National Engineering College, K.R.Nagar, Kovilpatti - 628 503.

(An Autonomous Institution - Affiliated to Anna University, Chennai) www.nec.edu.in

20th Board of studies Meeting in the Department of Information Technology

Venue: CSE Seminar Hall, National Engineering College K.R.Nagar, Kovilpatti – 628503

Date & Time: 25.11.2023 & 10.00 a.m.

Agenda

BoS / IT 20.1	2	Welcome address and Opening Remarks by Chairman, Board of studies in the department of Information Technology	
BoS / IT 20.2	1	Confirmation of the Minutes of the 19th meeting of Board of studies in the department of Information Technology held on 26th JUNE 2023 and Action taken report of 19th meeting of Board of studies	
BoS / IT 20.3	1	Business brought forward by the Chairman, Board of studies	
		20.3.1 Approval of second and third semester curriculum and syllabi for B.Tech IT programmes under R-2023	
		20.3.2 Approval of Verticals for Honors / Honors with Specialization for B.Tech IT programmes under R-2023	
		20.3.3 Refinement of vertical course for UG degree programmes under R-2019	
		20.3.4 Approval of Programme Core and Elective courses for PG degree programmes under R-2023	
BoS / IT 20.4	1	Any other items	
BoS / IT 20.5	1	Suggestions given by the BoS Members	

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F. No. 20.1/NEC/ IT/2023-24

25th NOV, 2023

Dear Sir/Madam.

Sub: Minutes of the 20th Meeting of the Board of studies in the Information Technology -Reg.

Kindly find attached herewith the Minutes of the 20th Meeting of Board of studies of the Information Technology of National Engineering College, K.R.Nagar, Kovilpatti – 628503 held on 25th Nov, 2023 at 10.00 AM. Hard copy of the minutes is also being sent to you by speed post.

It is requested that comments on the Minutes, if any, may please be sent by email at hodit@nec.edu.in or by post, at the earliest. If no comments are received, within ten days, the Minutes shall be taken as confirmed. With kind Regards,

Yours Sincerely (Dr.K.G.Srmivasagan)

MINUTES of 20th Meeting of the Board of studies held on 25th Nov, 2023 at 10.00 AM

Venue: CSE Seminar Hall, National Engineering College K.R.Nagar, Kovilpatti – 628503

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MINUTES OF THE MEETING

The 20th Meeting of the Board of studies of the Information Technology was held on 25th November 2023 at 10.00 AM in the Department of Information Technology of the National Engineering College, K.R.Nagar, Kovilpatti – 628503

1. The following members were present:

1.	Dr.V.Gomathi, Prof & Head	Board Chairman Dept. of CSE	
2.	Dr.K.G.Srinivasagan, Prof & Head	Board Chairman Dept. of IT	
3,	Dr.V.Kalaivani, Prof & Head	Board Chairman Dept. of AI&DS	
4.	Dr.G.Madhupriya, Associate Professor, Department of Computer Science & Engineering, Thiagarajar College of Engineering, Madurai	University Nominee	
5.	Dr.V.Masilamani, Associate Professor and Head, Department of Computer Science and Engineering, Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram	Academicians	
6.	Dr. C.Mala, Professor, Department of Computer Science and Engineering, National Institute of Technology, Tiruchirappalli		
7.	Dr.B.L.Velammal, Associate Professor, Department of Computer Science and Engineering, Anna University, Chennai		

8.	Dr.J.Sheeba Rani Associate professor, Department of Avionics, Indian Institute of Space Science and Technology, Valiamala, Thiruvananthapuram	R&D Experts	
9.	Mr.S.Pugazhenthi, Program Analyst, Cognizant Technology Solutions Corp, Chennai.		
10.	Mr.Muruganantham Madan Veluchamy, Delivery Head, Tata Consultancy Services, Chennai.	Industrial Experts	
11.	Mr.K.Sujeeth Senior Technical Lead – Data Analyst, Mercedes Benz R&D India, Brigate Tech Gargen, Kundanahalli, Bangalore.		
12.	Mr.S.Manikandan Product Lead Engineer, Zoho Corporation, Tirunelveli.	Alumni Expert	

2. The R&D Expert member Ms.R.Sheeba Mohan, Director, Information Security Officer, Kudankulam Nuclear Power Plant, Kudankulam, Industrial Expert Mr.R.Saravanan, TCS, Chennai and the Alumni Expert Mr. Arun Rajkumar, Co-Founder & CTO, Atoa Payment Bengaluru could not attend the meeting due to their prior commitments and unavoidable reasons and was granted leave of absence.

BoS / IT 20.1	=	WELCOME ADDRESS AND OPENING REMARKS BY CHAIRMAN, BOARD OF STUDIES IN THE ALUMNI CHAMBER
		The Chairman, BoS of the Information Technology welcomed and introduced the members of 20 th Board of Studies and thanked each one of them for sparing their valuable time to attend the meeting.
BoS / IT 20.2	:	TO CONFIRM THE MINUTES OF EIGHTEENTH BOS MEETING HELD ON 26th JUNE, 2023.
		The minutes of the Nineteenth Board of Studies meeting held on 26th June, 2023 were communicated to the members. The comments received have been incorporated and placed for confirmation. The same was approved by the 19th Academic council. > Action Taken Report (Enclosed in Annexure I)
BoS / IT 20.3.1	:	TO CONFIRM AND APPROVE SECOND AND THIRD SEMESTER CURRICULUM AND SYLLABI FOR B.TECH IT PROGRAMMES UNDER R-2023
		RESOLVED TO APPROVE second and third semester curriculum and syllabi for B.Tech IT programmes under R- 2023
BoS / IT 20.3.2	**	TO CONFIRM AND APPROVE VERTICALS FOR HONORS / HONORS WITH SPECIALIZATION FOR B.TECH IT PROGRAMMES UNDER R-2023
		RESOLVED TO APPROVE Verticals for Honors / Honors with Specialization for B.Tech IT programmes under R-2023

BoS / IT 20.3.3		TO CONFIRM AND APPROVE REFINEMENT OF VERTICAL COURSE FOR UG DEGREE PROGRAMMES UNDER R-2019	
		RESOLVED TO APPROVE the refinement of vertical course for UG degree programmes under R-2019	
BoS / IT 20.3.4	:	TO CONFIRM AND APPROVE PROGRAMME CORE AND ELECTIVE COURSES FOR PG DEGREE PROGRAMMES UNDER R-2023	
		RESOLVED TO APPROVE Programme Core And Elective Courses For PG Degree Programmes Under R-2023	
BoS / IT 20.4	:	ANY OTHER ITEMS, IF ANY, WITH THE PERMISSION OF THE CHAIRMAN OF THE BOS	
		On the whole, the proposed curriculum and syllabus for R2023 was very much appreciated by all members. They also congratulated the faculty members for their team efforts towards continuing Education.	
BoS / IT 20.5	:	SUGGESTIONS GIVEN BY THE BOS MEMBERS	
20.5.1	:	In OOPS, the word cotemporary in CO statement may be replaced with either innovative or efficient solution. Also, CO9 may be reframed.	
20.5.2	:	In Data Structures, CO1 contents may be of Arrays, Stacks and Queue, CO2 may include list. Problems on Prim's and Kruskal's may be included.	
20.5.3	:	In Data Structures Laboratory, exercise on implementation of Dictionary operation using AVL tree may be added.	
20.5.4	:	It is better to have practical course for Operating System in third semester. To maintain the maximum credits, credits of UI/UX may be reduced to 3.	
20.5.5	:	Computer Networks may be moved to previous Semester.	
20.5.6	:	In Semiconductor Physics and Digital Electronics, topics on memory may be removed.	

20.5.7	In Software Engineering, Rajesh kumar's "Software Engineering - Concepts and Implementation" book may included in references.		
20.5.8	In Computer Organization, pipelining and paral processing topics may be moved to CO5. Swap the conter of CO in that order. The course may be renamed Computer Organization and Architecture.	nte	
20.5.9		In Signals and Systems, implementation may be done using Python rather than Matlab. Also, recent text books may be	
20.5.10	. In Signal Processing using Matlab, if possible Python m be used.	ıay	
20.5.11	In Basics of Sensors, assignments may be provided then a there during content delivery. IoT related case studies Healthcare may be added.		
20.5.12	In Hardware Essentials and Troubleshooting, the word bat parts may be replaced by components.	si	
20.5.13	: In Data Science Verticals, overlapping of courses may avoided.	be	
20.5.14	Computer Vision vertical may be renamed. It is suggested offer more verticals like Machine Learning, Computation Intelligence etc.		
20.5.15	In Cyber Attacks Detection and Prevention System, boo on recent years may be added.	ok	
20.5.16	In Applied Cryptography, the first unit title may be given : Mathematical Foundation for Cryptosystem.	a	
20.5.17	In Cloud Security and Privacy, AWS Security related concepts may be added. In Cloud Security Lab, the versibeta may be removed.		
20.5.18	In Malware Analysis, special focus on Virtual Machine may be avoided.		
20.5.19	In Multimedia Security, topics on Steganography may added. Multimedia Security laboratory may be done usi Matlab.		

Internal Members	
Dr.B.Paramasivan, Professor	a. Omen winter
Dr.R.Muthukkumar, Professor	Polymen LS.H-23
Dr.S.Chidambaram, Asso. Prof.	Crano Inles.
Dr.S.Rajagopal, Asst. Prof. (SG)	D. 26/1/25/11/23
Ms.V.Anitha, Asst. Prof.	V. A. tea
Ms.V.Gowthami, Asst. Prof.	N. Jyun estilus
Ms.S.Santhi, Asst. Prof.	& Brandy for
Student Members	
Mr.M.Sundarraj, Final year / IT	S. S
Ms.S.Girija, Third year / IT	S. Grinia.

The members had a brainstorming discussion and interaction among themselves. After discussion, fruitful suggestions were incorporated.

Based on the suggestions given by the members, BOS resolved to recommend the following to the Academic Council for further approval.

- a) Approval of second and third semester curriculum and syllabi for B.Tech IT programmes under R-2023
- b) Approval of Verticals for Honors / Honors with Specialization for B.Tech IT programmes under R-2023
- Refinement of vertical course for UG degree programmes under R-2019
- d) Approval of Programme Core and Elective courses for PG degree programmes under R-2023

CHAIRMAN BOARD OF STUDIES

ANNEXURE I

Actions taken for Minutes of 19th BoS Meeting

As per BOS Committee suggestion,

- The curriculum should not focus on a particular language. In C Programming some Problem
 Solving Concepts may be added. The course name may also be renamed.
- Either Computer Organization or Computer Architecture course may be offered as a 3
 credit course.
- Data Structures may be offered in 3rd semester using C or C++. Lateral Entry students may
 be offered with some bridge courses for C and C++.
- Database Management Systems & Java course may be offered in 4th Semester.
- Design and Analysis of Algorithms may be offered in 4th semester along with practical component and L, T, P, E and C modified as 3, 0, 2, 0 and 4 respectively.
- Program Elective Course (PEC) may be offered from 5th semester onwards.
- Some communication related courses may be added related to IT. Courses related to Signals
 and Systems may be offered.
- Python Programming should be made as a mandatory self-learning course for the students during 2nd Semester.
- Quantum computing should not be offered as a Programme Core Course. Instead it may be
 offered as an Elective.
- Semester 6 is heavily loaded hence courses may be rearranged. Some courses should be reduced.
- Semester 7 and 8 is light weighted, so one elective course may be offered in 7th semester.
- UI/UX Design may be moved to 6th semester.
- Operating System Security subject may be given as the first elective course
- All text books and reference books must be from latest versions. All reference books must include the year of publication.
- Online reference links may be given for the subject 'Research Methodology and IPR'
- Laboratory of Advanced Data Structures may be handled in any programming language.
 Hence the reference books in specific to C++ may be modified.
- Course Outcomes of Vulnerability Assessment and Penetration Testing Theory may be modified. All laboratory exercises of Vulnerability Assessment and Penetration Testing may be modified.

BOARD OF STUDIES

20th BOARD OF STUDIES MEETING - DEPARTMENT OF CSE, IT

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2nd BOARD OF STUDIES MEETING - DEPARTMENT OF AI&DS ON 25.11.2023





20th BOARD OF STUDIES MEETING - DEPARTMENT OF CSE, IT

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2nd BOARD OF STUDIES MEETING - DEPARTMENT OF AI&DS ON 25.11.2023



