Report of the Expert Committee constituted to examine the Proposal of Satyabham Institute of Science & Technology for the grant of Deemed University status under Section 3 of the UGC Act, 1956.

The Commission constituted a committee comprising of the following members to examine the proposal of Satyabham Engineering College, now renamed as Satyabham Institute of Science & Technology, Chennai to examine its proposal for the grant of Deemed to be University status under Section 3 of the UGC Act.

1. Professor Rajasekharan Pillai, Former Vice-Chancellor, Mahatma Gandhi University, Kottayam

2. Professor R. Natarajan, Director, Indian Institute of Technology, Chennai

3. Professor P.B. Sharma, Vice-Chancellor, Rajiv Gandhi Technological University, Bhopal

4. Professor Sidappa, Vice-Chancellor, Bangalore University, Bangalore

5. Professor P.M. Prasad, Former Director, Institute of Technology, Banaras Hindu University, Varanasi

6. Prof. Vinaysheel Gautam, Professor of Management, IIT, New Delhi, New Delhi.

7. Dr Naseem Bhatia, Joint Secretary, UGC

8. Shri D.D. Mehta, Under Secretary, UGC
1. Preamble

The Committee visited the Institute on 12-13th April, 2001 to make an on the spot assessment of the academic programs and infrastructural facilities in the College. At the outset, a visual presentation was made covering the Profile of the College followed by an introductory meeting of the Committee with the Chairman Mr. Jeppiar, Principal of the Institute Dr. V.S.R.K. Mouly and other senior functionaries of the College. The Committee also interacted separately with the teaching staff and students to elicit their views.

After a detailed study of the relevant documents furnished by the College, the Committee had an interactive visit of the college. These included visit to the various laboratories, subject specific laboratories workshop, library, student amenities infrastructure and other basic facilities. The Committee makes the following observations and recommendations:

2. The College and its Courses

Satyabhama Engineering College, Chennai was established in the year 1987 by the Jeppiaar Educational Trust. It has been declared as a Christian minority institution by the Govt. of Tamil Nadu. The College consists of the 12 Departments and the requisite basic Science Laboratories. It follows the admission procedures currently in vogue in the state of Tamil Nadu and observes the norms laid down by Madras University for Minority Institutions.

The College offers ten under-graduate and five post-graduate programs which are as follows:

<table>
<thead>
<tr>
<th>UG Courses</th>
<th>Approved student intake</th>
<th>Output during past three years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical Engineering</td>
<td>60</td>
<td>60-65</td>
</tr>
<tr>
<td>Computer Science and Engineering</td>
<td>120</td>
<td>49-70</td>
</tr>
<tr>
<td>Electronics &amp; Communication Engineering</td>
<td>120</td>
<td>69-199</td>
</tr>
<tr>
<td>Electrical and Electronics Engineering</td>
<td>60</td>
<td>79-67 or 77</td>
</tr>
<tr>
<td>Production Engineering</td>
<td>30</td>
<td>37-45</td>
</tr>
<tr>
<td>Instrumentation and Control Engineering</td>
<td>30</td>
<td>44-40</td>
</tr>
<tr>
<td>Electronics &amp; Instrumentation</td>
<td>40</td>
<td>36-36</td>
</tr>
<tr>
<td>B.Tech.</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Chemical Engineering</td>
<td>40</td>
<td>33-37</td>
</tr>
<tr>
<td>Information Technology</td>
<td>100</td>
<td>42-107</td>
</tr>
<tr>
<td>B. Arch</td>
<td>40</td>
<td>18-32</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PG Courses</th>
<th>Approved student intake</th>
<th>Output during past three years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master of Computer Applications</td>
<td>60</td>
<td>S</td>
</tr>
<tr>
<td>Master of Business Administration (FT)*</td>
<td>60</td>
<td>53-59</td>
</tr>
<tr>
<td>Master of Business Administration (PT)*</td>
<td>60</td>
<td>53-54</td>
</tr>
<tr>
<td>M.E</td>
<td>18</td>
<td>New</td>
</tr>
<tr>
<td>Computer Science and Engineering</td>
<td>18</td>
<td>New</td>
</tr>
<tr>
<td>Computer Aided Design</td>
<td>15</td>
<td>New</td>
</tr>
</tbody>
</table>

* FT – Full Time, PT – Part Time
All the courses have been approved by the AICTE and University of Madras. In the year 1999, six B.E. courses (the first six of the above tabulated) have been accredited as 'A' grade by the AICTE. The college has also acquired ISO 9002 certification from M/s. Det Norske Verifies (DNV) for 5 years on 11.4.2000. The B.E. courses as above (first 8) have been approved by the Institution of Engineers India in 1999.

3. Academic Programmes

The Bachelors degree programmes (B.E. & B.Tech.) are being conducted at the desired level and high academic standards seem to be maintained. M.B.A. programme is also being run satisfactorily. There is scope for improvement in the other Master's Programmes.

Though there is evidence of relevant project work being carried out by the students at the different industries and in collaboration with local Universities and Institutions, considering the advantageous location (Chennai, where there are a large number of small and medium industries), there exists a scope for more purposeful interaction.

4. The Teaching Faculty

The teaching staff possess the qualifications as per AICTE norms. However, about 15% of them hold Ph.D. degrees. The faculty has been strengthened by hiring a few retired teachers drawn from reputed institutions. Though most of the teachers are from Tamilnadu, there are several from outside the State also.

The College is conscious of the need for improvement in the quality of teachers. Some of them are pursuing their Ph.D. programmes and several who do not possess a Master's degree are engaged in pursuing Master's degree in M.Tech. or M.S. (Engg.) by research. The college has already implemented UGC/AICTE pay scales and Career Advancement Scheme (CAS) is in operation for encouraging teachers.

Though the staff is enthusiastic about their teaching and also R&D work at present their research output is limited.

A good proportion of the faculty consists of women teachers. Teachers are very energetic as their average age is low.

The break-up of the faculty strength of the institution is given below:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Department</th>
<th>Professors</th>
<th>Assistant Professor / Readers</th>
<th>Lecturer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mechanical</td>
<td>2</td>
<td>12</td>
<td>5</td>
<td>19</td>
</tr>
<tr>
<td>2</td>
<td>Electrical &amp; Electronics</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>Electronics &amp; Communication</td>
<td>4</td>
<td>5</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>4</td>
<td>Computer Science &amp; Information Technology</td>
<td>2</td>
<td>3</td>
<td>14</td>
<td>19</td>
</tr>
<tr>
<td>5</td>
<td>Chemical</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>
On enquiry about the teachers to student ratio, the committee was informed that an additional 24 teachers were also recruited recently. This brings the teacher to student ratio to 1:15 (approximately).

5. College Library

At present the College Library has about 36000 books (8600 titles) and is subscribing 29 Indian and foreign journals. The total cost of existing books and journal is stated to be Rs.50.00 lakhs and the college is spending an average of Rs.6.5 lakhs per annum on library facilities.

The Committee noted that the Library requires to be strengthened by the installation of modern audio visual aids, CD-ROM facilities and subscription to more journals relevant to their needs.

6. Land & Buildings

This Institution is situated at about 15 km from Adyar in Madras on the Old Mammallapuram Road. The Trust owns about 80 hectares of land. Presently the Sathyabama Engineering College is built in an area of 25 hectares. It has 50,000 sq.m. of built-in area. The Classrooms, Drawing Halls, Computer Centre, Departmental Laboratories, Workshops, Library and other amenities occupy an area of 30,000 sq.m. The Mess (Canteen), Boys Hostel & Girls Hostel occupy an area of 20,000 sq.m. (approximately).

7. Student Amenities

The College has created adequate facilities for the students with well maintained Hostels and Messes.

It provides Hostel accommodation for about a quarter of its students. The rest of the students are located within the city of Chennai for whom adequate transport facilities are provided by the College. Sufficient dining (Mess) facilities are also available to resident and non-resident students as well as staff.
The College also provides reprographic, audio, and other facilities. It has amenities for athletics, sports and games in the form of a Gymkhana.

8. Medical Facilities

Medical amenities consisting of two doctors, supporting staff, first aid and others are available.

9. Communication Facilities

Communication facilities exist in the college in the form of STD/ISD/E-mail in various Hostel / Departments. An INTERNET with 500 terminals has also been installed.

The Committee observed that the said facilities are provided to teachers as well as students.

10. Industry Interaction

Over the years, the College has developed interaction with some 20 industries in the Chennai region for carrying out project work and practical training. However, there exists a good scope for improvement.

11. Placement of Students

There is an active Staff Advisory Bureau in the College for career advancement of the student the placement position via Campus Interviews has been steadily improving and during the current year (2000 – 2001) 123 of them have already been offered jobs.

A number of students have been going abroad for higher education or placement (jobs).

12. Professional Activities

There are several Chapters of the professional bodies like IECC, ISTE, IE, SAE, ASME, IIIE, IICLE, ISA, ICTE, etc. Students and teachers, thus are very active and bring out many in house bulletins.

13. Recognitions

Students are doing extremely well. They have won a number of gold medals and numerous ranks at their respective examinations conducted by the Madras University (e.g. in the year 2000 above six gold medals and 59 ranks). The students won many other laurels and are doing creditably in GRE, TOFFEL etc. The Committee noted that the students of the College are very disciplined and in the year 1995 they had won a ‘Best Discipline Award’.

14: Research Project and External Cash Flow (ECF)

Teachers have been taken up over 20 research projects from the AICTE and other agencies and successfully completed 14 of them. The external cash flow amounts to about Rs.115 lakhs during the last 3 years.
15. Amenities to Staff

The College contributes share of Provident Fund, provides LTC facility (upto 5000 kms.) once in two years and Retirement / Post retirement benefits to the staff. All the staff are covered by the Group Medical Insurance Scheme and seed money of Rs. 50 lakhs is deposited for the pension scheme. There is a provision for interest free housing loan upto Rs. 3 lakhs per person repayable in 100 instalments. This is a laudable feature which does not exist in many Institutions.

16. Promotion of Excellence

The College recognises outstanding contributions from eminent persons for which it has instituted a National Service and Technology Award in 1995, which carries a cash prize of Rs. 1.00 lakh, a citation and a trophy. So far ten eminent/well known personalities have been conferred the said NST Award by the JAIPEEER TRUST. It has also instituted Gold Medals to recognise students’ excellence.

17. Other Aspects

There is an Alumni Association and continuous efforts are visible for strengthening the College.

Recommendation

Satyabhama Engineering College, now renamed as Satyabhama Institute of Science & Technology, Chennai has been showing significant progress as an Engineering Institution with UG, PG and Research programmes. The institution has the necessary infrastructural facilities, financial resources and the will to make progress. The general discipline in the college is exemplary and there is an atmosphere conducive for pursuit of excellence.

The Committee feels that on the whole the Institute which is minority Institution is moving in the right direction. Thus, the Institution fulfills all the essential conditions in terms of objectives, programmes, faculty, infrastructural facilities, financial viability and internal strengths and deserves to get recognition as a Deemed University status.

The Committee therefore, recommends that Satyabhama Institute of Science & Technology may be granted Deemed to be University status under Section 3 of the UGC Act, 1956.

Professor Rajasekharan Pillai

Professor P.B. Sharma

Professor P.M. Prashad

Dr. Naseem Bhatia

Professor R. Natarajan

Professor Sidappa

Professor Vinaysheet Gautam

D.D. Metha