

GNIT

GURUNANAK INSTITUTE OF TECHNOLOGY

**Approved by A.I.C.T.E., New Delhi
Affiliated to MAKAUT, West Bengal**

GNIT

**MINUTES OF THE MEETING, 2023 OF BOARD OF
STUDIES OF COMPUTER SCIENCE AND
ENGINEERING DEPARTMENT HELD ON
26/04/2023 AT 11:00 A.M. FOR B.TECH**

Ref. No : GNIT/CSE/BOS/2023/01

Date: 03/04/2023

NOTICE

It is hereby informed to all the members of the Board of Studies that a meeting in blended mode will be held on 26/04/2023 from 11:00 a.m. onwards for B.Tech on the following agendas:

Agenda:

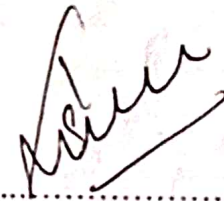
1. Confirmation of Minutes of last BOS Meeting.
2. Approval of Action Taken Report of the resolutions taken in the last meeting
3. Discussion on implementation of R23 Curriculum of Computer Science and Engineering with NEP 2020.
4. Discussion on curriculum feedback.

The online link of the meeting is <https://meet.google.com/tkt-yjnf-fuo>.

All are requested to attend the meeting.



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Dr. Sangeeta Bhattacharya
Chairperson, BOS
DR. SANGEETA BHATTACHARYA
Head of the Department
Computer Science and Engineering
Guru Nanak Institute of Technology
Sodepore, Panihati, Kol-114



.....
Ms. Srabani Kundu
Convener, BoS

Copy To:

1. Principal
2. Registrar
3. Prof. Utpal Raychowdhury, Dean Academics
4. Prof. Dr. Kaushik Roy, Dept. of Computer Science, West Bengal State University
5. Dr. Ram Sarkar, Dept. of Computer Science & Engineering, Jadavpur University
6. Mr. Indranil Roy Chowdhury, Sr. Manager – AI/ML & Cognitive, CTS
7. All Internal BoS Members

MINUTES OF THE MEETING

Referring to the notice no. GNIT/CSE/BOS/2023/01, dated 03/04/2023, a meeting of the Board of Studies of Computer Science and Engineering department for B.Tech was held on 26/04/2023 from 11:00 a.m. in blended mode.

Members Present:

Sl. No.	Name of the Member	Designation
External		
1	Dr. Kaushik Roy	Dept. of Computer Science. West Bengal State University
2	Dr. Ram Sarkar	Jadavpur University
3	Mr. Indranil Roy Chowdhury	Sr. Manager – AI/ML & Cognitive, CTS
Internal		
1	Dr. Sangeeta Bhattacharya	HoD and Chairperson, BoS
2	Ms. Srabani Kundu	Convener, BoS
3	Dr. Suranjan Ghose	Faculty
4	Dr. Suman Bhattacharya	Faculty
5	Dr. Mahamuda Sultana	Faculty
6	Dr. Rupak Chakraborty	Faculty
7	Mr. Amrut Ranjan Jena	Faculty
8	Dr. Ananjan Maiti	Faculty
9	Ms. Ipsita Saha	Faculty
10	Mr. Mology Dhar	Faculty
11	Ms. Mandira Banik	Faculty
12	Mr. Sourish Mitra	Faculty
13	Ms. Sayani Chandra	Faculty
14	Ms. Pallabi Das	Faculty
15	Ms. Bidyutmal Saha	Faculty
16	Mr. Rafiqul Islam	Faculty
17	Mr. Krishnendu Chowdhury	Faculty
18	Mr. Nirupam Saha	Faculty
19	Ms. Paramita Sarkar	Faculty
20	Ms. Masuma Sultana	Faculty
21	Mr. Ahana Ghosh	Faculty
22	Mr. Abhirup Sinha	Faculty
23	Mr. Sumit Kumar Banerjee	Faculty
24	Mr. Sougata Sarkar	Faculty
25	Mr. Ratnadeep Mazumdar	Faculty

Members Absent:

Internal		
Sl. No.	Name of the Member	Designation
1	Dr. Moumita Das	Faculty
2	Mr. Debraj Das	Faculty
3	Mr. Souvik Mazumdar	Faculty
4	Mr. Debashis Dhar	Faculty
5	Mr. Deepayan Pal	Faculty
6	Dr. Sayantan Nath	Faculty

The discussion was based on the following agenda:

Agenda:

1. Confirmation of Minutes of last BOS Meeting.
2. Approval of Action Taken Report of the resolutions taken in the last meeting
3. Discussion on implementation of R23 Curriculum of Computer Science and Engineering with NEP 2020.
4. Discussion on curriculum feedback.

Resolutions:

The following resolutions are made agenda wise as per the suggestions from the experts and members:

Agenda 1: Confirmation of Minutes of last BOS Meeting

The minutes of last BOS meeting was duly confirmed and approved by the members.

Agenda 2: Approval of Action Taken Report of the resolutions taken in the last meeting

The members noted the Action taken report of the last held BOS meeting's resolution.

Agenda 3: Discussion on implementation of R23 Curriculum of Computer Science and Engineering with NEP 2020.

During the discussion on the implementation of the R23 Curriculum of Computer Science and Engineering in accordance with the guidelines of NEP 2020, the Board of Studies (BoS)


members prepared a tentative list of courses and discussed the teaching process to ensure a more realistic and future-ready curriculum for the students.

Agenda 4: Discussion on curriculum feedback .

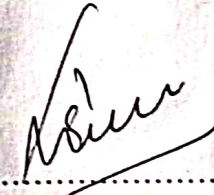
It is decided in the BoS that feedback on R21 curriculum will be taken from different Stake holders like Alumni, Industry experts.

The suggestions are approved by all members present in the BoS meeting.

The meeting ended with vote of thanks by the Convener of BoS.



Dr. Sangeeta Bhattacharya
Chairperson, BoS
Head of the Department
Computer Science and Engineering
Guru Nanak Institute of Technology
Sodepore, Panihati, Kol-114



Ms. Srabani Kundu
Convener, BoS

ANNEXURE I

1ST Year 1st Semester: 1st Semester

Sl. No.	Category	Course Code	Course Title	Hours per week				Credits
				L	T	P	Total	
THEORY								
1	Basic Science course	PH101	Physics-I	3	0	0	3	3
2	Basic Science course	M101	Mathematics -I	4	0	0	4	4
3	Humanities and Social Sciences including Management courses	HSMC 101	Professional Communication	2	0	0	2	2
PRACTICAL								
4	Basic Science course	PH191	Physics-I Lab	0	0	3	3	1.5
5	Engineering Science Courses	ME 191	Workshop & Manufacturing Practices Lab	0	0	3	3	1.5
6	PROJECT	PR191	Theme based Project I	0	0	1	1	0.5
7	PROJECT	PR192	Skill Development I: Soft Skill	0	0	1	1	0.5
MANDATORY ACTIVITIES / COURSES								
8	Mandatory Course	MC181	Induction Program	0	0	0	0	2Units
TOTAL CREDIT								13.0

Sl. No.	Category	Course Code	Course Title	Hours per week				Credits
				L	T	P	Total	
A. THEORY								
5	Program Core Course	CS302	Data Structures	3	0	0	3	3
6	Humanities and Social Sciences including Management courses	HSMC 303	Universal Human Values 2: Understanding Harmony	3	0	0	3	3
B. PRACTICAL								
7	Engineering Science Courses	M (CS)391	Numerical Methods Lab	1	0	3	3	2.5
8	Engineering Science Courses	ESC391	Digital and Analog Electronics Lab	0	0	3	3	1.5
9	Program Core Course	CS391	ITWorkshop Lab (SciLab/MATLAB/C++)	0	0	3	3	1.5
10	Program Core Course	CS392	Data Structures Lab	0	0	3	3	1.5
11	PROJECT	PR391	Theme based Project III	0	0	1	1	0.5
12	PROJECT	PR392	Skill Development III: Technical Seminar Presentation	1	0	0	1	0.5
C. MANDATORY ACTIVITIES / COURSES								
13	MC	MC 301	Environmental Science	0	0	3	3	3 Units
TOTAL CREDIT WITHOUT MOOCS COURSES								26.0
D. MOOCS COURSES**								
14	MOOCS COURSES	HM301	MOOCS COURSE-I	1	3	1	4	4
TOTAL CREDIT WITH MOOCS COURSES								30

Collective Data from 3rd to 6th Semester (Summer/Winter Training during Semester Break & Internship should be done after 5th Semester or 6th Semester). All related certificates to be collected by the training/ internship coordinator(s).

** MOOCS COURSES for HONOURS/MINOR Degree are Program specific and to be taken from MOOCS BASKET

2nd Year 2nd Semester: 4th Semester

Sl. No.	Category	Course Code	Course Title	Hours per week				Credits
				L	T	P	Total	
A. THEORY								
1	Program Course	Core PCC-CS401	Computer Organization and Architecture	3	0	0	3	3
2	Program Course	Core PCC-CS402	Design and Analysis of Algorithms	3	0	0	3	3
3	Program Course	Core PCC-CS403	Operating Systems	3	0	0	3	3
4	Program Course	Core PCC-CS404	Formal Language and Automata Theory	3	0	0	3	3
5	Humanities and Social Sciences including Management courses	HSMC 402	Gender Culture and Development	2	0	0	2	2
6	Basic Science course	BSC401	Probability and Statistics	3	0	0	3	3
B. PRACTICAL								
7	Program Course	Core PCC-CS491	Computer Organization and Architecture Lab	0	0	3	3	1.5
8	Program Course	Core PCC-CS492	Design and Analysis of Algorithms Lab	0	0	3	3	1.5
9	Program Course	Core PCC-CS493	Operating Systems Lab	0	0	3	3	1.5
10	Engineering Science Courses	ESC491	Programming using Python	0	0	3	3	1.5
11	PROJECT	PR 491	Theme based Project IV	0	0	1	1	0.5
12	PROJECT	PR492	Skill Development IV: Soft Skill & Aptitude-I	1	0	0	1	0.5
C. MANDATORY ACTIVITIES / COURSES								
13	MC	MC 481	Learning an Art Form [vocal or instrumental, dance, painting, clay modeling, etc.] OR Environmental Protection Initiatives	0	0	0	3	3Units
TOTAL CREDIT WITHOUT MOOCS COURSES								24
D. MOOCS COURSES								
14	MOOCS COURSES	HM401	MOOCS COURSE-II	3	1	0	4	4
TOTAL CREDIT WITH MOOCS COURSES								28

Collective Data from 3rd to 6th Semester (Summer/Winter Training during Semester Break & Internship should be done after 5th Semester or 6th Semester). All related certificates to be collected by the training/ internship coordinator(s).

3rd Year 1st Semester: 5th Semester

Sl. No.	Category	Course Code	Course Title	Hours per week				Credits
				L	T	P	Total	
A. THEORY								
1	Humanities and Social Sciences including Management courses	IISMC 505	Principles of Management	2	0	0	2	2
2	Program Core Course	PCC-CS501	Compiler Design	3	0	0	3	3
3	Program Core Course	PCC-CS502	Database Management Systems	3	0	0	3	3
4	Program Core Course	PCC-CS503	Object Oriented Programming using Java	3	0	0	3	3
5	Professional Elective courses	PEC-CS-T-501	Advanced Algorithms	3	0	0	3	3
		PEC-CS-S-501	Advanced Computer Architecture					
		PEC-CS-D-501	Neural Networks and Deep Learning					
		PEC-CS-A-501	Artificial Intelligence					
B. PRACTICAL								
6	Program Core Course	PCC-CS591	Compiler Design Lab	0	0	3	3	1.5
7	Program Core Course	PCC-CS592	Database Management Systems Lab	0	0	3	3	1.5
8	Program Core Course	PCC-CS593	Object Oriented Programming using Java Lab	0	0	3	3	1.5
9	Professional Elective courses	PEC-CS-T-591	Advanced Algorithms Lab	0	0	3	3	1.5
		PEC-CS-S-591	Advanced Computer Architecture Lab					

		PEC-CS-D-591	Neural Networks and Deep Learning Lab					
		PEC-CS-A-591	Artificial Intelligence Lab					
10	PROJECT	PR 591	Minor Project I	0	0	3	2	1
11	PROJECT	PR 592	Skill Development V: Soft Skill & Aptitude-II	1	0	0	1	0.5
C. MANDATORY ACTIVITIES / COURSES								
12	MC	MC 501	Constitution of India	3	0	0	3	3Units
TOTAL CREDIT WITHOUT MOOCS COURSES								21.5
D. MOOCS COURSES**								
1 3	MOOCS COURSES	HM501	MOOCS COURSE-III	3	1	0	4	4
TOTAL CREDIT WITH MOOCS COURSES								25.5

Collective Data from 3rd to 6th Semester (Summer/Winter Training during Semester Break & Internship should be done after 5th Semester or 6th Semester). All related certificates to be collected by the training/ internship coordinator(s).

** MOOCS COURSES for HONOURS/MINOR Degree are Program specific and to be taken from MOOCS BASKET

3rd Year 2nd Semester: 6th Semester

Sl. No.	Category	Course Code	Course Title	Hours per week				Credits
				L	T	P	Total	
A. THEORY								
1	Humanities and Social Sciences including Management courses	HSMC 604	Economics for Engineers	2	0	0	2	2
2	Program Core Course	PCC-CS601	Computer Networks	3	0	0	3	3
3	Program Core Course	PCC-CS602	Software Engineering	3	0	0	3	3
4	Professional Elective courses	PEC-CS-T-601	Microprocessor and Microcontroller	3	0	0	3	3
		PEC-CS-S-601	Advanced Operating Systems					
		PEC-CS-D-601	Machine Learning					
		PEC-CS-A-601	Web and Internet Technology					
5	Professional Elective courses	PEC-CS-T-602	Parallel and Distributed Algorithms	3	0	0	3	3
		PEC-CS-S-602	Embedded Systems					
		PEC-CS-D-602	Soft Computing					
		PEC-CS-A-602	Human Computer Interaction					
6	Open Elective	OEC-CS-601A	Introduction to Internet of	3	0	0	3	3

courses		Things						
	OEC-CS-601B	Bio-informatics						
	OEC-CS-601C	Robotics						

B. PRACTICAL

7	Program Course	Core	PCC-CS691	Computer Networks Lab	0	0	3	3	1.5
8	Program Course	Core	PCC-CS692	Software Engineering Lab	0	0	3	3	1.5
9	Professional Elective courses		PEC-CS-T-691	Microprocessor and Microcontroller Lab	0	0	3	3	1.5
			PEC-CS-S-691	Advanced Operating Systems Lab					
			PEC-CS-D-691	Machine Learning Lab					
			PEC-CS-A-691	Web and Internet Technology Lab					
10	PROJECT		PR 691	Minor Project II	0	0	3	2	1
11	PROJECT		PR 692	Skill Development VI: Soft Skill & Aptitude-III	1	0	0	1	0.5

C. MANDATORY ACTIVITIES / COURSES

12	MC		MC 601	Intellectual Property Right	3	0	0	3	3Units
TOTAL CREDIT WITHOUT MOOCS COURSES									23.0

D. MOOCS COURSES**

13	MOOCS COURSES		HM601	MOOCS COURSE-IV	3	1	0	4	4
TOTAL CREDIT WITH MOOCS COURSES									27

Collective Data from 3rd to 6th Semester (Summer/Winter Training during Semester Break & Internship should be done after 5th Semester or 6th Semester). All related certificates to be collected by the training/ internship coordinator(s).

** MOOCS COURSES for HONOURS/MINOR Degree are Program specific and to be taken from MOOCS BASKET

4th Year 1st Semester: 7th Semester

Sl No	Course Code	Paper Code	Theory	Contact Hours /Week				Credit Points
				L	T	P	Total	
A. THEORY								
1	Professional Elective courses	PEC-CS-T-701	Information Theory and Coding	3	0	0	3	3
		PEC-CS-S-701	Ad-Hoc and Sensor Networks					
		PEC-CS-D-701	Data Mining and Data Warehouse					
		PEC-CS-A-701	Cloud Computing					
2	Professional Elective courses	PEC-CS-T-702	Quantum Computing	3	0	0	3	3
		PEC-CS-S-702	Mobile Computing					
		PEC-CS-D-702	Natural Language Processing					
		PEC-CS-A-702	Cryptography and Network Security					
3	Open Elective courses	OEC-CS-701A	High Performance Computing	3	0	0	3	3
		OEC-CS-701B	Image Processing					
		OEC-CS-701C	Optimization Techniques					
4	Open Elective courses	OEC-CS-702A	Cyber Law and Ethics	3	0	0	3	3
		OEC-CS-702B	Soft Skills and Interpersonal Communication					
		OEC-CS-702C	Foreign Language					

B. PRACTICAL								
5	Professional Elective courses	PEC-CS-T-791	Information Theory and Coding Lab	0	0	0	3	1.5
		PEC-CS-S-791	Ad-Hoc and Sensor Networks Lab					
		PEC-CS-D-791	Data Mining and Data Warehousing Lab					
		PEC-CS-A-791	Cloud Computing Lab					
6	Open Elective courses	OEC-CS-791A	High Performance Computing Lab	0	0	3	3	1.5
		OEC-CS-791B	Image Processing Lab					
		OEC-CS-791C	Optimization Techniques Lab					
7	PROJECT	PR 791	Major Project-I	0	0	0	4	2
8	PROJECT	PR 792*	Industrial Training / Internship	0	0	0	0	1
9	PROJECT	PR 793	Skill Development VII: Seminar & Group Discussion	1	0	0	1	0.5
C. MANDATORY ACTIVITIES / COURSES								
10	MC	MC 781	Entrepreneurship & Innovation Skill	3	0	0	3	3 Units
TOTAL CREDIT WITHOUT MOOCS COURSES								18.5
D. MOOCS COURSES**								
11	MOOCS COURSES	HM701	MOOCS COURSE-V	3	1	0	4	4
TOTAL CREDIT WITH MOOCS COURSES								22.5

Collective Data from 3rd to 6th Semester (Summer/Winter Training during Semester Break & Internship should be done after 5th Semester or 6th Semester). All related certificates to be collected by the training/ internship coordinator(s).

** MOOCS COURSES for HONOURS/MINOR Degree are Program specific and to be taken from MOOCS BASKET

4th Year 2nd Semester: 8th Semester

Sl No	Course Code	Paper Code	Theory	Contact Hours /Week				Credit Points
				L	T	P	Total	
A. THEORY								
1	Professional Elective courses	PEC-CS-T-801	Advance Graph Algorithms	3	0	0	3	3
		PEC-CS-S-801	Real Time System					
		PEC-CS-D-801	Data Analytics					
		PEC-CS-A-801	Computer Graphics					
2	Open Elective courses	OEC-CS-801A	Human Resource Development and Organizational Behavior	3	0	0	3	3
		OEC-CS-801B	VLSI					
		OEC-CS-801C	Simulation and Modeling					
3	Open Elective courses	OEC-CS-802A	Values and Ethics in Profession	3	0	0	3	3
		OEC-CS-802B	History of Science					
		OEC-CS-802C	Economic Policies in India					

PRACTICAL

4	PROJECT	PR 891	Major Project-II	0	0	0	12	6
5	PROJECT	PR 892	Grand Viva	0	0	0	0	1

C. MANDATORY ACTIVITIES / COURSES

6	MC	MC 801	Essence of Indian Knowledge Tradition	0	0	3	3	3 Units
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TOTAL CREDIT								16
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