FRANCIS XAVIER ENGINEERING COLLEGE

No. 103 G2, By Pass Road, Vannarpettai - 627 003, Tirunelveli District, Tamil Nadu, India
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E-mail : ithod@francisxavier.ac.in

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Department of Information Technology

I Board of Studies Meeting

Date : 20.07.2019

Time : 10:00 am

Venue : Library Board Room

Curriculum and Syllabi B.Tech (IT) (Regulations 2019)

S.No.	Name, Designation, Department, College Address with Pin Code, Contact No.&Mail ID	Signature
1	**Dr.Dejey,** **Assistant Professor,** Department of Computer Science and Engineering, University College of Engineering, Konam, Nagercoil, TamilNadu India – 629004	
2	**Dr.B.Ramadoss,** **Professor,** (HAG) Department of Computer Applications NIT, Tiruchirapalli TamilNadu -620 015	B. Ramadoss 20/7/1
3	**Dr. Ka. Selvaradjou** **Professor,** Department of Computer Science & Engineering, Pondicherry Engineering College, Pondicherry - 605 014	Selva 20/7/19
4	**Mr.C.Karthikaeyan,** CEO & Trainer - Skill Rack Director, Peecee Castle Services Ltd. Bangalore	ABSENT
5	**Ms.N.Abinaya Devi,** MTech (PG Alumni 2013) Business analyst IBM, Chennai.	N. Abinaya Devi.

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1	Dr.Dejey, **Assistant Professor,** Department of Computer Science and Engineering, University College of Engineering, Konam, Nagercoil, TamilNadu India – 629004	
2	Dr.B.Ramadoss, **Professor,** CHAG) Department of Computer Applications NIT, Tiruchirapalli TamilNadu -620 015	B. Kamadoss 20/7/18
3	Dr. Ka. Selvaradjou **Professor,** Department of Computer Science & Engineering, Pondicherry Engineering College, Pondicherry - 605 014	
4	Mr.C.Karthikaeyan, CEO & Trainer - Skill Rack Director, Peecee Castle Services Ltd. Bangalore	ABSENT
5	Ms.N.Abinaya Devi, MTech (PG Alumni 2013) Business analyst IBM, Chennai.	N. Abinya Devi

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Minutes of the First Board of Studies Meeting

Date : 20.07.2019   **Time :** 10:00 am
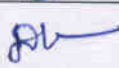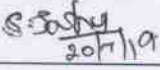
Venue : Library Board Room

The first Board of Studies Meeting of **Information Technology** Department was convened under the chairmanship of **Mrs. T. C. Subbulakshmi**, Professor and Head / **Information Technology** of Francis Xavier Engineering College in the **Library Board Room** on 20th July, 2019 at 10:00 am.
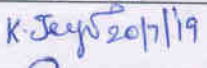
External Members present:

S. No	Members as per UGC Norms	Members Nominated	Signature
1	Head of the Department concerned (Chairman)	Prof. T.C. Subbulakshmi	*[signature]* 20/7/19.
2	One Expert nominated by the Vice Chancellor from a panel of six recommended by the college Principal	**Dr.Dejey,** **Assistant Professor,** Department of Computer Science and Engineering, University College of Engineering, Konam, Nagercoil, TamilNadu India – 629004	*[signature]* 20/7/19.
3	Two experts in the subject from outside the college nominated by the Academic Council	**Dr.B.Ramadoss,** **Professor,** Department of Computer Applications NIT, Tiruchirapalli TamilNadu -620 015	B. Kamadum 20/7/5
		Dr. Ka. Selvaradjou Professor, Department of Computer Science & Engineering, Pondicherry Engineering College, Pondicherry - 605 014	*[signature]* 20/7/19
4	One representative from industry/corporate sector/allied area relating to placement	**Mr.C.Karthikaeyan,** **CEO & Trainer - Skill Rack** Peecee Castle services Ltd. Bangalore.	ABSENT
5	One Post Graduate meritorious aluminous nominated by the Principal	**Ms.N.Abinaya Devi,** Business analyst IBM , Chennai.	N. Abinadevi.

Internal Members Present:

S. No	Name of the Member	Designation	Signature
1	Dr. R. Ravi	Professor/IT	
2	Dr. A. Anitha	Professor/IT	
3	Mr. G. Prince Devaraj	Assoc. Prof./IT	
4	Mr. T. Anto Theepak	Assoc. Prof./IT	
5	Mr. D. Joseph Pushparaj	AP/IT	
6	Ms. S. Agnes Joshy	AP/IT	
7	Ms. J. Monica Esther	AP/IT	
8	Ms.M.Westring Hannah	AP/IT	
9	Mrs. Ann Mary Thomas	AP/ English	
10	Mr. M. S. Mahesh	AP/Maths	
11	Mrs. K. Jeyapappa	AP/Physics	
12	Dr. Brillians Revin	Asso.Prof/Chemistry	

S. No	EX OFFICIO MEMBERS
1	Principal, Francis Xavier Engineering College, Tirunelveli
2	Professor Academics, Francis Xavier Engineering College, Tirunelveli
3	Controller of Examinations, Francis Xavier Engineering College, Tirunelveli

Principal and Professor D.C. Joy Winnie Wise welcomed the members of the Board of Studies and highlighted the importance of the first Board of Studies meeting. She pointed out that the local need is to strengthen **Communication, Analytical Ability and Industrial Exposure** (Either through industrial projects or attending in-plant training) of our students. She further requested the Chairman, University Nominee and other Expert members to give due consideration to the local need while finalizing the curriculum and syllabi in exercise of autonomy.

The Chairman of the board Mrs. T.C. Subbulakshmi, HOD / Information Technology introduced the external members of "Board of Studies" which includes a University Nominee, Expert members, an industry member and an alumni of the college. Chairman outlined the agenda for discussion in the meeting. The Internal members introduced themselves to the Board of Studies. The Expert members greeted the internal members and wished the faculty for the transition to autonomous status.

A short presentation on department profile was presented before the committee by the HoD/IT.

Agenda:

Item No.	Particulars
Item : 1.1	Curriculum and Syllabi of B.Tech Information Technology
Item : 1.2	Curriculum and Syllabi of M.Tech Information Technology
Item : 1.3	Reference & Text Books
Item : 1.4	Electives
Item : 1.5	Any Other Matter

Item : 1.1	Curriculum and Syllabi of B.Tech Information Technology

Prof. Dr.B.Ramadoss asked about changes incorporated in the new Curriculum compared to Anna University based curriculum.

The Chairman highlighted following points.

- Theory integrated with practicals for better understandability
- Special labs and special courses on latest technologies are incorporated.
- One professional elective can be replaced with Three 1 credit certification courses.
- Flexibility in choosing subjects of specialisation with more number of professional and open electives.

- Prof.Dr.Ka.Selvaradjou suggested to reduce number of subjects in 7th semester and it can be compensated with Internships.
- Prof.Subbulakshmi justified, 8th semester papers can be studied in 7th semester itself and projects/ Internships can be undertaken in industry in 8th semester.
- Dr.Dejey insisted on adding papers on latest technologies and was justified by the Board chairman.

1st Semester:

- Prof. Prof.Dr.Ka.Selvaradjou suggested inclusion of Biology as per AICTE model curriculum instead of two physics papers. He insisted that DNA computing and genetic engineering basics would be much useful to IT students as health applications are more. Ms.Abinaya also agreed to the point and said the students would be aware in health domain for applications.
- Prof.Dr.Ka.Selvaradjou queried about the introducing Computer skills laboratory in the 1st semester itself. Dr.R.Ravi, Dr.A.Anitha and Dr.Caroline Viola Stella Mary explained, such laboratories are visually appealing to understand concepts in core subjects like computer architecture, microprocessor etc,. Prof Ms.Westring Hannah said, such skilling is already ongoing in the Induction programme for freshers and students feedback is also good. Ms.Abinaya. agreed with the opinions given by faculty members. Prof. Subbu Lakshmi insisted that training of MS office tools needed to imparted in I semester.
  Finally after a discussion it was decided to handle in II Semester to reduce the credits in I semester.

2nd Semester:

- The academic board members suggested to opt Problem solving and Python programming in Semester 2 and Structured Programming languages like C can be moved to Semester1, as it deals with basic programming concepts. But it was insisted by the board chairman and the faculty that it would be easier for the students to learn python in I Semester and proceed as prescribed in AU curriculum and the members agreed. Ms.Abinaya too justified it. The members questioned the need for 2 physics papers in the curriculum and Ms. Jeyapappa explained it. But was suggested to go for one paper.

3rd Semester:

- Prof.Dr.Ka.Selvaradjou asked about the need for studying EVS. Dr.Brilliance Revins, Prof/Chemistry said, students must know about E-waste handling, Harm factors of environment etc., Prof B.Ramadoss, agreed his point and suggested EVS can be given to students as a mandatory non-credit courses and that credits can be compensated with Information Technology Basics subjects.
- Prof.T.C.Subbulakshmi mentioned, as EVS comes under HSS category, it cannot be replaced with core papers. Finally it was suggested to have a course related to IT with social science and EVS to be taken as mandatory course.

4th Semester:

- Prof.Dr.Ka.Selvaradjou suggested, Design and Analysis of algorithms can be integrated with Data Structures in Semester 3 and can be given as "Data Structures and Algorithms" in such a way that,3 units for data structures and 2 units for algorithm. So, that curriculum will provide space for 1 more core subject
- Prof.Dr.Ka.Selvaradjou insisted that one more theory to accommodate could be Information Theory and Coding because that subject would differentiate from CSE.
- For the subject Microprocessors and micro controllers, Prof.Dr.Ka.Selvaradjou suggested 8051 is found out-dated. He recommended to include BIOS, DOS and 8086 basics in Units I and II. And the Prof .B.Ramadoss also agreed to the same. ARM processor and Arduino programming in Units 3-5 as we are moving to USB and Wireless technologies.
- Ms.J.Monica Esther & Dr.R.Ravi agreed the suggestion and pointed ARM processor and Wireless technologies will meet the current industry requirements. Ms.S.Agnes Joshy elaborated the topics covered in Networks subject.
- Ms.Abinaya suggested to relate Networks concept with Cloud in the unit 5 since nowadays Cloud Computing & IoT is trending.
- Dr.Dejey suggested to include case studies w.r.t to real time applications in papers like network, cloud etc..

5th Semester:

- A discussion about subjects Software Engineering and Software Project Management went on. Ms.Abinaya. suggested Agile and SCRUM technologies are currently used in Industries. Such technologies can be brought in to Units 4 & 5 of Software Engineering.

6th Semester:

- Prof Dr.B.Ramadoss suggested to have Mobile Application based Theory with practical. HOD suggested one lecture hour and two practicals to be given for Mobile Application Development lab and it was finally agreed.
- Ms.Abinaya. suggested the need for providing communication skill in lower semesters itself. From 3rd year onwards placement centric learning can be imparted.
- Prof.Dr.Ka.Selvaradjou suggested Technical seminar in 6th semester can be changed as "Product Development and Presentation / Mini Project". Dr.B.Ramadoss Agreed to move technical seminar to lower semesters (in III / IV semesters)

7th Semester:

- Ms.Abinaya suggested to add Machine learning techniques as a part of the subject Artificial Intelligence.
- Dr.A.Anitha pointed that, machine learning techniques has been already incorporated with first 3 units of the subject "Data mining and Data Analytics". The board members agreed the points.

- Prof.Dr.Ka.Selvaradjou suggested to reduce the credits for Professional ethics. But Prof .Subbulakshmi convinced the board members to have 3 credits. She justified to to map PO and to match up the HSS credits.

8th semester:

- For project work Prof. Dr. B.Ramadoss suggested, maximum team size to be restricted to 3.
- Prof. Dr.Ka.Selvaradjou. said, individual project should be motivated. Faculty members agreed the suggestions.

Item : 1.2	Curriculum and Syllabi of M.Tech Information Technology

- Board members appreciated regarding the rank holders in the department.
- Board members asked about the selection process for PG admission. Prof.Dr.Ka.Selvaradjou asked about internal entrance exam for PG admission. HoD replied it is based on TANCET score for General quota and Entrance exam through Consortium for management quota students.
- Prof.Dr.Ka.Selvaradjou suggested, encourage UG students to appear for GATE Exams and admit to PG through GATE scores. They suggested GATE score will be useful for central government jobs.
- Prof. B.Ramadoss asked about minimum number of students for selecting elective papers.
- Prof.Dr.Ka.Selvaradjou suggested to include the word Advanced for the Lab courses Data Structures and DB laboratory in I sem.
- Dr.A.Anitha. replied it is $1/3^{rd}$ of total strength, it comes to 6.
- Ms.Abinaya discussed about topics in the subject Software Industrialization.

Item : 1.3	Text Books and Reference Books

Prof. Prof.Dr.Ka.Selvaradjou suggested to include Computer Networks by Andrew S Tanenbaum as a reference book in Data Communication and Computer Networks.

Prof.Ramdoss suggested to include the books of the author Balagurusamy for C programming as it would be easier for the beginners to learn.

Dr.Dejey suggested for include standard text books(foreign Author) for the subjects related to latest technologies.
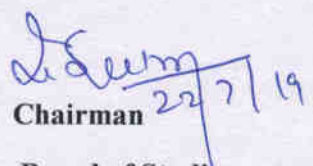
Item : 1.4	Elective

Prof B.Ramadoss. asked the minimum number of students for opting one elective. HoD/IT said 20 students.

- Prof.Dr.Ka.Selvaradjou asked about lack of track system in choosing electives. HOD/IT explained to provide equal opportunity in learning; all subjects are included in Electives.
- Prerequisite subjects for few elective papers like Software defined networks, Advanced DB, Multicore architecture were discussed and it was rightly justified by the HoD.

Item : 1.5	**Any Other Matter**

- NBA renewal for department was suggested by the board members during department profile presentation so as to justify continuous improvement. They insisted that it would add much more value to the department.
- Ms.Abinaya insisted to make the students familiar in the verticals of the domain such as Medical / Health, Finance, Telecommunications, Digital Marketing ...
- Dr.B.Ramadoss suggested the HoD to collect feedback about the curriculum from the students and present it in the next BoS Meeting.
- The members visited the Cyberforensics and IoT lab and had a look the tools in the lab.

Chairman 22/7/19.

Board of Studies

Department of Information Technology

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SCAD
A LEADING EDUCATIONAL GROUP

Department of Information Technology

Suggestions from the Industry Expert Member

Mr.C.Karthikaeyan,
CEO & Trainer - Skill Rack
Peecee Castle services Ltd.
Bangalore.

Programming Skills Enhancement

Mr.C.Karthikaeyan: visited the IT department and had an interaction with the faculty members of the department on 22.07.2019.

The industry expert member Insisted on regular programming practice for the students.

Adviced to conduct regular Hackathon contests for students. The member suggested to replace AWT and applets in Java with Java FX. The HoD requested for the training from the skillrack. He also agreed to impart training for the faculty in Java FX and suggested the exercises for Java Programming.

The faculty members enquired about the topics required in web programming. He suggested not to opt for PHP since it is outdated. He insisted to make the students familiar to handle JSON objects with web page. The member agreed to share his expertise in framing the syllabus for web programming and also agreed to share materials in this context.

The Member insisted to give intensive training on programming logic with C as it would help the students for placements.The member adviced to conduct regular contests. HOD/ IT told him that contests are conducted through techno club.

He insisted the faculty member handling data structures subject to provide a good number of exercises with hands-on so that the students could clearly understand data structures like binary tree creation, traversals and write programs on their own.

Chairman 22/7/19.

Board of Studies

Department of Information Technology

C.Karthikaeyan.
22/7/19.