

MINUTES OF THE 2<sup>ND</sup> MEETING, 2022 OF BOARD OF STUDIES OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 22/08/2022 AT 3.00 PM

Venue: Room No. 316B

# MINUTES OF THE MEETING OF THE BOARD OF STUDIES (BOS) OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 22/08/2022 AT 3.00PM

Meeting has been started with the welcome address by the Chairperson and all the leave of absence has been granted. Then the meeting is continued with agenda wise discussion.

The following resolutions were adopted after detailed deliberation.

### Agenda 1: To confirm the minutes of the Board of Studies meeting held on 27.01.2022

**Resolution 1:** The members are requested to go through the minutes of the last meeting which was already circulated for any suggestion or remarks. The minutes of the last meeting was confirmed.

#### Agenda 2: To report action taken on the minutes of Board of Studies held on 27.01.2022

Resolution 2: The action taken report of the last meeting (Annexure 1) was placed and noted.

#### Agenda 3: Value added courses

**Resolution 3:** The list of value added courses to be offered during the forth-coming even semester break was placed. After discussion the following courses have been suggested to conduct.

- a. PCB Design using PROTEUS
- b. Smart Devices & Emerging Technologies
- c. FPGA: ARCHITECTURE, PROGRAMMING & TESTING
- d. AR- Advancing Technology

Committee further suggests defining a suitable content in the form for brochure before enrolment of the students. It has been decided that this list will be forwarded to Training and Placement Department for conducting/coordinating training on these courses.

#### Agenda 4: Result analysis of the students and success rate

**Resolution 4:** The result analysis of the students of B.TECH ECE 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> year for the academic year 2021-22 has been placed. The pass percentage has been improved.

## Agenda 5: Attainment analysis of Course Outcomes (COs), Program Outcomes(POs) and Program Specific Outcomes(PSOs)

**Resolution 5:** The attainment analysis of Course outcome was discussed. It is found attainment of all courses have been attained reference to the target level.

The attainment analysis of POs and PSOs for 2022 pass-out batch was placed. The attainment of POs and PSOs has been achieved context to target level.

#### Agenda 6: Placement and Higher Study analysis of 2022 pass-out batch

**Resolution 6:** The list of placed student along with company was placed. It has been emphasized that to motivate students for higher study and entrepreneurship.

#### Agenda 7: Discussion about MOOCs courses for the students

**Resolution 7:** HOD placed before the committee about the MOOCs courses for the students for the Honours Degree of the students. The committee mentioned their satisfaction on this.

#### Agenda 8: Research, development and consultancy activity

**Resolution 8:** The list of Faculty and Student publication was placed. The publication in Scopus, WoS, SCI has been increased.



## Agenda 9: Industry interaction

Resolution 9: The past activities related to industry interaction were placed. The impact analysis

## Agenda 10: Reporting of past events

Resolution 10: The list of past events – webinars, online FDP/workshop, NSS activity organized by the department was placed and noted.

## Agenda 11: Project evaluation committee

Resolution 11: The list of members for project evaluation committee was placed and approved.

## Agenda 12: Visiting faculty requirement.

Resolution 12: It has been discussed that the department should invite more industry expert as resource person to organize seminar, workshop, expert lecture on recent trends of research and industry.

## Agenda 13: Quality of Teaching Learning

Resolution 13: The Feedback Analysis on Teaching learning was placed. It has been discussed that the necessary corrective measures were already taken by the department.

## Agenda 14: Activity for Slow learner and Advanced learner

Resolution 14: The activities related to assisting the slow and advanced learner were placed.

### **Agenda 15: Departmental Academic Audit**

Resolution 15: The report of departmental Academic Audit for the academic year 2021-2022 was placed.

### Agenda 16: The question setter and moderator

Resolution 16: The list of the question setter and moderator has been placed for the corresponding courses. The list has been approved.

### Agenda 17: SWOC analysis and next year plan

Resolution 17: The SWOC analysis of the department was placed. It is suggested that the attention to be given for the publication of the patents. Alumni interaction need to be improved. Faculty members who are yet not enrolled in the doctoral program are advised to enrol for the same. The next year plan for the department was placed and noted.

## Agenda 18: Any other points with the permission of the Chairperson

Resolution 18: It has been discussed that the department is going to organize International Conference on Analytical and Computational Electronics(ICACE 2022) on 28th to 29th September, 2022.

The meeting ends with vote of thanks to all the members present.

Arpita Barman Santra Secretary,

BOS, ECE Department

Dr. Anilesh Dey **HOD & Chairperson** BOS, ECE Department

Head, ECE Narula Institute of Technology Nilguni Road, Agarpara Kolkata - 700 109



MINUTES OF THE 1<sup>ST</sup> MEETING, 2022 OF BOARD OF STUDIES OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 27/01/2022 AT 3.00 PM

Venue: Online mode via Zoom Platform

## MINUTES OF THE MEETING OF THE BOARD OF STUDIES (BOS) OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 14/08/2021 AT 3.00PM

Meeting has been started with the welcome address by the Chairperson and all the leave of absence has been granted. Then the meeting is continued with agenda wise discussion.

The following resolutions were adopted after detailed deliberation.

#### Agenda 1: To confirm the minutes of the Board of Studies meeting held on 14.08.2021

Resolution 1: The members are requested to go through the minutes of the last meeting which was already circulated for any suggestion or remarks. The minutes of the last meeting was confirmed.

#### Agenda 2: To report action taken on the minutes of Board of Studies held on 14.08.2021

Resolution 2: The action taken report of the last meeting (Annexure 1) was placed and noted.

#### Agenda 3: To consider running of value added courses

**Resolution 3:** The list of value added courses to be offered during the forth-coming semester break was placed. After discussion the following courses have been suggested to conduct.

- a. PCB Design using PROTEUS
- b. AR- Advancing Technology
- c. FPGA: ARCHITECTURE, PROGRAMMING & TESTING

Committee further suggests defining a suitable content in the form for brochure before enrolment of the students. It has been decided that this list will be forwarded to Training and Placement Department for conducting/coordinating training on these courses.

## Agenda 4: Question paper Moderator, Examiner for theory and practical examination for the B.TECH ECE 1<sup>st</sup> year to 4<sup>th</sup> year

Resolution 4: List of moderator and examiner for theory and practical examination was placed. The list was approved. The approved list of moderator is Annexed in Annexure 2. It has been decided that any two academician among Prof. (Dr.) M. Mitra, Prof. (Dr.) S. Bhowmick and Prof. (Dr.) A. Sarkar will be invited as the External examiner for the laboratory examination.

#### Agenda 5: Training needs analysis of Faculty, TAs and students

**Resolution 5:** The Training Need Analysis (TNA) report of Faculty, Technical Assistants and Students has been placed and noted.

#### Agenda 6: Professional Society and NSS Activity

**Resolution 6:** The list of Professional society and NSS activity during the pandemic situation was placed.

#### Agenda 7: Preparation of Video Lecture

**Resolution 7:** It is discussed that the Video lectures are being prepared and stored in college LMS so that student can access anytime and from anywhere.

#### Agenda 8: Feedback analysis on industry visit

**Resolution 8:** The feedback analysis on Industry visit was placed. It is discussed that as pandemic is going on the physical industry visit is not possible however the student are applying for the online summer training/internship through AICTE internshala / other reputed organization.

#### Agenda 9: Best Practice of the department

Resolution 9: The best practice of the department was placed.

## Agenda 10: Departmental Newsletter and Magazine

Resolution 10: It has been reported that the departmental newsletter and magazine for the year 2021 has been published.

## Agenda 11: Any other points with the permission of the chairman:

**Resolution 11:** It is discussed that during pandemic situation the online webinars are arranged to motivate the students for extracurricular activities.

The meeting ends with vote of thanks to all the members present.

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Arpita Barman Santra Secretary, BOS, ECE Department Of the second second

Dr. Anilesh Dey HOD & Chairperson BOS, ECE Department



MINUTES OF THE 2<sup>ND</sup> MEETING, 2021 OF BOARD OF STUDIES OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 14/08/2021 AT 3.00 PM

Venue: Online mode via Zoom Platform

## MINUTES OF THE MEETING OF THE BOARD OF STUDIES (BOS) OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 14/08/2021 AT 3.00PM

Meeting has been started with the welcome address by the Chairperson and all the leave of absence has been granted. Then the meeting is continued with agenda wise discussion.

The following resolutions were adopted after detailed deliberation.

# Agenda 1: To confirm the minutes of the Board of Studies meeting held on 04.03.2021

Resolution 1: The members are requested to go through the minutes of the last meeting which was already circulated for any suggestion or remarks. The minutes of the last meeting was

## Agenda 2: To report action taken on the minutes of Board of Studies held on 04.03.2021

Resolution 2: The action taken report of the last meeting (Annexure 1) was placed and noted.

## Agenda 3: Value added courses

Resolution 3: The list of value added courses to be offered during the forth-coming even semester break was placed. After discussion the following courses have been suggested to conduct.

- a. PCB Design using PROTEUS
- b. Smart Devices & Emerging Technologies
- c. FPGA: ARCHITECTURE, PROGRAMMING & TESTING
- d. AR- Advancing Technology

Committee further suggests defining a suitable content in the form for brochure before enrolment of the students. It has been decided that this list will be forwarded to Training and Placement Department for conducting/coordinating training on these courses.

## Agenda 4: Result analysis of the students and success rate

Resolution 4: The result analysis of the students of B.TECH ECE 1st, 2nd, 3rd and 4th year for the academic year 2020-21 has been placed. The pass percentage has been improved.

### Agenda 5: Attainment analysis of Course Outcomes (COs), Program Outcomes(POs) and Program Specific Outcomes(PSOs)

Resolution 5: The attainment analysis of Course outcome was discussed. It is found attainment of all courses have been attained reference to the target level.

The attainment analysis of POs and PSOs for 2021 pass-out batch was placed. The attainment of POs and PSOs has been achieved context to target level.

## Agenda 6: Placement and Higher Study analysis of 2021 pass-out batch

Resolution 6: The list of placed student along with company was placed. It has been emphasized that to motivate students for higher study and entrepreneurship.

## Agenda 7: Research, development and consultancy activity

Resolution 7: The list of Faculty and Student publication was placed. The publication in Scopus, WoS, SCI has been increased.

### **Agenda 8: Industry interaction**

Resolution 8: The past activities related to industry interaction were placed. The impact analysis of industry interaction was discussed.

### **Agenda 9: Reporting of past events**

**Resolution 9:** The list of past events – webinars, online FDP/workshop, NSS activity organized by the department was placed and noted.

#### Agenda 10: Project evaluation committee

Resolution 10: The list of members for project evaluation committee was placed and approved.

#### Agenda 11: Visiting faculty requirement.

**Resolution 11:** It has been discussed that the department should invite more industry expert as resource person to organize seminar, workshop, expert lecture on recent trends of research and industry.

#### Agenda 12: Quality of Teaching Learning

**Resolution 12:** The Feedback Analysis on Teaching learning was placed. It has been discussed that the necessary corrective measures were already taken by the department.

#### Agenda 13: Activity for Slow learner and Advanced learner

Resolution 13: The activities related to assisting the slow and advanced learner were placed.

#### Agenda 14: Departmental Academic Audit

**Resolution 14:** The report of departmental Academic Audit for the academic year 2020-2021 was placed.

#### Agenda 15: The question setter and moderator

**Resolution 15:** The list of the question setter and moderator has been placed for the corresponding courses. The list has been approved.

#### Agenda 16: SWOC analysis and next year plan

**Resolution 16:** The SWOC analysis of the department was placed. It is suggested that the attention to be given for the publication of the patents. Alumni interaction need to be improved. Faculty members who are yet not enrolled in the doctoral program are advised to enrol for the same. The next year plan for the department was placed and noted.

## Agenda 17: Any other points with the permission of the Chairperson

**Resolution 17:** It has been discussed that the department has organized co-curricular and extracurricular activities to motivate students during this pandemic situation.

The meeting ends with vote of thanks to all the members present.

Arpita Barman Santra Secretary, BOS, ECE Department A Marcia Carlos de Carlos

Dr. Anilesh Dey HOD & Chairperson BOS, ECE Department



MINUTES OF THE 1<sup>ST</sup> MEETING, 2021 OF BOARD OF STUDIES OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 04/03/2021 AT 5.00 PM

Venue: Online Mode via Zoom Platform

MINUTES OF THE MEETING OF THE BOARD OF STUDIES (BOS) OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 04/03/2021 AT 5.00PM via online mode in zoom platform.

Meeting has been started with the welcome address by the Chairperson and all the leave of absence has been granted. Then the meeting is continued with agenda wise discussion.

The following resolutions were adopted after detailed deliberation.

#### Agenda 1: To confirm the minutes of the Board of Studies meeting held on 05.11.2020

**Resolution 1:** The members are requested to go through the minutes of the last meeting which was already circulated for any suggestion or remarks. The minutes of the last meeting was confirmed.

#### Agenda 2: To report action taken on the minutes of Board of Studies held on 05.11.2020

Resolution 2: The action taken report of the last meeting (Annexure 1) was placed and noted.

#### Agenda 3: To consider running of value added courses

**Resolution 3:** The list of value added courses to be offered during the forth-coming semester break was placed. After discussion the following courses have been suggested to conduct.

- a. PCB Design using PROTEUS
- b. AR- Advancing Technology
- c. FPGA: ARCHITECTURE, PROGRAMMING & TESTING
- d. SMART DEVICES & EMERGING TECHNOLOGIES

Committee further suggests defining a suitable content in the form for brochure before enrolment of the students. It has been decided that this list will be forwarded to Training and Placement Department for conducting/coordinating training on these courses.

## Agenda 4: Question paper Moderator, Examiner for theory and practical examination for the B.TECH ECE 1st year to 4th year

Resolution 4: List of moderator and examiner for theory and practical examination was placed. The list was approved. The approved list of moderator is Annexed in Annexure 2. It has been decided that any two academician among Prof. (Dr.) M. Mitra, Prof. (Dr.) S. Bhowmick and Prof. (Dr.) A. Sarkar will be invited as the External examiner for the laboratory examination.

#### Agenda 5: Training needs analysis of Faculty, TAs and students

**Resolution 5:** The Training Need Analysis (TNA) report of Faculty, Technical Assistants and Students has been placed and noted.

#### Agenda 6: Professional Society and NSS Activity

**Resolution 6:** The list of Professional society and NSS activity during the pandemic situation was placed.

#### Agenda 7: Preparation of Video Lecture

**Resolution 7:** It is discussed that the Video lectures are being prepared and stored in college LMS so that student can access anytime and from anywhere.

#### Agenda 8: Feedback analysis on industry visit

**Resolution 8:** The feedback analysis on Industry visit was placed. It is discussed that as pandemic is going on the physical industry visit is not possible however the student are applying for the online summer training/internship through AICTE Internshala / other reputed organization.

#### Agenda 9: Best Practice of the department

Resolution 9: The best practice of the department was placed.

#### Agenda 10: Departmental Newsletter and Magazine

**Resolution 10:** It has been reported that the departmental newsletter and magazine for the year 2020 has been published.

## Agenda 11: To consider and adopt the new Regulation 21 (R21) curriculum for B.TECH (ECE) program

**Resolution 11:** It has been highlighted that in formation of R21 curriculum, all the points, and guidelines of regulatory bodies have been taken into consideration. All members express their satisfaction and approve the same. It has been also pointed out that as per the suggestion of the members in the last meeting, course outcomes (as per OBE requirement) for all the courses have been prepared and also mapping with POs and PSOs are defined. MOOCs based learning was suggested for adoption and the committee approved the same.

#### Agenda 12: Any other points with the permission of the chairman:

**Resolution 12:** It is discussed that during pandemic situation the online webinars are arranged to motivate the students for extracurricular activities.

The meeting ends with vote of thanks to all the members present.

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Arpita Barman Santra Secretary, BOS, ECE Department A STATE OF THE PARTY OF THE PAR

Dr. Anilesh Dey HOD & Chairperson BOS, ECE Department



MINUTES OF THE 2<sup>ND</sup> MEETING, 2020 OF BOARD OF STUDIES OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 05/11/2020 AT 3.00 PM

Venue: Online Mode in Zoom Platform

MINUTES OF THE MEETING OF THE BOARD OF STUDIES (BOS) OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT FOR UG (B.TECH. ECE) PROGRAM HELD ON 05/11/2020 AT 3.00PM at Room No. 305A.

Meeting has been started with the welcome address by the Chairperson and the leave of absence has been granted. Then the meeting is continued with agenda wise discussion.

The following resolutions were adopted after detailed deliberation.

#### Agenda 1: To confirm the minutes of the Board of Studies meeting held on 10.04.2020

**Resolution 1:** The members are requested to go through the minutes of the last meeting which was already circulated for any suggestion or remarks. The minutes of the last meeting was confirmed.

#### Agenda 2: To report action taken on the minutes of Board of Studies held on 10.04.2020

Resolution 2: The action taken report of the last meeting (Annexure 1) was placed and noted.

#### Agenda 3: Identification of new courses in Regulation 21 (R 21) Curriculum.

Resolution 3: The list of new courses which have been introduced in R 21 curriculum, were placed.(Annexure 2)

## Agenda 4: Identification of Courses in Regulation 21 (R 21) Curriculum Mapped with Employability/ Skill Development/Entrepreneurship.

**Resolution 4:** The courses for Employability/Higher Studies/Advanced Skill Development/ Entrepreneurship introduced in R21 have been identified and listed for ready reference.

## Agenda 5: Adoption of the new Regulation 2021 (R21) curriculum for B.TECH (ECE) program

**Resolution 5**: The revised curriculum was placed under regulation 2021 (R 21) along with the course mapping percentage of courses with Program Outcomes (POs) and Program Specific Outcomes (PSOs). The course outcomes [as per the Outcome Based Education (OBE) requirement] are mapped with POs and PSOs to design the balanced curriculum. The total number of credit for R 21 curriculum is 160. The revision on the curriculum has been considered by adopting Massive Open Online Courses (MOOCs) in six semesters.

Followings percentage of mapping of POs and PSOs with courses of R 21 curriculum has been approved as balanced curriculum.

#### R21 Curriculum:

POs		Band of mapping of courses
PO1. F	O2, PO3, PO4, PO9, PO12	65% to 80%
PO5, F		25% to 30%
P06. F	07, P08, P011	8% to 10%

PSOs	Band of mapping of courses
PSO1, PSO2, PSO3	70% to 80%

After rigorous discussion all the BOS members express their satisfaction and approved the R 21 curriculum. It is also suggested to forward the curriculum to the Academic Council (AC) for further approval.

## Agenda 6: Target level of COs, POs & PSOs of Regulation-21 (R-21) curriculum and rubrics Resolution 6: The target level of attainment of Course Outcome for curriculum under Regulation

21 has been presented as follows:

Attainment level of Course Outcome(AL)	Target Level of Course Outcome					
1	>=60% - <70% of students scoring above Target level (70%)					
2	>=70% - <80% of students scoring above Target level (70%)					
3	>=80% & above students scoring above Target level (70%)					

The target level of attainment for POs and PSOs of curriculum under Regulation 21 has been shown as below:

PO1	PO2	РОЗ	PO4	PO5	PO6	P07	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
2.5	2.5	2.5	2.5	2.5	2.1	2.1	2.1	2.4	2.4	2.55	2.55	2.55	2.55	2.55

It has been also discussed and approved that the followings are the assessment tools for the attainment calculation.

The tools used in measuring the Course Outcomes for Theory Courses are Slot Tests, Assignments, Quizzes and Semester End Examination (SEE).

Tools for the measuring the Course Outcomes for Practical Courses are Continuous performance (15marks), Initiative to learn (10 marks), Experiment report(15 marks) and Semester End Examination (SEE)-Experiment(40) & Viva(20). Rubrics to assess the performance of student in practical courses is annexed (Annexure 3).

Tools and rubrics for Project are also discussed. The tools to assess the performance of students in project work as follows: Plan of work(5 marks), problem formulation(10 marks), Social Impact(5 marks), Design (5 marks), implementation (10 marks), Result Analysis(5 marks) and Semester End Examination - Individual/Team work (10marks), Design (15 marks), implementation (15 marks), demonstration (10 marks) & report (10 marks).

The approved rubrics for practical and projects is annexed in Annexure 4.

It is also discussed and approved that the attainment of COs will be calculated through direct method as follows: CO attainment= 40% of Continuous Internal Evaluation (CIE) + 60% of SEE and the attainment of POs and PSOs will be calculated as follows: PO attainment = 80% of direct method + 20% of indirect method & PSO attainment = 80% of direct method + 20% of indirect method.

Direct methods are CIE and SEE. Indirect methods are survey from exit student, employers, alumni, parent, Co-curricular and extra curricular activity.

#### Agenda 7: Result analysis of the students and success rate

Resolution 7: The result analysis of the students of B.TECH ECE 1st, 2nd, 3rd and 4th year for the academic year 2019-20 has been placed. The pass percentage has been improved.

# Agenda 8: Attainment analysis of Course Outcomes (COs), Program Outcomes(POs) and Program Specific Outcomes(PSOs)

**Resolution 8:** The attainment analysis of Course outcome was discussed. It is found attainment of all courses have been attained reference to the target level.

The attainment analysis of POs and PSOs for 2020 pass-out batch was placed. The attainment of POs and PSOs has been achieved context to target level.

#### Agenda 9: Placement and Higher Study analysis of 2020 pass-out batch

**Resolution 9:** The list of placed student along with company was placed. It has been emphasized that to motivate students for higher study and entrepreneurship.

#### Agenda 10: Research, development and consultancy activity

**Resolution 10:** The list of Faculty and Student publication was placed. The publication in Scopus, WoS, SCI has been increased.

#### Agenda 11: Industry interaction

**Resolution 11:** The past activities related to industry interaction were placed. The impact analysis of industry interaction was discussed.

#### Agenda 12: Reporting of past events

**Resolution 12:** The list of past events – webinars, online FDP/workshop, NSS activity organized by the department was placed and noted.

#### Agenda 13: Project evaluation committee

Resolution 13: The list of members for project evaluation committee was placed and approved.

#### Agenda 14: Visiting faculty requirement.

**Resolution 14:** It has been discussed that the department should invite more industry expert as resource person to organize seminar, workshop, expert lecture on recent trends of research and industry.

#### Agenda 15: Quality of Teaching Learning

**Resolution 15:** The Feedback Analysis on Teaching learning was placed. It has been discussed that the necessary corrective measures were already taken by the department.

#### Agenda 16: Activity for Slow learner and Advanced learner

Resolution 16: The activities related to assisting the slow and advanced learner were placed.

#### **Agenda 17: Departmental Academic Audit**

**Resolution 17:** The report of departmental Academic Audit for the academic year 2019-2020 was placed.

#### Agenda 18: The question setter and moderator

**Resolution 18:** The list of the question setter and moderator has been placed for the corresponding courses. The list has been approved.

#### Agenda 19: SWOC analysis and next year plan

**Resolution 19:** The SWOC analysis of the department was placed. It is suggested that the attention to be given for the publication of the patents. Alumni interaction need to be improved. Faculty members who are yet not enrolled in the doctoral program are advised to enrol for the same. The next year plan for the department was placed and noted.

## Agenda 20: Any other points with the permission of the Chairperson

**Resolution 20:** It has been discussed that the department has organized co-curricular and extracurricular activities to motivate students during this pandemic situation.

The meeting ends with vote of thanks to all the members present.

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Arpita Barman Santra Secretary, BOS, ECE Department Head ECE Head Agencies

Dr. Saradindu Panda HOD & Chairperson BOS, ECE Department



MINUTES OF THE 1<sup>ST</sup> MEETING, 2020 OF BOARD OF STUDIES OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 10/04/2020 AT 5.00 PM

Venue: Online Mode via Zoom Platform

MINUTES OF THE MEETING OF THE BOARD OF STUDIES OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 10/04/2020 AT 5.00PM via online mode in zoom platform.

Meeting has been started with the welcome address by the Chairperson and all the leave of absence has been granted. Then the meeting is continued with agenda wise discussion.

The following resolutions were adopted after detailed deliberation.

Agenda 1: To confirm the minutes of the Board of Studies meeting held on 27.11.2019

Resolution 1: The members are requested to go through the minutes of the last meeting which was already circulated for any suggestion or remarks. The minutes of the last meeting was confirmed.

Agenda 2: To report action taken on the minutes of Board of Studies held on 27.11.2019

Resolution 2: The action taken report of the last meeting (Annexure 1) was placed and noted.

#### Agenda 3: Online Class conduction during pandemic

Resolution 3: Due to nCovid—19 pandemic department adopted online Teaching Learning process. Digital platform like Zoom, Google meet, Skype, Google duo, Google drive, Google classroom, Google forms, BigBlueButton, OBS studio suite, V-labs, Microsoft Teams, Cisco Webex, Audacity, Bandicom are being used for online teaching process.

#### Agenda 4: To consider running of value added courses

**Resolution 4:** The list of value added courses to be offered during the forth-coming semester break was placed. After discussion the following courses have been suggested to conduct.

- a. PCB Design using PROTEUS
- b. AR- Advancing Technology
- c. FPGA: ARCHITECTURE, PROGRAMMING & TESTING

Committee further suggests defining a suitable content in the form for brochure before enrolment of the students. It has been decided that this list will be forwarded to Training and Placement Department for conducting/coordinating training on these courses.

## Agenda 5: Question paper Moderator, Examiner for theory and practical examination for the B.TECH ECE 1st year to 4th year

**Resolution 5:** List of moderator and examiner for theory and practical examination was placed. The list was approved. The approved list of moderator is Annexed in Annexure 2. It has been decided that any two academician among Prof. (Dr.) M. Mitra, Prof. (Dr.) S. Bhowmick and Prof. (Dr.) A. Sarkar will be invited as the External examiner for the laboratory examination.

#### Agenda 6: Training needs analysis of Faculty, TAs and students

**Resolution 6:** The Training Need Analysis (TNA) report of Faculty, Technical Assistants and Students has been placed and noted.

#### Agenda 7: Professional Society and NSS Activity

**Resolution 7:** The list of Professional society and NSS activity during the pandemic situation was placed.

#### Agenda 8: Preparation of Video Lecture

**Resolution 8:** It is discussed that the Video lectures are being prepared and stored in college LMS so that student can access anytime and from anywhere.

#### Agenda 9: Feedback analysis on industry visit

**Resolution 9:** The feedback analysis on Industry visit was placed. It is discussed that as pandemic is going on the physical industry visit is not possible however the student may apply the online summer training/internship through AICTE internshala / other reputed organization.

#### Agenda 10: Best Practice of the department

Resolution 10: The best practice of the department was placed.

### Agenda 11: Departmental Newsletter and Magazine

**Resolution 11:** It has been reported that the departmental newsletter and magazine for the year 2019 has been published.

## Agenda 12: Any other points with the permission of the chairman:

**Resolution 12:** It is discussed that during pandemic situation the semester examination will be conducted as per the guideline from Controller of Examination.

The meeting ends with vote of thanks to all the members present.

Arpita Barman Santra Secretary, BOS, ECE Department Alanda Institute di Technologi Nanda Institute di Technologi Nanda

Dr. Saradindu Panda HOD & Chairperson BOS, ECE Department



MINUTES OF THE 2<sup>ND</sup> MEETING, 2019 OF BOARD OF STUDIES OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 27/11/2019 AT 3.00 PM

Venue: Room No 305A

## MINUTES OF THE MEETING OF THE BOARD OF STUDIES (BOS) OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 27/11/2019 AT 3.00PM at Room No. 305A.

Meeting has been started with the welcome address by the Chairperson and all the leave of absence has been granted. Then the meeting is continued with agenda wise discussion.

The following resolutions were adopted after detailed deliberation.

### Agenda 1: To confirm the minutes of the Board of Studies meeting held on 22.01.2019

**Resolution 1:** The members are requested to go through the minutes of the last meeting which was already circulated for any suggestion or remarks. The minutes of the last meeting was confirmed.

## Agenda 2: To report action taken on the minutes of Board of Studies held on 22.01.2019

Resolution 2: The action taken report of the last meeting (Annexure 1) was placed and noted.

#### Agenda 3: Result analysis of the students and success rate

**Resolution 3:** The result analysis of the students of B.TECH ECE 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> year for the academic year 2018-19 has been placed. The pass percentage has been improved.

## Agenda 4: Attainment analysis of Course Outcomes (COs), Program Outcomes(POs) and Program Specific Outcomes(PSOs)

**Resolution 4:** The attainment analysis of Course outcome was discussed. It is found attainment of all courses have been attained reference to the target level.

The attainment analysis of POs and PSOs for 2019 pass-out batch was placed. The attainment of POs and PSOs has been achieved context to target level.

### Agenda 5: Placement and Higher Study analysis of 2019 pass-out batch

**Resolution 5:** The list of placed student along with company was placed. It has been emphasized that to motivate students for higher study and entrepreneurship.

### Agenda 6: Research, development and consultancy activity

**Resolution 6:** The list of Faculty and Student publication was placed. The publication in Scopus, WoS, SCI has been increased.

#### Agenda 7: Industry interaction

**Resolution 7:** The past activities (Industry visit, summer training at industry, Industry expert lecture, internship) related to industry interaction were placed. The impact analysis of industry visit was discussed.

#### Agenda 8: Reporting of past events

**Resolution 8:** The list of past events – seminars, workshop, NSS activity organized by the department was placed and noted.

#### Agenda 9: Project evaluation committee

Resolution 9: The list of members for project evaluation committee was placed and approved.

#### Agenda 10: Visiting faculty requirement.

**Resolution 10:** It has been discussed that the department should invite more industry expert as resource person to organize seminar, workshop, expert lecture on recent trends of research and industry.

### Agenda 11: Quality of Teaching Learning

Resolution 11: The Feedback Analysis on Teaching learning was placed. It has been discussed that the necessary corrective measures were already taken by the department.

### Agenda 12: Activity for Slow learner and Advanced learner

Resolution 12: The activities related to assisting the slow and advanced learner were discussed.

#### **Agenda 13: Departmental Academic Audit**

Resolution 13: The report of departmental Academic Audit for the academic year 2018-2019 was placed. It has been discussed that the department may motivate the students to participate in State level, National level Hackathon.

### Agenda 14: The question setter and moderator

Resolution 14: The list of the question setter and moderator has been placed for the corresponding courses. The list has been approved.

### Agenda 15: SWOC analysis and next year plan

Resolution 15: The SWOC analysis of the department was placed. It is suggested that the attention to be given for the publication of the patents. Alumni interaction need to be improved. Faculty members who are yet not enrolled in the doctoral program are advised to enrol for the same. The next year plan for the department was placed and noted.

## Agenda 16: Any other points with the permission of the chairman:

Resolution 16: The quality of student admitted in the 1st year and lateral entry in the year 2019 terms of opening rank and closing rank and percentage of 10+2 marks has been reported.

The meeting ends with vote of thanks to all the members present.

Arpita Barman Santra Secretary,

BOS, ECE Department

Dr. Saradindu Panda **HOD & Chairperson** BOS, ECE Department

Head, ECE Narula Institute of Technology Nilgunj Road, Agarpara Kolkata - 700 109



MINUTES OF THE 1<sup>ST</sup> MEETING, 2019 OF BOARD OF STUDIES OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 22/01/2019 AT 3.00 PM

Venue: Room No 305A

## MINUTES OF THE MEETING OF THE BOARD OF STUDIES (BOS) OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 22/01/2019 AT 3.00PM at Room No. 305A.

Meeting has been started with the welcome address by the Chairperson and all the leave of absence has been granted. Then the meeting is continued with agenda wise discussion.

The following resolutions were adopted after detail deliberation.

#### Agenda 1: To confirm the minutes of the Board of Studies meeting held on 14.11.2018

**Resolution 1:** The members are requested to go through the minutes of the last meeting which was already circulated for any suggestion or remarks. The minutes of the last meeting was confirmed.

#### Agenda 2: To report action taken on the minutes of Board of Studies held on 14.11.2018

Resolution 2: The action taken report of the last meeting (Annexure 1) was placed and noted.

#### Agenda 3: To consider running of value added courses

**Resolution 3:** The list of value added courses to be offered during the forth-coming semester break was placed. After discussion the following courses have been suggested to conduct.

- a. PCB Design using PROTEUS
- b. AR- Advancing Technology
- c. FPGA: ARCHITECTURE, PROGRAMMING & TESTING

Committee further suggests defining a suitable content in the form for brochure before enrolment of the students. It has been decided that this list will be forwarded to Training and Placement Department for conducting/coordinating training on these courses.

## Agenda 4: Question paper Moderator, Examiner for theory and practical examination for the B.TECH ECE 1<sup>st</sup> year to 4<sup>th</sup> year

Resolution 4: List of moderator and examiner for theory and practical examination was placed. The list was approved. The approved list of moderator is Annexed in Annexure 2. It has been decided that any two academician among Prof. (Dr.) M. Mitra, Prof. (Dr.) S. Bhowmick and Prof. (Dr.) A. Sarkar will be invited as the External examiner for the laboratory examination. (SMP)

#### Agenda 5: Training needs analysis of Faculty, TAs and students

**Resolution 5:** The Training Need Analysis (TNA) report of Faculty, Technical Assistants and Students has been placed and noted. It has been suggested that MOOCs should be considered for the upgradation of Faculties, TAs, students.

#### Agenda 6: Professional Society and NSS Activity

**Resolution 6:** The list of Professional and NSS activity was placed. It is suggested that IEEE CAS Student Branch Chapter may organize Technical Paper Contest.

#### Agenda 7: Online Courseware

**Resolution 7:** It is reported that Online Courseware are developed and uploaded on the College website for the benefit of student.

#### Agenda 8: Departmental Library

Resolution 8: It is discussed that the departmental library is functioning in full swing for the benefit of student.

### Agenda 9: Feedback analysis on industry visit

**Resolution 9:** The feedback analysis on Industry visit was placed. It has been suggested to enhance the number of Industry visit.

#### Agenda 10: Best Practice of the department

Resolution 10: The best practice of the department was discussed.

#### Agenda 11: Departmental Newsletter and Magazine

**Resolution 11:** It has been reported that the departmental newsletter and magazine for the year 2018 has been published.

#### Agenda 12: Any other points with the permission of the chairman

Resolution 12: It is reported that digital evaluation of answer script has been adopted for the transparency and fastest publication of semester result.

The meeting ends with vote of thanks to all the members present.

Arpita Barman Santra Secretary,

**BOS, ECE Department** 

Dr. Saradindu Panda HOD & Chairperson BOS, ECE Department

Head, ECE Narula Institute of Technology Nilgunj Road, Agarpara

Kolkata - 700 109

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MINUTES OF THE 2<sup>ND</sup> MEETING, 2018 OF BOARD OF STUDIES OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 14/11/2018 AT 3.00 PM

Venue: Room No 305A

MINUTES OF THE MEETING OF THE BOARD OF STUDIES (BOS) OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 14/11/2018 AT 3.00PM at Room No. 305A.

Meeting has been started with the welcome address by the Chairperson and all the leave of absence has been granted. Then the meeting is continued with agenda wise discussion.

The following resolutions were adopted after detailed deliberation.

#### Agenda 1: To confirm the minutes of the Board of Studies meeting held on 16.02.2018

**Resolution 1:** The members are requested to go through the minutes of the last meeting which was already circulated for any suggestion or remarks. The minutes of the last meeting was confirmed.

### Agenda 2: To report action taken on the minutes of Board of Studies held on 16.02.2018

Resolution 2: The action taken report of the last meeting (Annexure 1) was placed and noted.

#### Agenda 3: Result analysis of the students and success rate

**Resolution 3:** The result analysis of the students of B.TECH ECE 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> year for the academic year 2017-18 has been placed. It is found that the number of backlogs in each year have been reduced compared to the previous academic year. The pass percentage has been increased.

#### Agenda 4: Attainment analysis of Course Outcomes (COs)

Resolution 4: The attainment analysis of Course outcome was discussed.

#### Agenda 5: Placement and Higher Study analysis of 2018 pass-out batch

**Resolution 5:** The list of placed student along with company was placed. It has been emphasized that to motivate students for higher study.

#### Agenda 6: Research, development and consultancy activity

**Resolution 6:** The list of Faculty and Student publication was placed. The publication in Scopus, WoS, SCI has been increased.

#### Agenda 7: Industry interaction

**Resolution 7:** The past activities (Industry visit, summer training at industry, Industry expert lecture, internship) related to industry interaction were placed. The impact analysis of industry visit was discussed.

#### **Agenda 8: Reporting of past events**

**Resolution 8:** The list of past events – seminars, workshop, NSS activity organized by the department was placed and noted.

#### Agenda 9: Project evaluation committee

Resolution 9: The list of members for project evaluation committee was placed and approved.

#### Agenda 10: Visiting faculty requirement.

**Resolution 10:** It has been discussed that the department should invite more industry expert as resource person to organize seminar, workshop, expert lecture on recent trends of research and industry.

#### Agenda 11: Quality of Teaching Learning

**Resolution 11:** The Feedback Analysis on Teaching learning was placed. It has been discussed that the necessary corrective measures were already taken by the department.

## Agenda 12: Activity for Slow learner and Advanced learner

**Resolution 12:** The activities related to assisting the slow and advanced learner were discussed.

## **Agenda 13: Departmental Academic Audit**

Resolution 13: The report of departmental Academic Audit for the academic year 2017-2018 was placed. It has been discussed that the department may motivate the students to participate in MOOCs.

### Agenda 14: The question setter and moderator

Resolution 14: The list of the question setter and moderator has been placed for the corresponding courses. The list has been approved.

#### Agenda 15: SWOC analysis and next year plan

Resolution 15: The SWOC analysis of the department was placed. It is suggested that the attention to be given for the publication of the patents. Alumni interaction need to be improved. Faculty members who are yet not enrolled in the doctoral program are advised to enrol for the same. The next year plan for the department was placed and noted.

#### Agenda 16: Any other points with the permission of the chairman

Resolution 16: It has been discussed that to obtain the B.TECH degree, partially student need to earn necessary points through Mandatory Additional Requirement (MAR) as notified by the Controller of Examination.

The meeting ends with vote of thanks to all the members present.

Arpita Barman Santra Secretary,

BOS, ECE Department

Dr. Saradindu Panda **HOD & Chairperson BOS, ECE Department** 

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MINUTES OF THE 1<sup>ST</sup> MEETING, 2018 OF BOARD OF STUDIES OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 16/02/2018 AT 3.00 PM

Venue: Room No. 305A

## MINUTES OF THE MEETING OF THE BOARD OF STUDIES (BOS) OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 16/02/2018 AT 3.00PM

Meeting has been started with the welcome address by the Chairperson and all the leave of absence has been granted. Then the meeting is continued with agenda wise discussion.

The following resolutions were adopted after detailed deliberation.

#### Agenda 1: To confirm the minutes of the Board of Studies meeting held on 11.07.2017

**Resolution 1:** The members are requested to go through the minutes of the last meeting which was already circulated for any suggestion or remarks. The minutes of the last meeting was confirmed.

#### Agenda 2: To report action taken on the minutes of Board of Studies held on 11.07.2017

Resolution 2: The action taken report of the last meeting (Annexure 1) was placed and noted.

#### Agenda 3: Identification of new courses in Regulation 18 (R 18) Curriculum.

**Resolution 3:** As per the suggestion of the member, the list of new courses which have been introduced in R 18 curriculum, are placed.(Annexure 2)

## Agenda 4: Identification of Courses in Regulation 18 (R 18) Curriculum Mapped with Employability/ Skill Development/Entrepreneurship.

**Resolution 4:** The courses for Employability/Higher Studies/Advanced Skill Development/ Entrepreneurship introduced in R18 have been identified and listed for ready reference.

#### Agenda 5: Adoption of the new Regulation 2018 (R18) curriculum for B.TECH (ECE) program

Resolution 5: The revised curriculum was placed under regulation 2018 (R 18) along with the course mapping percentage of courses with Program Outcomes (POs) and Program Specific Outcomes (PSOs). The course outcomes [as per the Outcome Based Education (OBE) requirement] are mapped with POs and PSOs to design the balanced curriculum. The total number of credit for R 18 curriculum is 160. The revised curriculum has been designed with incorporating new electives and project based learning has been adopted.

Followings percentage of mapping of POs and PSOs with courses of R 18 curriculum has been approved as balanced curriculum.

#### R18 Curriculum:

POs	Band of mapping of courses
PO1, PO2, PO3, PO4, PO9, PO12	65% to 80%
PO5, PO10	25% to 30%
PO6, PO7, PO8, PO11	8% to 10%

PSOs	Band of mapping of courses
PSO1, PSO2, PSO3	70% to 80%

After rigorous discussion all the BOS members express their satisfaction and approved the R 18 curriculum. It is also suggested to forward the curriculum to the Academic Council (AC) for further approval.

#### Agenda 6: To consider running of value added courses

**Resolution 6:** The list of value added courses to be offered during the forth-coming semester break was placed. After discussion the following courses have been suggested to conduct.

a. PCB Design using PROTEUS

- b. AR- Advancing Technology
- c. FPGA: ARCHITECTURE, PROGRAMMING & TESTING

Committee further suggests defining a suitable content in the form for brochure before enrolment of the students. It has been decided that this list will be forwarded to Training and Placement Department for conducting/coordinating training on these courses.

## Agenda 7: Question paper Moderator, Examiner for theory and practical examination for the B.TECH ECE 1st year to 4th year

Resolution 7: List of moderator and examiner for theory and practical examination was placed. The list was approved. The approved list of moderator is Annexed in Annexure 3. It has been decided that any two academician among Prof. (Dr.) M. Mitra, Prof. (Dr.) S. Bhowmick, Prof. (Dr.) D. R. Poddar and Prof. (Dr.) A. Sarkar will be invited as the External examiner for the laboratory examination.

#### Agenda 8: Training needs analysis of Faculty, TAs and students

**Resolution 8:** The Training Need Analysis (TNA) report of Faculty, Technical Assistants and Students has been placed and noted. It has been suggested that MOOCs should be considered for the upgradation of Faculties, TAs, students.

#### Agenda 9: Quality of Teaching Learning

**Resolution 90:** It is discussed that to engage student following pedagogical approach have been considered. Annexure 4.

## Agenda 10: Target level of COs, POs & PSOs of Regulation-18 (R-18) curriculum and rubrics Resolution 10: The target level of attainment of Course Outcome for curriculum under Regulation

18 has been presented as follows:

Attainment level of Course Outcome(AL)	Target Level of Course Outcome
1	>=60% - <70% of students scoring above Target level (70%)
2	>=70% - <80% of students scoring above Target level (70%)
3	>=80% & above students scoring above Target level (70%)

The target level of attainment for POs and PSOs of curriculum under Regulation 18 has been shown as below:

PO1	PO2	РО3	PO4	PO5	PO6	P07	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
2.5	2.5	2.5	2.5	2.5	2.1	2.1	2.1	2.4	2.4	2.55	2.55	2.55	2.55	2.55

It has been also discussed and approved that the followings are the assessment tools for the attainment calculation.

The tools used in measuring the Course Outcomes for Theory Courses are Slot Tests, Assignments, Quizzes and Semester End Examination (SEE).

Tools for the measuring the Course Outcomes for Practical Courses are Continuous performance (15marks), Initiative to learn (10 marks), Experiment report(15 marks) and Semester End

Examination (SEE)-Experiment(40) & Viva(20). Rubrics to assess the performance of student in practical courses is annexed (Annexure 5).

Tools and rubrics for Project are also discussed. The tools to assess the performance of students in project work as follows: Plan of work(5 marks), problem formulation(10 marks), Social Impact(5 marks), Design (5 marks), implementation (10 marks), Result Analysis(5 marks) and Semester End Examination — Individual/Team work (10 marks), Design (15 marks), implementation (15 marks), demonstration (10 marks) & report (10 marks).

The approved rubrics for practical and projects is annexed in Annexure 6.

It is also discussed and approved that the attainment of COs will be calculated through direct method as follows: CO attainment= 40% of Continuous Internal Evaluation (CIE) + 60% of SEE and the attainment of POs and PSOs will be calculated as follows: PO attainment = 80% of direct method + 20% of indirect method & PSO attainment = 80% of direct method + 20% of indirect method.

Direct methods are CIE and SEE. Indirect methods are survey from exit student, employers, alumni, parent, Co-curricular and extracurricular activity.

#### Agenda 11: Any other points with the permission of the chairman:

Resolution 11: It has been discussed that the department is going to organize a workshop in the month of July 2018.

The meeting ends with vote of thanks to all the members present.

Arpita Barman Santra

Secretary,

BOS, ECE Department

Dr. Saradindu Panda HOD & Chairperson BOS, ECE Department

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MINUTES OF THE 3<sup>RD</sup> MEETING, 2017 OF **BOARD OF STUDIES OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 15/11/2017 AT** 3.00 PM

Venue: Room No. 305A

# MINUTES OF THE MEETING OF THE BOARD OF STUDIES OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 15/11/2017 AT 3.00PM

Meeting has been started with the welcome address by the Chairperson and all the leave of absence has been granted. Then the meeting is continued with agenda wise discussion.

The following resolutions were adopted after detailed deliberation.

### Agenda 1: To confirm the minutes of the Board of Studies meeting held on 11.07.2017

**Resolution 1:** The members are requested to go through the minutes of the last meeting which was already circulated for any suggestion or remarks. The minutes of the last meeting was confirmed.

#### Agenda 2: To report action taken on the minutes of Board of Studies held on 11.07.2017

Resolution 2: The action taken report of the last meeting (Annexure 1) was placed and noted.

#### Agenda 3: The Curriculum structure and syllabus for autonomy.

**Resolution 3:** It has been discussed that the next revision of curriculum (Regulation 18) is being drafted and in the next meeting it will be placed for the discussion. It has been suggested to identify the new courses in the revised curriculum.

## Agenda 4: Vision, Mission, Program Educational Objectives (PEOs), Program Specific Outcomes (PSOs) of the department.

**Resolution 4**: The drafted vision and mission statement of ECE department along with the consistency of the vision and mission statement with institutional vision and mission statement received from Departmental Academic Committee (DAC). The vision and mission statement of the department has been approved and has been forwarded to Academic Council (AC) for further approval.

The Program Educational Objectives (PEOs) (see Annexure 2) and the consistency of PEOs with departmental mission statement has been reviewed and approved.

the Program Specific Outcomes (PSOs) (see Annexure 3) of B. Tech in Electronics and Communication Engineering have been reviewed and it has been approved that the previous statements will continue.

### Agenda 5: Visiting faculty requirement.

**Resolution 5:** It has been discussed that similar to previous semester the department should invite industry expert as resource person to organize seminar, workshop, expert lecture on recent trends of research and industry.

### Agenda 6: Quality of Teaching Learning

**Resolution 6:** To improve the Teaching Learning process the faculties are following pedagogical method for student centric learning.

### Agenda 7: Slow learner and Advanced learner

**Resolution 7:** The activities related to assisting the slow and advanced learner were discussed. It has been suggested that slow learner may be classified into weak and mediocre student with certain numeric percentage as cut off which revealed their academic performance.

### Agenda 8: Industry interaction

**Resolution 8:** The past activities related to industry interaction were placed. The impact analysis of industry visit was placed. It was suggested that the number of internship training need to be enhanced.

Agenda 9: Research, development and consultancy activity

**Resolution 9:** The list of Faculty and Student publication was placed. The publication in good quality journal has been increased. It was reported that the MODROBS funds of amount Rs. 9,09,700/- has been sanctioned by AICTE for Embedded System Lab. The consultancy work need to be improved.

Agenda 10: Result analysis of the students and success rate

**Resolution 10:** The result analysis of the students of B.TECH ECE 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> year for the academic year 2016-17 has been placed. It is found that the number of backlogs in each year have been reduced compared to the previous academic year. The pass percentage has been increased.

Agenda 11: Attainment analysis of Course Outcomes (COs)

Resolution 11: The attainment analysis of Course outcome was discussed.

Agenda 12: Placement and Higher Study analysis of 2017 pass-out batch

**Resolution 12:** The list of placed student along with company was placed. It has been emphasized that to motivate students for higher study.

Agenda 13: Departmental Academic Audit

**Resolution 13:** The report of departmental Academic Audit for the academic year 2016-2017 was placed. It has been discussed that the department should emphasize on project and research work.

Agenda 14: Any other points with the permission of the chairman:

Resolution 14: It has been discussed that during the semester break the Value Added Courses will be conducted.

The meeting ends with vote of thanks to all the members present.

Arpita Barman Santra Secretary,

BOS, ECE Department

Dr. Saradindu Panda HOD & Chairperson BOS, ECE Department

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MINUTES OF THE 2<sup>ND</sup> MEETING, 2017 OF BOARD OF STUDIES OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 11/07/2017 AT 3.00 PM

# MINUTES OF THE MEETING OF THE BOARD OF STUDIES (BOS) OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 11/07/2017 AT 3.00PM

Meeting has been started with the welcome address by the Chairperson and all the leave of absence has been granted. Then the meeting is continued with agenda wise discussion.

The following resolutions were adopted after detailed deliberation.

### Agenda 1: To confirm the minutes of the Board of Studies meeting held on 10.01.2017

**Resolution 1:** The members are requested to go through the minutes of the last meeting which was already circulated for any suggestion or remarks. The minutes of the last meeting was confirmed.

### Agenda 2: To report action taken on the minutes of Board of Studies held on 10.01.2017

Resolution 2: The action taken report of the last meeting (Annexure 1) was placed and noted.

### Agenda 3: Formation of the Program Assessment Committee(PAC)

Resolution 3: It has been proposed that the formation of the Program Assessment Committee (PAC) with senior faculty members of the department and one senior faculty from another department as recommended by the Departmental Academic Committee (DAC).

The following PAC has been approved by the BOS members:

- 1. Prof. (Dr.) Saradindu Panda, Chairperson, Professor & HOD ECE, NiT
- 2. Prof. (Dr.) Salil Kumar Sanyal, Professor ECE, NiT
- 3. Prof. (Dr.) Joyanta Kumar Roy, Professor ECE, NiT
- 4. Prof. (Dr.) Bidyut Kumar Medya, Professor & HOD IT, NiT
- 5. Ms. Arpita Santra, Secretary, PAC, ECE, NiT

### Agenda 4: Initiative to revise the Vision, Mission and Program Educational Objectives (PEOs)

**Resolution 4:** The institute received autonomous status. In this line the ECE department has taken initiative to revise the Vision, Mission and Program Educational Objectives (PEOs) statement. Consequently, the process to define the Vision, mission and PEOs were placed. After minor revision the processes (Annexure 2) have been approved.

### Agenda 5: List of past events

**Resolution 5:** The list of past events including NSS activity was placed. It is suggested to organize IPR related events.

### Agenda 6: The question setter and moderator

**Resolution 6:** The list of the question setter and moderator has been placed for the corresponding courses. The list has been approved.

### Agenda 7: SWOC analysis and next year plan

Resolution 7: The SWOC analysis of the department was placed. It is suggested that the attention to be given for the publication of the patents. Alumni interaction need to be improved. Faculty members who are yet not enrolled in the doctoral program are advised to enrol for the same. The next year plan for the department was placed and noted.

## Agenda 8: Any other points with the permission of the chairman:

Resolution 8: It is discussed to carry out the impact analysis of industry visit.

There is no other significant discussion and the meeting ends with thanks from and to the chair.

Arpita Barman Santra

Secretary,

**BOS, ECE Department** 

Dr. Saradindu Panda **HOD & Chairperson** BOS, ECE Department

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MINUTES OF THE 1<sup>ST</sup> MEETING, 2017 OF BOARD OF STUDIES OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 10/01/2017 AT 3.00 PM

# MINUTES OF THE MEETING OF THE BOARD OF STUDIES (BOS) OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 10/01/2017 AT 3.00PM

Meeting has been started with the welcome address by the Chairperson and all the leave of absence has been granted. Then the meeting is continued with agenda wise discussion.

The following resolutions were adopted after detailed deliberation.

### Agenda 1: To confirm the minutes of the Board of Studies meeting held on 22.06.2016

**Resolution 1:** The members are requested to go through the minutes of the last meeting which was already circulated for any suggestion or remarks. The minutes of the last meeting was confirmed.

### Agenda 2: To report action taken on the minutes of Board of Studies held on 22.06.2016

Resolution 2: The action taken report of the last meeting (Annexure 1) was placed and noted.

### Agenda 3: Activity for Slow learner and Advanced learner

Resolution 3: The activities related to assisting the slow and advanced learner were discussed.

### Agenda 4: Industry interaction

**Resolution 4:** The past activities related to industry interaction were placed. It was suggested that few industry oriented student project may be carried out.

### Agenda 5: Research, development and consultancy activity

**Resolution 5:** The list of Faculty and Student publication was placed. It has been suggested to publish paper in WoS, Scopus and SCI indexed journal. The consultancy work need to be improved. It has been suggested to apply for Government, Non-government funded projects.

## Agenda 6: Result analysis of the students and success rate

**Resolution 6:** The result analysis of the students of B.TECH ECE 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> year for the academic year 2015-16 has been placed before the members. It is found that the number of backlogs in each year have been reduced compared to the previous academic year.

## Agenda 7: Attainment analysis of Course Outcomes (COs)

**Resolution 7:** The attainment analysis of Course outcome was discussed. It has been suggested to emphasize on student centric learning.

## Agenda 8: Placement analysis of 2016 pass-out batch

**Resolution 8:** The list of placed student along with company was placed. It is suggested to conduct special technical and soft skill session for the improvement of the placement percentage.

### Agenda 9: Value added courses

**Resolution 9:** The list of value added courses to be offered in the next academic year (2017-18) placed. After discussion the following courses have been selected. Committee further suggests to define a suitable content in the form for brochure before enrolment of the students. List of value added courses:

- a. PCB Design using PROTEUS
- b. Recent Advances in Communication

It has been decided that this list will be forwarded to Training and Placement Department for conducting/coordinating training on this topic.

## Agenda 10: Departmental Newsletter and Magazine

**Resolution 10:** It has been reported that the departmental newsletter and magazine for the year 2016 has been published.

### Agenda 11: Impact analysis of Student project

**Resolution 11:** The impact analysis of student project has been placed and the committee expressed satisfaction.

### Agenda 12: Any other points with the permission of the chairman:

**Resolution 12:** It is discussed that the National Conference was organized by the department in the month of August 2016. Total 40 number of paper was presented and published in the proceedings.

There is no other significant discussion and the meeting ends with thanks from and to the chair.

Arpita Barman Santra Secretary,

**BOS, ECE Department** 

Dr. Saradindu Panda HOD & Chairperson BOS, ECE Department

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MINUTES OF THE 2<sup>ND</sup> MEETING, 2016 OF BOARD OF STUDIES OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 22/06/2016 AT 3.00 PM

# MINUTES OF THE MEETING OF THE BOARD OF STUDIES OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 22/06/2016 AT 3.00PM

Meeting has been started with the welcome address by the Chairperson and all the leave of absence has been granted. Then the meeting is continued with agenda wise discussion.

The following resolutions were adopted after detail deliberation.

### Agenda 1: To confirm the minutes of the Board of Studies meeting held on 25.02.2016

Resolution 1: The members are requested to go through the minutes of the last meeting which was already circulated for any suggestion or remarks. The minutes of the last meeting was confirmed.

## Agenda 2: To report action taken on the minutes of Board of Studies held on 25.02.2016

Resolution 2: The action taken report of the last meeting (Annexure 1) was placed and noted.

### Agenda 3: Reporting of past events

**Resolution 3:** The list of past events – seminars, workshop, NSS activity organized by the department was placed and noted.

# Agenda 5: Target level of COs, POs & PSOs of Regulation -16 (R-16) curriculum and rubrics Resolution 5: The target level of attainment for Cos, POs, PSOs have been approved as per the following tables for R 16 curriculum.

Attainment level of Course Outcome(AL)	Target Level of Course Outcome			
1	>=60% - <70% of students scoring above Target level (70%)			
2	>=70% - <80% of students scoring above Target level (70%)			
3	>=80% & above students scoring above Target level (70%)			

										PO1		PSO 1	PSO 2	PSO 3
2.4	2.4	2.4	2.4	2.4	2.1	1.8	2.1	2.4	2.4	2.4	2.4	2.4	2.4	2.4

It has been also discussed and approved that the followings are the assessment tools for the attainment calculation.

The tools used in measuring the Course Outcomes for Theory Courses are Slot Tests (30 Marks), Assignments(30 Marks), Quizzes(30 Marks) and Semester End Examination (SEE) (70 Marks).

Tools for the measuring the Course Outcomes for Practical Courses are Continuous performance (15marks), Initiative to learn (10 marks), Experiment report(15 marks) and Semester End Examination (SEE)-Experiment(40) & Viva(20). Rubrics to assess the performance of student in practical courses is annexed.

Tools and rubrics for Project are also discussed. The tools to assess the performance of students in project work as follows: Plan of work(5 marks), problem formulation(10 marks), Social Impact(5 marks), Design (5 marks), implementation (10 marks), Result Analysis(5 marks) and Semester End Examination — Individual/Team work (10 marks), Design (15 marks), implementation (15 marks), demonstration (10 marks) & report (10 marks).

The approved rubrics for practical and projects is annexed in Annexure 2.

It is also discussed and approved that the attainment of COs will be calculated through direct method as follows: CO attainment= 40% of Continuous Internal Evaluation (CIE) + 60% of SEE and the attainment of POs and PSOs will be calculated as follows: PO attainment = 80% of direct method + 20% of indirect method & PSO attainment = 80% of direct method + 20% of indirect method.

Direct methods are CIE and SEE. Indirect methods are survey from exit student, employers, alumni, parent, Co-curricular and extracurricular activity.

### Agenda 6: The question paper setter and moderator

**Resolution 6:** The list of question paper setter and moderator for the courses under Regulation 2015 and Regulation 2016 for the academic year 2016-2017 was placed and approved. The approved list of moderator is enclosed in Annexure 3.

### Agenda 7: Visiting faculty requirement.

**Resolution 7:** It has been discussed that similar to previous semester the department should invite industry expert as resource person to organize seminar, workshop, expert lecture on recent trends of research and industry.

### Agenda 8: Quality of Teaching Learning

**Resolution 8:** The following process (Annexure 4) have been approved to improve the teaching learning process.

### Agenda 9: SWOC analysis and next year plan

Resolution 9: The SWOC analysis and next year plan was placed.

## Agenda 10: Any other points with the permission of the chairman:

**Resolution 10:** It was discussed that the Regulation 2016 curriculum will be implemented from from the First year of 2016-2017 admission batch. The departmental academic calendar was prepared in line with the institutional academic calendar.

The meeting ends with vote of thanks to all the members present.

Arpita Barman Santra

Secretary,

BOS, ECE Department

Dr. Saradindu Panda HOD & Chairperson BOS, ECE Department

Head, ECE
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MINUTES OF THE 1<sup>ST</sup> MEETING, 2016 OF BOARD OF STUDIES OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 25/02/2016 AT 3.00 PM

# MINUTES OF THE MEETING OF THE BOARD OF STUDIES (BOS) OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT HELD ON 25/02/2016 AT 3.00PM

Meeting has been started with the welcome address by the Chairperson and all the leave of absence has been granted. Then the meeting is continued with agenda wise discussion.

The following resolutions were adopted after detailed deliberation.

### Agenda 1: To confirm the minutes of the Board of Studies meeting held on 06.10.2015

**Resolution 1:** The members are requested to go through the minutes of the last meeting which was already circulated for any suggestion or remarks. The minutes of the last meeting was confirmed.

### Agenda 2: To report action taken on the minutes of Board of Studies held on 06.10.2015

Resolution 2: The action taken report of the last meeting (Annexure 1) was placed and noted.

### Agenda 3: Identification of new courses in regulation 2016 (R 16) Curriculum.

**Resolution 3:** As per the suggestion of the member in the last meeting the new courses which have been introduced in R16 have been identified and listed for ready reference.

# Agenda 4: Identification of Courses in R16 Curriculum Mapped with Employability/ Skill Development/Entrepreneurship.

**Resolution 4:** The courses for Employability/Higher Studies/Advanced Skill Development/ Entrepreneurship introduced in R16 have been identified and listed for ready reference.

### Agenda 5: Adoption of the new Regulation 2016 (R16) curriculum for B.TECH (ECE) program

**Resolution 5**: The revised curriculum was placed under regulation 2016 (R 16) along with the course mapping percentage of courses with Program Outcomes (POs) and Program Specific Outcomes (PSOs). The course outcomes [as per the Outcome Based Education (OBE) requirement] are mapped with POs and PSOs to design the balanced curriculum. The total number of credit for R 16 curriculum is 198.

Followings percentage of mapping of POs and PSOs with courses of R 16 curriculum has been approved as balanced curriculum.

#### R16 Curriculum:

POs	Band of mapping of courses
PO1, PO2, PO3, PO4, PO9, PO12	65% to 80%
PO5, PO10	25% to 30%
PO6, PO7, PO8, PO11	8% to 10%

PSOs	Band of mapping of courses			
PSO1, PSO2, PSO3	70% to 80%			

After rigorous discussion all the BOS members express their satisfaction and approved the R 16 curriculum. It is also suggested to forward the curriculum to the Academic Council (AC) for further approval.

### Agenda 6: To consider running of value added courses

**Resolution 6:** The list of value added courses to be offered during the coming semester break placed before the Committee. After discussion the following courses have been selected. Committee further suggests to define a suitable content in the form for brochure before enrolment of the students.

List of value added courses:

- a. PCB Design using PROTEUS
- b. Big Data

## c. Recent Advances in Communication

It has been decided that this list will be forwarded to Training and Placement Department for conducting/coordinating training on this topic.

# Agenda 7: Question paper Moderator, Examiner for theory and practical examination for the B.TECH ECE 1<sup>st</sup> year to 4<sup>th</sup> year

Resolution 7: List of moderator and examiner for theory and practical examination was placed. The list was approved. The approved list of moderator is Annexed in Annexure 2. It has been decided that any two academician among Prof. (Dr.) M. Mitra, Prof. (Dr.) S. Bhowmick, Prof. (Dr.) D. R. Poddar will be invited as the External examiner for the laboratory examination.

### Agenda 8: Training needs analysis of Faculty, TAs and students

**Resolution 8:** The feedback analysis on Teaching Learning was placed. Based on the feedback, the Training Need Analysis (TNA) of Faculty, Technical Assistants and Students has been placed and noted.

### Agenda 9: Activity for Slow Learners and Advanced Learners

**Resolution 9:** The activities to assist the Slow Learners and Advanced Learners has been discussed.

### Agenda 10: Industry interaction

**Resolution 10:** The list of activities context to industry interaction was placed. It has been suggested to increase the industry visits, internship of students at the industries, industry expert lecture. The questionnaire of Student feedback on industrial training/tour and internship or summer training has been placed and approved. (Annexure 3)

### Agenda 11: Research, development and consultancy activity

**Resolution 11:** The list of publications in journals, conferences was placed. It has been suggested to publish in good quality journal. The activity related to the consultancy work has also been discussed. It is suggested to bring more consultancy work by the faculty member.

## Agenda 12: Faculty competency and visiting faculty requirements

**Resolution 12:** The competency area of the faculty was discussed. It has been suggested to invite Industry personnel or Academician from reputed institute to deliver some portion of the courses relevant to recent trends of industry and emerging area.

## **Agenda 13: Departmental Academic Audit**

**Resolution 13:** The report of departmental Academic Audit for the academic year 2015-2016 was placed. It has been discussed that the department should emphasize on project and research work.

## Agenda 14: Any other points with the permission of the chairman:

**Resolution 14:** It has been discussed that the departmental budget for the next financial year was prepared in Departmental Academic Committee (DAC) and processed.

The meeting ends with vote of thanks to all the members present.

Arpita Barman Santra

Secretary,

BOS, ECE Department

Dr. Saradindu Panda HOD & Chairperson

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Minutes of the meeting, BOS, ECE Department held on 25th February 2016