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)

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March 22, 2017

Minutes of the Fifth **Meeting of the Academic Advisory Council** (First meeting for the academic year 2016-2017) of St. Francis Institute of Technology (Engineering College) held on Saturday, the **18th March 2017.**

The Fifth meeting of the Academic Advisory Council (First meeting for the academic year 2016-2017) of St. Francis Institute of Technology (Engineering College) was held on Saturday, the 18th of March 2017 at 10.00 a.m. in the Board Room of the Institute.

The following members and special invitees were present:

1. Bro. Melchior Tom   - Director SFIT, Member
2. Dr. Sincy George   - Principal, Chairperson
3. Dr. Kevin Noronha   - Member-Secretary
4. Dr. S.N. Merchant   - Member
5. Dr. S. Biswas   - Member
6. Mr. Lester Fernandes   - Member
7. Dr. Deepak Jayaswal   - Dean M.E., Member
8. Dr. Kavita Sonawane   - HOD-CMPN, Member
9. Dr. Gautam Shah   - HOD- EXTC, Member
10. Dr. Joanne Gomes-   - HOD- INFT, Member
11. Ms Preethi Colaco   - In-charge FE Co-coordinator
12. Dr. Uday Pandit Khot   - EXTC, Special Invitee
13. Dr. Vikram Shete   - CMPN, Special Invitee
14. Dr. C. Hariprasad   - Dean SA, Special Invitee
15. Mr. Francis D'Souza   - Office

Leave of absence was granted to Bro. Jose Thuruthiyil, Dy Director, Member, Mr. Albert D' Souza-Member and Mr. M. Chaudhury, Head-T&P who couldn't be present due to unavoidable circumstances.

Bro. Mechior Tom, Director, welcomed all the members, especially Dr. Merchant, Dr. Biswas and Mr. Lester Fernandes who are always there to support the growth of the institute. He then mentioned that the Principal, Dr. Sincy George, has been appointed as the new Chairperson of AAC and Dr. Kevin Noronha, Dean Academics (UG), the Member-Secretary and requested Dr. Sincy George, to chair the meeting. Dr. Sincy George, the new Chairperson, AAC requested the Member-Secretary, Dr. Kevin Noronha, to proceed with the Agenda which was already circulated to the members in advance.

ITEM 1: To confirm the minutes of the Academic Advisory Committee (AAC) meeting held on 5th September 2015, for the academic year 2015-16.

The draft minutes of the last AAC were circulated on 21/09/2015 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 unanimously confirmed.

1

ITEM 2: To report on the action taken on decisions recorded in the meeting of the AAC held on 5th September 2015.

Dr. Kevin Noronha, reported the action taken on the decisions recorded in the previous meeting of the AAC are as follows:

Sr. No.	Particulars / Activity	Action Taken	Open / Closed
	ITEM 3 of AAC held on 05/09/2015: b) **Procedure for formulation & allocation of Final Year projects (UG/PG) to ensure quality and involvement of the students - progress and status.** a) Dr. Merchant had suggested to establish a linkage between BE projects, ME dissertations and PhD thesis with good monitoring of BE and ME projects. b) Dr. Thomas Mathew also emphasized the need of cooperation between PhD, ME and BE students for projects, dissertation and thesis work respectively and the need of a system to be developed for the purpose. c) Dr. Kevin Noronha too mentioned that BE and ME students can collaborate with PhD students.	In EXTC some of the BE projects are extended to ME dissertation, especially in the areas of Microwave and Antenna by Dr. Uday Khot. The process will be further explored for other fields from the next academic year onwards	Closed
	d) Mr. Lester Fernandes enquired if there is a method to evaluate the projects. It was answered by Ms Bidisha Roy, HOD of CMPN saying that at this point of time, there is no rubric but only the opinion of the guide is taken into account for rating the project.	This is being taken care in the agenda of the current meeting under Item No. 4.	Closed
2	**ITEM 3c: Working with NEN to upgrade the quality of Final Year projects (UG/PG) and encourage entrepreneurship development.** a) Dr. Joanne Gomes had suggested to involve more number of alumni may be by inviting a whole batch like a Re-union type. She was requested by the Director to prepare a working proposal and submit to him. b) Mr. Lester Fernandes suggested	As regards the involvement of alumni in encouraging entrepreneurship, the E-Cell under Dr. Vikram Shete is conducting various programmes in which many alumni are invited as resource persons. A few Alumni were also called during the NBA visit. The alumni are contacted through alumni website and those who are	Closed

	that since making cold calls are not very effective, contacting on social media would be a better option to contact alumni.	interested are connected and interacting on social media. However, they don't like to disclose their ideas in the open on social media.	Closed
3	**ITEM 8 d) Employability and Finishing Training:-** Dr. S. Biswas had suggested that while reporting the placement of students, not only the number/percentage of students placed in the organizations, but also the students going for higher studies (India/abroad), startups or joining family business etc. to be recorded and the % of students placed, to be calculated accordingly. This was accepted and would be shown in the next AAC.	This is being taken care in the agenda of the current meeting under Item No. 12	Closed
4	**ITEM 14: Any other points:** Dr. S. Biswas enquired about the status on mentoring of students in SFIT and mentioned that in IIT, Bombay, they have system of senior students mentoring (one to one), the juniors and the system is working fairly well. He suggested that SFIT could also try by identifying good students from the senior batch and allot them a few junior students and make a beginning and see how it works.	This is being taken care in the agenda of the current meeting under Item No. 7.	Closed

ITEM 3: To report the progress on various initiatives for promoting industry, institute interaction and academic up gradation.

Dr. Kevin Noronha, Member-Secretary informed the members that Mr. M. Chaudhury, Head – Training & Placement has already started working on a tie-up with TCS to set up an IOT Lab and an order for the same has been already placed. The IOT Lab should be operational in the next academic year, which will be a first step in promoting Industry, Institute interaction and academic up gradation. More such initiatives will be explored in the next academic year.

He also mentioned that, regular Industrial Visits are being organised by all the departments as well as Student Chapters. Students are also encouraged to take up Internship in Industries during their vacation.

Dr. Merchant however, commented that since vacation period is very short for engineering students, as the exams are stretched for long time, it is very difficult for industries to offer short internship which should be atleast 2-3 months. Hence, industries are reluctant to offer internship during vacation.

Bro. Melchior Tom, also commented that compulsory internship contemplated by MHRD/AICTE/University, is not practical in view of the large number of engineering students unless

the Govt. makes it mandatory for the industries to take a min. number of students as interns and accordingly it should be included during the semester itself and not merely during vacation. Suitable syllabus change also needs to be introduced.

ITEM 4: To report on the progress on promoting entrepreneurship education and development in the institute.

Dr. Vikram Shete, in-charge E-cell had given a detailed report on the activities done in E-Cell from its inception till date (July 2016 to March 2017) to promote entrepreneurship. This was given in advance to the members along with the Agenda. He mentioned a few highlights as follows:

During the last AAC meeting, it was suggested that a progressive platform be set up for the students to convert their ideas to reality through projects which can be marked, once they complete their studies.

The E-Cell has pioneered a 3-stage system in SFIT. It starts with 'Prayas' for First Year students to show case their projects in the areas of their knowledge of Engineering Mechanics, Physics and Chemistry. There is no competition involved at this stage, but students are given encouragement and opportunity.

The second stage is 'Pragati' where SE,TE students are expected to work on projects using their domain knowledge in which they are specializing and the projects would be competitive and would be judged by internal as well as external judges and the best projects would be awarded cash prizes/certificates. This completion will still remain internal, within SFIT.

The third stage in progression would be 'Unnati' in which best BE projects will be show cased and judged. This will be an inter-college competition for the future.

'Prayas' which was launched two years ago is an annual feature now and was held this year on 01/03/2017.

'Pragati' is launched this year on March 17-18, 2017 in which 27 projects are show cased and best projects would be judged a team of internal/external judges and best projects would be award prizes.

E-Cell has been conducting a number of seminars/programs during the year in which many alumni who have their own startups are invited to speak on entrepreneurship and share their own experiences. E-cell has touched around 1000 participants so far, trough seminars/programs on entrepreneurship, startups, etc. For the next 6 months, E-Cell is planning to conduct seminars on 'Mock Business Plan' for the students who have participated in 'Pragati' project competition. As of now, 19 startups by our Alumni as well as current students (from 2003 till date) are operating and all of them are connected with each other through 'WhatsApp'. The eldest is from the batch of 2003 and the youngest being 2 Third Year students.

Dr. Vikram Shete mentioned also the idea of RAD Lab (ROBOTICS AND AUTOMATION DEVELOPMENT LAB) in which projects which have marketable potential are developed. He cited the fowling two ongoing projects as examples:

a) Project Ninja Box – Autonomous intrusion detection and alarming device using EXP8266 Wi-Fi Module. First prototype is successfully tested. This device can give the exact time when the intrusion has occurred. So one can go directly to CCTV footage effortlessly. The next device would be an instant buzzer, when the intrusion occurs. It can work without internet. Dr. Merchant suggested to integrate the idea of a camera which can capture also the image. He further mentioned that in the IIT-B campus, there is 'SIGN', a facility available to help entrepreneurship and startups and SFIT students can take the benefit of it.

Dr. Biswas asked if there is any feedback from students regarding correlation between academics and projects. Dr. Vikram Shete mentioned in the affirmative and cited an example of 'noise cancellation' which the students have now understood while working on the projects for 'Pragati'.

Mr. Lester Fernandes mentioned that in these activities, students initiative will really work and faculty can play the 'enabler role'.

ITEM 5: To report on NBA accreditation and Application for extension for an additional year

Dr. Kevin Noronha, mentioned that all the three UG programmes have been re-accredited for the academic years 2016 - 2017 and 2017 -2018 up to 30-06-2018. We have applied for extension for an additional year after submitting the 'pre-qualifiers' report and the reply from NBA is awaited.

ITEM 6: To report on UG programme: Dr. Kevin Noronha mentioned that to enhance the knowledge and skill development of the students a number of initiatives (seminars/workshops and industrial visits) have been organized / planned by individual departments and requested the respective HODs to present their report. The details were given in advance along with the Agenda.

1. Computer Engineering department:-

Dr. Kavita Sonawane, HOD, Computer Engineering department, mentioned the following points:

- A seminar on Intellectual Property rights was held in October 2016 and students/staff were informed as the how convert the same into patents. Two more seminars on 'Embedded Systems' and 'Open GL' are planned in March/April 2017.

- An industrial visit is planned on 7/4/2017 to BARC.

- A new Association namely, 'CodeX' is formed in the CMPN department to learn on coding and participate in coding competitions. Based on the students interest, we are creating a data base, to help such students. The 'CodeX' Association conducted a programme 'PYCODE – Data Science And Machine Learning Workshop' on 18/02/17, 24/02/17 and 25/02/17.

2. Electronics & Telecommunication Engineering department:-

Dr. Gautam Shah, HOD, Electronics & Telecommunication Engineering department mentioned the following:

- A seminar was organized on 'Cell phone and cell tower radiation hazards and solutions' on 18/02/2017. Dr. Girish Kumar, IITB, an expert in this field was the main resource person, gave

a very useful talk on the subject. This was followed by a full day practical workshop conducted 2 Ph. D students of Dr. Girish Kumar, to Third Year – EXTC students.

- Another seminar was held on 15/02/2017 on 'LaTex' for which Mr. Nirav Patel, SJCE, Phaghar and Mr. Santosh Chapaneri, SFIT, were the resource persons.

- An industrial visit to RailTel Corporation, Mahalaxmi, is organized 18/03/2017.

- IETE, Student Chapter, conducted/planned to conduct the following programs:

  o Workshop on Andriod Application Design on 17/09/16 and 18/09/2016

  o Python programming on 11/03/17and 12/03/17

  o LaTex workshop on 17/03/17

  o Seminar on Importance of GATE examination on 17/03/2017. Faculty members Mr. Santosh Chapaneri and Ms. Jovita Serrao, who had very good GATE score, were the resource persons.

  o NS2 workshop on 22/03/17

3. Information Technology Engineering department:-

Dr. Joanne Gomes, HOD, Information Technology department, informed the following:

- IT Colloquium "IT for Society" was successfully conducted on 20/01/2017 & 21/02/2017. The program was aimed at familiarizing the participants with applications of I.T. in various domains and stimulating their minds towards problem solving using latest internet and communication technologies. Around 400 IT students (SE, TE and BE) and staff members participated. It is planned to conduct the colloquium 'IT for Society' every year.

- A department seminar on "Social Entrepreneurship and Startups' on 23/09/2016 coordinated by Ms. Purnima Kubde, Assistanat Professor and the resource person was Mr. Bushan Trivedi.

- In addition to the above, a number of seminars such as 'How to make a PPT presentation', 'Poster and Paper Presentation' were also held.

- An industrial visit for final year students is planned during this semester. The details are yet to be worked out.

- IT Students Association organized the following programs:

  o Workshop on Python on 21/09/2016
  o Node JS on 30/09/2016 & 17/09/2016
  o Power BI on 31/08/2016
  o 3D Gaming Workshop by Robokart on 17th & 18th March 2017
  o Seminar on Latex by faculty member, Ms. Amritha Mathur, on 23/09/2016

On a query from Dr. Biswas regarding participation of students, Dr. Joanne Gomes mentioned that the participation of students in the IT Colloquium is compulsory. Around 400+ students & faculty members were present. In the workshops, maximum 50 students in a batch are allowed.

On a query from Mr. Lester Fernandes, it was clarified that the CSI (Student Chapter) also conducts separate seminars.

4. First Year Engineering:-

Ms Preethi Colaco, In-charge FE Coordinator, mentioned the following points fro FE.

- 'Prayas' for First Year students to show case their projects in the areas of their knowledge of Engineering Mechanics, Physics and Chemistry was held this year on 01/03/2017.

- An industrial visit was held on 23/02/2017 & 24/02/02017 to Electrical Manufacturing industries in Nashik.

a) **Procedure for Evaluation of Final Year projects:**

In the last AAC meeting there was a suggestion made to evaluate final year projects based on some rubric. Accordingly all three departments have started grading the projects and the rubrics for the same are prepared which were given in a detailed table under this Item, in the current meeting's Agenda.

On going through the Rubrics of each department, the Committee recommended that all the three departments could have a common 'Rubric'.

ITEM 7: To report on the Implementation of Mentoring Scheme for students:

The Implementation of Mentoring Scheme is under process. The 'Mentor Form' to collect the detailed data of Mentees is finalized. To start with FE students of the current batch will be filling their individual data online in the ERP module developed internally by one of our Asst. System Administrators. Senior teachers are appointed 'Mentors' for a 20 students batch and they will continue with the same students from FE to BE till they graduate. As suggested by Dr. Biswas in the last the AAC meeting, there is plan to include good BE students as Mentors along with the faculty mentors.

Dr. Biswas mentioned that continuous monitoring should be there to make it a success.

ITEM 8: To report on PG programme:

a) Dr. D. J. Jayaswal, Dean –ME, mentioned briefly the Progress of the M.E dissertation projects department wise and batch wise highlighting the following points namely, No of students enrolled, No of students graduated, Academic performance, Publications etc.

While going through the details, Committee Member, Mr. Lester Fernandes, observed that there is a considerable drop in the number of admission for ME in the last batch. It was explained that one of the reasons is that last academic year, GATE examination was made mandatory for admission to ME programme and many fresh BE graduates who were interested to pursue ME course, were not aware of the change in the admission eligibility rules. Secondly, the ME programme has almost reached a saturation point, since it is mostly academic based namely, minimum qualification prescribed for teaching in an Engineering College and almost all faculty members are ME qualified.

On a query regarding input on student faculty ratio, it was clarified that it is based on intake and not actual number of students admitted. In our case, our intake for ME is 18 students and the student faculty ratio is 1:6. Accordingly, we have 3 teachers for each ME in each department.

b) Report on PG selection process, mile stones & innovation (5th batch 2016-2018

Dr. Jayaswal mentioned the following points on the above subject.

a) Guidelines of DTE are followed for the selection process based on GATE score, CAP rounds and BE marks for Minority and Institute level seats.

b) Mile stones :
   - 100% students of first batch of COMP and EXTC have completed ME degree.
   - 100% students of second batch of COMP and 94% EXTC have completed ME degree.
   - Ms. Lopes Renia Melvin of second batch 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.
   - For the enhancement of capabilities of individuals for actual practice, Institute offers
   - On-credit course free of charge like pedagogical skills development, e-learning, ICT Research methodology etc.

Progress on recognition of PG teachers for the PG guidance:

CMPN: Approved M.E. Teachers: 15

EXTC: Approved M.E. Teachers: 15

ITEM 9: To report on PhD programme:

Dr. Sincy George, Principal, briefly explained the PhD selection process and progress as follows:

a) Candidates are informed in advance regarding the guidelines for preparation for PhD interview at SFIT namely,
   - Selection of their area of interest after meeting all approved guides of the institute
   - Doing a literature survey on the selected area.
   - The candidate is expected to send one page report on research proposal in advance and discuss the proposed research problem during the interview.

b) Details of PhD admission year wise for the last three Academic Years 2014-2015, 2015-2016 and 2016-2017 along with the Names of PhD guides and students guided by each guide were given in the table under this Item along with Agenda/Notes in advance to the members.

c) PhD program is monitored through 'Progress Seminars'.

d) Progress on recognition of new Ph. D. guides – Dr. Sincy George mentioned that Dr. Gautam Shah and Dr. Kevin Noronha have applied for PhD guideship in EXTC department and the official communication from the University is awaited.

ITEM 10: To report progress on Research and Development projects undertaken

Dr. Sincy George mentioned the following progress on R&D activities in the institute:

i.   **Lecture Series:** A lecture was arranged for all faculty members on the topic Research and Development" by Dr. Vivek Agarwal from IIT – Bombay on 10/01/2017 in the Assembly Hall of SFIT.

ii.   **Publications:** The summary of papers department wise published in Journals and Conferences are as follows:

Sl. No.	Dept.	Journals		Conferences	
		International	National	International	National
1	CMPN	01	02	03	-
2	EXTC	07	-	-	-
3	INFT	05	-	09	-
4	Total	13	02	12	-

iii. **Minor Research Grant**

The following faculty members have received Minor Research Grant from the University of Mumbai for the Year 2016-17

Sr. No.	Name of faculty	Project Name	Sanctioned amount
1	Dr. Kevin Norohna –EXTC	Infrared Reflection based Eye Tracking and Blink Recognition system for Augmentative and Alternative Communication	Rs. 26,000/-
2	Ms. Savita Kulkarni –EXTC	Smart Prepaid Energy Meter	Rs. 15,000/-
3	Dr. Uday Pandit Khot –EXTC	Smart Examination System	Rs. 25,000/-
4	Mr. Shamsuddin S. Khan –CMPN	Voice Controlled Obstacle Avoiding Wheelchair	Rs. 30,000/-
5	Mr. Rajkumar Shende –CMPN	Use of drones for crop health monitoring using NDVI	Rs. 25,000/-

On a query from the Committee Members, it was informed that 'Minor Research Grant' is pegged at max. Rs.40, 000/-

iv. **Major Grant Applied**

Sr. No.	Name of PI / Dept	Project Name	Grant Applied (Amount Rs.)
1	Dr. Sincy George & Dr. Joanne Gomes	Development of an efficient method for battery charging for electric vehicle using solar panel	58,00,000/-
2	Dr. Gautam Shah EXTC Dept	Modrobs (AICTE) – Modernization of Labs.	20,00,000/-

v. ROBOCON

ABU Robocon Asia-Pacific is an international Robotics Competition held every year in more than 18 countries. In India, MIT Pune organizes this event in collaboration with Doordarshan every year in the first week of March. The theme of Robocon 2017 is ASOBI (The flying disc). The SFIT Robocon 2017 team consisted of 16 students from all the branches and 2 faculty members, which was held from 2nd to 4th March, 2017. Our college was placed 43 among 110 teams this year.

Details on 'RADLAB' activities in the college since November 2016 and E-Yantra Robotics Competition (eYRC) which is scheduled to be held in April 2017, were earlier circulated to the members along with Agenda/Notes under this Item.

The AAC members noted the above details and appreciated the same.

ITEM 11: Brief report on the execution of UG academic programs including PEOs, POs, COs session plans, lesson plans, feedback, assignments, projects, pedagogy & innovative exercise of various programs for the year 2015-16 of (FE, INFT, EXTC, CMPN)as per the New SAR for NBA (Re-Accreditation).

The process of execution of UG academic programs including PEOs, POs, COs session plans, lesson plans, feedback, assignments, projects, pedagogy & innovative exercise of various programs remains the same.

The NBA committee during their recent visit advised the departments to rework on the PEO's, POs and COs keeping in mind the stakeholders of the Institute for strengthening the teaching learning process and identifying key areas in research. The Committee will include Faculty Members of the Department, Experts from Academics and Industry, Alumni and a representative of the Management. The Committee can also include a parent representative. The process of forming the committee is under process.

ITEM 12: To report on Training and placement activities

In the absence Mr. Chaudhury, Head T&P, Dr. Kevin Noronha, briefly reported a few important points from the details on Training and Placement activities along with comments and notes given to the members in advance under this item.

Members noted the main area of concern namely, how to improve 'eligibility' for placement.

Mr. Lester Fernandes observed that students who are smart but didn't make the grades can apply to Startups & Small entrepreneurs.

ITEM 13: To report on Social Awareness and Societal Sensitivity for our students

Detailed activities of Social Responsibility Cell and National Service Scheme for the academic year 2016-2017 were earlier provided to the members along with the Agenda/Notes on this item. The AAC members noted and appreciated them.

Dr. Vikram Shete mentioned that RADLAB is working on the Project 'Sugar Cane Harvesting'. They have visited around 100 farmers and the 'Problem Statement' is finalized and now it is in the design stage. Really interested students are working on the project.

ITEM 14: Any other points with the permission of the chair: How to improve the Technical knowledge of the students to be selected in the placements.

Dr. Kevin Noronha, Member-Secretary, requested for suggestions from the members on the above point.

Apart from improving the academic eligibility for placement, many students even after being eligible are not able to crack the Aptitude Tests of the companies. Even if organize special training programs, students don't attend them.

Dr. Biswas suggested involving parents in this regard.

Dr. Merchant mentioned that the whole academic system which is exam oriented, doesn't support such things.

On a suggestion from Dr. Merchant on Ph. D monitoring, Dr. Sincy George mentioned that Review Progress Seminars (twice in an academic year) are held regularly, one with internal subject experts and one external.
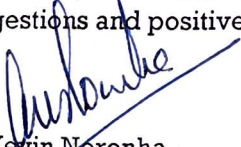
Mr. Lester Fernandes mentioned that students should use NPTEL and learn many on-line courses available Viz. Python, Big Data Analytics, Machine Learning etc.

Dr. Kevin mentioned that many students are registering, but very few are giving the exam.

Dr. Kevin also asked for suggestions how to make our students industry ready, to connect to industries.

Mr. Lester Fernandes that while it may be difficult to make industry internship mandatory unless Govt. makes it mandatory for industries, we can always invite industry people to the institute to give seminars/courses. He also suggested getting projects in industries after knowing the students interests and sharing the areas of interest of the institute with industries.

In the end, Bro. Melchior Tom thanked all the members especially the external members for their suggestions and positive contribution for the academic progress of the college.

Dr. Kevin Noronha
Member – Secretary