

Department of Information Technology

MINUTES OF THE NINTH BOARD OF STUDIES MEETING DEPARTMENT OF INFORMATION TECHNOLOGY

Venue: CSE Lab-3

Date & Time: 12.06.2023 & 10:00 AM

The 9th Meeting of the Board of studies of the Department of Information Technology was held on 12th June, 2023 at 10.00 AM in the CSE – Lab 3 of the Francis Xavier Engineering College through Hybrid mode.

Google Meet link: <https://meet.google.com/vbe-yisq-ych>

The Meeting was convened under the Chairmanship of **Dr.G. Aravind Swaminathan, HoD/CSE**

MEMBERS PRESENT

S.No	Name	External / Internal Members
1	Dr.G.Aravind Swaminathan. Prof & Head Department of Computer Science and Engineering, Francis Xavier Engineering College Tirunelveli.	Chairman
2	Dr J.B. ShajilinLoret Professor & Head Department of Information Technology, Francis Xavier Engineering College Tirunelveli.	HoD - IT
3	Dr. C.Senthil Kumar, Associate Professor, Department of Computer Science and Engineering, Thiagarajar College of Engineering, Madurai.	External – Anna University Nominee
4	Dr.E.Illavarasan, Professor, Department of Computer Science and Engineering, Puducherry Technological University, Pondicherry – 605014.	External – Academic Expert
5	Dr.D.Murugan, Professor, Department of Computer Science and Engineering, Manonmanium Sundaranar University, Tirunelveli – 627012	External – Academic Expert
6	Mr.Prabagar Ramamurthy Head, Information Security Management, Tata Consultancy Services, 1/G1, Sipcot, IT Park,	External – Industrial Expert



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	Siruchery, Chennai -600006	
7	Mr. Abishek Stephen Senior Backend Engineer, Turing, Palo Alto, California, USA	External – Alumni
8	Dr. L R Priya, Professor/Academics	Internal
9	Dr. Rajakumar M COE & Professor/ECE	Internal
10	Dr. M Caroline Viola Stella Mary, Prof & ERP /IT	Internal
11	Mr. G. Prince Devaraj, Associate Prof / IT	Internal
12	Dr T C Subbulakshmi, Asso. Prof/IT	Internal
13	Mr. Anto Theepak T, Asso. Prof/IT	Internal
14	Ms Agnes Joshy S AP/IT	Internal
15	Dr. A. Jainul Fathima, AP / IT	Internal
16	Ms. Nishan A H, AP / IT	Internal
17	Ms. T. Nancy Lydia, AP / IT	Internal
18	Ms. P. Sathya AP/IT	Internal
19	Mr. Richard Singh Samuel, AP/IT	Internal
20.	Ms. R. Shirly Myrtle, AP/IT	Internal
21.	Ms. Jean Celia Grace, AP/IT	Internal
22.	Ms. Arunadevi, AP/IT	Internal
23.	Ms. Agnes, AP/IT	Internal



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MINUTES OF MEETING

BOS Chairman Prof. **Dr. G. AravindSwaminathan** welcomed the members of the Board of Studies. **Dr. J.B Shajilin Loreet - HoD / IT** highlighted the importance of the 9th Board of Studies meeting. She requested the University Nominee and other Expert members to give valuable suggestion in finalizing the curriculum and syllabus of 6th and 7th semester for new regulation 2021 for B Tech – Information Technology, in exercise of autonomy.

Prof. Dr. J B. Shajilin Loreet, HOD/IT welcome the Board of Studies external members University Nominee, Expert members, an Industry member and an alumnus of the college. The HOD - IT outlined the agenda for discussion in the meeting.

Agenda:

Item No.	Particulars
Item: 9.1	Curriculum of B.Tech – Information Technology (2021 Regulation)
Item: 9.2	Meeting Minutes of BoS meeting VIII
Item 9.3	Syllabus of VI and VII Semester
Item 9.4	Syllabus for Professional Elective III to VII
Item: 9.5	List of NPTEL Courses
Item: 9.6	Department Specific Value Added Course
Item: 9.7	Others



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Item: 9.1: Curriculum of B.Tech Information Technology (2021 Regulation)

- The HOD - IT presented the credit distribution of the curriculum of B.Tech Information Technology of Regulation 2021.

S.No	Category	Credits Per Semester								Total Credits	LE Credits
		I	II	III	IV	V	VI	VII	VIII		
1	HSSM	3+1*	2+1*		3			3		11+2*	6
2	BS	12	4	4						20	4
3	ES	5	13	4						22	4
4	PC			15	20	15	6	4		60	60
5	PE					6	6	9		21	21
6	OE					3	6	3		12	12
7	EEC			1	1	1	5		10	18	18
Total		20+1*	19+1*	24	24	25	23	19	10	164+2*	125

* Tamil Course included for the students those who have admitted after 2023-2024 academic year.

- The members enquired about the professional elective streams and it was presented and justified by the HOD - IT. The Board Members appreciated the categorization of streams of professional electives.

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- **21IT6702: Statistical Analytics using R**, the members suggested updating the text books within last 5 years.
- **21IT6704: Multimedia Systems and Technologies**, the expert members suggested to include the case studies regarding the training phase of AI image recognition. They also suggested updating the recent text books.
- **21IT6705: Edge and Fog Computing**, the experts insisted to include the edge devices and also to replace the topics Dockers and edge cloud architecture.
- **21IT6710: Ethical Hacking**, the expert members suggested to include WPA, N-map, kali-Linux which is an updated one.
- **21IT6711: Computer Modeling and Animation**, the panel members suggested to include lay-tracing concepts within the syllabus.
- **21IT6713: Wireless Communication**, the board members suggested to include the wireless security concepts instead of the Equalization and Diversity (Unit 5)
- **21IT7701: Android Programming**, the experts suggested that not to restrict the students in building the applications only in android. They suggested including the iOS Application Development, and they suggested enriching the knowledge of the students in Swift, React Native, Flutter and Kotlin.
- **21IT7705: Agile Methodologies and DEVOPS**, the experts suggested to include the concept of web hook.
- **21IT7707: Internet Security**, the expert members suggested to remove the topics such as secure coding practice and input validation, security testing techniques. They recommended including WRAF.
- **21IT7710: Next Generation Networks**, the experts suggested including the concepts of Optimal Networks and SDN (Software Define Networks) in Unit III.
- **21IT7712: Software Testing and Tools**, the panel members suggested including the topics secure coding practice and input validation, security testing techniques.

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- **21IT7714: Cloud Security**, the expert members suggested to change topics the secure cloud software testing of Unit I, Autonomic Security of Unit II and IBM Security of Unit IV .
- The panel members suggested including the cloud native security tools, if there found any feasibility in the course **21IT7714: Cloud security**.
- The panel members suggested to include papers with recent technologies instead of **High Speed Switching Architecture** and **High Performance Network**.
- The panel members appreciated that the department syllabus satisfies the needs of the industry and the above corrections to be carried out.

Item: 9.5: List of NPTEL Courses

The HOD – IT presented the list of NPTEL Online Courses for R 2019 and R2021 for the Academic year 2023-2024 for approval. If the students complete the online course, he / she may go for credit transfer of one Professional elective in the forthcoming semesters. The list of NPTEL courses presented was approved.

S No	Course Id	Course Name	Duration	Start date	End date	Exam date
REGULATION 2021 STUDENTS						
1	noc23-cs103	Getting Started With Competitive Programming	12 Weeks	July 24, 2023	October 13, 2023	October 28, 2023
2	noc23-cs116	Design & Implementation Of Human-Computer Interfaces	12 Weeks	July 24, 2023	October 13, 2023	October 28, 2023
3	noc23-cs84	Statistical Learning For Reliability Analysis	12 Weeks	July 24, 2023	October 13, 2023	October 28, 2023
4	noc23-cs100	Reinforcement Learning	12 Weeks	July 24, 2023	October 13, 2023	October 29, 2023
5	noc23-cs104	Applied Accelerated Artificial Intelligence	12 Weeks	July 24, 2023	October 13, 2023	October 28, 2023



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6	noc23-cs102	Parameterized Algorithms	12 Weeks	July 24, 2023	October 13, 2023	October 28, 2023
7	noc23-cs111	Computational Complexity	12 Weeks	July 24, 2023	October 13, 2023	October 28, 2023
REGULATION 2019 STUDENTS						
1	noc23-cs84	Statistical Learning For Reliability Analysis	12 Weeks	July 24, 2023	October 13, 2023	October 28, 2023
2	noc23-cs100	Reinforcement Learning	12 Weeks	July 24, 2023	October 13, 2023	October 29, 2023
3	noc23-cs104	Applied Accelerated Artificial Intelligence	12 Weeks	July 24, 2023	October 13, 2023	October 28, 2023
4	noc23-cs102	Parameterized Algorithms	12 Weeks	July 24, 2023	October 13, 2023	October 28, 2023
5	noc23-cs111	Computational Complexity	12 Weeks	July 24, 2023	October 13, 2023	October 28, 2023

Item: 9.6: Department Specific Value Added Skill Courses

The department specific value added skill courses curriculum was presented. The syllabus for I semester, III semester and V semester were presented by HOD – IT. The following list of courses and Syllabus were approved by the panel. On completion of any one of the courses the Students can earn 2 credits. If the students have successfully earned 4 credits through the department specific value added skill course, there is a benefit of applying the credit transfer for any one of the professional elective course.

- The panel members suggested to include Commands, Tools and automation in the module I in the syllabus of the skill course Programming boot camp in Linux environment.
- The expert members suggested beginning the course content with the basic concepts of web development in the course Full Stack Development.

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S No	Course Code	Course Name	Semester	Contact Periods	L	T	P	C
1	21FCIT01	Computer hardware mantling and dismantling	1	60	0	0	3	2
2	21FCIT02	Animation Tool : CANVA,FIGMA	1	60	0	0	3	2
3	21MSIT03	Boot camp on data analysis tools	2	60	0	0	3	2
4	21MSIT04	Programming boot camp in Linux environment	3	60	0	0	3	2
5	21MSIT05	Programming boot camp in advanced algorithms	4	60	0	0	3	2
6	21MSIT06	Full Stack Development	5	60	0	0	3	2
7	21MSIT07	Placement Fit Training – Level 1	6	60	0	0	3	2
8	21MSIT08	Placement Fit Training – Level 2	7	60	0	0	3	2

G. Aravind Swaminathan
12/6/2023

Prof. Dr.G. AravindSwaminathan
BOS- Chairman

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SCREENSHOT FOR THE NINETH BOARD OF STUDIES MEETING HELD ON 12th JUNE 2023

The screenshot shows a Google Meet interface. A presentation slide is displayed in the center, titled 'PROGRAMMING WITH ARDUINO' and 'INTEGRATION OF SENSORS AND ACTUATORS WITH ARDUINO'. The slide contains text about actuators and various Arduino units. A small video window in the top right shows a participant named 'Arul Amalraj A'. The bottom of the screenshot shows the Windows taskbar with the time 3:55 PM and the text '9th BOS MEETING'.

UNIT III PROGRAMMING WITH ARDUINO 8

Introduction to arduino, Features, Components, Arduino IDE, Program elements-Structure, Variables and constants, Data types, Operators, Control statements, Loops, Functions, Arrays, String objects, Time, I/O function, Display, Controlling LEDs - Working with buttons - The toggle switch - Button multiplexing - Interrupts.

UNIT IV INTEGRATION OF SENSORS AND ACTUATORS WITH ARDUINO 7






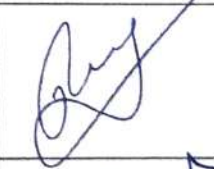
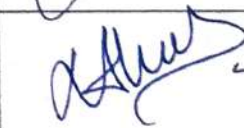
Integration of Sensors with Arduino: Interfacing with Temperature sensor, Detecting motion using PIR sensor - Measuring distance using infrared and ultrasonic sensor- Object position using accelerometer and localization using Global Positioning System (GPS) Integration of Actuators with Arduino: Controlling motors with transistors - Spinning motors both ways - Servo motor - Stepper motor.







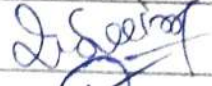

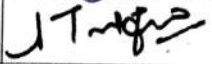
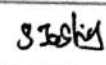
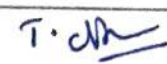
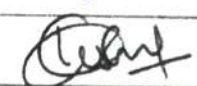


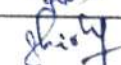
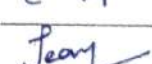
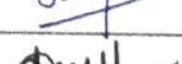
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ATTENDANCE FOR THE NINETH BOARD OF STUDIES MEETING HELD ON
12th JUNE 2023 AT 10:00 AM

VENUE: CSE LAB 3 (NETWORKS LAB)

S.No	Name	External / Internal Members	Signature
1	Dr.G. Aravind Swaminathan. Prof & Head Department of Computer Science and Engineering, Francis Xavier Engineering College Tirunelveli.	Chairman	 12/6/2023
2	Dr. J.B. Shajilin Loret Professor & Head Department of Information Technology, Francis Xavier Engineering College Tirunelveli	HoD - IT	 12/6/23
3	Dr. C. Senthil Kumar, Associate Professor, Department of Computer Science and Engineering, Thiagarajar College of Engineering, Madurai.	External – Anna University Nominee	
4	Dr.E.Illavarasan, Professor, Department of Computer Science and Engineering, Puducherry Technological University, Pondicherry – 605014.	External – Academic Expert	
5	Dr.D.Murugan, Professor, Department of Computer Science and Engineering, Manonmanium Sundaranar University, Tirunelveli – 627012	External – Academic Expert	
6	Mr.Prabagar Ramamurthy Head, Information Security Management, Tata Consultancy Services, 1/G1, Sipcot, IT Park, Siruchery, Chennai -600006	External– Industrial Expert	
7	Mr.Abishek Stephen Senior Backend Engineer, Turing, Palo Alto, California,	External – Alumni	

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	USA		
8	Dr. L R Priya Professor/Academics	Internal	
9	Dr. Rajakumar M COE & Professor/ECE	Internal	
10	Dr. M Caroline Viola Stella Mary, Prof/IT	Internal	
11	Mr. G.PrinceDevaraj, Associate Prof / IT	Internal	
12	Dr. T. C Subbulakshmi, Asso. Prof/IT	Internal	
13	Mr. AntoTheepak T, Asso. Prof/IT	Internal	
14	Dr.A.JainulFathima, AP / IT	Internal	
15	Ms Agnes Joshy S AP/IT	Internal	
16	Ms.T.Nancy Lydia, AP /IT	Internal	
17	Ms.Nishan A H, AP / IT	Internal	
18	Ms. P Sathya, AP/IT	Internal	
19	Mr.Richard Singh Samuel, AP/IT	Internal	
20.	Ms.R Shirly Myrtle, AP/IT	Internal	
21.	Ms.Jean Celia Grace, AP/IT	Internal	
22.	Ms.Arunadevi, AP/IT	Internal	
23.	Ms.Agnes, AP/IT	Internal	