

GNIT

GURUNANAK INSTITUTE OF TECHNOLOGY

Approved by A.I.C.T.E., New Delhi

Affiliated to MAKAUT, West Bengal

GNIT

**MINUTES OF THE MEETING, 2021 OF BOARD OF
STUDIES OF COMPUTER SCIENCE AND
ENGINEERING DEPARTMENT HELD ON
24/03/2021 AT 11:00 A.M. FOR B.TECH**

Ref. No : GNIT/CSE/BOS/2021/01

Date: 19/03/2021

NOTICE

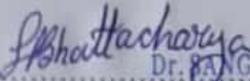
It is hereby informed to all the members of the Board of Studies that an online meeting will be held in the Google Meet platform on 24/03/2021 from 11:00 a.m. onwards for B.Tech on the following agendas:

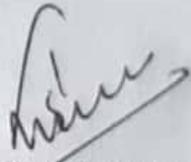
Agenda:

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 the courses added in Regulation 21 (R21) Curriculum of Computer Science and Engineering w.e.f. 2021-22 autonomy admission batch to strengthen skill development, employability, and entrepreneurship
4. Finalization of Elective Courses added in R21 Curriculum
5. Approval of new courses added in R21 curriculum
6. Finalization of R21 Curriculum and Syllabus of Computer Science and Engineering
7. Analysis of students performance in project and innovative activities with respect to Regulation 18 curriculum

The link of the meeting is <https://meet.google.com/akh-yyiw-kuf>.

All are requested to attend the meeting.


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


.....
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/2021/01, dated 19/03/2021, a meeting of the Board of Studies of Computer Science and Engineering department for B.Tech was held on 24/03/2021 from 11:00 a.m. in the Google Meet platform.

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	Professor
4	Dr. Suman Bhattacharya	Professor
5	Dr. Mahamuda Sultana	Associate Professor
6	Dr. Rupak Chakraborty	Associate Professor
7	Dr. Amrut Ranjan Jena	Associate Professor
8	Dr. Moumita Das	Associate Professor
9	Dr. Ananjan Maiti	Asst. Professor
10	Ms. Ipsita Saha	Asst. Professor
11	Mr. Moloy Dhar	Asst. Professor
12	Ms. Mandira Banik	Asst. Professor
13	Mr. Sourish Mitra	Asst. Professor
14	Ms. Sayani Chandra	Asst. Professor
15	Ms. Pallabi Das	Asst. Professor
16	Ms. Bidyutmala Saha	Asst. Professor
17	Mr. Rafiqul Islam	Asst. Professor
18	Mr. Krishnendu Chowdhury	Asst. Professor
19	Mr. Nirupam Saha	Asst. Professor
20	Ms. Masuma Sultana	Asst. Professor
21	Mr. Sougata Sarkar	Asst. Professor

Members Absent:

Internal		
Sl. No.	Name of the Member	Designation
1	Mr. Ahana Ghosh	Asst. Professor
2	Mr. Abhirup Sinha	Asst. Professor

3	Dr. Sayantan Nath	Asst. Professor
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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 the courses added in Regulation 21 (R21) Curriculum of Computer Science and Engineering w.e.f. 2021-22 autonomy admission batch to strengthen skill development, employability, and entrepreneurship
4. Finalization of Elective Courses added in R21 Curriculum
5. Approval of new courses added in R21 curriculum
6. Finalization of R21 Curriculum and Syllabus of Computer Science and Engineering
7. Analysis of students performance in project and innovative activities with respect to Regulation 18 curriculum

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 the courses added in Regulation 21 (R21) Curriculum of Computer Science and Engineering w.e.f. 2021-22 autonomy admission batch to strengthen skill development, employability, and entrepreneurship

Based on employer feedback and external member Mr. Indranil Roy Chowdhury, courses such as Foreign Language, Human Resource Development and Organizational Behavior, Skill Development in each semester, has been introduced with focus to enhance employability and skill development. Also, courses such as Entrepreneurship & Innovation Skill and Intellectual Property Right have been introduced to improve entrepreneurship ability. Also, several new courses have been introduced as Program Core, Professional Elective, and Open Elective keeping in focuses the important issues (Annexure I).

Minutes of BoS Meeting of CSE Dept. held on 24/03/2021

Agenda 4: Finalization of Elective Courses added in R21 Curriculum

Based on Alumni feedback to increase elective courses and allow multidisciplinary growth of the students, the number of professional and open electives has been increased in R21 curriculum. BoS members suggested replacing the course "Sensor Network and IoT" with two separate electives "Introduction to Internet of Things" in 6th semester as Open Elective and "Ad-Hoc and Sensor Networks" in 7th semester as Professional Elective. BoS members approved the other chosen elective courses (Vide Annexure II).

Agenda 5: Approval of new courses added in R21 curriculum

Based on students', employer, and alumni feedback and regulatory body's guidelines, several courses such as Discrete Mathematics, Programming using Python, Programming Using Python, Neural Networks and Deep Learning, etc. have been introduced to meet current industry need. BoS members approved the addition of the new courses in R21 curriculum (vide Annexure-III).

Agenda 6: Finalization of R21 Curriculum and Syllabus of Computer Science and Engineering

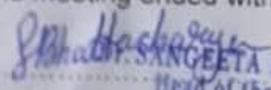
The BoS members agreed the drafted curriculum and syllabus of Computer Science and Engineering discipline is as per current need and approved the finalization of R21 curriculum and syllabus (Vide Annexure IV).

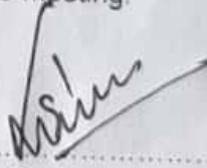
Agenda 7: Analysis of students performance in project and innovative activities with respect to Regulation 18 curriculum

BoS members reviewed 3rd and 5th semester students' feedback for project and innovative activities in Regulation 18 and suggested to move forward the work in line with startup and entrepreneur regards.

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
Head of the Department
Computer and Engineering
Institute of Technology
Pacihati, Kol-114


Ms. Srabani Kundu
Convener, BoS

ANNEXURE-I

Name of the Course	Course Code	Employability/ Entrepreneurship/ Skill development
Professional Communication	HSMC 101	Skill Development
Workshop & Manufacturing Practices Lab	ME 191	Skill Development
Theme based Project I	PR191	Skill Development, Entrepreneurship
Skill Development I: Soft Skill	PR192	Employability, Skill Development
Professional Communication LAB	HSMC 291	Employability, Skill Development, Entrepreneurship
Theme based Project II	PR291	Skill Development, Entrepreneurship
Skill Development II: Life Skill	PR292	Skill Development
Workshop & Manufacturing Practices Lab	ME 291	Skill Development
Theme based Project III	PR391	Skill Development, Entrepreneurship
Skill Development III: Technical Seminar Presentation	PR392	Employability, Entrepreneurship
Theme based Project IV	PR 491	Skill Development, Entrepreneurship
Skill Development IV: Soft Skill & Aptitude-I	PR492	Skill Development
Minor Project I	PR 591	Skill Development, Entrepreneurship
Skill Development V: Soft Skill & Aptitude-II	PR 592	Skill Development
Minor Project II	PR 691	Skill Development, Entrepreneurship
Skill Development VI: Soft Skill & Aptitude-III	PR 692	Skill Development
Intellectual Property Right	MC 601	Entrepreneurship
Major Project-I	PR 791	Skill Development, Entrepreneurship
Industrial Training / Internship	PR 792*	Employability, Skill Development
Skill Development VII: Seminar & Group Discussion	PR 793	Employability, Skill Development, Entrepreneurship
Entrepreneurship & Innovation Skill	MC 781	Entrepreneurship
Major Project-II	PR 891	Skill Development, Entrepreneurship
Principles of Management	HSMC 505	Employability, Entrepreneurship
Economics for Engineers	HSMC 604	Employability, Entrepreneurship

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Analog Electronics	ESC301	Employability
Digital and Analog Electronics Lab	ESC391	Employability, Skill Development
Probability and Statistics	BSC401	Employability
Programming using Python	ESC491	Employability, Skill Development
Advanced Algorithms	PEC-CS-T-501	Employability
Advanced Computer Architecture	PEC-CS-S-501	Employability
Neural Networks and Deep Learning	PEC-CS-D-501	Employability
Artificial Intelligence	PEC-CS-A-501	Employability
Advanced Algorithms Lab	PEC-CS-T-591	Employability, Skill Development
Advanced Computer Architecture Lab	PEC-CS-S-591	Employability, Skill Development
Neural Networks and Deep Learning Lab	PEC-CS-D-591	Employability, Skill Development
Artificial Intelligence Lab	PEC-CS-A-591	Employability, Skill Development
Microprocessor and Microcontroller	PEC-CS-T-601	Employability
Advanced Operating Systems	PEC-CS-S-601	Employability
Machine Learning	PEC-CS-D-601	Employability
Web and Internet Technology	PEC-CS-A-601	Employability
Parallel and Distributed Algorithms	PEC-CS-T-602	Employability
Embedded Systems	PEC-CS-S-602	Employability
Soft Computing	PEC-CS-D-602	Employability
Human Computer Interaction	PEC-CS-A-602	Employability
Introduction to Internet of Things	OEC-CS-601A	Employability
Bio-informatics	OEC-CS-601B	Employability
Robotics	OEC-CS-601C	Employability
Microprocessor and Microcontroller Lab	PEC-CS-T-691	Employability, Skill Development
Advanced Operating Systems Lab	PEC-CS-S-691	Employability, Skill Development
Machine Learning Lab	PEC-CS-D-691	Employability, Skill Development
Web and Internet Technology Lab	PEC-CS-A-691	Employability, Skill Development
Information Theory and Coding	PEC-CS-T-701	Employability
Ad-Hoc and Sensor Networks	PEC-CS-S-701	Employability
Data Mining and Data Warehouse	PEC-CS-D-701	Employability
Cloud Computing	PEC-CS-A-701	Employability
Quantum Computing	PEC-CS-T-702	Employability
Mobile Computing	PEC-CS-S-702	Employability
Natural Language Processing	PEC-CS-D-702	Employability
Cryptography and Network Security	PEC-CS-A-702	Employability
High Performance Computing	OEC-CS-701A	Employability
Image Processing	OEC-CS-701B	Employability

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Optimization Techniques	OEC-CS-701C	Employability
Cyber Law and Ethics	OEC-CS-702A	Employability
Soft Skills and Interpersonal Communication	OEC-CS-702B	Employability, Skill Development, Entrepreneurship
Foreign Language	OEC-CS-702C	Employability, Skill Development, Entrepreneurship
Information Theory and Coding Lab	PEC-CS-T-791	Employability, Skill Development
Ad-Hoc and Sensor Networks Lab	PEC-CS-S-791	Employability, Skill Development
Data Mining and Data Warehousing Lab	PEC-CS-D-791	Employability, Skill Development
Cloud Computing Lab	PEC-CS-A-791	Employability, Skill Development
High Performance Computing Lab	OEC-CS-791A	Employability, Skill Development
Image Processing Lab	OEC-CS-791B	Employability, Skill Development
Optimization Techniques Lab	OEC-CS-791C	Employability, Skill Development
Advance Graph Algorithms	PEC-CS-T-801	Employability
Real Time System	PEC-CS-S-801	Employability
Data Analytics	PEC-CS-D-801	Employability
Computer Graphics	PEC-CS-A-801	Employability
Human Resource Development and Organizational Behavior	OEC-CS-801A	Employability, Entrepreneurship
VLSI	OEC-CS-801B	Employability
Simulation and Modeling	OEC-CS-801C	Employability
Values and Ethics in Profession	OEC-CS-802A	Employability, Entrepreneurship
History of Science	OEC-CS-802B	Entrepreneurship
Economic Policies in India	OEC-CS-802C	Entrepreneurship

ANNEXURE-II

Semester	Course Code	Course Name
5 th	PEC-CS-T-501	Advanced Algorithms
	PEC-CS-S-501	Advanced Computer Architecture
	PEC-CS-D-501	Neural Networks and Deep Learning
	PEC-CS-A-501	Artificial Intelligence
	PEC-CS-T-591	Advanced Algorithms Lab
	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
6 th	PEC-CS-T-601	Microprocessor and Microcontroller
	PEC-CS-S-601	Advanced Operating Systems
	PEC-CS-D-601	Machine Learning
	PEC-CS-A-601	Web and Internet Technology
	PEC-CS-T-602	Parallel and Distributed Algorithms
	PEC-CS-S-602	Embedded Systems
	PEC-CS-D-602	Soft Computing
	PEC-CS-A-602	Human Computer Interaction
	OEC-CS-601A	Introduction to Internet of Things
	OEC-CS-601B	Bio-informatics
	OEC-CS-601C	Robotics
	PEC-CS-T-691	Microprocessor and Microcontroller Lab
	PEC-CS-S-691	Advanced Operating Systems Lab
	PEC-CS-D-691	Machine Learning Lab
	PEC-CS-A-691	Web and Internet Technology Lab
	7 th	PEC-CS-T-701
PEC-CS-S-701		Ad-Hoc and Sensor Networks
PEC-CS-D-701		Data Mining and Data Warehouse
PEC-CS-A-701		Cloud Computing
PEC-CS-T-702		Quantum Computing
PEC-CS-S-702		Mobile Computing
PEC-CS-D-702		Natural Language Processing
PEC-CS-A-702		Cryptography and Network Security
OEC-CS-701A		High Performance Computing
OEC-CS-701B		Image Processing
OEC-CS-701C		Optimization Techniques
OEC-CS-702A		Cyber Law and Ethics
OEC-CS-702B		Soft Skills and Interpersonal Communication
OEC-CS-702C		Foreign Language
PEC-CS-T-791		Information Theory and Coding Lab
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
OEC-CS-791A	High Performance Computing Lab	

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	OEC-CS-791B	Image Processing Lab
	OEC-CS-791C	Optimization Techniques Lab
8 th	PEC-CS-T-801	Advance Graph Algorithms
	PEC-CS-S-801	Real Time System
	PEC-CS-D-801	Data Analytics
	PEC-CS-A-801	Computer Graphics
	OEC-CS-801A	Human Resource Development and Organizational Behavior
	OEC-CS-801B	VLSI
	OEC-CS-801C	Simulation and Modeling
	OEC-CS-802A	Values and Ethics in Profession
	OEC-CS-802B	History of Science
	OEC-CS-802C	Economic Policies in India

ANNEXURE-III

New Courses Introduced in R21	
Course Code	Course Name
PR192	Skill Development I: Soft Skill
PR292	Skill Development II: Life Skill
M301	Discrete Mathematics
ESC301	Analog Electronics
PCC-CS301	ITWorkshop(SciLab/MATLAB/C++)
HSMC 303	Universal Human Values 2: Understanding Harmony
PR392	Skill Development III: Technical Seminar Presentation
HSMC 402	Gender Culture and Development
BSC401	Probability and Statistics
ESC491	Programming using Python
PR492	Skill Development IV: Soft Skill & Aptitude-I
MC 481	Learning an Art Form [vocal or instrumental, dance, painting, clay modeling, etc.] OR Environmental Protection Initiatives
PEC-CS-T-501	Advanced Algorithms
PEC-CS-D-501	Neural Networks and Deep Learning
PCC-CS591	Compiler Design Lab
PEC-CS-T-591	Advanced Algorithms Lab
PEC-CS-S-591	Advanced Computer Architecture Lab
PEC-CS-D-591	Neural Networks and Deep Learning Lab
PR 592	Skill Development V: Soft Skill & Aptitude-II
PEC-CS-T-602	Parallel and Distributed Algorithms
PEC-CS-A-602	Human Computer Interaction
PEC-CS-S-691	Advanced Operating Systems Lab
PEC-CS-D-691	Machine Learning Lab
PR 692	Skill Development VI: Soft Skill & Aptitude-III
MC 601	Intellectual Property Right
PEC-CS-T-701	Information Theory and Coding
PEC-CS-S-701	Ad-Hoc and Sensor Networks
PEC-CS-T-702	Quantum Computing
OEC-CS-701A	High Performance Computing
OEC-CS-701C	Optimization Techniques
OEC-CS-702B	Soft Skills and Interpersonal Communication
OEC-CS-702C	Foreign Language
PEC-CS-T-791	Information Theory and Coding Lab
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
OEC-CS-791A	High Performance Computing Lab
OEC-CS-791B	Image Processing Lab
OEC-CS-791C	Optimization Techniques Lab
PR 792	Industrial Training / Internship

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PR 793	Skill Development VII Seminar & Group Discussion
MC 781	Entrepreneurship & Innovation Skill
PEC-CS-T-801	Advance Graph Algorithms
PR 792	Industrial Training / Internship
PEC-CS-D-801	Big Data Analytics
OEC-CS-801A	Human Resource Development and Organizational Behavior
OEC-CS-802B	History of Science
PR 892	Grand Viva

ANNEXURE IV

1 ST Year 1 ST Semester; 1 ST 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 Sciences	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

1ST Year 2nd Semester: 2nd Semester

Sl. No.	Category	Course Code	Course Title	Hours per week				Credits
				L	T	P	Total	
THEORY								
1	Basic Science courses	CH 201	Chemistry-I	3	0	0	3	3
2	Basic Science courses	M 201	Mathematics –II	4	0	0	4	4
3	Engineering Science Courses	EE 201	Basic Electrical Engineering	3	0	0	3	3
4	Engineering Science Courses	CS 201	Programming for Problem Solving	3	0	0	3	3
PRACTICAL								
5	Basic Science course	CH 291	Chemistry-I Lab	0	0	3	3	1.5
6	Humanities and Social Sciences including Management courses	HSMC 291	Professional Communication LAB	0	0	2	2	1.0
7	Engineering Science Courses	EE 291	Basic Electrical Engineering Lab	0	0	3	3	1.5
8	Engineering Science Courses	ME 292	Engineering Graphics & Design Lab	0	0	3	3	1.5
9	Engineering Science Courses	CS 291	Programming for Problem Solving Lab	0	0	3	3	1.5
10	PROJECT	PR291	Theme based Project II	0	0	1	1	0.5
11	PROJECT	PR292	Skill Development II: Life Skill	1	0	0	1	0.5
MANDATORY ACTIVITIES / COURSES								
12	Mandatory Course	MC281	NSS/Physical Activities / Meditation & Yoga / Photography	0	0	3	3	3 Units
TOTAL CREDIT								21

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 1st Semester; 3rd Semester								
Sl. No.	Category	Course Code	Course Title	Hours per week				Credits
				L	T	P	Total	
A. THEORY								
1	Basic Science course	M301	Discrete Mathematics	3	0	0	3	3
2	Engineering Science Courses	ESC301	Analog Electronics	3	0	0	3	3
3	Engineering Science Courses	ESC302	Digital Logic and Electronics	3	0	0	3	3
4	Program Core Course	PCC-CS301	ITWorkshop (SciLab/MATLAB/C++)	3	0	0	3	3
5	Program Core Course	PCC-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	PCC-CS391	ITWorkshop Lab (SciLab/MATLAB/C++)	0	0	3	3	1.5
10	Program Core Course	PCC-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

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2nd Year 2 nd Semester: 4 th 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).

Minutes of BoS Meeting of CSE Dept. held on 24/03/2021

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	HSMC 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					

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		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 courses	OEC-CS-601A	Introduction to Internet of Things	3	0	0	3	3
		OEC-CS-601B	Bio-informatics					

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		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

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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					

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		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					
B. 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
TOTAL CREDIT								16

Minutes of BoS Meeting of CSE Dept. held on 24/03/2021

GNIT

GURUNANAK INSTITUTE OF TECHNOLOGY

Approved by A.I.C.T.E., New Delhi

Affiliated to MAKAUT, West Bengal

GNIT

**MINUTES OF THE MEETING, 2020 OF BOARD OF
STUDIES OF COMPUTER SCIENCE AND
ENGINEERING DEPARTMENT HELD ON
18/09/2020 AT 11.00 AM**

Ref. No: GNIT/CSE/BOS/2020/02

Date: 24/08/2020

NOTICE

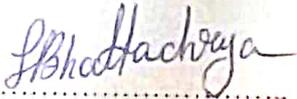
It is hereby informed to all the members of the Board of Studies that an online meeting will be held in the Google Meet platform on 18/09/2020 from 11:00 a.m. onwards for B.Tech on the following agendas:

Agenda:

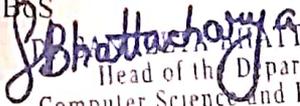
1. Discussion on organization of online classes
2. Conduction of Webinar and Beyond curriculum training program
3. Discussion on R&D activities
4. Discussion on reformation of Vision, Mission and PEO Statements
5. Discussion on the process to initiate the R18 curriculum feedback collection from different stakeholders

The link of the meeting is <https://meet.google.com/xfh-myrw-vwf>.

All are requested to attend the meeting.



Dr. Sangeeta Bhattacharya
Chairperson, BoS


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/2020/02 dated 24/08/2020, a meeting of the Board of Studies of Computer Science and Engineering department for B.Tech was held on 18/09/2020 from 11:00 a.m. in the Google Meet platform.

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	Dr. Amrut Ranjan Jena	Faculty
8	Dr. Sayantan Nath	Faculty
9	Dr. Moumita Das	Faculty
10	Dr. Ananjan Maiti	Faculty
11	Ms. Masuma Sultana	Faculty
12	Mr. Moloy Dhar	Faculty
13	Ms. Mandira Banik	Faculty
14	Mr. Sourish Mitra	Faculty
15	Ms. Sayani Chandra	Faculty
16	Ms. Pallabi Das	Faculty
17	Ms. Ahana Ghosh	Faculty
18	Ms. Bidyutmala Saha	Faculty
19	Mr. Rafiqul Islam	Faculty
20	Mr. Abhirup Sinha	Faculty
21	Mr. Nirupam Saha	Faculty
22	Mr. Sougata Sarkar	Faculty

Members Absent:

Internal		
Sl. No.	Name of the Member	Designation
1	Mr. Krishnendu Chowdhury	Faculty
2	Ms. Ipsita Saha	Faculty

In presence of Director (GNIT), External BOS members, the Head of the department of Computer Science and Engineering GNIT, a meeting was held on 18th July, 2020 to discuss the following agenda.

Agenda 1

Discussion on organization of online classes

The experts queried about the organization of the classes in online mode. They also suggested to take test, assignments, quiz, etc. in various innovative digital way, to engage the student's attention.

Agenda 2

Conduction of Webinar and Beyond curriculum training program

The experts suggested utilizing the pandemic situation to arrange webinars by national and international alumni, academia, and industry experts to bridge the curriculum gap. The experts also suggested including multidisciplinary subjects in beyond curriculum training program to encourage the students to get involved in various domain.

Agenda 3

Discussion on R&D activities

- 1) The experts queried the present status of Ph.D. enrolment of the departmental faculties and encouraged them to enrol at the earliest for the same.
- 2) They reviewed the publication of the faculties and suggested ways to publish in peer-reviewed journals and conferences.
- 3) They also suggested applying for grants and suggested to organize International conference by the department.

Agenda 4

Discussion on reformation of Vision, Mission and PEO Statements

Based on the analysis (Annexure I) of feedback taken from different stakeholder, the experts suggested no changes of the Vision, Mission and PEO Statements.

Agenda 5

Discussion on the process to initiate the R18 Curriculum feedback collection from different stockholders.

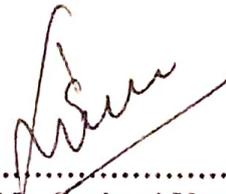
In response to the pandemic, the BoS members proposed gathering feedback on the R18 curriculum from stakeholders through digital platforms such as Google Forms and spreadsheets. In certain situations, feedback may also be collected via phone calls. This approach aims to ensure the safety and convenience of all parties involved while obtaining valuable input.

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

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



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



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Ms. Srabani Kundu
Convener, BoS