre | Dental | The aim to create awareness about oral health and ill effects of tobacco and to provide dental care free of cost for the local community in and around Sholinganallur. | 2 | 68 |
| Road Safety Awareness | NSS | The intention was to bring awareness on road safety to passengers and the staff of the Transport Corporation was carried out in Thondayarpet. | 2 | 54 |
| Lake Cleaning | Eco Club | The students were given a brief of what they had to do and also were asked to bring awareness among villagers on how to maintain water bodies. | 1 | 75 |
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## 3.7 – Collaborations

3.7.1 – Number of Collaborative activities for research, faculty exchange, student exchange during the year

| Nature of activity | Participant | Source of financial support | Duration |
|---|---|---|---|
| Faculty Exchange | Dr.Y .Bevish Jinila | Nottingham Trent University,UK | 7 |
| Faculty Exchange | Dr.Jesudoss A | Daffodils International University, Bangladesh | 5 |
| Faculty Exchange | Dr.R.Subhashini | Nottingham Trent University,UK | 8 |
| Faculty Exchange | Dr.G.Mathivanan | Sathyabama Institute of Science and Technology | 8 |
| Research | Mr.Mathan N | Sathyabama Institute of Science and Technology | 4 |
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 3.7.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

| Nature of linkage | Title of the linkage | Name of the partnering institution/ industry /research lab with contact details | Duration From | Duration To | Participant |
|---|---|---|---|---|---|
| INTERNSHIP | INTERNSHIP | University Of Texas, Dallas, USA | 06/01/2019 | 31/07/2019 | NANNAPURAJU NACHIKETHA RAJU |
| INTERNSHIP | INTERNSHIP | University Of Texas, Dallas, USA | 06/01/2019 | 31/07/2019 | JOSHUA STEPHEN RODRIGUES |
| INTERNSHIP | INTERNSHIP | NUS Singapore | 06/01/2019 | 30/06/2019 | Pokuri Ashok Kumar |
| INTERNSHIP | Spring Internship | University Of Texas, Dallas, USA | 15/01/2020 | 19/02/2020 | VUYYURU KARTHIK REDDY |
| INTERNSHIP | Spring Internship | University Of Texas, Dallas, USA | 15/01/2020 | 19/02/2020 | VISWAS PULI |
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 3.7.3 – MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year

| Organisation | Date of MoU signed | Purpose/Activities | Number of students/teachers participated under MoUs |
|---|---|---|---|
| AWISKAR Labs | 19/07/2019 | Business Analytics | 300 |

| Star Certification | 19/07/2019 | Python | 120 |
|---|---|---|---|
| VMware | 10/07/2019 | VMware certification Program | 28 |
| Capgemini Centre of Excellence | 10/02/2020 | Capegemini Centre of Excellence | 72 |
| RJP Info Tech | 10/07/2019 | Certification Program | 15 |
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## CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

### 4.1 – Physical Facilities

4.1.1 – Budget allocation, excluding salary for infrastructure augmentation during the year

| Budget allocated for infrastructure augmentation | Budget utilized for infrastructure development |
|---|---|
| 300000000 | 275143700 |

4.1.2 – Details of augmentation in infrastructure facilities during the year

| Facilities | Existing or Newly Added |
|---|---|
| Value of the equipment purchased during the year (rs. in lakhs) | Newly Added |
| Classrooms with LCD facilities | Existing |
| Laboratories | Newly Added |
| Class rooms | Existing |
| Campus Area | Existing |
| No file uploaded. ||

### 4.2 – Library as a Learning Resource

4.2.1 – Library is automated {Integrated Library Management System (ILMS)}

| Name of the ILMS software | Nature of automation (fully or patially) | Version | Year of automation |
|---|---|---|---|
| Autolib | Fully | 8.2 | 2006 |

4.2.2 – Library Services

| Library Service Type | Existing | | Newly Added | | Total | |
|---|---|---|---|---|---|---|
| Text Books | 284044 | 155984942 | 1035 | 2522343 | 285079 | 158507285 |
| Reference Books | 15326 | 10398996 | 1726 | 1500000 | 17052 | 11898996 |
| e-Books | 10926 | 23500 | 186500 | 374000 | 197426 | 397500 |
| Journals | 138 | 354592 | 42 | 250855 | 180 | 605447 |
| e-Journals | 18827 | 10037849 | 9 | 410644 | 18836 | 10448493 |
| Digital Database | 9 | Nill | 1 | Nill | 10 | Nill |

| | | | | | | |
|---|---|---|---|---|---|---|
| CD & Video | 2914 | Nill | 265 | Nill | 3179 | Nill |
| Library Automation | Nill | 397600 | 1 | 35400 | 1 | 433000 |
| Weeding (hard & soft) | 3260 | 918564 | 292 | 127000 | 3552 | 1045564 |
| Others(s pecify) | 1 | 3300000 | Nill | 100000 | 1 | 3400000 |

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4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

| Name of the Teacher | Name of the Module | Platform on which module is developed | Date of launching e-content |
|---|---|---|---|
| Dr.P.Shanmugapand iyan | BP106RBT | Moodle | 06/12/2019 |
| Dr.P.Shanmugapand iyan | BP202T Pharmaceutical Organic Chemistry I | Moodle | 20/01/2020 |
| DR. D VELUMONI | SBA1501 – MANAGEMENT ACCOUNTING | Moodle | 15/06/2020 |
| DR. D VELUMONI | SBAX1020 – MANAGEMENT ACCOUNTING | Moodle | 15/06/2020 |
| Renugadevi | SBB4301- Molecular Biology lab | Moodle | 06/06/2020 |

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## 4.3 – IT Infrastructure

4.3.1 – Technology Upgradation (overall)

| Type | Total Co mputers | Computer Lab | Internet | Browsing centers | Computer Centers | Office | Departme nts | Available Bandwidt h (MBPS/ GBPS) | Others |
|---|---|---|---|---|---|---|---|---|---|
| Existin g | 2442 | 30 | 310 | 30 | 10 | 200 | 2242 | 310 | 25 |
| Added | 700 | 4 | 190 | 4 | 2 | 50 | 650 | 190 | 20 |
| Total | 3142 | 34 | 500 | 34 | 12 | 250 | 2892 | 500 | 45 |

4.3.2 – Bandwidth available of internet connection in the Institution (Leased line)

| |
|---|
| 1500 MBPS/ GBPS |

4.3.3 – Facility for e-content

| Name of the e-content development facility | Provide the link of the videos and media centre and recording facility |
|---|---|
| Sathyabama Media Centre | |

## 4.4 – Maintenance of Campus Infrastructure

4.4.1 – Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

| Assigned Budget on academic facilities | Expenditure incurred on maintenance of academic facilities | Assigned budget on physical facilities | Expenditure incurredon maintenance of physical facilites |
|---|---|---|---|
| 126500000 | 123226953 | 103500000 | 100822052 |

4.4.2 – Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website, provide link)

• The maintenance office of the institution oversees the maintenance of buildings, classrooms and laboratories. • The maintenance office is headed by the Registrar who efficiently maintains the infrastructure of the institution • Adequate in - house staff is employed to meticulously maintain hygiene, cleanliness and infrastructure on the campus so as to provide a congenial learning environment. Trash bins have been place on every floor and classroom. • The institution houses two research parks which runs real time research projects in various fields and has also been funded by many Government, international and national organizations. • The greenery of the institution is maintained by the gardeners of our institution. • Classrooms, Staffrooms, Seminar halls and Laboratories, etc are cleaned and maintained regularly by respective support staff . • The institution has trained electricians, plumbers and inhouse civil workers. • Lab assistants under the supervision of the System administrator maintain the efficiency of the college computers and accessories. • The campus maintenance is monitored through surveillance Cameras. • Every department maintains a stock register and maintenance register for periodic maintenance of the equipments. • Pest control of library books and records is done every year by the maintenance department. • Well qualified and experienced Doctors and medical attendants are always available in terms of emergencies. • Good facilities for inpatient, outpatient and emergency care are available. • The institution has University has Sports Cell, NSS Cell, Cultural, Literary and other Committees to promote students interest in sports and other activities. • The sports department has a separate gym in the hostel which can be utilized by the students and faculty members. Apart from this we have an indoor basketball stadium. • There are also outdoor game fields and grounds for the maintaining the fitness of the staff and students.

https://www.sathyabama.ac.in/academics/iqac

# CRITERION V – STUDENT SUPPORT AND PROGRESSION

## 5.1 – Student Support

5.1.1 – Scholarships and Financial Support

|  | Name/Title of the scheme | Number of students | Amount in Rupees |
|---|---|---|---|
| Financial Support from institution | Anbu Scholarship scheme | 1143 | 201135750 |
| Financial Support from Other Sources |  |  |  |
| a) National | Tata Education and Development Trust | 6 | 1418400 |

| b)International | Nill | Nill | Nill |
|---|---|---|---|

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5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

| Name of the capability enhancement scheme | Date of implemetation | Number of students enrolled | Agencies involved |
|---|---|---|---|
| Hackathon- Deep Learning | 25/07/2019 | 60 | Sathyabama University |
| UX Design | 24/10/2019 | 159 | NASSCOM, Chennai |
| Healthcare Workshop | 22/07/2019 | 300 | Siemens, Bangalore |
| Corporate Readiness | 06/11/2019 | 350 | Cognizant, Chennai |
| InsighT | 30/10/2019 | 400 | TCS, Chennai |

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5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

| Year | Name of the scheme | Number of benefited students for competitive examination | Number of benefited students by career counseling activities | Number of students who have passedin the comp. exam | Number of studentsp placed |
|---|---|---|---|---|---|
| 2019 | InsighT | Nill | 400 | Nill | 375 |
| 2019 | Corporate Readiness | Nill | 350 | Nill | 316 |
| 2019 | Healthcare Workshop | Nill | 3 | Nill | 3 |
| 2019 | UX Design | Nill | 159 | Nill | 152 |
| 2019 | Hackathon- Deep Learning | Nill | 60 | Nill | 58 |
| 2019 | AMCAT | Nill | 1037 | Nill | 990 |
| 2019 | Cocubes | Nill | 2362 | Nill | 2256 |
| 2019 | AptiCracker | Nill | 2723 | Nill | 2641 |
| 2019 | CodeGene | Nill | 2141 | Nill | 2059 |

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5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

| Total grievances received | Number of grievances redressed | Avg. number of days for grievance redressal |
|---|---|---|
| 17 | 17 | 2 |

## 5.2 – Student Progression

5.2.1 – Details of campus placement during the year

| On campus | | | Off campus | | |
|---|---|---|---|---|---|
| Nameof organizations visited | Number of students participated | Number of stduents placed | Nameof organizations visited | Number of students participated | Number of stduents placed |
| 289 | 1904 | 1727 | 13 | 191 | 18 |
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## 5.2.2 – Student progression to higher education in percentage during the year

| Year | Number of students enrolling into higher education | Programme graduated from | Depratment graduated from | Name of institution joined | Name of programme admitted to |
|---|---|---|---|---|---|
| 2019 | 1 | Sathyabama Institute of Science and Technology | DEPARTMENT OF AERONAUTICAL | Technical University | Aeronautical Engineering |
| 2019 | 1 | Sathyabama Institute of Science and Technology | DEPARTMENT OF AERONAUTICAL | Technical University | Aeronautical Engineering |
| 2019 | 1 | Sathyabama Institute of Science and Technology | DEPARTMENT OF AERONAUTICAL | IIT BOMBAY | Aerospace Engineering |
| 2019 | 1 | Sathyabama Institute of Science and Technology | DEPARTMENT OF AERONAUTICAL | University of California | Aeronautical Engineering |
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## 5.2.3 – Students qualifying in state/ national/ international level examinations during the year (eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

| Items | Number of students selected/ qualifying |
|---|---|
| GRE | 71 |
| TOFEL | 8 |
| GATE | 8 |
| GMAT | 1 |
| Any Other | 2 |
| Any Other | 288 |
| No file uploaded. | |

## 5.2.4 – Sports and cultural activities / competitions organised at the institution level during the year

| Activity | Level | Number of Participants |
|---|---|---|
| Short film | State | 11 |
| Short film | State | 11 |
| Kickboxing | International | 1 |
| Group dance | State | 1 |
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## 5.3 – Student Participation and Activities

5.3.1 – Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one)

| Year | Name of the award/medal | National/ Internaional | Number of awards for Sports | Number of awards for Cultural | Student ID number | Name of the student |
|------|-------------------------|------------------------|-----------------------------|-------------------------------|-------------------|---------------------|
| 2019 | CLASSICAL SONG (SOLO) | National | 5 | 4 | Nill | Nill |

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5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

A group of ignited minds clustered together to provide regular inputs for the complete development of a student. The Student Development Cell (SDC) is to identify the potential of each student and to facilitate them in achieving their academic goals through various clubs and participate in the various academic activities. Student's feedback has taken for preparing the syllabus on CBCS systems. Every department there is student ambassador for representing the students of the department to share the academic and general issues to the higher officials. They also take part in organizing the seminar, conferences, workshops', cultural, club activities and societal activities.AtSathyabama, we have 21 clubs which play a vital part of every student life in Campus. Open to all students, the clubs plan events and activities throughout the year. All the clubs together conduct an annual national level technical event called Technosummit. These clubs enrich the social, cultural and academic experience of students. This is a cognitive domain of knowledge sharing in various fields, which influence the larger student community and offers diverse learning practices. It provides an exclusive platform for different dimension of learning, networking and socializing outside of the classroom. SDC organizes a variety of events such as Workshops, Skill development courses, Power lecture series, Value added courses, Seminars and many more to mention.Student activities are initiated through various Clubs and Schemes like National Service Scheme (NSS), Youth Red Cross (YRC), Red Ribbon Club, Community Development Cell, Eco Club, Rotaract Club. These clubs and Centres are devoted to serve the society. Several Awareness Camps, Health Camps and Rallies are organized by these clubs.

## 5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

With more than 40,000 alumni living, working, and innovating around the globe, Sathyabama alumni network is a hub of inspiration and opportunity. The Sathyabama Alumni Association was established by our Founder Chancellor Col. Dr. Jeppiaar in the year of 1992. Currently in its 29th 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 to develop synergistic plans to aid and improve our campus community. Our alumni facilitate the self-assessment and career exploration of our students to develop clear career goals and paths. They also provide their expertise on career guidance and promote their benefits among the students, alumni, faculty, staff and industry partners.

5.4.2 – No. of registered Alumni:

| 33256 |
| --- |

5.4.3 – Alumni contribution during the year (in Rupees) :

| 3200000 |
| --- |

5.4.4 – Meetings/activities organized by Alumni Association :

Program: Career Guidance Date: 09.07.19 Title: Art of Getting placed in Campus Interview Alumni Name: Praveen Kumar Rajendran Alumni YOP: 2015 Program Date # of Alumni Alumni Meet 25.06.19 40 Alumni Meet 28.06.19 62 Alumni Meet 28.09.19 70 Alumni Meet 06.03.20 29 Alumni Meet 29.06.20 40 Alumni Meet 08.08.20 60 Alumni Meet 18.07.20 60 Alumni Meet 13.04.20 60 Alumni Meet 27.06.20 64 Alumni Meet 29.10.20 60 Program Date Alumni Name Alumni YOP Topic Alumni Talk 01.02.19 Ar.Antony morais,Ar.Dhanashakar, Ar.Jackchandi, 2006, 2007, 2000 Alumni meet-2019 Alumni Talk 14.06.19 Mr. Kasi Viswanath 2016 A Phase shift from Academics to Professional career Alumni Talk 23.06.19 S. Krishnakumar 2015 Job Trends in BME and endoscopy 25.06.19 Bhargav Teja Srikanta 2019 Interactive Session with First Years Alumni Talk 28.06.19 Ms. Mira Pridharshini 2016 The Corporate World Alumni Talk 03.07.19 Prof Dr. Arvind Chandrasekaran 2003 Bio-inspired Micro engineering: Advancingthe frontiers of fundamental biology Alumni Talk 03.07.19 Prof. Dr. Vettrivel Gnaneswaran 2002 Human-Centered Design Alumni Talk 16.07.19 Ar.Govindharajan, Ar.Keethana, Ar.Sai saranya 2019 Theadal Alumni Talk 17.07.19 Immanuel Barnabas 2012 Internet of Things on MFG Industry Alumni Talk 22.07.19 Mr.Vasanth 2014 Careers Oppurtunities after Graduation Alumni Talk 24.07.19 Ms.Pradeepa 2018 Emerging Trends in Management Techniques Alumni Talk 31.07.19 Ms.Chiamala Aravamudhan 2005 Entreprenuership Alumni Talk 21.08.19 Mr.Rakesh Ravi Shanker 2016 Seminar on Aeronautical/Aerospace Engineering Careers after graduation and NASA Rover Challenge Alumni Talk 06.09.19 Rajesh R 2009 Biomedical Engineering- What it holds Alumni Talk 29.09.19 Mr.Ajay Kumar Neelan 2017 Scope of Digital learning Alumni Talk 28.01.20 Mr. Prashanth Parthasarathy 2010 Campus to Corporate Expectations by Premier Automotive Industries Alumni Talk 10.02.20 Mr.Rohan Krishna 2008 Entrepreneurship opportunities and challenges Alumni Talk 06.03.20 Mr. Avinash Kumarri 2017 Opportunities in Data Science for the Bioinformatics Student Alumni Talk 15.05.20 Mr.Subham Melvin Felix 2018 Front end Framwework Angular Alumni Talk 18.05.20 Dr.K.Kulothungan Guest Smart grid communication Alumni Talk 19.05.20 Mr.Issac Job 2012 Career aspiration in global market for Electrical Engineer Alumni Talk 30.05.20 Mr.Taraprasanna 2014 How To Crack Data Science Interview Alumni Talk 10.06.20 Dr. I.A Palani 2003 Shape Memory Alloys for Micro Mechatronics and soft Robotics Systems Alumni Talk 16.06.20 Ms. Akshaya Hemchandar 2016 Bridging College Placement Alumni Talk 24.06.20 Mr. Prashanth Parthasarathy 2010 Young Engineers a To Corporates Alumni Talk 27.06.20 B. Sathish Kumar 2009 Career guidance recent trends in IT Industry Alumni Talk 09.09.20 EDWIN VARGHESE MATHEW 2017 Motivational Talk

# CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

## 6.1 – Institutional Vision and Leadership

6.1.1 – Mention two practices of decentralization and participative management during the last year (maximum 500 words)

1. Information Communication Technology Team During the Pandemic a core Team known as Information Communication Technology Team is formed to face the challenges created by the Pandemic. The Team comprises of Deans, Department Heads, and Faculty with expertise in ICT. The Team functions under the direct guidance and support of the Vice Chancellor and Registrar. This team made it possible for the Institution to transform into a complete digitally driven education campus. This Team facilitates the following: Adaption of Learning Management System, which supported us to manage with more than 100 online

classes simultaneously. LMS helped us to manage curriculum, deliver and manage course, communicate with students, evaluate and track the performance of students. Students are effectively engaged in the online classes. The assessment tool in-built in the LMS allows the faculty members to provide assignments, quizzes and tests to evaluate the students' performance and provide feedback. The LMS provide access to course materials and assist in creating a virtual learning environment. It also facilitated asynchronous collaboration among students and faculty. To carry out the assessment examinations, which are proctored online through zoom platform. Students are taught the usage of online proctored examination through zoom sessions. Online Placement interviews were arranged and the Placement Cell coordinated the placement activities through zoom platform To organize Programmes like Webinars, online Student Development Programmes, Virtual Cultural Programmes, Virtual Alumni Meetings, Online Hackathons etc 2. Creativity and Innovation Cell Academic activities are carried out without disruption during pandemic. Similarly research and innovation activities of the Institution also progressed in a smooth and efficient manner irrespective of the situation prevailing. There is a creativity and Innovation Cell, created to promote and sustain the research and development and develop the innovation ecosystem of the Institution. This Cell has members across the departments and Research Centres, guided by Vice Chancellor, Registrar, Research Director, and Heads of Research Centres. Functions of the Cell To promote an environment of innovation within the campus. To sensitise students, research scientists and faculty members about the importance of IP generation and motivate them to file for patents. To motivate students, researchers and faculty members to commercialise their innovative products and services. To organise both off-line and online Seminars, Workshops, and Training Programs on Innovation, Intellectual Property Rights and Technology Transfer. To encourage faculty members and researchers to come out with good publications in high impact journals.

6.1.2 – Does the institution have a Management Information System (MIS)?

| Yes |
|-----|

## 6.2 – Strategy Development and Deployment

6.2.1 – Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

| Strategy Type | Details |
|---|---|
| Curriculum Development | • We design our curriculum with adequate emphasis on environmental education. Subjects relating to sustainable development are included in the curriculum of all branches of studies, ensuring that all of our students are groomed as professionals who follow sustainability principles in their professional life. Students are taught about their role in building a strong and sustainable community. • Students are encouraged to participate in Symposiums, Workshops and Conferences. • To improve the problem solving skills, students are encouraged to participate in Software and Hardware Hackathons, where they solve some of the pressing problems faced by the business and Government organisations. |
| Teaching and Learning | • Centre for Skill development |

| | |
|---|---|
| | imparts skill oriented training to our students and improve their employment prospects. • Students are encouraged to participate in national and international conferences and workshops through which students gain knowledge in the desired field from leading experts. • Flipped Class room instructional strategy has been widely practiced in the Institution to increase the level of student engagement and learning. • For every course e-books, courseware, tutorial modules are developed. • Technology is incorporated into teaching to actively engage the students. Interactive online tools were used to improve students' involvement and interaction |
| Examination and Evaluation | • Question paper for every subject is prepared based on the level of Learning outcomes predefined in every course • The learning outcomes are measured at each and every stage of the continuous assessment process. • The CO attainment process is performed at the end of continuous assessment and end semester examination and this process ensures that all the course outcomes of all the courses are given due importance. The target level of CO attainment is fixed based on the average performance of the students. • The PO attainment is done at the end of the program. The target of PO attainment is fixed by the departmental advisory committee based on the performance of the earlier batches. |
| Research and Development | • Collaborative and joint research in association with National and International Partners has resulted in more joint publications, citations and Patents. Around 10,000 publications are made in Scopus and WoS indexed Journals. International joint publications are made with Top ranked Institutions • Research Excellence Awards were given for faculty members making publication in high impact Journals. Projects, patents and publications are given more weightage during the performance appraisal every year. • Faculty members are exposed to training programmes on 'how to write research proposals', 'how to apply for patents' etc. IPR Cell has organised several sensitization Programmes on IPR. |

| | |
|---|---|
| Library, ICT and Physical Infrastructure / Instrumentation | • Digital Library with the support of Knimbus provides remote access to all the e-resources in the library. •The Institution has established a NEXTGEN Lab with advanced technologies including Artificial Intelligence, Augmented Reality, Virtual reality, Block Chain technology and Data Science. • Advanced Equipments are purchased for Department Labs and Research Centres. • Confocal Raman Microscope is purchased for the Research Centre • Earth Science Technology Cell funded by Ministry of Earth Science was established for Marine Biotechnological studies. |
| Human Resource Management | • Faculty are encouraged to enrich themselves by attending FDPs, workshops, conferences, etc. • Summer camps, Science exhibitions are conducted for children of staff members. • Faculty members are appointed as members in various Committees, which expose them to various administrative roles and develop their decision making skill and leadership qualities. • Annual performance appraisal is conducted systematically and the increments, promotions were given based on their meritorious performance. • On the Institutions Founders Day, awards and Recognition to the staff for their consistent contribution. On every Teachers Day, the faculty are awarded with cash and appreciation certificates for their academic and research contribution. |
| Industry Interaction / Collaboration | • Alumni working in Industry are frequently invited to the Institution to meet and discuss with students and mentor them. • The establishment of Centres of Excellence with the industries enabled the institution in starting joint academic programmes with the industries. • The collaboration with industries has facilitated us in bringing more companies for recruitment • The Institution is part of Campus Connect, a unique academia-industry initiative of Infosys to build sustainable partnership with engineering education institutions in India to produce industry ready recruits. • The Industrial partners were instrumental in commercializing the products developed by the |

| Admission of Students | • Admissions are made through all India Exam and Online Counselling • Sathyabama Entrance Examination (SAEEE) is conducted in 41 cities across India in the last week of April • Results and the Rank list are published in the First week of May and online counseling is conducted in the second week of May. • Programme allocation is based on Ranking list. |
|---|---|

6.2.2 – Implementation of e-governance in areas of operations:

| E-governace area | Details |
|---|---|
| Examination | The application of the examination, including arrear examination, hall ticket generation and the publication of results is automated. All academic services like migration certificate, transcripts, certificate verification, etc, can be downloaded from the portal. |
| Administration | Online attendance system is in place for both students and staff. The payroll management system is automated. The booking of the common amenities like auditorium, conference halls, seminar halls are made available online. |
| Student Admission and Support | We have a robust online portal for aspiring students to apply for the SAEEE (entrance exams) and the examination is also conducted online. A dedicated online payment portal is available for fee payment. Every admitted student is provided with login credentials to access the LMS Online counselling is conducted and the seats are allocated based on their entrance exam score. |

## 6.3 – Faculty Empowerment Strategies

6.3.1 – Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

| Year | Name of Teacher | Name of conference/ workshop attended for which financial support provided | Name of the professional body for which membership fee is provided | Amount of support |
|---|---|---|---|---|
| 2019 | M SARAVANAN | IOT AUTOMATION ROBOTICS | Nill | 3000 |
| 2019 | DR.M.MAHESWARI | ISEA FTP on state-of-the-art Technologies in Information Security | Nill | 3000 |

| 2019 | Dr.A.Sahaya Anselin Nisha | IEI | 5000 | Nill |
| 2019 | Vedanarayanan.V | IEEE | 152 USD | Nill |
| [View File](#) | | | | |

6.3.2 – Number of professional development / administrative training programmes organized by the University for teaching and non teaching staff during the year

| Year | Title of the professional development programme organised for teaching staff | Title of the administrative training programme organised for non-teaching staff | From date | To Date | Number of participants (Teaching staff) | Number of participants (non-teaching staff) |
|---|---|---|---|---|---|---|
| 2019 | Innovation in Aircraft M anufacturi ng Technology Thermodyna mic Cycles | Nill | 13/05/2019 | 13/05/2019 | 40 | Nill |
| 2020 | Two Days Hands on Workshop on Innovative Composite Materials and Structures | Nill | 12/02/2020 | 13/02/2020 | 100 | Nill |
| 2019 | Nill | Innovati ons in Laboratory Quality control | 04/12/2019 | 04/12/2019 | Nill | 28 |
| 2020 | E-leader Workshop | E-leader Workshop | 27/01/2020 | 27/01/2020 | 50 | 52 |
| 2019 | Workshop on women E mpowerment | Workshop on women E mpowerment | 12/08/2019 | 16/08/2019 | 100 | 85 |
| [View File](#) | | | | | | |

6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

| Title of the professional development programme | Number of teachers who attended | From Date | To date | Duration |
|---|---|---|---|---|
| ATAL FDP on Cyber Security | 78 | 14/05/2020 | 18/05/2020 | 5 |

| Integration of IOT cloud computing Services in Smart cities | 10 | 01/06/2019 | 12/06/2019 | 12 |
| Data Science | 9 | 20/04/2020 | 24/04/2020 | 5 |

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6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

| Teaching | | Non-teaching | |
| --- | --- | --- | --- |
| Permanent | Full Time | Permanent | Full Time |
| 31 | 31 | 19 | 19 |

6.3.5 – Welfare schemes for

| Teaching | Non-teaching | Students |
| --- | --- | --- |
| • Teaching staff member's children (who get admission in our university) provided 50 concession on tuition fee. • Medical insurance (sum assured Rs.One lakh/Head) for the staff members is provided and Premium paid by the management. • A maternity leave of three months with full pay can be availed by the Female staff members (for two children). • The staff members who have been working in our university for more than 5 years, in case of sudden demise, the family member may be granted an amount of 1 lakh. • Free Master health checkup for our staff members above 35 years will be provided • Free dental screening camp will be organized for all the staff members every 6 months in our university Dental hospital. • Summer camp is organized every year for the children of our staff members • One-week medical leave may be granted to the staff members (once in a year) for the staff members who have undergone surgery. • | • A 100 concession for the children of the non teaching faculty whose child scores very high score in the qualifying examination. • Medical insurance (sum assured Rs.One lakh/Head) for the staff members is provided and Premium paid by the management. • A maternity leave of three months with full pay can be availed by the Female staff members (for two children). • The staff members who have been working in our university for more than 5 years, in case of sudden demise, the family member may be granted an amount of 1 lakh. • Free Master health checkup for our staff members above 35 years will be provided • Free dental screening camp will be organized for all the staff members every 6 months in our university Dental hospital. • Summer camp is organized every year for the children of our staff members • One-week medical leave may be granted to the staff members (once in a year) for the staff members who have undergone surgery. • | • Dr.Jeppiaar Remibai Merit Scholarship is awarded to the toppers for an academic year. 30 of the tuition fee is waived off for the first rank holders, 20 for the second rank and 10 for the third rank holders accordingly. • 100 fee waiver through the Anbu Scholarship for the students from economically weaker section of the society • Outgoing Student Excellence Award is awarded to students with 100 attendance. • Funding is provided for students with publications in reputed journals and conferences and national level projects. • Institution has in-house counsellors to offer counselling service to address the psychological needs of the students. • Mentor-Mentee system to ensure students' overall development • Fully equipped medical Facility is available for the students at the Sathyabama General Hospital • Transportation facility provided for all day scholars. • Mess facilities for all meals |

| | | |
|---|---|---|
| Day care facility is available for the children of our Staff members. • 50 of the registration fee will be provided for referred conferences and journals such as IEEE, ACM, ELSEVIER and SCOPUS INDEXED journal. A Staff can avail this facility once in a year. • Staff children who have finished 10th and 12th with highest mark will be honored with a cash award of Rs.10,000/- each (for first 3 toppers). • 50 TA will be granted for the foreign conference. A Staff can avail this facility once in 3 years. This facility can be availed by the staff members who are working in our university for more than 10 Years • A grant of Rs.10,000/- may be sanctioned for each faculty to conduct FDP once in a year • Staff orientation program will be conducted for all the new staff members joining in our university. • Staff members showing good publication will be rewarded with a cash prize and certificate. • Staff member doing sponsored research projects will be rewarded after completing the project successfully. | Day care facility is available for the children of our Staff members. | for both day scholars and hostel students. • Subsidized canteens and convenience store available inside the campus to cater to the students' needs. • Seed funding for students to encourage entrepreneurship and research. • Well-equipped gym and sports facilities in house • Student Development Cell with 23 active cells to enrich students' co-curricular and extra-curricular activities. • Technovation – An annual project exhibition to showcase technical skills of the students • The institution has a Book Bank Facility for all the students • Inter/Intra collegiate festivals for cultural and sports annually. • Free Coaching to the Indian Administrative Service examination aspirants through Jeppiaar IAS academy |

## 6.4 – Financial Management and Resource Mobilization

6.4.1 – Institution conducts internal and external financial audits regularly (with in 100 words each)

The Institute maintains the accountancy records as per the Accounting standards prescribed by Ministry of Finance, Government of India. As per these guidelines, all the receipts and payments are being recoded using Tally software. The accounts and the related records are being audited both internally and externally. Internal auditing takes place once in three months, the Accounts Department verifies all the records of receipts and payments of all the Administrative and Academic Departments. A separate Audit Team is in place in order to audit the Accounts relating to the sponsored projects from Governmental and Non-Governmental agencies. In addition to the periodical internal audit, mandatory external audit is carried by the External chartered

Accounting and Auditing Firm. The firm undertakes the total auditing and the Final accounts are submitted to the income Tax Department for filing the income Returns.

6.4.2 – Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

| Name of the non government funding agencies /individuals | Funds/ Grnats received in Rs. | Purpose |
| --- | --- | --- |
| NA | Nill | Nill |

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6.4.3 – Total corpus fund generated

| 50000000 |
| --- |

**6.5 – Internal Quality Assurance System**

6.5.1 – Whether Academic and Administrative Audit (AAA) has been done?

| Audit Type | External | | Internal | |
| --- | --- | --- | --- | --- |
| | Yes/No | Agency | Yes/No | Authority |
| Academic | Yes | ISO DNV | Yes | Auditor |
| Administrative | Yes | ISO DNV | Yes | Auditor |

6.5.2 – What efforts are made by the University to promote autonomy in the affiliated/constituent colleges? (if applicable)

| NA |
| --- |

6.5.3 – Activities and support from the Parent – Teacher Association (at least three)

Stakeholders are involved in the Board of studies, and board meetings They are also involved in the process of framing of Vision, Mission and PEO of the Institution as a part of OBE practice. Welcome day is arranged for both parents and students of the first year on the opening day of the Institution. The Institution rules, policies, and regulations are briefed to both the parents and students. All parents are invited to the online Graduation day celebrations. Best outgoing students are honoured with medals, cash prizes, and certificates. Feedback and suggestions are taken from parents for overall development of the Institution.

6.5.4 – Development programmes for support staff (at least three)

Fire safety training and use of fire extinguishers are given to all supporting staff. Road safety Awareness program for bus drivers is organized on the occasion of National Safety Week. Personality and soft skill development program are organized for all technical staff. Spoken English classes are conducted periodically.

6.5.5 – Post Accreditation initiative(s) (mention at least three)

• Research and Publication award was instituted to encourage the Faculty to publish more papers in high impact factor journals. Faculty are given cash award and certificates for high impact publications. • Entrepreneurship development programmes are organised to give More Emphasis to Entrepreneurship • New facilities to promote research in various thrust areas. • More recruitment of University supported Full time Research Scholars • Funding support for faculty to undergo faculty exchange programme and Post Doctoral research programmes • Green initiative

6.5.6 – Internal Quality Assurance System Details

| a) Submission of Data for AISHE portal | Yes |
|---|---|
| b)Participation in NIRF | Yes |
| c)ISO certification | Yes |
| d)NBA or any other quality audit | Yes |

6.5.7 – Number of Quality Initiatives undertaken during the year

| Year | Name of quality initiative by IQAC | Date of conducting IQAC | Duration From | Duration To | Number of participants |
|---|---|---|---|---|---|
| 2019 | Curriculum revision for all the engineering programmes as per AICTE model curriculum | 05/06/2019 | 05/06/2019 | 06/08/2019 | 3092 |
| 2019 | Introduced Industry 4.0 | 05/06/2019 | 05/06/2019 | 06/08/2019 | 2687 |
| 2019 | Compulsory industry internship | 05/06/2019 | 05/06/2019 | 20/06/2019 | 2687 |
| 2019 | Introduced mini projects during the 7th semester | 05/06/2019 | 05/06/2019 | 05/09/2019 | 3092 |

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# CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

**7.1 – Institutional Values and Social Responsibilities**

7.1.1 – Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

| Title of the programme | Period from | Period To | Number of Participants | |
|---|---|---|---|---|
| | | | Female | Male |
| National Seminar on Violence against Women | 23/08/2019 | 23/08/2019 | 73 | 96 |
| National Workshop on Gender Main Streaming | 30/01/2020 | 30/01/2020 | 58 | 83 |
| National Conference on Women's Rights | 17/02/2020 | 17/02/2020 | 81 | 73 |
| Faculty Development Program on combating | 16/02/2020 | 20/02/2020 | 73 | 83 |

| Gender Stereotypes and sexism | | | | | |

## 7.1.2 – Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

### Percentage of power requirement of the University met by the renewable energy sources

10kW of energy is provided by Si based Solar Cell panels which has been used for lighting of solar roofed pavements . 500 W Windmill caters to the power requirement of a cabin in the Department of Electrical and Electronics Engineering.Food waste handed over to pig farms, e-waste to e-waste recyclers, biomedical waste to authorized handlers, paper and plastic waste to municipal corporation was routinely followed like the previous years. But the quantum of waste were found to increase owing to the expansion of the institution in terms of the increase in the number of schools as well as number of departments in certain schools. The enormously generated food waste has been identified as a potential renewable energy resource with a proposal to use Food waste powered MFCs in series to provide lighting and clean water requirements in roof gardens.A working prototype that could generate power to charge a mobile phone was developed. The extension of research is planned to harvest more power by operating the MFC is series.Apart from providing to the Institution buses, the produced cold flow properties and oxidation stability enhanced Waste Cooking Oil ,Algal Oil is also provided for irrigation water pump sets.The number of battery operated vehicles were increased further to six numbers catering to the in campus commutation contributing to the green campus initiative. The water consumption by the Institution is moderate as the institution is using treated water from the STP for gardening and flushing which are the major water usage points. Since water for flushing is met by recycled water the intake water can directly be diverted for purposes like drinking, cooking, cleaning, bathing etc. So the intake water of 360 KLD per day seems adequate. As with the adoption of STP and reusing the recycled water for flushing and gardening the institution could reduce their water footprint to a great extent. During this year the power supplied by the TNEB is 30000kVA while utilization is well below supplied i.e 47,88,590 kVAh , maximum among all the years in the past. Environmental and Energy Audits were performed and recommendations have been taken forth to maximum extent possible and have been implemented in the subsequent years.

## 7.1.3 – Differently abled (Divyangjan) friendliness

| Item facilities | Yes/No | Number of beneficiaries |
|---|---|---|
| Physical facilities | Yes | 93 |
| Provision for lift | Yes | 93 |
| Ramp/Rails | Yes | 93 |
| Braille Software/facilities | Yes | 21 |
| Rest Rooms | Yes | 93 |
| Scribes for examination | Yes | 21 |
| Special skill development for differently abled students | Yes | 93 |
| Any other similar facility | Yes | 68 |

## 7.1.4 – Inclusion and Situatedness

| Year | Number of initiatives to address locational advantages and disadvantages | Number of initiatives taken to engage with and contribute to local community | Date | Duration | Name of initiative | Issues addressed | Number of participating students and staff |
|---|---|---|---|---|---|---|---|
| 2019 | Nill | 1 | 07/06/2019 | 1 | TNSCB-Capacity Building Program | The program was to inspire the Residents of Perumbakkam and motivate them to better their lives | 15 |
| 2019 | 1 | Nill | 20/06/2019 | 1 | Blood Donation Camp | Blood donation drive for children who are undergoing treatment for Thalassemia at VHS Hospital | 25 |
| 2020 | 1 | Nill | Nill | Nill | Child Cancer Awareness Program1 | Created awareness | 50 |
| | | | [View File](#) [View File](#) | | | | |

7.1.5 – Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders

| Title | Date of publication | Follow up(max 100 words) |
|---|---|---|
| Handbook on Human Values And Professional Ethics | 01/07/2019 | Programs conducted focusing on Rules based decision making by Promoting fairness by valuing rights, rules and laws, supporting equitable treatment. Teachers respects individual students and deals with them with fairness, follows due process to protect civil and human rights. Caring for individuals promoting compassion, empathy, maintaining relationships |

and dignity. Initiated social discourse to confront moral issues and inequities. Students Engages in discourses of questioning the status quo, analyses and evaluates who benefited from the laws, and demonstrates sensitivity to inequities. Serving best interest of the student, by promoting professional standards and decision-making Used professional code of ethics and kept the student at the centre of decisions.

7.1.6 – Activities conducted for promotion of universal Values and Ethics

| Activity | Duration From | Duration To | Number of participants |
|---|---|---|---|
| National Seminar on Fundamental Duties | 23/11/2019 | 24/11/2019 | 119 |
| Faculty Development Programme on Gender Sensitization and Human Rights | 18/05/2020 | 22/05/2020 | 235 |
| National Conference on Healthy Ageing and Sustainable Development Goals | 13/02/2020 | 14/02/2020 | 135 |
| One day Training Programme on Professional Ethics | 05/03/2020 | 05/03/2020 | 120 |
| One day Workshop on Non-Violence and Love | 17/07/2019 | 17/07/2019 | 1500 |
| Capacity Building Training Programme on Communal Harmony | 12/08/2019 | 12/08/2019 | 100 |
| No file uploaded. | | | |

7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)

1. Sewage treatment plant: A massive initiative to recycle 1.25 Lakh litres of water to be reused for developing and maintenance of flora and Fauna in the campus. 2. HT electrical line: A new HT line was established in order to minimize the use of Diesel in overall maintenance of the power back up in our campus, thus reducing the carbon factor in a big way. 3. Solid Waste management: A detailed initiative is currently underway to efficiently manage the solid waste management. Waster disposals/biomedical waste are properly

categorized and disposed as per ethical committee guidelines. 4. E-wastes like computers and its accessories, electrical cables are dispersed through buy back schemes. 5. Waste water collected from different hostels are recycled and used for the cultivation of water grass in sewage farm. 6. Battery operated vehicles are used to commute within the campus. Mass transportation is practiced in the University. The staff and students should commute to the University only by the University buses to save fuel and reduce pollution.

## 7.2 – Best Practices

### 7.2.1 – Describe at least two institutional best practices

BEST PRACTICES - I TITLE: FACULTY PUBLICATION REWARD OBJECTIVES OF THE PRACTICE: • To encourage faculty members to publish high quality papers in high impact journals • To reward and recognize the faculty members for their contribution towards research THE CONTEXT Research and Teaching are the two vital activities for a faculty. Cutting edge research activities have been the order of the day at Sathyabama. The management of Sathyabama has felt it to be absolutely necessary to motivate the faculty for their research publication in high impact journals to appreciate and recognize their hard work. THE PRACTICE • At the end of every academic year a form is circulated to all the faculty members asking them to enter their publications in Science Indexed publications with impact factor greater than 1. • The first/corresponding author of the paper receives the reward. • The cash amount for the reward is decided based on the impact factor. • Every paper with impact factor receives the cash award on Teachers day (Sep 5th) every year. OBSTACLES OBSERVED There have been no obstacles observed so far. It has only motivated other faculty to do high quality research and publish in high impact journals EVIDENCE OF SUCCESS Around 131 nos of faculty have received the reward in this academic year RESOURCES REQUIRED Fund allocation for award in the annual budget BEST PRACTICE – II Title: 24 x 7 PSYCOLOGICAL COUNSELLING PRESERVING THE MENTAL HEALTH OF STAFF AND STUDENTS • OBJECTIVES OF THE PRACTICE: To equip the students to handle the personal concerns and academic challenges smoothly • To educate and expose teaching staff about the psychological aspects of students • Introverts and non-team workers to be identified and counselled • Promoting interpersonal relationship and developing positive attitude at the workplace Expose and educate the students about giving a helping hand to people who need counselling THE CONTEXT: The emotional and mental strength of a person is highly fluctuating and is dependent on physical health, family members, the team leader, peer group and individual socio-economic needs. Students at their young age end up their lives when they could not handle a relationship failure, seclusion by peers or family or when they fail in an examination. Staff members also undergo lot of psychological disturbances which interrupt their interrelationship with students and fellow staff members. THE PRACTICE: The mechanism of the practice is as follows • The Department of Psychology has 1 male and 1 female counsellor available at the campus round the clock. • Students are encouraged to meet the counsellors any time to address their concerns and get counselled and their privacy is assured • Regular lecture and workshop sessions related to common issues like- dealing with failures, combating peer pressure, overcoming negative attitude etc., are conducted once in a month • Specific counselling is given to students who get involved in malpractice during examinations, who involve in physical fight with their peers or undergo depression due to their personal or family issues Student volunteers are made to associate with organisations like Banyan – mental health NGO, National Institute for Empowerment of Persons with Multiple Disabilities (NIEPMD) to educate and expose themselves to the mental health needs OBSTACLES OBSERVED: Many students do not come out to seek the help of counsellors fearing social stigma and fear of their friends isolating them. As this program matures, with more student volunteering to help others, this hurdle will be

swept away. EVIDENCE OF SUCCESS: • More than 150 students volunteered themselves to get counseling for their various personal, interpersonal and social issues • Around 6 lecture and workshop sessions are handled for staff and students • Around 60 students involved in malpractice were counselled and taught ethical values and codes • 2 field visits to Banyan and NIEPMD has been organized so far. Student volunteers were educated about lending a helping hand to persons with multiple disabilities. RESOURCES REQUIRED Separate infrastructure for handling students during counseling, an office, computer and its peripherals with 2 counselors are provided by the Institute CONTACT PERSON: HEAD OF THE DEPARTMENT OF PSYCOLOGY

| Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link |
| :---: |
| https://www.sathyabama.ac.in/academics/iqac |

## 7.3 – Institutional Distinctiveness

7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

The institution never misses any opportunity to service the society.New programmes in Artificial Intelligence, Datascience, IoT, Mechatronics were instituted to provide domain specific knowledge sharing to our students. Courses on Industry 4.0 were introduced to match the expectations of the industry. Centre for Skill Development is established in collaboration with NSTI (MSDE), which aims to upgrade skills to international standards through significant industry participation. The University has adopted e-governance (Paper less) with use of HRMS. Innovation club was an effort to encourage more students to come out with more innovative ideas and products for the societal needs. The curriculum is revamped and revisited to provide academic flexibility to our students. The Institution gracefully handled the curbs due to corona and completed all its academic activities online through an effective HRMS, LMS systems in place. All Student and Institution related activities were conducted through online Zoom platform and seamless service to students was never interrupted. The faculty and students were given free access to learning material and certification courses through online platforms to keep them acquainted with technology advancements. Col. Dr. Jeppiaar Research Forum was initiated to facilitate knowledge sharing on thrust areas of research. The forum creates awareness on the advances in research and development activities happening around the world. The forum also provides opportunities for the students to discuss their research ideas with the Scientists of our University to convert their ideas into technological development. Students are guided on writing research articles and converting them into publications. The University maintains clean campus by adopting "Swachha Bharat Abihyan". The University research efforts are directed towards sustainable development goals.

| Provide the weblink of the institution |
| :---: |
| https://www.sathyabama.ac.in/academics/iqac |

## 8.Future Plans of Actions for Next Academic Year

NEP in Practice Sathyabama is actively working towards implementation of the recommendations of the National Education Policy 2020 from the forthcoming year. Sathyabma aims to inculcate critical thinking, creativity, problem solving skills, Scientific temper, social responsibility and digital literacy among the students which will pave way for quality education. The Institution has plans to initiate programmes with different entry and Exit options for the students at various levels during their course of study. The Institution is planning to offer More skill based programmes, sandwich courses, in association with Industries and other National and International Universities. The institution has tied up with

Board of Apprenticeship training to provide Internship embedded programmes for students under which the students will have opportunity to undergo internships in various Industries. To start with, Sathyabama has initiated Internship Embedded programme for B. Com and B.Sc Computer Science programmes. We adopt Outcome Based Learning ensures reflective, responsible and lifelong learning to the students. To make students more employable the Institution will offer more skill based courses and vocational job based courses as per National Skill Quality Framework (NSQF). The use of mooc courses, moodle platforms for course delivery will facilitate larger outreach of content to maximum number of students. The Institution is working towards strengthening the digital infrastructure, Cloud Infrastruture to provide extensive blended learning experience to learners. This has lead to envision the target of moving towards Bookless University. Centre for Distance and Online Education: The Institution has pitched in with Open Distance Learning (ODL) and online programmes across the domains of Science, Commerce, Business Administration, Mathematics and English Literature from the year 2020. ODL programmes would increase the outreach of higher education to diverse learners. The University in tailoring high quality standard learning content for such programmes introduced. Artificial Intelligence, Data Science, Bioinformatics Courses emphasizing on the Professional development for students and working professionals are introduced from the year 2020. New Laboratory: It is proposed to start a Labview Academy Programme in association with National Instruments. The centre will consist of National Instruments hardware like data acquisition cards, DSP cards, signal conditioning units, The centre includes the latest versions of National Instruments sucha s LabVIEW software, Vision Development Module, NI MATRIX, LabWINDOWS, Measurements Studio and toolkits like Model Based Control Design Toolkit, Signal Processing Toolkit, PID Control Toolkit, Fuzzy logic Design Toolkit, FPGA Design Toolkit, Digital Filter Design Toolkit etc. This Industry oriented Programme will enhance the employability skills of the students. The advanced equipments in the lab provides practical and hands on experience to students. The skillsets of the students can be improved with such Industry sponsored laboratories. Open Air theatre: A multi-purpose Open Air theatre, fully air conditioned with 1000 seating capacity, to be constructed. This open-air theatre will be used to organize events at National and International level. Students will have a different experience in participating in various activities organized in the open air theatre. Award Ceremonies, Sports events, cultural events and other events can be organized in a grand manner.