



# ST. FRANCIS INSTITUTE OF TECHNOLOGY (ENGINEERING COLLEGE)

(Roman Catholic Christian Minority Educational Institute)

(Approved by AICTE & Govt. of Maharashtra with permanent Affiliation to University of Mumbai)

P.B. No. 8456, Mount Painsur, S.V.P. Road, Borivli (West), Mumbai - 400 103  
Phone: 2890 8585 / 2892 8585 Fax: 28954787 E-mail: sferu@sfitengg.org Website: sfitengg.org

Ref:

Date:

September 16, 2017

## Revised Minutes

Minutes of the **Sixth Meeting of the Academic Advisory Council** (First meeting for the academic year 2017-2018) of St. Francis Institute of Technology (Engineering College) held on Saturday, the **16<sup>th</sup> September 2017**.

The Sixth meeting of the Academic Advisory Council (First meeting for the academic year 2017-2018) of St. Francis Institute of Technology (Engineering College) was held on Saturday, the 16<sup>th</sup> of September 2017 at 10.00 a.m. in the Board Room of the Institute.

The following members and special invitees were present:

1. Bro. Jose Thuruthiyil - Director SFIT, Member
2. Dr. Sincy George - Principal & Chairperson of AAC
3. Dr. Kevin Noronha - Dean Academics (UG) & Member-Secretary
4. Dr. S.N. Merchant - Professor -IITB, Member
5. Dr. S. Biswas - Professor - IITB, Member
6. Dr. Deepak Jayaswal - Dean M.E., Member
7. Dr. Kavita Sonawane - HOD - CMPN, Member
8. Dr. Gautam Shah - HOD - EXTC, Member
9. Dr. Joanne Gomes - HOD - INFT, Member
10. Dr. Poonam Hemnani - FE Co-coordinator
11. Dr. C. Hariprasad - Dean SA, Special Invitee
12. Dr. Uday Pandit Khot - R&D Coordinator, Special Invitee
13. Mr. Wilson Pinto - Head Training & Placement, Special Invitee
14. Mr. Francis D'Souza - Office Manager

Leave of absence was granted to Mr. Lester Fernandes, Member, who couldn't be present due to unavoidable circumstances.

Bro. Jose Thuruthiyil, Director, after reciting the college anthem and a short prayer, welcomed all the members, especially Dr. Merchant, Dr. Biswas and Mr. Albert D'Souza for taking time off in their busy schedule to give time to SFIT for its growth and academic excellence.

Following this, Dr. Kevin Noronha, Member-Secretary proceeded with the Agenda which was already circulated to the members in advance.

**ITEM 1: To Read and approve of the minutes of the last Academic Advisory Committee meeting held on 18<sup>th</sup> March 2017, for the academic year 2016-17.**

The draft minutes were circulated on 29/09/2017 to all the members, inviting amendments, comments, if any to be made in the draft minutes. As there were no suggestions amendments from the members, the draft minutes were deemed as confirmed.

**ITEM 2: Item 2: To report on action taken on decisions recorded in the meeting of the AAC held on 18<sup>th</sup> March 2017.**

Dr. Kevin Noronha reported the action taken on the decisions arrived at, in the previous meeting of the AAC is as follows:

Sr. No.	Particulars / Activity	Action Taken	Open / Closed
	<p><b>ITEM 6 of AAC held on 18/03/2017:</b> To report on UG programme.</p>		
	<p>a) Procedure for Evaluation of Final year projects: The committee recommended that all the three departments could have a common rubric for evaluation of final year project</p>	<p>The department heads met and finalized the common rubric for evaluation of final year project as attached in the <b>Annexure 2</b></p>	<p>Closed</p>
	<p><b>ITEM 7:</b></p> <p>a) Dr. Biswas mentioned that continuous monitoring of Mentoring for students should be done</p>	<p>This is being taken care in the agenda of the current meeting under Item No. 11</p>	<p>Closed</p>
	<p><b>ITEM 14:</b></p> <p>a) To improve the academics of students' parents should be involved</p>	<p>a) Parent teachers meet is organized for SE students on October 7, 2017</p>	<p>Closed</p>
		<p>b) Parents are involved in department academic committee</p>	<p>Closed</p>
	<p>b) Mr. Lester Fernandes mentioned that students should use NPTEL and other online courses to improve their knowledge</p>	<p>a) More than 350 students have enrolled for NPTEL courses.</p>	<p>Closed</p>
		<p>b) A programme is organised under NMEICT - IIT Bombay on "College to Corporate" for third / fourth year students</p>	<p>Closed</p>

Dr. Kevin Noronha further mentioned that a rubric has been developed to evaluate and select the final year BE projects based certain criteria and rate them as Best, Average and Below Par. The details of the rubric were given in page 14-15, Annexure-2 of Item 2 in the Agenda. Best projects would be given awards.

Mr. Wilson Pinto, Head T&P mentioned that the best projects can be uploaded on the college website also, if possible. The AAC committee appreciated the rubric, being followed to rate the projects.

**Item 3: To report on NBA Accreditation and Application for extension for an additional year**

All the three UG programmes namely, Computer Engineering, Electronics & Telecommunication Engineering and Information Technology were re-accredited for 2 academic years i.e. 2016 - 2017 and 2017 -2018 up to 30-06-2018.

Subsequently, the Institute had submitted the pre-qualifier reports for all the 3 UG programmes, to consider our case for further extension of Accreditation by 1 more year i.e. from 2 to 3 years.

NBA has granted extension for an additional year i.e. till June 2019 for Electronics & Telecommunication Engineering as well as Computer Engineering. Extension for Information Technology is awaited.

Mr. Albert D'Souza mentioned that in addition to NBA accreditation it is advantageous to have also NAAC accreditation as it gives eligibility and makes it easy to apply for UGC grants for research projects, which would be beneficial to the institute.

**ITEM 4: Brief report on the execution of UG academic programs (FE, INFT, EXTC, CMPN) (Include report on results, professional activities, important milestone achieved etc.).**

Each HOD gave a brief report on the above item, for their respective departments.

**EXTC:** Dr. Gautam Shah, HOD, mentioned the following:

The results of the examinations held in May 2017 have been analyzed by the department and following are findings:

Third year pass percentage has dipped. The subject-wise analysis is done and the reasons for the dip have also been identified. The department is working suitable remedial measures to remedy the situation.

Second year pass percentage is slowly but steadily increasing. The percentage of students scoring above 60% has increased. Subject-wise analysis is done, and suitable measures are being taken to further improve the result.

BE Final year results have just been declared. The pass percentage has taken a dip and the subject-wise result analysis is yet to be performed.

The table given below shows the result trend of last 3 years (2015, 2016 & 2017)

**SE EXTC (SEM IV) RESULT ANALYSIS - EXTC MAY 2017**

SEM IV (EXTC)	May 2017	May 2016	May 2015
No. Of Students Appeared	155	152	149
No. Of Students Passed/%	119 (76%)	116 (76%)	100 (67%)
No. Of Students Failed	36	36	49
Above 7.75 (70%)	45	28	35
Above 6.75 (60%)	36	35	37
Above 5.75 (50%)	27	47	23

**TE EXTC (SEM VI) RESULT ANALYSIS - EXTC MAY 2017**

SEM VI (EXTC)	May 2017	May 2016	May 2015
No. Of Students Appeared	155	149	151
No. Of Students Passed/%	112 (72%)	122 (82%)	85 (56%)
No. Of Students Failed	43	27	66
Above 7.75 (70%)	18	19	3
Above 6.75 (60%)	34	55	24
Above 5.75 (50%)	45	37	48

**BE EXTC (SEM VIII) RESULT ANALYSIS - EXTC MAY 2017**

SEM VIII (EXTC)	May 2017	May 2016	May 2015
No. Of Students Appeared	150	145	147
No. Of Students Passed	133 (88.7%)	137 (94.5%)	145 (98.6%)
No. Of Students Failed	17	8	2
<b>PASS PERCENTAGE</b>	<b>88.67%</b>	<b>94.48%</b>	<b>98.63%</b>
Above 7.75 (70%)	43%	52	79
Above 6.75 (60%)	50%	64	61
Above 5.75 (50%)	28%	18	5

Other activities

- IEEE has conducted a workshop on Cisco Certified Network Associate by Mr. Ramjee Yadav, Asst. Prof EXTC on 09/09/2017. 61 students attended the same.
- The Department is planning for industrial visits in the month of December 2017 - January 2018.
- At an institute level the International Conference CSCITA 2017 was organized under the chairmanship of Dr. Kevin Noronha.

Brief report on the execution of UG academics of CMPN DEPT.

- a. Result Analysis CMPN: Report on the academic performance of the UG Engineering students in the even semester of the academic year 2016 – 17.

**RESULT ANALYSIS**

SEM IV (CMPN)	May 2015	May 2016	May 2017
NO. OF STUDENTS APPEARED	153	154	152
NO. OF STUDENTS PASSED	127	111	135
NO. OF STUDENTS FAILED	26	43	17
PASS PERCENTAGE	83%	72.08%	88.82%
ABOVE 7.75(70%)	35	45	51
ABOVE 6.75 (60%)	39	20	39
ABOVE 5.75(50%)	33	31	31

SEM VI (CMPN)	May 2015	May 2016	May 2017
NO. OF STUDENTS APPEARED	153	155	146
NO. OF STUDENTS PASSED	143	148	137
NO. OF STUDENTS FAILED	10	7	9
PASS PERCENTAGE	93.46%	95.48%	93.84%
ABOVE 7.75(70%)	63	70	84
ABOVE 6.75 (60%)	54	49	36
ABOVE 5.75(50%)	22	26	15

SEM VIII (CMPN)	May 2015	May 2016	May 2017
NO. OF STUDENTS APPEARED	148	154	146
NO. OF STUDENTS PASSED	146	151	143
NO. OF STUDENTS FAILED	2	3	3
PASS PERCENTAGE	98.64%	98.05%	97.95
ABOVE 7.75(70%)	62	90	Details not yet received
ABOVE 6.75 (60%)	67	49	
ABOVE 5.75(50%)	10	12	

Toppers for 2016-17-from SE CMPN (**7 students with 10 Pointer**), TE CMPN (**6 students with 10 Pointer**) and BE First five Toppers have achieved (9.56, 9.41, 9.41, 9.33, 9.33 Pointer resp.)

**Analysis and Remedial Action Plan:** Analyzing the results in detail, it has been observed that the number of distinction holders and first class holders has significantly increased for all the semesters. On the other hand respective subject teachers have also identified the reasons for the change (either Positive or Negative) in their subjects. Based on which we have planned to

make the necessary changes in the teaching learning process. Teachers will focus on motivating bright as well as (academically) weaker students by identifying their strengths and weak areas so that we can help them to improve their results and skills.

## **b. Technical Achievements (2016-17)-(Students)**

- Represented SFIT at National **Smart India Hackathon 2017** Proposal on : “Low Cost Asset tracking system ” **CMPN\_Team -CODEX**, they were Finalist and were at **12th Position among total 61 Teams (Bangalore)**
- Represented SFIT at National **Smart India Hackathon 2017** Proposal on : “Ambulance Services on National Highway” **CMPN Team : Beta Squad** they were Finalist and were at **10th Position among total 86 Teams (Nagpur)**
- CODEX\_CMPN with SEED InfoTech Competition at college for all Dept- Students **Ms. Renuka Sule (BE CMPN B)** 16th Place ( among 73K Participants from 8 Universities)
- ECELL website (<http://ecell.sfitengg.org>) & IRIS 2017 website (<http://irisfest.com>) & Student Portal app for PRAGATI Developed by Akash Donghde (BE CMPN).
- Dynamic Website for Sacred Heart Andheri with users over 8000 Developed by Achilles Jerome Rasquinha (BE CMPN).
- Two Groups of TE CMPN have Secured 1st Position in two different Project categories in the Competition Pragati -2017.
- Jetso Analin Has Secured First Place in the Event “Kineto Power” and has also developed a Website for new Association CODEX.
- Industrial visit to BARC was organized and executed successfully for all BE CMPN Students.
- Many students have participated and secured 1st place in various extracurricular activities like National Debate – Fr. CRCE 17th Annual Memorial Debate, MOSAIC, IRIS 17 and IGNITRA etc.

## **Professional Activities/ Achievements (Teachers):**

### **a. Seminar / Conference / Symposium Workshop Attended/ conducted**

- A Project completion was organized for BE CMPN students to showcase their projects was conducted successfully for the year 2016-17.
- Short training course on open source Tools conducted by Mr. Johnson Pen for faculties in the department as per their requirement in June 2017 before the start of the semester.

Many Faculties have attended various **Seminar/workshops/ Continuous educational courses** and training programs at **IITB/ Infosys** etc.

Many faculties have contributed in the 2<sup>nd</sup> International conference on Communication Systems, Computing & IT Applications(CSCITA-2017) through research paper presentations and also helping organizing the same through various committees.

#### **Research Related Activities : Publications in 2016-17**

- i. No. of papers in International Conferences = 22 (out of which 19 are IEEE conferences)
- ii. No. of International Journals = 3 (out of which 1 is Scopus Indexed.)

#### **Research Proposals:**

- Faculties have applied and working on 4 Institutional Research proposals.
- We have received 5 University Minor Research Grant till date and have applied for 7 proposals this year.

#### **Activities (Planned) to be Executed and In- Execution mode**

- a. **Codex\_Event:** By CMPN Codex Committee for SE,TE,BE (All branches).
- b. **R and D lecture series:** 20/09/2017 CMPN R and D Committee Lecture by faculty of department of CMPN engineering (1.30 pm onwards)
- c. **Workshop on “Cyber/NW Security”** 20/09/2017 for (BE CMPN A & B)CMPN Dept. at 3.15 p.m. in Assembly Hall.
- d. **Codex\_Hackathon\_2017** 09/09/2017 CMPN Codex Committee For SE, TE, BE All branches
- e. **Codex\_Training** Sessions are going on As per Student's request on Every Wednesday 3 to 5 by the Codex- Team of Students.
- f. Ready with the plan for STTP on “Digital India” and planning to apply for AICTE / ISTE grant.
- g. **Hands-on Workshop** for all TE CMPN students on Open source Tech( Drupal) will be conducted in September (they can use it in their Mini Project development)

## RESULT ANALYSIS - INFT

SEM IV (INFT)	May 2015	May 2016	May 2017
NO. OF STUDENTS APPEARED	153	151	152
NO. OF STUDENTS PASSED	126	121	138
NO. OF STUDENTS FAILED	27	30	14
PASS PERCENTAGE	82.35	80.13	90.79
ABOVE 7.75(70%)	17	42	51
ABOVE 6.75 (60%)	32	46	41
ABOVE 5.75(50%)	51	24	35

**Result analysis:** Results of S.E. have been improved from 80% to 90%. There is also increase in number of student getting marks above 70%.

**Comments:** Results will be improved further by conducting doubt clearing sessions for failed students

SEM VI (INFT)	May 2015	May 2016	May 2017
NO. OF STUDENTS APPEARED	149	152	150
NO. OF STUDENTS PASSED	142	146	147
NO. OF STUDENTS FAILED	7	6	3
PASS PERCENTAGE	95.3	96.05	98
ABOVE 7.75(70%)	30	40	72
ABOVE 6.75 (60%)	53	60	46
ABOVE 5.75(50%)	37	32	17

**Result analysis:** Results of T.E. have been improved marginally from 96% to 98%. There is also notable increase in the number of student getting marks above 70%.

**Comments:** Results will be improved further by mentoring the students in the subjects they are weak at.

SEM VIII (INFT)	May 2015	May 2016	May 2017
NO. OF STUDENTS APPEARED	134	144	146
NO. OF STUDENTS PASSED	127	142	138
NO. OF STUDENTS FAILED	07	2	03
PASS PERCENTAGE	94.77	98.61	-
ABOVE 7.75(70%)	38	89	-
ABOVE 6.75 (60%)	74	42	-
ABOVE 5.75(50%)	15	9	-

**Note** - In May 2017 result some subject papers have not been assessed for 5 students hence till date result of 141 students have been declared out of which **138 students have passed the exam.**

**Comments:** Overall passing % is consistent at 98%



Report on results: There is continuous improvement in the last year results of INFT Dept. For the last even Semester, from Jan to July 2017, S.E. results is 90.79%, which was 80% in 2016 and 82% in 2015. T.E. result is 98% which was 96% in 2016 and 95% in 2015, and BE result is consistent at 98% which was 98.6% in 2016 and 95% in 2015. The results are improved remarkably especially for second year and we believe that all the results can be improved further. The remedial lectures for the weaker students, mentoring the bright students towards better understanding of the concepts, conducting descriptive tests and teaching the topics beyond syllabus through labs, workshops and seminars are few of the actions that we take at the dept. of IT for improvement of UG academic program.

#### Professional activities:

- An Industrial Visit was organized by Ms. Prachi Raut and Ms. Vandana Patil for B.E. INFT students at traffic police headquarters to give them insights into how Information Technology was used for traffic control by Mumbai police.
- A Seminar was conducted for T.E. INFT students on, 'Ideas for final year project selection' by Dr. Amiya Tripathi from DBIT organized by Ms. Nazneen Ansari.
- Second year students attended a Seminar on 'writing a technical paper' given by Ms. Prachi Raut.
- Various hands-on workshops were arranged for the students of INFT under ITSA club of the dept.
- INFT students participated in NSS and sports activities.
- Ms Nitika Rai and Dr Vaishali Jadhav presented technical papers in International conference abroad and 5+ research papers were published by other faculties in the reputed conferences.
- Few Faculties attended various workshops.
- Few Faculties are involved in various research projects at dept. level.
- INFT faculties were Resource Persons to the other institutes on various upcoming topics.

#### Important milestones achieved:

- Dept. of IT received AICTE grant of Rs. one lakh for conducting STTP on Data Analytics which will in Nov 2017.
- Student of Second Year INFT, Het Shah stood at first-place of the 'FOURTH-SEED-MAHA IT-Idol- 2017' competition, conducted by SEED-InfoTech-Ltd. on 30th -March-

2017, across all eight Universities-in-Maharashtra, among 73000+ participants from more-than 336 colleges.

- Dr. Vaishali Jadhav from INFT department received her doctorate in Computer Engineering.
- A dept. annual program, 'I.T for society', - a colloquium, was successfully held on 20th and 21st January, 2017. Experts talk on I.T in transportation, Agriculture, Entertainment, Smart Cities and Healthcare were arranged for students and faculty. Event also included Poster and Technical paper presentation competition for students.

### **BASIC SCIENCE AND HUMANITIES (FE) – Dr. Poonam Hemnani (FE Coordinator)**

Dr. Poonam Hemnani, FE Coordinador, gave the following report on FE Admissions, student intake quality, result and departmental activities, for the academic year 2017-2018.

#### **ADMISSIONS**

Number of students admitted (M/F) in FIRST YEAR ENGG.under different Programs for the Academic year 2017-2018.

<b>GENDER</b>	<b>CMPN</b>	<b>EXTC</b>	<b>INFT</b>
<b>BOYS</b>	<b>88</b>	<b>85</b>	<b>86</b>
<b>GIRLS</b>	<b>41</b>	<b>40</b>	<b>40</b>
<b>TOTAL</b>	<b>129</b>	<b>125</b>	<b>126</b>

#### **Student Intake Quality – Academic Year 2017-2018**

<b>Branch</b>	<b>CAP</b>		<b>Minority</b>		<b>Institute Level</b>	
	<b>Highest</b>	<b>Lowest</b>	<b>Highest</b>	<b>Lowest</b>	<b>Highest</b>	<b>Lowest</b>
<b>CMPN</b>	<b>94.00</b>	<b>53.50</b>	<b>91.00</b>	<b>49.67</b>	<b>87.00</b>	<b>49.67</b>
<b>EXTC</b>	<b>95.00</b>	<b>54.17</b>	<b>87.33</b>	<b>46.67</b>	<b>80.67</b>	<b>50.67</b>
<b>INFT</b>	<b>95.22</b>	<b>57.00</b>	<b>87.67</b>	<b>49.67</b>	<b>87.33</b>	<b>50.33</b>

## RESULT - SEM II (2016-17)

Grade \ Year	Total	Distinction	First Class	Pass Class	Fail	Passing %
May 2015	377	129	91	51	106	71.88
May 2016	371	108	101	49	113	69.54
May 2017	378	25	72	157	112	69.39 *

\* The result is expected to increase after the declaration of revaluation result

## RESULT - SEM I (2016-17)

### First Year Sem 1 Result (Regular CBGS)

Grade \ Year	Total	Distinction	First Class	Pass Class	Fail	Passing %
Dec 2014	378	108	92	77	101	73.28
Dec 2015	377	93	109	79	96	74.54
Dec 2016	382	20	60	184	118	69.11 *

\* Result of BEE and Engineering Mechanics is low as paper was difficult for the students.

## PRELIMS

- Preliminary Examinations for F.E students were conducted in both the semester for the students of Academic year 2016-17.

## AICTE-ISTE Approved STTP

AICTE-ISTE Approved STTP on "Applications of Mathematics in Engineering and Research" was organized from 1st to 6th July, 2017. Our idea behind this one week AICTE-ISTE approved program was to keep in mind the learners i.e. our students and teachers perspective. Therefore, the sessions were planned accordingly.

Comments by Committee members on the above reports presented by the HODs:-

1. Mr. Albert D'Souza suggested that tracing of the academic performance of students with their result of SSC, HSC, FE, SE, TE, BE will give a lot of inputs to the HODs to improve academic performance. He also mentioned that it is better to report the result to the AAC before Re-valuation and after Re-valuation.

Mr. Albert D'Souza further mentioned that the EXAM software developed by St. John College of Engineering is updated now and SFIT could go for the updated version.

2. Dr. Biswas observed that the no. of distinctions and 1<sup>st</sup> Class in some departments has come down. Also, if there are any errors in the reporting, they should be recorded.

The committee members noted the results, analysis and findings, remedial measures taken up by the departments for result improvement. The Committee also took note of various departmental activities and appreciated the initiatives and innovative ways undertaken by each department towards continual improvement and academic excellence in their respective department and the institute as a whole.

### **ITEM 5: To report on PG programme: Progress and milestones.**

Dr. Deepak Jayaswal, Dean M.E., presented the following report of PG (ME) program.

#### **Progress of the M.E Dissertation (Computer Engineering)**

Batch	Number of student	Total number of student graduated	Academic Performance	Placement
2012-14	17	17	Distinction: 15 First class: 02	Teaching: Industry: Higher studies:
2013-15	18	18	Distinction: 14 First class: 04	Teaching: Industry: Higher studies:
2014-16	15	12	Distinction: 11 First class:	Teaching:06 Industry: 05 Higher studies:
2015-17	10	01 In process:09	Distinction: 01 First class:	Teaching: Industry: Higher studies:

#### **Progress of the M.E Dissertation (Electronics and Telecommunication Engineering)**

Batch	Number of student	Total number of student graduated	Academic Performance	Placement
2012-14	10	10	Distinction: 08 First class: 02	Teaching: 06 Industry: 02 Higher studies:02
2013-15	16	15	Distinction: 09 First class: 06	Teaching: 12 Industry: 03
2014-16	18	14	Distinction: 08 First class: 06 Writing Thesis:02	Teaching: 07 Industry: 02 Higher studies: 01
2015-17	11		Thesis writing: 08 In process: 03	

#### **Progress and Milestones**

- ME EXTC Results 2016-18 batch
  - SEM-I = 100%
  - SEM-II = 100%

- **Students Achievement**

1. Patil Bhavika of fourth batch EXTC won best paper award for paper titled “ Improved Image Splicing Forgery Localisation with First Digits and Markov Model Features” at IEEE International Conference on Intelligent Techniques in Control, Optimisation and Signal Processing (INCOS'17) at Kalasalingam University, Tamilnadu, India.
2. Lopes Renia Melvin of second batch EXTC won best paper award for paper titled “Evaluation of Music Features for PUK Kernel Based Genre Classification” at Conference ICACTA 2015, Publisher Elsevier Procedia Computer Science.
3. Rakesh Saroj of first batch EXTC was awarded second prize in the student category in IEEE Computational Intelligence Workshop on “PAPR Reduction using an efficient Conventional Hybrid SLM-PTS Techniques” organised by Indian Institute of Information Technology. Allahabad, India during Oct 13-15, 2014.

**ITEM 6: To report on Ph.D. Programme (Progress of the students, new recognized guides and report on the admissions in the current academic year)**

- a. Dr. Gautam Shah and Dr. Kevin Noronha have obtained the guideship from the University of Mumbai in EXTC department.
- b. The Ph.D. selection interviews for the admission in the academic year 2017 – 18 (I) were conducted on 13/09/2017. Subsequent to this, 2 PhD students have been selected in the branch of Electronics and Telecommunication Engineering department one each under Dr. Gautam Shan and Dr. Kevin Noronha.
- c. The progress of the existing PHD scholars was given in Annex 3 under this Item, in the Agenda/Notes circulated in advance.

Dr. Merchant mentioned that at least one course work should be in IIT.

**Item 7: To report the progress on various initiatives for promoting industry, institute interaction and academic up gradation.**

Dr. Joanne Gomes, HOD, Information Technology department gave the following progress report on setting up an IOT Lab in the college.

Department of Information Technology had initiated the process of setting up of IOT (Internet of Things) laboratory in association with TCS Ltd. Mumbai in the academic year 2016-17 with the support of ex-director Bro. Melchior Tom, ex-HOD-INFT: Mr. Shanbaug and ex-TPO Mr. M. Chowdhury.

Currently this project of IOT Lab is handled by HOD-INFT: Dr. Joanne Gomes and Mr. Wilson Pinto, Head-Training & Placement.

The objectives of this lab are as follows:

- To create awareness among students and faculty members about IOT based new technologies used in day to day life.
- To develop an internship program for the students of SFIT.
- To undertake research projects in the said domain.

The current status of this project is as follows:

1. The list of components and equipment required for the IOT lab has been finalized under the guidance of TCS representative.
2. Recently Mr. Wilson Pinto had a talk with TCS representative. According to him, TCS has agreed to extend their support for technical knowhow. However, no financial assistance will be provided by TCS.
3. Three faculty members from the Dept. of INFT (Ms. Prachi Raut, Ms Minal Lopes and Ms. Priyanka Gonsalves) have been appointed to take up the overall responsibilities related to this lab. These faculty members will undergo the subject related training required if any, and will also look after the other related tasks.
4. The Room No. B-104 in the new SFIT building 'B' wing, has been allotted for developing the proposed IOT lab.

The committee members suggested to explore the possibility of association/partnership with IBM and also with Texas Instruments (TI). IBM gives a lot of software free of cost and TI provides analogue kits and instruments. It was agreed that the Principal, Dr. Sincy George and Mr. Wilson Pinto, will work towards this.

**Item 8: To report on the progress on promoting entrepreneurship education and development in the institute (Include report on NEN, Pragathi, Haekathon, RAD Lab, Urban Farming workshop, E Cell day and any other activities)**

Dr. Kevin Noronha gave the following report compiled on promoting entrepreneurship education and development in the institute.

E-cell has planned its annual activities like Pragati (Project competition), Unnati (Business plan Competition) and E-Cell day etc and many more for current academic year.

1. As pre-cursor to Pragati-2018 – An in-house project competition, Mr. Jerin Thankappan, Assistant Professor in Computer Engineering, conducted ideation workshop on how to develop useful project ideas on 2<sup>nd</sup> August 2018. Around 40 students attended the workshop.
2. As pre-cursor to Unnati –2018 - A Business Plan development competition, Dr. Rakhi Sharma, HOD, Jai Hind College conducted a business plan development workshop on 23<sup>rd</sup> August 2017. Dr. Sharma explained the concepts like value proposition, customer segment identification, channel development etc. Around 38 groups have registered for Unnati 2018.
3. E-cell day which is a familiarization event for first year students is being rescheduled. The original date was 16th September 2017. Since MOSAIC 2017 is planned on the same day, E-Cell day will be conducted on 14th October 2017.
4. Recruitment interviews for new student members for the 1<sup>st</sup> round was conducted on 6th September 2017.
5. Faculty members of the E-Cell –Mr. Bysani M., Mr. Bhavesh Pandya and Mr. Jerin Thankappan attended an entrepreneurship training program arranged at Sardar Patel Institute of Technology, Andheri from 22nd June to 25th June 2017. The later part of this program is to conduct courses at our college premises for SFIT students who register for the program. This course is conducted in conjunction with National Entrepreneurship Network (NEN) by Wadhvani foundation that has developed curriculum and course material. The advanced stages of the course involves, mentoring and funding for start-up ideas of the participants. Mr. Bysani M., Mr. Bhavesh Pandya, Mr. Jerin Thankappan, Mr. Inderkumar Kochhar, Ms. Sridari Iyer and Mr. Ramjee Yadav are actively helping in conducting sessions for this course. The sessions are arranged on Saturdays and Wednesday after 3:00 p.m.

**National Entrepreneurship Network (NEN)** inspires, educates and supports student entrepreneurs, startups and SMEs for creating high-value jobs in India, Indonesia, Malaysia, Philippines, Kenya and Mexico, operating in association with governments, corporates, mentors, investors and educational institutes.

NEN Student Entrepreneurship Programs inspire, educate and skill young entrepreneurs:

- Cloud based Learn Wise platform
- Wadhvani E-Cells on campus
- Campus Companies

- Networking on wfnen.org
- NEN Entrepreneurship Support Programs through expert resources – investors, mentors, educators & coaches.

It Operates on:

- Learn Wise platform
- Mentor Wise platform
- Fund Wise platform

The course consists of 7 modules. Up to module 103 are conducted in the campus.

- WFNEN 100- Orientation in Entrepreneurship
- WFNEN101 – Basic program in Entrepreneurship
- WFNEN102 - Intermediate program in Entrepreneurship
- WFNEN103 – Advanced program in Entrepreneurship.
- WFNEN104, WFNEN105 AND WFNEN106 will be conducted outside the college.

These courses are conducted along the regular college, as co-circular activity.

These courses will help our students:-

- To experience the world of entrepreneurship through fun activities.
- Provide a platform for students to learn entrepreneurial skills.
- Enable students to become entrepreneurial leaders who are focused on business opportunities and value creation.
- Empower students with necessary tools and guidance to leverage their entrepreneurship abilities.
- Provides networking opportunities with networks and resources in the business world.
- Provides networking opportunities with subject matter experts, angel investors, CEOs of organizations including startups, and alumni members while still in college.



The Projects undertaken this year include

**1. Automated Hydroponics System:**

The current methods of horizontal farming have proved to be inadequate to feed the 7 billion people on this planet. This is evident from the frequent famines and the uptrend in the prices of food products across the globe. To counter this problem and to feed the ever growing populace a new kind of green revolution is needed. This revolution has already started in the form of vertical farming or indoor farming. It increases the productivity of traditional farming methods by implementing the stack and grow method, and uses plant specific UV lighting method, is apparently soil-less and also conserves water. Simple mechanisms can be implemented to maintain the temperatures and humidity within the product thereby creating conditions to grow exotic food as well. In case of terrace gardening this model can be scaled up and made completely energy independent by using solar panels and batteries to store energy. Hence, this concept of a miniature vertical farming home product has the potential to at least meet some of the daily nutritional requirements of Homo sapiens in a cost effective manner and with minimal energy requirements.

**2. Augmented Reality Application (Depth Estimation or Distance calculation using monocular cues):**

The Stereoscopic vision method has been implemented in computer vision for depth estimation using stereoscopic cues (this method uses 2 cameras). Google's project Tango and Apple's AR kit are some programs which make use of stereoscopic vision for distance calculation. However, recently researchers are devising methods to find depth in images using one single camera. Some of these methods include using motion parallax and relative angular displacement of objects from a fixed point. Such methods are used in astronomy for measuring distances of distant stars. These methods are now being scaled down and being used for distance calculation in computer vision.

**3. Automation and Swarm Robotics Aid - (AASRA)**

With the growing advancements in the field of Robotics and Automation, it is necessary to inculcate the required knowledge and skills in the upcoming generation. The robotic kits available in the market are fully equipped but static and a bit heavy on pockets. One such example is Firebird V robot developed by Nex Robotics in collaboration with IIT Bombay. IIT Bombay promotes Firebird V via a robotics competition eYantra Robotics Competition. Another emerging field is Swarm Robotics which includes designing and implementing self-organization and self-assembly algorithms in real world. A number of think-

tanks around the world have developed robots to implement self-organization and self-assembly algorithms.

Hence we propose to design and develop a modular and low cost educational and development robotic kits with few basic communication elements required for implementing Swarm Robotics but also provide provisions to attach other modules and peripherals. We also plan to promote the kit via setting up a competitive platform for the enthusiasts.

#### **4. Water Imploder:**

Apart from human consumption freshwater is also used for farming, livestock and washing purposes. We also know that of all the water available on this planet only 2.5% is pure freshwater with most of it being trapped in ice caps and glaciers. Humans cannot consume saline water directly nor can farming be done with such water. Groundwater is one solution to this but direct consumption of groundwater too can be risky as dangerous chemicals may leach into it making it unfit for consumption and farming activities. Ground water even contains carbonates of calcium and magnesium which can cause irreparable damage to pipes and containers. A lot of purification methods are available but are quite expensive and with poor results. One such solution to solving all the above problems is the Water Implosion technique. Water implosion passes the water through a special fitting which mainly consists of a circular array of magnets around a pipe that causes clockwise spiral vortex motion which makes the water to implode upon itself. This implosion transforms the water at a molecular level, naturally restructuring it. However these systems are quite expensive and are out of the reach of the common people. This unique concept can be made available to the masses through further miniaturization and with more cost effective methods. Hence RAD lab proposes to build a low cost but effective model based on the same working principle which can be then be used for commercial and household purposes.

Apart from these projects, we have 16 interns at RadLab who have undergone a month of training and hands-on experience on the common technologies that we use. They are in the Ideation phase for their yearlong project with RaDLab. So, we expect 4 more projects in the coming days.

The AAC members appreciated the above initiatives taken up in the institute.

**Item 9: To report on the Progress on Research and Development projects undertaken.**

The following report of the progress on R&D projects was presented.

**Minor Research Grant Proposals: 2017-18**

Program	Sr. No	Principal Investigator	Title of the Project	Proposed Budget (Rs.)	Total Budget (Rs.)
Electronics and Telecommunication Engg.	1.	Mr. Ansari Vaqar	Smart Rover for Surveillance	46,500	1,53,820
	2.	Ms. Prachi Raut	Voice Activated Smart Mirror for Personalized Assistance	18,000	
	3.	Ms. Nitika Rai	Smart Vault for Multi-vendor Services	48,500	
	4.	Ms. Shilpa Chaman	Printing from a USB Flash Drive Without PC	40,820	
Computer Engg.	5.	Dr. Kavita Sonawane	Electronic Health Record System	40,943	4.05.581
	6.	Ms. Jayshree Mittal	Advanced Home Automation using Li-Fi	48,008	
	7.	Ms. Safa Hamdare	An Expert System Design to develop and monitor a Hydroponic Farm	42,070	
	8.	Rupesh Mishra	Assess level of Autism using Gestures	75,000	
	9.	Ms. Snehal Kulkarni	NETRA	60,500	
	10.	Ms. Sridari Iyer	Interpret Sign Language using Gesture Recognition	75,000	
	11.	Ms. Nidhi Gaur	Wireless Home Based Health Monitoring	64,060	
Information Technology	12.	Dr. Vaishali Jadhav	Detecting Diabetic Retinopathy From Retinal Images Using Deep Cnns	59,850	2,70,950
	13.	Ms. Nazneen Ansari	Automatic Weather Stations for Agriculture	77,000	
	14.	Ms. Shree Jaswal	Smart Building Automation	65,000	
	15.	Ms. Amrita Mathur	Dissociated Swarm the future of intelligence	14,200	
	16.	Mrs. Mrinmoyee Mukherjee	Multi-Language Wireless Gesture Recognition Module for Physically Challenged	42,900	
	17.	Ms. Grinal Merwin Tuscano	Principles for Minimal Data Collection to Improve Decision Making in Smart IoT	12,000	
Chemistry	18.	Ms. Preethi Colaco	System for Analyzing Quality of Water Sources- An Initiative for Social Benifit	46,950	46,950
<b>Grand Total</b>					<b>8,77,301</b>

**Minor Research Grants - 2016-2017**

<b>Sr. No.</b>	<b>Project No.</b>	<b>Principal Investigator</b>	<b>Program</b>	<b>Title of the Project</b>	<b>Sanctioned Amount (Rs.)</b>
1.	461	Dr. Kevin Prathap Noronha	EXTC Engineering	Infrared Reflection Based Eye Tracking and Blink Recognition System for Augmentative and Alternative Communication	26,000
2.	488	Ms. Savita Kulkarni	EXTC Engineering	Smart Prepaid Energy Meter	15,000
3.	489	Dr. Uday Pandit Khot	EXTC Engineering	Smart Examination System	25,000
4.	556	Shamsuddin S. Khan	Engineering	Voice Controlled Obstacle Avoidance Wheelchair	30,000
5.	571	Rajkumar Shende	Engineering	UAV Drones in Agriculture and Crop Monitoring	25,000
<b>Total</b>					<b>1,21,000</b>

- A. Seminar Grant of Rs. 1,00,000/- (Rupees One Lakh only) has been sanctioned from AICTE to IT department for conducting the STTP.
- B. R&D Lecture Series in all the 3 departments are scheduled
- C. Details of the publications by staff will be presented during the meeting.

Mr. Albert D'Souza mentioned that the college should go for NAAC accreditation as it will help for obtaining UGC grant for the research projects. Even non-approved teachers with 5 years or more teaching experience are eligible to apply for UGC grant.

**Item 10: To report on Training and placement activities**

Mr. Wilson Pinto, Head – Training & Placement gave the following report on Training & Placement activities.

<b>Sr. No</b>	<b>Activities</b>	<b>Branch and class</b>	<b>Attendance</b>	<b>Remark</b>
1	CV Preparation session by Head T & P	BE - IT B, CMPN A & B, EXTC B	Apprx. 230 students were present	As CV is first impression students were briefed about CV preparation. Also there are asked to get their CV's checked by Head T & P
2	Aptitude test(organized by placement team	All BE classes	Apprx. 330 students were present	Aptitude tests (Test Funda) were conducted class wise to make students prepare for campus drive. Also students enrolled for

				Cocubes online test on technical % aptitude and test funda online tests(50 nos)
3	Code vita awareness session by TCS by Hari Menon	All BE classes	Apprx. 200 students were present	TCS expert visited college to address students who participated in code vita. He briefed them about the steps to follow for codevita contest. He also explained the opportunity which students will get if they win the contest.
4	Overview of recruitment process (Head T&P)	TE - CMPN A & B	Apprx. 120 students were present	Students were briefed about recruitment process.
5	GD session by Head T & P	BE - CMPN A & B	Apprx. 100 students were present	GD preparation was done for campus drive .
6	Aptitude training by external faculty Mr.Vinay Raikar,CEO,Campus Credential	All BE classes	Apprx. 100 students were present	Aptitude training was done so that students will get some tricks to solve aptitude test.
7	Mock GD and Personal Interview session by SFIT Alumni students	All BE classes	Apprx. 83 students were present	Alumni were contacted by Head T & P to prepare students for campus drive.
8	Soft Skills Training by GTT	B.E IT	Apprx. 100 students were present	Students were given inputs on Corporate requirement with regards To soft skills
9	Industrial visit to Barclays	B.E students	24	Career guidance sessions and info about latest technology trends

He highlighted the following important points:

a) The major hurdle for placement was clearing the Aptitude Tests of the hiring companies. He has been working on this issue and has tied up with 'Test Funda' for administering aptitude tests both on-line. TPO also administers hard copies of for aptitude test papers. Solving of aptitude a number of times, gives confidence to students which will help them to do well during placement.

b) Programming/coding skills of our students is poor and companies are looking for students who are good in coding. They are also poor in written English. This was revealed in the results of a National Level Test taken by 87 of our students to test their caliber.

c) Mr. Albert D'Souza gave a brief overview of what is being done in St. John's College of Engineering to improve the technical skills of students. From Sem V to Sem VII 60 hours of skills training is given to students, in the areas what the industry needs, which is just 20 hours in each Semester. It is called 'STEP' (Skill Training for Employment) activity. He suggested that even SFIT could adopt such methods.

## **Item 11: To report on the implementation of Mentoring Scheme for students**

### Mentor – Mentee Progress Report & Previous work done: (April 2017)

The mentor program was initiated by the former Director Bro Melchior Tom & Principal Dr. Sincy George in April 2017. The mentor – mentee interaction forms were prepared by Dr. C Hariprasad which is now available on the mentors – mentees ERP. The Counsellor Ms. Beatrice Lobo now coordinates with the mentors. Total number of mentors consisting of senior faculty members is 18.

In April 2017 the counselor Ms. Beatrice Lobo along with the then FE Coordinator Ms. Preethi Colaco first introduced the mentees (FE students) to their respective mentors. An orientation meeting was held for the same. Each mentor has been allotted 20 mentees. Total number of mentees taken care of is 360. The mentor continues for all the 4 years.

### Current work: (August 2017)

In August 2017 the mentors filled a form on their respective ERP to introduce themselves, to define their role and strengths as a mentor. Currently, in September 2017, mentors are now helping mentees to fill the form and also have started interacting on a personal basis with them. The mentors will be meeting their respective mentees twice in a semester i.e. once after IAT 1 and other before IAT 2. Mentees who require additional personal and professional guidance will be referred to the counselor. The counselor is expected to stay in regular contact with mentors and mentees. Mentors will also be providing mentees with references of Alumni students for interaction.

Mr. Albert D'Souza suggested that a proper mentoring procedure to be followed which should include confidential reporting, gap findings and analysis, issues to be addressed such as, stress and anxiety related issues, relationship issues, peer issues etc. The confidential reporting may be done by the Mentors to the HOD/Principal/Director as the case may be.

## **Item 12: To report on Social Awareness and Societal Sensitivity for our students.**

The following brief report on National Service Scheme Activities from January 2017 to September 2017 prepared by Mr. Paul Fernandes, NSS coordinator, was presented to the AAC.

## National Service Scheme Activities from January 2017 to September 2017

Sr. No	Activity	Date	Venue	Department			Total number of students participated
				CM PN	EX TC	IT	
01	Seven Day Rural Camp	2 <sup>nd</sup> -8 <sup>th</sup> Jan 2017	Bhaliwali Virar	18	20	12	50
02	Work shop on Road Safety	20/01/2017	SFIT	21	22	15	58
03	Human Chain for Road Safety	22/01/2017	S. V. Road Borivli	15	18	11	44
04	Marrow Donation Awareness	22/02/2017	SFIT	23	29	28	80
05	Marrow Donation Registration	27/02/2017	SFIT	56	79	64	199
06	Women's Day Celebration	08/03/2017	SFIT	30	27	36	93
07	FIL (Football Is Life) Project	Jan- April 2017	St. Xeviers School Vile Parle	04	03	02	09
08	SFIT Stage Beautification Drive	04/04/2017	SFIT Stage	10	10	03	23
09	Medical Checkup Camp for SFIT Staff	20/04/2017	SFIT Assembly Hall	01	10	01	12
10	Police Station Campus Beautification	29/04/2017	Borivli Police Station	02	04	03	09
11	Library Stock Verification/Dusting of Library Books, shelves etc	June 19 - 30, 2017	SFIT Library	15	14	11	40
12	Tree Plantation at Meda Phatak Palghar	01/07/2017	Meda Phatak Palghar	14	10	10	34
13	Visit to Nisarg Biotech Composting Project	09/07/2017	Bhaliwali Palghar	03	02	00	05
14	Tree Plantation at SFIT Campus	15/07/2017	SFIT Campus	16	11	19	46
15	University Foundation Day	17/07/2017	Convocation Hall University Campus Churchgate	07	06	06	19
16	Eye Check up Camp for SFIT Staff	05/08/2017	SFIT Assembly Hall	03	04	04	11
17	Visit to Shanthidaan	27/08/2017	Shantidaan ,L.T.Road,Borivali	03	02	07	12
18	Dengue and Malaria Awareness	28/08/2017	Shivaji nagar community, Borivali	13	11	15	39
19	Rally "Save Mumbai Rivers"	01/09/2017	Borivli and Dahisar	29	26	24	79
19	Zero garbage exhibition organized by BMC R-WARD	10 <sup>th</sup> -11 <sup>th</sup> Sept' 2017	Samaj Kalyan, Dahisar	8	8	8	24
20	Vermicompost Project	May 2017 to Present	SFIT	04	03	05	12
21	"Seed to Plant" Project (Saplings of Mango, Jamun, Jack fruit, Ashoka being prepared)	June 2017 to Present	SFIT	04	04	04	12

The Committee noted the above activities and appreciated the same

### **Item 13: Under any other points with the permission of the chair**

#### 1. Addition of new branches

Director Bro. Jose Thuruthiyil and Principal, Dr. Sincy George, mentioned that we are planning to apply for adding two new additional branches in core Engineering namely (1) Mechanical Engineering and (2) Electrical Engineering, from the academic year 2018-2019. The Prospective Plan of the University is yet to come out.

#### 2. How to improve PG (ME) admissions

Principal, Dr. Sincy George mentioned that for the academic year 2017-2018 we have only two students for ME in Computer Engineering and only one in Electronics & Telecommunication Engineering. She requested for suggestions from the committee members to improve the situation for the next academic year.

Mr. Albert D'Souza commented that looking at the current trend, the demand for ME is dwindling as the requirement of ME qualification is only for teaching jobs in Engineering Colleges and the recruitment is already saturated in almost all the colleges. He suggested that the ME programme should be redesigned by tie up with the industry. Industry to give projects for ME students and place them at a higher level salary than the BE graduates.

Mr. Wilson Pinto, Head – Training & Placement suggested for tie up with a US university for MS program under the Twining concept, which is permitted by AICTE. The ME degree will be awarded by the foreign University.

#### 3. How to achieve at least 6.75 GPA for students to be eligible for placements

Dr. Kevin Noronha, Dean ME mentioned that many students get a drop because of not clearing one subject i.e. Maths (Sem) which they must clear before going for Sem VII. Because of this they don't get eligible for placement, even if they clear subsequently.

It was suggested to conduct remedial classes during vacation, especially for Diploma students who are admitted directly to Second Year.

#### 4. How to make students Industry ready.

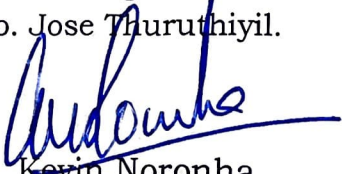
This point was already discussed earlier under Item 10: Training and placement activities'.



5. How to improve our research activities by getting grants and collaborative projects from industry.

This point too was discussed earlier under Item 9: To report on the Progress on Research and Development projects undertaken. One of the suggestion from Albert D'Souza was to go for NAAC accreditation which will give ample scope for applying for UGC grant.

The meeting was concluded at around 1.00 p.m. with a vote of thanks by Director, Bro. Jose Thuruthiyil.

  
Dr. Kevin Noronha  
Member-Secretary