



## Yearly Status Report - 2017-2018

### 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. S. SUNDAR MANOHARAN                               |
| Designation                                   | Vice Chancellor                                       |
| Does the Institution function from own campus | Yes   |
| Phone no/Alternate Phone no.                  | 04424503243   |
| Mobile no.                                    | 9444238423  |
| Registered Email                              | registrar@sathyabama.ac.in                            |
| Alternate Email                               | vc@sathyabama.ac.in                                   |
| Address                                       | Jeppiaar Nagar, Rajiv Gandhi Salai,<br>Sholinganallur |
| City/Town                                     | Chennai-  |
| State/UT                                      | Tamil Nadu  |
| Pincode                                       | 600119  |

| <b>2. Institutional Status</b>  |                 |                                       |   |             |             |   |       |      |   |                 |                                       |                      |             |      |   |      |      |             |             |
|---|-----------------|---------------------------------------|---|-------------|-------------|---|-------|------|---|-----------------|---------------------------------------|----------------------|-------------|------|---|------|------|-------------|-------------|
| 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.  |                 |                                       | 04424503153   |             |             |   |       |      |   |                 |                                       |                      |             |      |   |      |      |             |             |
| Mobile no.  |                 |                                       | 9443786840  |             |             |   |       |      |   |                 |                                       |                      |             |      |   |      |      |             |             |
| Registered Email  |                 |                                       | iqac@sathyabama.ac.in   |             |             |   |       |      |   |                 |                                       |                      |             |      |   |      |      |             |             |
| Alternate Email   |                 |                                       | vc@sathyabama.ac.in   |             |             |   |       |      |   |                 |                                       |                      |             |      |   |      |      |             |             |
| <b>3. Website Address</b>   |                 |                                       |   |             |             |   |       |      |   |                 |                                       |                      |             |      |   |      |      |             |             |
| Web-link of the AQAR: (Previous Academic Year)  |                 |                                       | <a href="https://www.sathyabama.ac.in/academics/iqac/aqar">https://www.sathyabama.ac.in/academics/iqac/aqar</a> |             |             |   |       |      |   |                 |                                       |                      |             |      |   |      |      |             |             |
| <b>4. Whether Academic Calendar prepared during the year</b>  |                 |                                       | Yes   |             |             |   |       |      |   |                 |                                       |                      |             |      |   |      |      |             |             |
| if yes,whether it is uploaded in the institutional website:<br>Weblink :  |                 |                                       | <a href="https://www.sathyabama.ac.in/academics/iqac">https://www.sathyabama.ac.in/academics/iqac</a>           |             |             |   |       |      |   |                 |                                       |                      |             |      |   |      |      |             |             |
| <b>5. Accreditation Details</b>   |                 |                                       |   |             |             |   |       |      |   |                 |                                       |                      |             |      |   |      |      |             |             |
| <table border="1"> <thead> <tr> <th rowspan="2">Cycle</th> <th rowspan="2">Grade</th> <th rowspan="2">CGPA</th> <th rowspan="2">Year of Accreditation</th> <th colspan="2">Validity</th> </tr> <tr> <th>Period From</th> <th>Period To</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>A</td> <td>3.09</td> <td>2017</td> <td>14-Sep-2017</td> <td>13-Sep-2022</td> </tr> </tbody> </table>       |                 |                                       |   |             |             | Cycle   | Grade | CGPA | Year of Accreditation                         | Validity        |                                       | Period From          | Period To   | 2    | A | 3.09 | 2017 | 14-Sep-2017 | 13-Sep-2022 |
| Cycle   | Grade           | CGPA                                  | Year of Accreditation   | Validity    |             |   |       |      |   |                 |                                       |                      |             |      |   |      |      |             |             |
|   |                 |                                       |   | Period From | Period To   |   |       |      |   |                 |                                       |                      |             |      |   |      |      |             |             |
| 2   | A               | 3.09                                  | 2017  | 14-Sep-2017 | 13-Sep-2022 |   |       |      |   |                 |                                       |                      |             |      |   |      |      |             |             |
| <b>6. Date of Establishment of IQAC</b>   |                 |                                       | 03-Jul-2007   |             |             |   |       |      |   |                 |                                       |                      |             |      |   |      |      |             |             |
| <b>7. Internal Quality Assurance System</b>   |                 |                                       |   |             |             |   |       |      |   |                 |                                       |                      |             |      |   |      |      |             |             |
| <table border="1"> <thead> <tr> <th colspan="3">Quality initiatives by IQAC during the year for promoting quality culture</th> </tr> <tr> <th>Item /Title of the quality initiative by IQAC</th> <th>Date &amp; Duration</th> <th>Number of participants/ beneficiaries</th> </tr> </thead> <tbody> <tr> <td>Preparation for NAAC</td> <td>10-Jun-2017</td> <td>5000</td> </tr> </tbody> </table> |                 |                                       |   |             |             | 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 | Preparation for NAAC | 10-Jun-2017 | 5000 |   |      |      |             |             |
| 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 |   |             |             |   |       |      |   |                 |                                       |                      |             |      |   |      |      |             |             |
| Preparation for NAAC  | 10-Jun-2017     | 5000                                  |   |             |             |   |       |      |   |                 |                                       |                      |             |      |   |      |      |             |             |

|                                       |                    |      |
|---------------------------------------|--------------------|------|
| inspection.                           | 90                 |      |
| Stake Holder                          | 06-Jun-2017<br>1   | 400  |
| Review on teaching learning resources | 08-Jun-2017<br>120 | 650  |
| Review on teaching learning process   | 08-Jun-2017<br>120 | 1050 |
| <a href="#">View File</a>             |                    |      |

**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 of excellence for Energy Research | FAST   | MHRD           | 2014<br>2190                | 40000000  |
| Col.Dr. Jeppiaar Research Park           | NSTEDB | DST            | 2013<br>1825                | 330000000 |
| Department of Biotechnology              | FIST   | DST            | 2012<br>1825                | 8000000   |
| Department of Computer Science           | FIST   | DST            | 2014<br>1825                | 2200000   |
| Department of Physics                    | FIST   | DST            | 2015<br>1825                | 7800000   |
| Centre of Excellence for energy Research | FAST   | MHRD           | 2014<br>2190                | 40000000  |
| <a href="#">View File</a>                |        |                |                             |           |

|  |                           |
|--|---------------------------|
| <b>9. Whether composition of IQAC as per latest NAAC guidelines:</b>   | Yes                       |
| Upload latest notification of formation of IQAC  | <a href="#">View File</a> |
| <b>10. Number of IQAC meetings held during the year :</b>  | 5                         |
| 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  | <a href="#">View File</a> |
| <b>11. Whether IQAC received funding from any of the funding agency to support its activities during the year?</b> | No                        |

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

1. Undergone NAAC reassessment in August 2017 and granted A Grade accreditation with a score of 3.09. 2. Participated in world Rankings and Ratings. The institution was ranked among 1449 institutions globally in Times Higher Education World Rankings 2017. QS has rated our institution with 4 star rating for overall excellence. 3. Skill development centre was established in association with Ministry of Skill Development and Entrepreneurship through which more skill development programs are conducted for all the students. 4. More international collaborations were initiated and conducted joint international conferences on different themes. Invited professors from the partnering institutions to handle part of our courses. Faculty exchange programme, student exchange program, semester abroad program, internship abroad program, research internship program were initiated. 5. In order to upskill the faculty members on ICT enabled innovative teaching learning pedagogy, workshops/FDP/Seminars were conducted which has increased the repository of more e resources at the institution.

No Files Uploaded !!!

**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  |
|--|---|
| Proposal given to introduce new UG and PG programmes as per the industry and societal needs. The departments were instructed to design the curriculum for the newly proposed programmes. | New programmes introduced in the academic year 20172018 are: i) B.Sc Physics ii) B.Sc Chemistry iii) B.A English iv) M.E Embedded Systems and IoI v) M.Tech Industrial Systems and Biotechnology vii) M.E Thermal Engineering |
| Motivate and encourage faculty members to do quality research and Development  | Number of publications and projects has increased in terms of quality and quantity. Faculty members were rewarded and recognized based on their research contribution.  |
| Data collection and submission for NIRF Ranking - National Institutional Ranking Framework   | National Institutional Ranking Framework (NIRF) has ranked Sathyabama in 44th position in the University category   |
| Participation in Global Ranking and Ratings  | The institution has also been ranked 801+ among the Global Universities by Times Higher Education.  |
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**14. Whether AQAR was placed before statutory body ?**

Yes

| Name of Statutory Body | Meeting Date |
|------------------------|--------------|
| Board of Management    | 03-Sep-2018  |

|  |   |
|--|---|
| <b>15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?</b> | <b>Yes</b>  |
| Date of Visit  | 30-Aug-2017   |
| <b>16. Whether institutional data submitted to AISHE:</b>  | <b>Yes</b>  |
| Year of Submission   | 2018  |
| Date of Submission   | 04-Mar-2018   |
| <b>17. Does the Institution have Management Information System ?</b>   | <b>Yes</b>  |
| If yes, give a brief description 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 |
|-------------------|----------------|---|------------------|
| BE                | 18             | Electronics and Instrumentation Engineering | 04/11/2017       |
| BE                | 13             | Electronics and Communications Engineering  | 04/11/2017       |
| Mtech             | 82             | VLSI Design                                 | 04/11/2017       |

|                           |    |   |            |
|---------------------------|----|---|------------|
| ME                        | 88 | Embedded Systems                              | 04/11/2017 |
| BE                        | 14 | Electronics and<br>Electronics<br>Engineering | 04/11/2017 |
| <a href="#">View File</a> |    |   |            |

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 | 05/06/2017           | S26PT<br>1-Professional Training - 1 | 05/06/2017           |
| BE                        | Aeronautical Engineering | 05/06/2017           | S26PT<br>2-Professional Training - 2 | 05/06/2017           |
| BE                        | Aeronautical Engineering | 05/06/2017           | SAE1<br>302-Aircraft Propulsion      | 05/06/2017           |
| BE                        | Aeronautical Engineering | 05/06/2017           | SAE1<br>403-Aviation Management      | 05/06/2017           |
| <a href="#">View File</a> |                          |                      |                                      |                      |

## 1.2 – Academic Flexibility

1.2.1 – New programmes/courses introduced during the Academic year

| Programme/Course          | Programme Specialization    | Dates of Introduction |
|---------------------------|-----------------------------|-----------------------|
| BE                        | SEC1316 CMOS VLSI design    | 05/06/2017            |
| BE                        | SCSX1061-PYTHON PROGRAMMING | 05/06/2017            |
| MSc                       | Chemistry                   | 06/01/2018            |
| ME                        | EMBEDDED AND IOT            | 05/06/2017            |
| BSc                       | COMPUTER SCIENCE            | 05/06/2017            |
| <a href="#">View File</a> |                             |                       |

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                               | EMBEDDED SYSTEMS                              | 17/06/2017  |
| ME                               | APPLIED ELECTRONICS                           | 17/06/2017  |
| BE                               | ELECTRONICS AND COMMUNICATION ENGINEERING     | 17/06/2017  |
| BE                               | ELECTRONICS AND TELECOMMUNICATION ENGINEERING | 17/06/2017  |
| BE                               | ELECTRICAL AND ELECTRONICS ENGINEERING        | 17/06/2017  |

|       |   |            |
|-------|---|------------|
| BE    | ELECTRONICS AND INSTRUMENTATION ENGINEERING | 17/06/2017 |
| Mtech | VLSI DESIGN                                 | 17/06/2017 |
| ME    | EMBEDDED AND IOT                            | 17/06/2017 |
| BE    | CSE   | 17/06/2017 |
| BTech | IT  | 17/06/2017 |
| MSc   | PHYSICS                                     | 17/06/2017 |
| BE    | Mechanical Engineering                      | 17/06/2017 |
| BSc   | Chemistry                                   | 17/06/2017 |
| MSc   | Chemistry                                   | 17/06/2017 |
| BE    | Mechanical & Production Engineering         | 17/06/2017 |
| BE    | Civil Engineering                           | 17/06/2017 |
| ME    | Structural Engineering                      | 17/06/2017 |
| BE    | BIOINFORMATICS                              | 07/06/2017 |
| BSc   | PHYSICS                                     | 17/06/2017 |
| BE    | Automobile Engineering                      | 17/06/2017 |
| BArch | Architecture                                | 17/06/2017 |

### 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 |
|---------------------------|----------------------|-----------------------------|
| AutoCAD                   | 09/10/2017           | 172                         |
| AutoCAD                   | 23/10/2017           | 139                         |
| AutoCAD                   | 18/01/2018           | 112                         |
| Basic Inventor            | 05/09/2017           | 125                         |
| Basic Inventor            | 18/01/2018           | 82                          |
| <a href="#">View File</a> |                      |                             |

#### 1.3.2 – Field Projects / Internships under taken during the year

| Project/Programme Title | Programme Specialization                      | No. of students enrolled for Field Projects / Internships |
|-------------------------|---|---|
| BE                      | Computer Science Engineering                  | 420   |
| BE                      | Electronics and Communication Engineering     | 370   |
| BE                      | Electrical and Electronics Engineering        | 200   |
| BE                      | Electronics and Instrumentation Engineering   | 49  |
| BE                      | Electronics and Telecommunication Engineering | 120   |

## 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. Credits are given under Non CGPA for 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                    | Electronics and Instrumentation Engineering | 60                        | 1429                           | 19                |
| BE                    | Electronics                                 | 60                        | 1629                           | 21                |



|                           |   |     |       |     |
|---------------------------|---|-----|-------|-----|
|                           | and Telecommunication Engineering         |     |       |     |
| BE                        | Electrical and Electronics Engineering    | 120 | 7954  | 99  |
| BE                        | Electronics and Communication Engineering | 600 | 29580 | 469 |
| BE                        | Computer Science and Engineering          | 400 | 44348 | 858 |
| <a href="#">View File</a> |   |     |       |     |

## 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 |
|------|---|---|---|---|--|
| 2017 | 2483  | 433   | 475   | 362   | 837  |

## 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 | Number of smart classrooms | E-resources and techniques used |
|----------------------------|---|-----------------------------------|----------------------------------|----------------------------|---------------------------------|
| 837                        | 837   | 150                               | 110                              | 23                         | 8                               |

[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 20 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 interaction are maintained. Efficacy of the system • The comprehensive record of mentees has been effective in the analysis of student performance. The mentees' records are maintained using a mentoring card. • 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 |
|--|-----------------------------|-----------------------|
| 12948  | 837                         | 1:15                  |

## 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 |
|-----------------------------|-------------------------|------------------|--|--------------------------|
| 837                         | 831                     | 6                | 6  | 362                      |

### 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                                   |
|---------------|---|---------------------|--|
| 2018          | Dr.M.Sundareswari   | Professor           | Elected as fellow of Academy of sciences,  |
| 2018          | Dr D S JAYALAKSHMI  | Assistant Professor | Young Achiever Award from Institute for exploring Advances in engineering                                      |
| 2018          | Dr.V.K.Bupesh Raja  | Professor           | Overseas Research Fellowship (ORF) from Materials Division, National University of Singapore (NUS), Singapore. |
| 2018          | R.Kaja Bantha Navas   | Assistant Professor | General Inspection Authority, Maulana Azad Education Foundation, Ministry of Minorty Affairs, Govt of Indis    |

[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             | 14             | 5              | 10/01/2018  | 31/01/2018  |
| BE             | 13             | 5              | 10/01/2018  | 31/01/2018  |

|                           |    |   |            |            |
|---------------------------|----|---|------------|------------|
| BSc                       | 27 | 5 | 20/11/2019 | 31/01/2018 |
| BCom                      | 74 | 5 | 27/11/2017 | 31/01/2018 |
| <a href="#">View File</a> |    |   |            |            |

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 |
|---|--|------------|
| 92  | 12680  | 0.72       |

## 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)

|   |
|---|
| <a href="https://www.sathyabama.ac.in/academics/schools">https://www.sathyabama.ac.in/academics/schools</a> |
|---|

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 Sciecn Engineering                  | 420   | 401   | 95.48           |
| 13                        | BE             | Electronics and Communic ation Engineering   | 376   | 356   | 94.68           |
| 14                        | BE             | Electrical and Electronics Engineering       | 200   | 190   | 95              |
| 18                        | BE             | Electronics and Instrume ntation Engineering | 49  | 45  | 85.71           |
| <a href="#">View File</a> |                |  |   |   |                 |

## 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)

|   |
|---|
| <a href="https://www.sathyabama.ac.in/academics/igac">https://www.sathyabama.ac.in/academics/igac</a> |
|---|

## 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 |
|------|--|-------------------|---------------|-----------------|
|------|--|-------------------|---------------|-----------------|

|                           |                 |                                       |            |  |
|---------------------------|-----------------|---------------------------------------|------------|--|
| National                  | Ms.V.Amala Rani | Topper in NPTEL online certification  | 17/10/2017 | NPTEL                                    |
| International             | Brijitta J      | Postdoctoral Fellowship               | 01/09/2017 | Lund University, Sweden                  |
| International             | Brijitta J      | Travel Grant (Large Scale Facilities) | 07/02/2018 | Institut Laue-Langevin, Grenoble, France |
| <a href="#">View File</a> |                 |                                       |            |  |

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        | 365                        | Sathyabama Institute of Science and Technology. |
| Junior Research Fellowship        | 1095                       | Sathyabama Institute of Science and Technology. |
| National Post Doctoral Fellowship | 365                        | DST   |
| Junior Research Fellowship        | 547                        | CVRDE, DRDO, Chennai.                           |
| <a href="#">View File</a>         |                            |   |

### 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 |
|---------------------------|----------|---|------------------------|---------------------------------|
| Major Projects            | 1825     | DST-FIST  | 2200000                | 0                               |
| Major Projects            | 1825     | Department of Science and Technology (DST)-FIST | 2200000                | 0                               |
| Major Projects            | 1825     | DST-FIST  | 5600000                | 2500000                         |
| <a href="#">View File</a> |          |   |                        |                                 |

### 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       |
|--|------------------------------|------------|
| Workshop on Image Designing                      | Computer Science Engineering | 27/06/2017 |
| Business Intelligence in Real World Applications | Computer Science Engineering | 07/07/2017 |
| FDP on Computer Vision                           | Computer Science Engineering | 31/07/2017 |

|  |                        |            |
|--|------------------------|------------|
| A Short term Course on Deep Learning and Computer Vision | Information Technology | 05/03/2018 |
| IoT with Raspberry Pi                                    | Information Technology | 20/07/2017 |
| <a href="#">View File</a>                                |                        |            |

### 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                              |
|--|----------------------|----------------------|---------------|---------------------------------------|
| 2 Topper in NPTEL online certification course on Power System Analysis     | Mrs.M.Kavitha        | NPTEL , IIT Khargpur | 06/07/2017    | Elite Topper in Power System Analysis |
| Top Performing Mentor for the NPTEL Online Course of Power System Analysis | Dr.D.Godwin Immanuel | NPTEL , IIT Khargpur | 06/07/2017    | Top Performing Mentor                 |
| 5 Topper in NPTEL online certification course                              | Dr.R.Vanitha         | NPTEL , IIT Khargpur | 03/01/2018    | Elite Topper in Research Writng       |
| Top 2 in NPTEL online certification course - Research Writing              | Dr.D.Susitra         | NPTEL , IIT Khargpur | 03/01/2018    | Elite Topper in Research Writng       |
| Project Competition  | Mr.Samyak Sreyash    | IIT, Mumbai          | 10/06/2017    | Student                               |
| <a href="#">View File</a>  |                      |                      |               |                                       |

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

| Incubation Center | Name                 | Sponsered By | Name of the Start-up | Nature of Start-up | Date of Commencement |
|-------------------|----------------------|--------------|----------------------|--------------------|----------------------|
| TBI (DST-NSTDEB)  | Mr. Partha sarathy C | DST          | Dot2Globe            | SAAS               | 18/07/2017           |
| TBI (DST-NSTDEB)  | Mr. Jeyakumar        | DST          | JSIP Designs         | Patent Drafting    | 01/03/2018           |
| No file uploaded. |                      |              |                      |                    |                      |

## 3.4 – Research Publications and Awards

### 3.4.1 – Ph. Ds awarded during the year

| Name of the Department           | Number of PhD's Awarded |
|----------------------------------|-------------------------|
| Physics                          | 3                       |
| Computer Science                 | 1                       |
| Life Sciences                    | 3                       |
| Computer Science and Engineering | 36                      |

|                         |    |
|-------------------------|----|
| Electronics             | 18 |
| Electrical              | 6  |
| Mechanical              | 11 |
| Bio Engineering         | 4  |
| Civil Engineering       | 2  |
| Business Administration | 8  |
| English                 | 1  |
| Maths                   | 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             | Computer Science Engineering              | 13                    | 0.3                            |
| National                  | Information Technology                    | 3                     | 0.4                            |
| International             | Information Technology                    | 39                    | 0.9                            |
| International             | Electronics and Communication Engineering | 22                    | 1.4                            |
| International             | Electrical and Electronics Engineering    | 35                    | 1.6                            |
| <a href="#">View File</a> |   |                       |                                |

#### 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 |
|---|-----------------------|
| Biomedical Engineering                        | 4                     |
| Electronics and Telecommunication Engineering | 3                     |
| Electrical and Electronics Engineering        | 7                     |
| Electronics and Communication Engineering     | 38                    |
| Information Technology                        | 3                     |
| <a href="#">View File</a>                     |                       |

#### 3.4.4 – Patents published/awarded/applied during the year

| Patent Details  | Patent status | Patent Number | Date of Award |
|---|---------------|---------------|---------------|
| A device which indicates ground water leve and avoids damage to motor | Filed         | 201741026170  | 24/07/2017    |
| Electronic time table planner kit                                     | Published     | 201741043407  | 04/12/2017    |

|  |           |              |            |
|--|-----------|--------------|------------|
| for Juveniles  |           |              |            |
| Dynamic Control of Street Lights with Human Mobility, Illumination | Filed     | 201741042771 | 29/11/2017 |
| Autonomous Fuzzy Based Robot for Agri Activities                   | Published | R20184011656 | 18/04/2018 |
| Exclusive Acute Bags for Striplings                                | Published | 201741043409 | 04/12/2017 |
| <a href="#">View File</a>  |           |              |            |

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 |
|--|--|--|---------------------|----------------|---|---|
| A new species of <i>Lysemata</i> Risso, 1816 (Crustacea, Decapoda, <i>Lysematidae</i> ) from the Gulf of Mexico        | Prakash, S., Baeza, J.A.                                     | Zootaxa  | 2017                | 12             | Sathyabama Institute of Science and Technology            | 12  |
| Automated Guided Vehicle for Physically Handicapped People - A Cost Effective Approach                                 | Arun Kumar, G., Sivasubramaniam, A.                          | IOP Conference Series: Materials Science and Engineering | 2017                | Nil            | Sathyabama Institute of Science and Technology            | Nil   |
| Performance, Combustion, and Emission Analysis of Neat Palm Oil Biodiesel and Higher Alcohol Blends in a Diesel Engine | Devarajan, Y., Munuswamy, D.B., Mahalingam, A., Nagappan, B. | Energy and Fuels   | 2017                | 70             | Sathyabama Institute of Science and Technology            | 70  |

|  |   |   |      |      |  |      |
|--|---|---|------|------|--|------|
| Effect of chevron on the decay characteristics of compressible round jet   | Senthil Velavan, S., Vijayaraja, K.   | International Journal of Mechanical and Production Engineering Research and Development | 2017 | Nill | Sathyabama Institute of Science and Technology | Nill |
| Engine performance and emission characteristics of 1-octanol blended bio-diesel in a single cylinder diesel engine | Sriram, V., Jeevahan, J., Mageshwaran, G., Brittojoseph, G., Durairaj, R.B. | International Journal of Mechanical and Production Engineering Research and Development | 2017 | 6    | Sathyabama Institute of Science and Technology | 6    |
| <a href="#">View File</a>  |   |   |      |      |  |      |

#### 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 |
|---|--|--|---------------------|---------|---|---|
| Emissions analysis on diesel engine fueled with palm oil biodiesel and pentanol blends                  | Radhakrishnan, S., Devarajan, Y., Mahalingam, A., Nagappan, B.             | Journal of Oil Palm Research                       | 2017                | 22      | 1   | Sathyabama Institute of Science and Technology            |
| Isolation of fucoidan from Sargassum polycystum brown algae: Structural characterization, in vitro anti | Palanisamy, S., Vinosha, M., Marudhupandi, T., Rajasekar, P., Prabhu, N.M. | International Journal of Biological Macromolecules | 2017                | 128     | Nill  | Sathyabama Institute of Science and Technology            |



|  |  |   |      |     |      |  |
|--|--|---|------|-----|------|--|
| oxidant and anticancer activity  |  |   |      |     |      |  |
| Automated risk identification using NLP in cloud based development environments  | Vijayakumar, K., Arun, C.                                    | Journal of Ambient Intelligence and Humanized Computing | 2017 | 41  | Nill | Sathyabama Institute of Science and Technology |
| Emission analysis on the effect of nanoparticles on neat biodiesel in unmodified diesel engine                         | Pandian, A.K., Ramakrishnan, R.B.B., Devarajan, Y.           | Environmental Science and Pollution Research            | 2017 | 113 | 1    | Sathyabama Institute of Science and Technology |
| Performance, Combustion, and Emission Analysis of Neat Palm Oil Biodiesel and Higher Alcohol Blends in a Diesel Engine | Devarajan, Y., Munuswamy, D.B., Mahalingam, A., Nagappan, B. | Energy and Fuels  | 2017 | 38  | Nill | Sathyabama Institute of Science and Technology |
| <a href="#">View File</a>  |  |   |      |     |      |  |

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

| Number of Faculty           | International | National | State | Local |
|-----------------------------|---------------|----------|-------|-------|
| Attended/Seminars/Workshops | 190           | 230      | 76    | 68    |
| Presented papers            | 67            | 407      | 35    | 510   |
| Resource persons            | 56            | 166      | 12    | 25    |
| No file uploaded.           |               |          |       |       |

### 3.5 – Consultancy

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

| Name of the Consultant(s) department | Name of consultancy project | Consulting/Sponsoring Agency | Revenue generated (amount in rupees) |
|--------------------------------------|-----------------------------|------------------------------|--------------------------------------|
|--------------------------------------|-----------------------------|------------------------------|--------------------------------------|

|   |   |   |        |
|---|---|---|--------|
| Mr.B.Padmanabhan                          | Theoretical and practical solutions for various industrial problems | Theoretical and practical solutions for various industrial problems | 200000 |
| Computer Science Engineering              | Online based production management system                           | Different Hair Pvt Ltd, Chennai                                     | 500000 |
| Dr.A.Sivasangari,<br>Dr.P.Ajitha          | Bulk milk cooler monitoring system                                  | Jeppiar milk pvt ltd  | 100000 |
| Electronics and Communication Engineering | Energy Conservation using LED Appliances                            | JS IP DESIGN  | 47000  |
| Mr.Senthil Nayagam.V                      | Energy management and auditing                                      | Vedamrit Technology Solutions Private limited, Chennai              | 320000 |

[View File](#)

### 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                         | 169500                               | 100                |
| Dr. G. Mathivanan and Mrs. V. Vijeya Kaveri | PG (MS) level course                          | Wipro Technologies, employees of Chennai               | 50000                                | 30                 |
| Mr.Senthil Nayagam.V                        | Energy management and auditing                | Vedamrit Technology Solutions Private limited, Chennai | 50000                                | 4                  |
| Electronics Instrumentation                 | Electronic Circuit Design using Simulink      | TEKIKNOW   | 75000                                | 15                 |
| Centre for Nanoscience and Nanotechnology   | Thin Film Coating Characterisation Techniques | Self   | 147000                               | 47                 |

[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, Sai ram Inst of Science Tech , Chennai Combined Annual Training Camp conducted by 1(TN) Medical Unit NCC Annual Training Camp, VTMT, Avadi | NCC Army Wing | 1 | 17 |
| <a href="#">View File</a>   |               |   |    |

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 |
|---|--------------------------------|--|------------------------------|
| Outstanding Contribution in the field of Tea Outstanding Contribution in the field of Teaching and researching and research | Best Faculty Award             | Cognizant Technology Solutions                                       | 1                            |
| Top 12 women Transforming India under Education Category  | Women transforming India award | NITI aayog in association with My Gov and UN in India                | 12                           |
| One among the 100 women achievers in India in the field of education  | 100 women achievers in India   | Ministry of Women and Child Development in association with Facebook | 1                            |
| Excellence in Research and Publication  | Rashtria Gaurav                | IIFS Award   | 4                            |
| Excellence in Research and Publication  | Bharat Jyothi Award            | IIFS   | 1                            |
| <a href="#">View File</a>   |                                |  |                              |

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 activities | Number of students participated in such activities |
|--|---|---|--|--|
| Blessed to Bleed Campaign - Ladies Police Station, Mylapore  | Student Development Cell                    | Blessed to Bleed - 5 times (100/month) Given 500 napkins                                    | 2  | 25   |
| School Visit - Panchayat Union Middle school at Nallambakkam | Community Development Club                  | Given lecture about Freedom fighters and the luxury of free India                           | 3  | 10   |
| Voter ID campaign  | NSS   | A voter ID campaign has been conducted by NSS students.                                     | 3  | 10   |
| Blood Donation Camp  | NSS   | 353 donors has donated the blood in the blood donation camp                                 | 3  | 25   |
| Blessed to Bleed Campaign for Women in Policing @ Sathyabama | Student Development Cell                    | Blessed to Bleed - An awareness programme on using eco-friendly napkins (Given 200 napkins) | 2  | 25   |
| <a href="#">View File</a>                                    |   |   |  |  |

### 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 |
|-----------------------------|--|--|----------|
| Research Mobility Programme | Mr.Mathan N  | Sathyabama Institute of Science and Technology | 117      |
| Student Exchange            | Mohamed Nawasuddin                                       | Sathyabama Institute of Science Technology     | 180      |
| Research                    | Dr.J Premkumar   | Sathyabama Institute of Science Technology     | 4        |
| Collaborative Research      | Department of Microbiology, Theni Medical College, Theni | Sathyabama Institute of Science Technology     | 72       |
| <a href="#">View File</a>   |  |  |          |

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 |
|---------------------------|---------------------------------------|---|---------------|-------------|-------------|
| Soft skill development    | ProDev                                | Innovative, Vistamind   | 29/01/2018    | 03/02/2018  | 91          |
| Coding skill development  | CodeGene                              | Ebox, CCC, Ethnus   | 17/08/2017    | 22/08/2017  | 91          |
| Aptitude Development      | AptiCracker                           | Innovative ,Time, Vistamind   | 19/06/2017    | 28/06/2017  | 91          |
| Training                  | Training on Cloud server installation | DST FIST cloud Computing lab  | 12/03/2018    | 15/03/2018  | 20          |
| <a href="#">View File</a> |                                       |   |               |             |             |

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 |
|-----------------------------|--------------------|---|---|
| RedHat Center of Excellence | 18/01/2018         | RHCSA RHCSE   | 65  |
| IBM Center of Excellence    | 17/10/2017         | Cybersecurity Data Analytics  | 45  |
| Red Hat Linux               | 18/01/2018         | Linux Certification   | 40  |
| CDAC, Pune                  | 07/07/2017         | Develop skilled manpower on specialized manpower, Joint research, placement | 13  |
| <a href="#">View File</a>   |                    |   |   |

**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 |
|--|--|
| 50000000   | 55040072                                       |

4.1.2 – Details of augmentation in infrastructure facilities during the year

| Facilities | Existing or Newly Added |
|------------|-------------------------|
|            |                         |

|                                   |             |
|-----------------------------------|-------------|
| Laboratories                      | Newly Added |
| Seminar halls with ICT facilities | Newly Added |
| Class rooms                       | Newly Added |
| 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                | 251992   | 150415025 | 6997        | 258989  | 258989 | 150674014 |
| Reference Books           | 13520    | 9340496   | 1026        | 1058500 | 14546  | 10398996  |
| e-Books                   | 10926    | 23500     | Nill        | Nill    | 10926  | 23500     |
| Journals                  | 138      | 306380    | 42          | 620847  | 180    | 927227    |
| e-Journals                | 19149    | 8736823   | 9           | 410644  | 19158  | 9147467   |
| Digital Database          | 9        | Nill      | 1           | Nill    | 10     | Nill      |
| CD & Video                | 1993     | Nill      | 632         | Nill    | 2625   | Nill      |
| Library Automation        | Nill     | 397600    | Nill        | Nill    | Nill   | 397600    |
| Others(s pecify)          | Nill     | 1200000   | Nill        | 1300000 | Nill   | 2500000   |
| <a href="#">View File</a> |          |           |             |         |        |           |

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.John Britto      | SBA1101-<br>PRINCIPLES OF<br>MANAGEMENT AND<br>PROFESSIONAL ETHICS | Moodle                                | 18/08/2018                  |
| Dr.John Britto      | SBA1101-<br>PRINCIPLES OF<br>MANAGEMENT AND<br>PROFESSIONAL ETHICS | Moodle                                | 06/01/2018                  |
| Dr.John britto      | SBAA1101 BUSINESS<br>COMMUNICATION                                 | Moodle                                | 19/09/2018                  |

[View File](#)

#### 4.3 – IT Infrastructure

##### 4.3.1 – Technology Upgradation (overall)

| Type     | Total Computers | Computer Lab | Internet | Browsing centers | Computer Centers | Office | Departments | Available Bandwidth (MBPS/GBPS) | Others |
|----------|-----------------|--------------|----------|------------------|------------------|--------|-------------|---------------------------------|--------|
| Existing | 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)

|                |
|----------------|
| 500 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                    | <a href="https://www.sathyabama.ac.in/Media_Centre">https://www.sathyabama.ac.in/Media_Centre</a> |

#### 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 incurred on maintenance of physical facilities |
|--|--|--|--|
| 49500000                               | 48104650   | 40500000                               | 39358350   |

##### 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 placed on every floor and classroom. • The institution houses two research parks which run 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 in-house 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 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  | 831                | 121330400        |
| Financial Support from Other Sources |                          |                    |                  |
| a) National                          | Nill                     | Nill               | Nill             |
| b) International                     | Nill                     | Nill               | Nill             |
| <a href="#">View File</a>            |                          |                    |                  |

#### 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                      |
|---|-----------------------|-----------------------------|--|
| Commune                                   | 05/02/2018            | 1874                        | Ebek, Vistamind, Stride, Innovative    |
| CodeGene                                  | 05/03/2018            | 3267                        | SixPhrase, Face, CCC, Guvi             |
| AptiCracker                               | 03/07/2017            | 3267                        | IMS, Vistamind, Innovative, FACE, Time |
| Challenger Tech talk series               | 04/10/2017            | 350                         | Capgemini, Chennai                     |
| <a href="#">View File</a>                 |                       |                             |  |

#### 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 passed in the comp. exam | Number of students placed |
|-------------------|-----------------------------|--|--|--|---------------------------|
| 2017              | Challenger Tech talk series | Nill   | 350  | Nill   | 250                       |
| 2017              | AptiCracker                 | Nill   | 3267   | Nill   | 2388                      |
| 2017              | CodeGene                    | Nill   | 3267   | Nill   | 2388                      |
| No file uploaded. |                             |  |  |  |                           |



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 |
|---------------------------|--------------------------------|---|
| 50                        | 49                             | 2   |

## 5.2 – Student Progression

5.2.1 – Details of campus placement during the year

| On campus                     |                                 |                           | Off campus                    |                                 |                           |
|-------------------------------|---------------------------------|---------------------------|-------------------------------|---------------------------------|---------------------------|
| Name of organizations visited | Number of students participated | Number of students placed | Name of organizations visited | Number of students participated | Number of students placed |
| 291                           | 1532                            | 1319                      | 23                            | 190                             | 61                        |
| <a href="#">View File</a>     |                                 |                           |                               |                                 |                           |

5.2.2 – Student progression to higher education in percentage during the year

| Year                      | Number of students enrolling into higher education | Programme graduated from                       | Department graduated from  | Name of institution joined | Name of programme admitted to |
|---------------------------|--|--|----------------------------|----------------------------|-------------------------------|
| 2017                      | 1  | Sathyabama Institute of Science and Technology | DEPARTMENT OF AERONAUTICAL | R M I T University         | MS AEROSPACE                  |
| 2017                      | 1  | Sathyabama Institute of Science and Technology | DEPARTMENT OF AERONAUTICAL | Caltech University         | AEROSPACE ENGINEERING         |
| 2017                      | 1  | Sathyabama Institute of Science and Technology | DEPARTMENT OF AERONAUTICAL | MS                         | MS MECHANICAL                 |
| <a href="#">View File</a> |  |  |                            |                            |                               |

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 |
|-------------------|---|
| GATE              | 11                                      |
| Any Other         | 2                                       |
| Any Other         | 212                                     |
| GRE               | 71                                      |
| TOFEL             | 4                                       |
| No file uploaded. |   |

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

| Activity           | Level    | Number of Participants |
|--------------------|----------|------------------------|
| Oratorical Contest | National | 1                      |
| Tooth carving      | State    | 1                      |

|                           |       |   |
|---------------------------|-------|---|
| Rangoli                   | State | 1 |
| Face painting             | State | 1 |
| <a href="#">View File</a> |       |   |

### 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         |
|---------------------------|------------------------------------|------------------------|-----------------------------|-------------------------------|-------------------|-----------------------------|
| 2017                      | SRI RAGAVENDRA TROPHY - Basketball | National               | 1                           | Nill                          | Nill              | University Basket Ball Team |
| 2017                      | PEGASUS - Basketball               | National               | 1                           | Nill                          | Nill              | University Basket Ball Team |
| <a href="#">View File</a> |                                    |                        |                             |                               |                   |                             |

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. At Sathyabama, 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:

24845

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

2700000

5.4.4 – Meetings/activities organized by Alumni Association :

Alumni Talk 16.06.17 Mr. Prashanth Parthasarathy 2010 Corporate World - Reality and Virtuality Alumni Talk 14.07.17 Ashwini Kumar 2007 Training at GE Healthcare Alumni Talk 14.07.17 Shaheen 2008 Training at GE Healthcare Alumni Meet 08.08.17 Er. Augustine Abraham 2011 Trending Industrial Advancement Aids in Civil Industry Alumni Meet 24.08.17 Er. Augustine Abraham 2011 Application of Softwares in Civil Engineering Alumni Talk 19.02.18 Ar.Binson ooman 2017 Architecture-Alumni talk Alumni Talk 09.03.18 Ms.Preethi 2011 Personality Development Alumni Talk 15.03.18 Mr.Dharshan 2011 Television Production Alumni Talk 10.03.18 Saroj Kumar 2015 Setting Priority life Alumni Talk 17.03.18 Mr.Rajasekar 2012 New technology software in market Alumni Talk 26.03.18 Mr.Louis 2018 How to prepare for the competitive exams Alumni Talk 07.06.18 Mr.Sree Thanu 2017 Current Trends in Industry Alumni Talk 10.08.18 Ms. Nancy Shyla 2012 Carreer as Radio Jockey Alumni Talk 21.08.18 Ar.Sabarish 2016 Architecture-Alumni talk Alumni Talk 03.10.18 Mr.Saroj Kumar 2015 How to Set Priority in Life

## 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)

The Vice Chancellor is the Principal Executive Officer of the institution and exercises general supervision and control over the affairs of the institution and is mainly responsible for implementation of the decisions of all the authorities of the institution. The Vice Chancellor exercises all other powers as delegated by the Board of Management and has power to re-delegate some of the powers to any of his/her subordinate officers with the concurrence and approval of the Board of Management. Deans of Schools and Heads of the Departments have been delegated adequate powers by the Vice Chancellor to smoothly run the Institution. Committees and Cells To promote participative style of management in the administration various Cells are formed and faculty members are given opportunity to fairly represent in such committees. In order to give exposure to everyone to gain academic and professional development, the positions will be filled on rotation.

1. Institution innovation Cell • Institution innovation cell is one of the best practices to promote decentralization and participative management in the Institution. The Cell is managed centrally at the institution level and the structure itself is supported by a decentralized and well-coordinated structure at Departmental levels. Innovation promotion and funding at the institution level and the ideation, incubation are initiated at departmental levels. • Pre Incubation centres are established through this cell and all departments and research centres are inter connected and these centres facilitate the transformation of

ideas to products and services. • The cell provides mentoring services for patenting and commercialisation to the incubates. 2. Internal Examination Cell

- Continuous internal Assessment system is practiced in the Institution to evaluate students' performance.
- The Internal Examination Cell coordinates and conducts two Continuous Assessment Examinations (both Theory and Practical).
- The Internal Examination Cell functions at Institution level and in each Department there is a Department Coordinator, who coordinates with the Internal Examination Cell for conducting the exams smoothly. The Department coordinator collects the question papers, allocates the faculty members for invigilation, coordinates the evaluation of papers and ensures the smooth conduct of the Internal Assessment Exams and publication of results on time. This is one best example of participative management at lower levels.

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  |
|--------------------------------------|--|
| Admission of Students                | 1. "SATHYABAMA ALL INDIA ENTRANCE EXAMINATION" an online entrance examination is conducted in all the major cities of the country. 2. The results are published online and students are given admission base don their entrance exam ranking. 3. Admission of Non Resident Indians and Foreign students are based on the Grade obtained in the qualifying examination. 4. Students from developing countries may be allowed scholarships in the tuition fee charged for International students.  |
| Industry Interaction / Collaboration | <ul style="list-style-type: none"> <li>• Joint Academic Programmes are offered to students in association with Virtusa, Infosys, IBM, Oracle and Cisco.</li> <li>• Research Centres of our Institution work in collaboration with industries and Centres of Excellence are established in association with industrial partners like GE healthcare, Vector Works etc</li> <li>• Consultancy services are provided to Industries like, Renault Nissan, FL Smidth, India Pistons, Orchid Chemicals etc.,</li> <li>• Linkages with Industry have helped in the development of industry relevant academic courses.</li> </ul> |
| Human Resource Management            | <ul style="list-style-type: none"> <li>• Faculty members along with their family members are sponsored for Holy visits.</li> <li>• Financial support was provided to faculty members for up gradation of knowledge through Quality Improvement programmes, conferences, workshops and faculty development programmes.</li> <li>• The Institution offers</li> </ul>   |

opportunity for Teaching and Research Staff members to participate in the Staff Mobility Programme with Foreign universities. They can spend 4-24 weeks in the Partner Institution The objective of this programme is to provide broader experience to faculty members by exposing them to different culture and work ethics. It provides opportunity for the faculty members to learn the best practices on curriculum and pedagogy from other countries.

#### Library, ICT and Physical Infrastructure / Instrumentation

- The Institution has established Earth Science Technology Cell sponsored by MoES in association with NIOT and CMLRE for Marine Biotechnological Studies.
- Laboratories in Departments and Research Centres are upgraded with latest equipments.
- Buildings are expanded and additional floors are constructed in some of the blocks.
- More new computers and accessories are purchased
- E Journals and E magazines are subscribed in addition to the existing resources.

#### Research and Development

- The Institution has a provision in place for providing Seed money for facilitating research and the conversion of innovative research and development ideas into products and services.
- Students are provided access to all the research facilities in the Research Centres and encouraged to do the internships in the Centres.
- Research committees are 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 outcome of the research activities are propagated to the society and industry by way of publications, seminars, workshops, symposium and through other academic forums.

#### Examination and Evaluation

- Credits are given for professional training and development courses.
- Credits are given for internship and semester abroad program.
- Performance is assessed through Continuous Assessment Exams and End Semester Exams.
- Continuous evaluation system is further strengthened with 50-50 percentage weight-age system in place for internal and external Examinations.
- Assessment questions are aligned with course learning outcomes
- Examination

papers are set with questions of different difficulty levels to evaluate the different capabilities of students.

- Assignments, open ended problems, Quiz, Seminar, Presentation, and Case Studies pertaining to Complex Engineering Problems are given to students.

#### Teaching and Learning

- Our teaching and learning strategies are based on the objective to make the students highly employable graduates.
- International Visiting Professors visited the Institution to teach our students which enriched the learning environment and added international flavour.
- Students are provided opportunity to study a part of their course at foreign universities under Semester Abroad Programmes and internship programmes.
- Project Based Learning is practiced with the objective of promoting student engagement and addressing more complex, open-ended real-world problems. Group of 4-6 students are involved in solving complex engineering problems. Guidance provided by internal and external supervisor.

#### Curriculum Development

- The Institution focuses on research based education and students learn actively through research and enquiry. Students connect with researchers and with the institution's research. Students are given opportunities to engage in research within and beyond the formal curriculum.
- Academic curriculum is designed with more emphasis on corporate needs. Open electives are offered for the students.
- The students are offered subjects from all the streams, from which they could select any discipline to promote multidisciplinary learning.

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

| E-governance area             | Details  |
|-------------------------------|--|
| Student Admission and Support | 1. The entire admission process is done online. 2. The online fee payment portal enables students to make their payments online 3. Online counselling for seat allotment is done based on their entrance exam score. |
| Administration                | 1. Student and faculty attendance is online and biometric based. 2. The entire Central library is automated to ensure that staff and students can  |

|                    |   |
|--------------------|---|
|                    | access the library resources remotely.  |
| <b>Examination</b> | 1. The examination process is online.<br>The exam time table, hall ticket generation, transcripts and migration certificates can be generated online.<br>2. Certificate verification facility is available through Online Portal. |

### 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/<br>workshop attended<br>for which financial<br>support provided | Name of the<br>professional body for<br>which membership<br>fee is provided | Amount of support |
|---------------------------|------------------------|---|---|-------------------|
| 2017                      | MASILAMANI<br>SELVAM.M | recent trends<br>in life science  | Nill  | 3000              |
| 2017                      | Mr.V.Balamuru<br>gan   | understanding<br>nanotechnoogy  | Nill  | 3000              |
| 2017                      | Vedananarayanan.V      | Nill  | IEEE  | 5000              |
| 2017                      | M.S.Godwin<br>Premi    | Nill  | IEEE  | 6000              |
| <a href="#">View File</a> |                        |   |   |                   |

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<br>professional<br>development<br>programme<br>organised for<br>teaching staff | Title of the<br>administrative<br>training<br>programme<br>organised for<br>non-teaching<br>staff | From date  | To Date    | Number of<br>participants<br>(Teaching<br>staff) | Number of<br>participants<br>(non-teaching<br>staff) |
|---------------------------|---|---|------------|------------|--|--|
| 2017                      | Workshop<br>on Advance<br>ment in Co<br>nstruction  | Nill  | 14/09/2017 | 14/09/2017 | 18   | Nill   |
| 2017                      | Training<br>Programme<br>on Life sk<br>illsTraini<br>ng<br>Programme<br>on Life<br>skills   | Nill  | 03/04/2017 | 03/04/2017 | 100  | Nill   |
| 2017                      | Nill  | Training<br>Programme<br>on Life<br>skills  | 03/05/2017 | 03/05/2017 | Nill   | 120  |
| <a href="#">View File</a> |   |   |            |            |  |  |

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 |
|--|---------------------------------|------------|------------|----------|
| 5 Day COSMOL Multiphysics                                  | 1                               | 15/05/2017 | 16/05/2017 | 2        |
| Indian Patenting Filing Procedures                         | 4                               | 19/08/2017 | 19/08/2017 | 1        |
| Research Challenges and Innovation on Solar Energy systems | 1                               | 04/08/2017 | 04/08/2017 | 1        |
| <a href="#">View File</a>                                  |                                 |            |            |          |

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

| Teaching  |           | Non-teaching |           |
|-----------|-----------|--------------|-----------|
| Permanent | Full Time | Permanent    | Full Time |
| 837       | 837       | 1255         | 1255      |

6.3.5 – Welfare schemes for

| Teaching  | Non-teaching  | Students  |
|---|---|---|
| <ul style="list-style-type: none"> <li>• Teaching staff member's children (who get admission in our university) provided 50 concession on tuition fee.</li> <li>• Medical insurance (sum assured Rs.One lakh/Head) for the staff members is provided and Premium paid by the management.</li> <li>• A maternity leave of three months with full pay can be availed by the Female staff members (for two children).</li> <li>• 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.</li> <li>• Free Master health checkup for our staff members above 35 years will be provided</li> <li>• Free dental screening camp will be organized for all the staff members every 6 months in our</li> </ul> | <ul style="list-style-type: none"> <li>• A 100 concession for the children of the non teaching faculty whose child scores very high score in the qualifying examination.</li> <li>• Medical insurance (sum assured Rs.One lakh/Head) for the staff members is provided and Premium paid by the management.</li> <li>• A maternity leave of three months with full pay can be availed by the Female staff members (for two children).</li> <li>• 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.</li> <li>• Free Master health checkup for our staff members above 35 years will be provided</li> <li>• Free dental screening camp will be organized for all the staff members every 6 months in our</li> </ul> | <ul style="list-style-type: none"> <li>• 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.</li> <li>• 100 fee waiver through the Anbu Scholarship for the students from economically weaker section of the society</li> <li>• Outgoing Student Excellence Award is awarded to students with 100 attendance.</li> <li>• Funding is provided for students with publications in reputed journals and conferences and national level projects.</li> <li>• Institution has in-house counsellors to offer counselling service to address the psychological needs of the students.</li> <li>• Mentor-Mentee system to</li> </ul> |



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. • 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.

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. • Day care facility is available for the children of our Staff members.

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 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 one in three months in which the Accounts Departments verifies all the records of receipts and payments of all the Administrative and Academic Departments. A separate Audit Team in place in order 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 Agency, namely Ramakrishna and Associates, A chartered Accounting and Auditing Firm. This firm undertaken he total auditing and after the due consolidation, the Final accounts are submitted in the form of Final Accounts. The Final accounts are submitted to the income Tax Departments for filing the income Returns . In addition to this, periodical submission of GST payments are also being carried.

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   | 0                             | NA      |
| No file uploaded.  |                               |         |

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      | Nill      |
| Administrative | Yes      | ISO DNV | Yes      | Nill      |

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)

|   |
|---|
| 1. Parents are involved in the Department Advisory Committee and their inputs are considered for strengthening the department activities. Parents are also involved in the board of studies of few of the departments. 2. Welcome day is arranged for both parents and students of the first year on the opening day of the Institute. The Institute rules, policies, and regulations were briefed to both the parents and students. 3. All parents are invited to the Achievers day celebrations. 4. Feedback and suggestions are taken from parents for overall development of the Institution. |
|---|

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

|   |
|---|
| 1. A workshop on laboratory management and instrument operations was given to all lab in-charges. 2. Data Transfer and File Management training was given for all administration staff. 3. Training on the use of Mobile and Online Banking was given to all non-teaching staff. 4. The Department of Visual Communications organized a Desktop Publishing (DTP) program for all non-teaching staff. 5. Training program on 5S Methodology in the workplace was organized for all |
|---|

support staff.

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

- Reviews are conducted based on Accreditation peer teams report.
- Action taken initiatives are pursued for remedial action.
- New initiatives are pursued in Research, Curriculum and students progression.
- Labs with Advanced technologies are established.
- Programme wise Accreditation is initiated to improve the quality at programme level.
- Faculty were encouraged to pursue Ph.D and faculty who were in the near completion stage were provided leave support to complete their Ph.D

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 |
|------|---|-------------------------|---------------|-------------|------------------------|
| 2017 | Preparation for NAAC inspection.  | 10/06/2017              | 10/06/2017    | 11/09/2017  | 5000                   |
| 2017 | Stake Holder's Feedback on the curriculum is taken and improvements are incorporated. Feedback was also taken on the relevance and usefulness of the internships, professional training programs, and the projects. | 06/06/2017              | 06/06/2017    | 06/06/2017  | 4000                   |
| 2018 | coordinated the data collection process from the departments and successfully   | 09/01/2018              | 09/01/2018    | 09/02/2018  | 15                     |

submitted  
data for QS  
rankings,  
Times Higher  
Education  
rankings,  
NIRF  
rankings

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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 Gender Equality                                  | 09/10/2017  | 09/10/2018 | 93                     | 54   |
| National Workshop on Gender based Violence                           | 30/01/2018  | 30/01/2018 | 127                    | 84   |
| National Conference on Women's health                                | 12/02/2018  | 12/02/2018 | 81                     | 94   |
| National Workshop on preventing and combating violence against women | 23/03/2018  | 23/03/2018 | 63                     | 75   |

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   |
|---|
| <p>Research was pursued and completed for development 0.1 W Perovskite Solar Cells .Apart from adopting the conventional means of feeding pigs, connecting with authorized recycler, solid waste especially food waste to be used Microbial Fuel Cells exclusively designed for power generation from food waste and waste water streams Continued Operation of 50 Litres pilot scale Biodiesel Production Unit with 45-48 litres production efficiency. Waste Cooking Oil biodiesel oxidation stability as improvised by blending with algal oil Battery operated vehicles (2 nos.) was procured and used for shuttling services within campus The construction of STP was initiated and was executed for completion to handle 1.5 MLD effluent. The institution believes in promoting the research findings of the researchers, students and academicians trying to encourage translating their research outcomes into products and technologies. Enormous funding was diverted to encourage research activities pertaining to renewable and sustainable energy. Environmental and Energy Audits were performed and recommendations have been taken forth to maximum extent possible and have been implemented in the subsequent years.</p> |

7.1.3 – Differently abled (Divyangjan) friendliness

| Item facilities  | Yes/No | Number of beneficiaries |
|--|--------|-------------------------|
| Physical facilities                                      | Yes    | 60                      |
| Provision for lift                                       | Yes    | 10                      |
| Ramp/Rails   | Yes    | 10                      |
| Braille Software/facilities                              | Yes    | 4                       |
| Rest Rooms   | Yes    | 10                      |
| Scribes for examination                                  | Yes    | 4                       |
| Special skill development for differently abled students | Yes    | 60                      |
| Any other similar facility                               | Yes    | 46                      |

#### 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 |
|---------------------------|--|--|------------|----------|----------------------|--|--|
| 2017                      | 1  | Nil  | 12/06/2017 | 2        | Mushroom Cultivation | Mushroom Cultivation   | 15   |
| 2017                      | Nil  | 1  | 05/06/2017 | 20       | Commercial Baking    | To meet the challenge of skilling at scale with speed and standard (quality) | 10   |
| 2017                      | Nil  | 1  | 30/06/2017 | 1        | Blessed to Bleed     | Awareness programme on sanitary napkin usage                                 | 50   |
| <a href="#">View File</a> |  |  |            |          |                      |  |  |

#### 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 | 01/07/2017          | Teachers made a positive impact on our learners so that these |

learners will emerge as leaders or citizens who will contribute towards a better society. Teachers have inculcated sound human values within themselves and are successful in teaching these human values to their learners created an effect on the minds of students. Observational learning has a significant impact in the teaching and learning situation. It emphasizes the role that teachers and other figures of authority may have on the education of students merely through the process of observed behaviour or modelled behaviour. This drives their will to learn better and do well in their academics.

7.1.6 – Activities conducted for promotion of universal Values and Ethics

| Activity  | Duration From | Duration To | Number of participants |
|---|---------------|-------------|------------------------|
| Capacity Building Training Programme on Communal Harmony      | 12/08/2017    | 12/08/2017  | 200                    |
| Learn to earn Programme on Righteous Conduct (Karpom Velovom) | 06/10/2017    | 06/10/2017  | 150                    |
| One day Workshop on Equality and Self Defence                 | 07/10/2017    | 07/10/2017  | 120                    |
| Capacity Building Training Programme for Social Cohesion      | 01/02/2018    | 01/02/2018  | 170                    |
| Mass cleaning Campaign fo                                     | 23/03/2018    | 23/03/2018  | 200                    |
| Training Programme on Yoga                                    | 05/10/2017    | 05/10/2017  | 185                    |

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

1.Utilisation of green energy sources 2. Paper free campus by digitizing most of our activities. 3. Waste water management by using recycled water for gardening 4. Battery operated cars used inside the institution 5. Clean Campus initiative 6. Plastic free Campus

## 7.2 – Best Practices

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

**BEST PRACTICES - I Title: FACULTY VISIT TO INTERNATIONAL UNIVERSITIES**

**OBJECTIVES OF THE PRACTICE:**

- To create awareness to the faculty on the global scenario of education
- To encourage interaction with international faculty and their research facilities
- To identify new areas of research and work on collaborative projects
- To explore new pedagogical initiatives in the teaching learning process

**THE CONTEXT** Research and higher education curriculum does not get limited by geographical boundaries. More than 95 of the teaching and research faculty at Sathyabama had their education at India, which minimised their exposure to the global arena. To compete with global standards in research and academia, it is necessary that each faculty, visit few of their peer groups at other countries to learn, share and evolve through the practices in foreign institutions.

**THE PRACTICE**

- The practice of sending 2-3 faculty per year to Universities abroad was started in 2017.
- The faculty selection process in this scheme was only based on individual interest, expertise in subject/research domain of the faculty, thrust/relevancy to student and research development and not on experience or cadre of the faculty.
- Short visits spanning from 2-8 months, with full salary, travel and accommodation is provided by Sathyabama.
- The faculty on return suggests and educates the peer group in the department and students on the best practices, research methodology, student engagement, pedagogical initiatives, novel research areas, research collaborations, laboratory development etc., Highlighted in yellow needs to be checked

The mechanism involves (a) Giving a open call for applications for the international visit programme (b) Consolidate and scrutinise the applications and select 6 faculty applications based on research/academic thrust area (c) Interact online with suitable research/academic departments at various international universities through International Relations Office. (d) Shortlist 2-3 faculty and proceed to travel procedures • (e) On return, the effectiveness of the visit is measured through faculty feedback, collaborative projects and papers, tools learned and knowledge transfer.

**OBSTACLES OBSERVED** Difficulty were administrative in nature such as visa processing, assigning the faculty departmental roles to other faculty etc., Married women faculty had more inhibition to apply for this visit. The obstacles are more likely to get minimized when this practice matures.

**EVIDENCE OF SUCCESS** Resulted in

- Strengthening the relations with various international universities
- Collaborative projects completed/ongoing are as follows (1) Dr. Brijitta project (Give title, year of going, lab and univ name etc) (2) Dr. Theerthagiri project

- Collaborative research papers are as follows (1) Dr. Manigandan (aero) (2) Dr. Bupesh Raja (auto) (3) Ms. Adeline Sneha (EIE) (4) Ms. Jamuna Rani (EIE)

- Initiation of new courses

**RESOURCES REQUIRED**

- Enthusiastic competing faculty willing to progress forward
- Financial budget from the administrative end to provide this facility to a greater number of faculty
- Subsequent initiatives to motivate and direct the faculty who already utilised the facility towards subsequent visits, interaction and development
- Adequate manpower at the office capable of handling international relations

**BEST PRACTICE - II TITLE: INTRODUCTION OF BRIDGE COURSES**

**OBJECTIVES OF THE PRACTICE:**

- Prepare the slow learners and learners from diversified boards of school education learn the essential concepts to ensure their smooth study of curriculum
- Eliminating the language and skill barriers at the early level

**THE CONTEXT** Every year students from diversified backgrounds and different boards of education across different states come for their higher education. The medium of instruction in their schools, if learnt in their mother tongue or native language becomes a potential barrier in pursuing their higher education smoothly. Soft skills, basic programming skills, basic mathematics are enhanced at the entry level of the course

**THE PRACTICE**

- Students who have scored below 70 in Mathematics in



their X and XII standard are required to learn the Fundamental Mathematics as the non credit bridge course at the entry point of the first semester. • Students learnt their school subjects in their native language/mother tongue need to undergo non creditFundamental English and Grammar course during the first year of their study • Basic programming skills and soft skills are included in the curriculum with minimum credits in the first year of study

OBSTACLES OBSERVED Disinterest and reluctance is observed among the students towards the non-credit courses. EVIDENCE OF SUCCESS • Students from native medium of instruction were able to perform well in exams, seminars and interviews and the number of student drop out due to language barrier has considerably decreased. RESOURCES REQUIRED Unavailability of working slots to conduct these classes along with regular classes is a challenge.

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/igac>

### 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

Sathyabama rightly believes that a society that has empowered women, and where equality exists, growth becomes inevitable. The students participate in Gender equality seminars, webinar and many other programs, but are also made to have hands on experience while they visit villages and the schools that we adopt. The institution has adopted nearly 9 villages in and around our campus and are sponsoring all sanitation facilities to them. The schools of those villages are provided with IT infrastructure and knowledge transfer through training programmes are given to students and teachers. The Institution offers opportunity for Teaching and Research Staff members to participate in the Staff Mobility Programme with Foreign universities. They can spend 4-24 weeks in the Partner Institution. The objective of this programme is to provide broader experience to faculty members by exposing them to different culture and work ethics. It provides opportunity for the faculty members to learn the best practices on curriculum and pedagogy from other countries. Our faculties have been provided opportunities to act as domain experts and Guest lecturers in various international Universities through our Faculty Exchange Programme. Our Institution has always looked for opportunities to serve the society. Research is focused on to improve water quality by reducing pollution, Energy research, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally. The Institution devised various Technology Solutions for Healthcare, Agriculture for better solutions to the society. Number of patents were filed and published on these topics. The Institution has established Earth Science Technology Cell sponsored by MoES in association with NIOT and CMLRE for Marine Biotechnological Studies. As a measure of sustainable development Vermi compost pits have been set up in the campuses for biodegradable waste. The institution initiated the Jeppiaar IAS Academy wherein the students are given training for Group 1 service exams free of cost. The training is provided by top notch professionals and practicing IAS officers. This initiative is the unique of its kind where the students are trained for leadership positions.

Provide the weblink of the institution

<https://www.sathyabama.ac.in/academics/igac>

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



2017-2018 -(2018-19 Plan) • Skill Development Centre: The Institution plans to establish a skill Development Centre in association with NSTI, MSDE, to offer skill based programmes to the students on different areas. Centre for Skill development will impart skill oriented training to our students to improve their employment prospects. The objective of the Centre will be upgrading the skills of the students to international standards through significant industry participation. • Earth Science Technology Cell: The Institution proposes to establish Earth Science Technology Cell sponsored by MoES in association with NIOT and CMLRE for Marine Biotechnological Studies. The aim of establishment of this Cell is to encourage and promote the potential of research in frontier areas of Marine Biotechnology in collaboration with industry and research centres at national and International level. It will conduct training programmes, seminars and workshops to disseminate information on the thrust area. • Establish School of Law: The Institution proposes to establish School of Law to offer 3 years Bachelor of Law Programme and 5 years Integrated Law Degree programmes, with the aim of becoming an internationally renowned Institution for teaching and research in law. This School will work to achieve excellence in educating legal professionals, serving the public and fostering justice. • Establish School of Pharmacy: Understanding the growth of Pharmaceutical industry and the career opportunities available for Pharmacists, the Institution proposes to establish School of Pharmacy to offer Diploma and Bachelor programmes in Pharmacy. This School will work towards developing pharmacists capable of competing at national and international levels who can bring forth positive health outcomes through the pharmacy profession and community service. • QS I- Gauge: Following the award of QS Stars, the Institution is planning to apply for QS I- Gauge Rating, a rating for Indian Universities by Quacquarelli Symonds. QS I- Gauge will evaluate the Institutions excellence in various parameters including Teaching and Learning, Research, Facilities, Entrepreneurship and Employability. Internationalization The Institution will work towards building an international profile to achieve international standards of excellence through appropriate internationalization strategies. The institution will focus on student and staff mobility programmes, international research collaborations and international study programmes. Research: Sathyabama will focus on collaborative/joint research in association with National and International Partners which will result in more publications, increased citations, New Technology Development, Technology Transfer, Joint Publications and Patents. Participation in Unnat Bharath Abhiyan Government's Initiatives: The Faculty members and the Research Scientists of the Institution will actively participate in Unnat Bharath Abhiyan, a Government of India initiative. The Mission of Unnat Bharat Abhiyan is to enable higher educational institutions to work with the people of rural India in identifying development challenges and evolving appropriate solutions for accelerating sustainable growth. The Institution will also participate in any initiative as and when launched by the Indian Government with the objective of promoting quality education, research and nation building.