# **Supporting Documents**

1.1.3 & 1.2.1

# **Electronics & Communication Engineering**

S. No.	Documents attached
1	MOMs Highlighting Employability Courses_1.1.3
	ांसाध टैवतीवस क



### Minutes of Meeting

Due to Covid-19 epidemic, it was directed by Hon'ble Vice Chancellor & Dean Academics, to convene the meetings of Board of Studies (BOS) of various Engineering disciplines of IKGPTU Kapurthala, regarding preparation of syllabus for upcoming batches through online mode. It is to bring to your kind notice that BOS Electronics and Communication Engineering (ECE) (Affiliated colleges) had already conducted its Board of Studies ECE on 13/09/2019 at Department of Academics, 2nd Floor, Conference Room, Front building, IKGPTU Kapurthala and had finalized the scheme and syllabi of 3rd to 5th Semesters of B.Tech Electronics and Communication Engineering (ETE) and B.tech Electronics and Instrumentation Engineering (EIE). Now, this time only one subject from 7th Semester is adjusted to 5th Semester by taking the consent of BOS ECE members online, under the Chairmanship of Dr. Manoj Kumar, Principal DAVIET, Jalandhar.

On behalf of BOS ECE (Affiliated colleges) members, Board took the following decisions online:

- . The Study schemes for B.Tech. Electronics and Communication Engineering (ECE), B.Tech. Electronics and Telecommunication Engineering (ETE) and B.Tech. Electronics and Instrumentation Engineering (EIE) from 3rd semester to 5th semester was accepted and approved for the batch 2018-2022 as finalized by the BOS ECE on 13/09/2019.
- The Board finalized the syllabus contents of 5th semester of B.Tech. Electronics & Communication Engineering (ECE) and B.Tech. Electronics & Instrumentation Engineering (EIE).
  Moreover, it is also discussed the set of the set o
- Moreover, it is also discussed that the syllabi of all M.Tech courses of Electronics and Communication Engineering are completed in full.

Submitted for the record of Department of Academics, IKGPTU Kapurthala.

Dr. Manoj Kumar Chairman BOS ECE (Affiliated colleges) (Principal DAVIET Jalandhar)

Dr. Dalveer Kaur BOS Coordinator ECE (AP ECE IKGPTU)

Cautoda (Puijab



# LK.Gujral Punjab Technical University Jalandhar-Kapurthala Highway, Kapurthala 144603 (PB) Department of Electronics & Communication Engineering

#### Minutes of Meeting

# Subject: Minutes of the 5" meeting of Board of Studies Electronics and Communication Engineering on 18/02/2019.

A meeting of the Board of Studies Electronics and Communication Engineering (ECE) held on 18.02.2019 at 10:30am; at Department of ECE, College Building-I, 2nd Floor, IKOPTU Main Campus, Kapurthala under the chairmanship of Dr Satvir Singh (officiating) for the under graduate programs listed below: 1. B. Tech. in Electronics & Communication Engineering

- 2. B.Tech. in Electronics & Instrumentation Engineering 3. B.Tech. in Electronics & Telecommunication Engineering

The Agenda of the moeting is to deliberate and finalize:

1. Study Scheme of above B.Tech. ECE and related programs from 3rd to 8th

2. Syllabus of above B.Tech. ECE and related programs for 2nd year along with Vision, Mission, Program Outcomes (POs), Course Objectives and Course Outcomes (COs).

3. To discuss any other matter with permission of the Chair,

Following members of the BOS & Special Invitees were requested to attend said meeting for expert inputs:

- Dr J S Sahambi 1.
- 2. Dr Dilbag Singh
- 3. Dr. Y.S. Brar
- Dr. Harpal Singh 4.
- Dr Satvir Singh 5. 6. Dr. Jagroop Singh
- Dr. Ashish Arora 7.
  - Dr. Sarabjet Singh

Dr Rakesh Kumar

r Rakesh Goyal

Professor Professor Professor & Director Professor Associate Professor Associate Professor Associate Professor Mathematical Sciences Assistant Professor (Human Values) Assistant Professor

Assistant Professor

IIT Ropar, Special Invitee NIT Jalanchat, Special Invites IKOPTU Main Campus CEC Landran Special invite IKOPTU Main Campus Member DAVIBT Jalandhar Member IKOPTU Main Campus Special Invites IKOPTU Main Campus, Nominec/Special invitce IKOPTU Bhikhiwind Campus Special Invitee

IKGPTU Main Campus Member

Department of Electronics & Comm IK Gujral Punjab Technical University Main Campus, Kapurthala (Punjab)-144503

NI I

188

11. Dr Amit Gupta 12. Dr. K.S.Bhatis 13. Dr. Shabir Sidhu 14. Dr. Anshit Bhasin 15. Er Navdeepak Singh 16. Dr Dalveer Kaur	
17. Dr Sandeep Singh Gill 18. Dr Harbhajan Singh 19. Dr Avtar Singh Buttar	Assistant Professor & IKGPTU Main Campus Member Cordinator BOS ECE Professor Professor Chairman BOS ECE Chairman BOS ECE Chairman BOS ECE
20. Dr. B.S.Sohi 21. Dr Jaswinder Singh 22. Dr Charanjit Singh 23. Dr Nina Gupta 24. Dr Dharminder Singh 25. Dr A K Chatterjee	Pro Vice Chancellor Associate Professor Pr
	Professor Thepar University Member No. 16-24 could not attend the model

end the meeting.

Based on the delibrations, the Board recommended the following: (ECE), B.Tech. Electronics and Telecommunication Engineering (ETE) and B. Tech. Electronics and Instrumentation Engineering (EIE) from 3rd somester to 8th semester was discussed and finalised (attached herewith as Annexure-I). 2. Statements for Vision and Mission ; Program Educational Objectives, Program Outcomes, Program Specific Outcomes, Course Objectives and Course Outcomes has been discussed and finalised specifically for the B.Tech. BCB IKOPTU Main campus (attached herewith as Annexure-II). 3.

The Board observed and finalized the syllabus contents for second year of B.Tech. Electronics & Communication Engineering (ECE), B.Tech. Electronics & Instrumentation Engineering (EIE), B.Tech. Blectronics & Telecommunication Engineering (ETB) (attached herewith an Apnexure-III). In the meeting of BOS ECE, it is decided that following chapters should be covered in Mathematics III to meet the requirements of other core subjects, irrespective of the suggestions given by AICTE.

a. Fourier Transform

b. Laplace Transform

- 2-Transform

d. Probability & Statistic

It is desided by the Board that the contents of the (a) Data Structures and Algorithms and (b) Environmental Sciences (a non credit Mandatory course),

18

Department of Electronics & Communication Engineering Head IK Gujral Punjab Technical University Main Campus, Kapurthala (Punjab)-144603 in 4th semaster and (c) HUSS courses - Foundational course in Humanities (Development of Societies/Philosophy) and (d) Universe Human Values-2: Understanding Hatmony (in semasters 3rd and 4th, respectively) will be provided by the concerned Department.

The board finalized the syllabus of the subject: (a) BTEC-305-18 Besic Electronics (for B.Tech. Civil Engineering and B.Tech. Mechanical Engineering), (b) BTEC-315-18 Basic Electronics Lab for B.Tech. Civil Engineering), (c) Instrumentation & Sensor Technology (for B.Tech Civil Engineering) as requested by the respective BOS.

Further important suggestions (if any) will be incorporated with the approval of Chairman BOS ECE to be put for restification in next BOS ECE meeting.

Meeting ended with vote of thanks.

Dr Ansku Bhilin

y

r. Harpel Sings

Or Yadwinder Slagh Brar

Dr. Siret and

Dr. Stander Stellen

186

Heao Department of Electronics & Communication Engineering IK Gujral Punjab Technical University Main Campus, Kapurthala (Punjab)-144603



Minutes of Meeting 16th July, 2019 Board of Studies - Electronics & Communication Engineering (Affiliated Colleges) I.K.Gujral Punjab Technical University, Kapurthala

#### **Minutes of Meeting**

As per the University BOS notification no. IKGPTU/Reg/Notification/203 dated 13/05/2019, the 1st meeting of the notified Board of Studies of Electronics & Communication Engineering (BOS ECE) (Affiliated Colleges), I.K.Gujral Punjab Technical University, Kapurthala was held under the Chairmanship of Dr. Manoj Kumar, Principal DAVIET, Jalandhar and Vice-Chairmanship of Dr. Avtar Singh Buttar, Associate Professor, Department of Electronics and Communication Engineering IKGPTU at Department of Academics. Conference room, 2nd Floor, IKGPTU, Kapurthala on 16.07.2019 at 10:30am.

The meeting started with the welcome address to the members of BOS (ECE) by the Dr Manoj Kumar.

The following member were present :

Dr. Manoj Kumar, Principal DAVIET, Jalandhar (Chairman)

Dr. Avtar Singh Buttar, Head, Department of ECE, IKGPTU, Kapurthala (Vice-Chairmna)

Dr. Suyeb Ahmed Khan. BKSJEC, Amritsar (Member)

Dr. Vinay Bhatia, CGC, Landran (Member)

Dr. Narinder Sharma, ACET, Amritsar (Member)

Dr. Baljeet Kaur, GNDEC Ludhiana (Member)

Dr. Tripatjot Singh Panag, BBSBEC, Fatehgarh Sahib (Member)

Dr. Balwinder Singh Dhaliwal, GNDEC, Ludhiana (Member)

Dr. Ravindra Kumar Sharma. Professor ECE, Ambedkar Instt. of Advance Communication

Technologies & Research Geeta Colony, Delhi (Member)

Dr. N.S. Raghava, Professor Deptt. ECE, Delhi Technological University, Delhi (Member)

Dr. B.S. Saini, NIT, Jalandhar (Member)

Er. Gurpreet Singh, EdGate Technologies Pvt. Ltd. #68, 15th Cross, 1st Block R.T. Nagar, Banglore-560032 (Member)

Dy. Director / Assistant Director CR&A, Department of CR&A, IKGPTU (Member)

- Mr. Danny Lin, Industry Expert (Special Invitee)
- Mr. Himanshu Mahajan, Industry Expert (Special Invitee)
- Er. Meenakshi Sansoy, Student

Dr. Dalveer Kaur, Assistant Professor, Department of ECE Main Campus IKGPTU (Coordinator)

The following were not present :

Dr. Rajni, SBS STC, Ferozepur (Member) Dr. Amarpal Singh, BCET, Gurdaspur (Member) Dr. Jagjit Singh, DAVIET, Jalandhar (Member)

The Agenda of the meeting was to deliberate and finalize:

 To accept and approve the study schemes of 3rd to 8th Semester B.Tech. Electronics and Communication Engineering (ECE) and B.Tech. Electronics and Instrumentation Engineering (EIE) that is already uploaded on University website for batch 2018 and onwards at par with AICTE Model Curriculum 2018.

2) To discuss and finalize the syllabus of the courses of 5th Semester of B.Tech ECE and

B.Tech Ell Head nent of Electronics & Communication Engineering

IK Gujral Punjab Technical University



Minutes of Meeting 16<sup>th</sup> July, 2019 Board of Studies - Electronics & Communication Engineering (Affiliated Colleges) I.K.Gujral Punjab Technical University, Kapurthata

- To distribute the courses of 6th Semester of B.Tech ECE and B.Tech EIE to design the syllabus for next BOS ECE.
- To adopt the policy regarding MOOCs courses.
- 4) To finalise the on-line SWAYAM/MOOCS courses for the session July-November 2019 that a student may take to get Honors degree or Minor degree in Electronics and Communication Engineering and Electronics and Instrumentation Engineering.
- To select 2 BOS Members to map the syllabus for migration cases.
- Any other agenda with permission of the Chair.

The Proceedings of the meeting were recoded as under:

- The Study schemes for B.Tech. Electronics and Communication Engineering (ECE) and B.Tech. Electronics and Instrumentation Engineering (EIE) from 3rd semester to 8th semester was considered for the batch 2018-2022, and following changes were made:
  - a) The subject of Computer Networks (Course code: BTCS-ZZZ-18) is swapped with the subject Digital Signal Processing (Course code: BTEC-502-18) and concurrently the course code is changed to BTEC-602-18.
  - b) The Professional Elective Courses are classified into five groups viz. Electronic Hardware, Communication, Software Development, ICT and Signal Processing.
  - c) The revised study scheme along with the list of Professional Elective Courses is attached at Annexure I.
  - d) The revised list of the Open Electives is attached at Annexure II.
- The Board deliberated on the course contents of the subjects of 5<sup>th</sup> semester of B.Tech. Electronics & Communication Engineering (ECE) and B.Tech. Electronics & Instrumentation Engineering (EIE) along with the Course Objectives and Course Outcomes will be discussed and finalized in the next BOS meeting on 13/09/2019.
- 3. In view of the University notification no. IKGPTU/Reg/NF/2096 dated 24/05/2019 and MHRD guidelines in respect of SWAYAM/MOOCs for Honors/Minor Degree in ECE/EIE. it was decided that courses having duration of minimum 12 weeks with 4 credits be permitted. Also, one faculty coordinator up to 30 students is to be nominated by the HOD for registration, certification and coordination on rotation basis. The registration fee for the faculty coordinator(s) shall be borne by the Institute, if faculty is interested. The faculty coordinator will monitor the students' progress from time to time and maintain the record of the same.



Minutes of Meeting 16th July, 2019 Board of Studies - Electronics & Communication Engineering (Affiliated Colleges) I.K.Gujral Punjab Technical University, Kapurthala

- 4. The BOS discussed and approved the list of SWAYAM /MOOCs courses (for Semester July-Nov 2019) for Honors and Minor Degree in Electronics & Communication Engineering (Annexure III) and for Honors and Minor Degree in Electronics & Instrumentation Engineering (Annexure IV).
- Dr. Dalveer Kaur and Dr. Jagjit Singh Malhotra are nominated to map the syllabus for 5.

The BOS ECE meeting ended with a vote of thanks.

Dr. Manoj Kumar Dr.

Avtar Singh Buttar

Dr. Ravinder Kumar Sharma

Sharma

Dr. Vinay Bhatia

N.S.Raghava

Dr. Narinder

Dr. Suveb Ahmed Khan

Dr. Tripatjot Singh Panag

Dr. Balwinder Singh Dhaliwal

Eq. (17/19. Er. Gurpreet Singh Dr. Baljeet Kaur

Meenakshi Sansoy

(Student) (PhD)

Dr. Narinder

Sharma

Mr. Danny Lin

Er. Navdeepak Sandhu

Himanshu Mahajan

er Kau

on Engineering inical Universit



Minutes of Meetingus December -Board of Studies - Electronics & Communication Engineering (Affiliated Colleges) 1.K.Gujral Punjab Technical University, Kapurthala

#### Minutes of Meeting

On behalf of Department of Academics IKGPTU Kapurthala, an online meeting of the Board of Studies of Electronics & Communication Engineering (BOS ECE) (Affiliated Colleges), I.K.Gujral Punjab Technical University. Kapurthalawas conducted under the Chairmanship of Dr. Avtar Singh Buttar, Associate Professor. Department of Electronics and Communication Engineering IKGPTU on 03 December 2020 at 11:00am.

The meeting started with the welcome address to the members of BOS (ECE) affiliated colleges by the Dr. Avtar Singh Buttar.

The following BOS Members were present:

Dr. Avtar Singh Buttar, Chairman, Associate Professor, IKGPTU Main Campus, Kapurthala

Dr. Ravindra Kumar Sharma, Professor, Ambedkar Instt. of Advance Communication Technologies & Research Geeta Colony, Delhi

Dr. B.S. Saini, Professor, NIT Jalandhar

Dr. N.S. Raghava, Professor, Department of ECE, Delhi Technological University, Delhi

Dr. Rajni, Professor, SBSSTC Ferozpur

Dr. Suyeb Ahmed Khan. Professor, BKSJEC, Amritsar

Dr. Vinay Bhatia, Professor, CGC, Landran Mohali

Dr. Jagjit Singh, Associate Professor, DAVIET, Jalandhar

Dr. Narinder Sharma, AssociateProfessor, ACET, Amritsar

Dr. Baljeet Kaur, Assistant Professor, GNDEC, Ludhiana

Dr. Tripatjot Singh Panag, Assistant Professor, BBSBEC, Fatehgarh Sahib

Er. Gurpreet Singh. Industry Expert, EdGate Technologies Pvt. Ltd., Banglore

Er. Navdeepak Sandhu, Deputy Director. Department of CR&A, IKGPTU.

Dr.Dalveer Kaur, Assistant Professor, Deptt of ECE. IKGPTU Kapurthala (BOS Coordinator)

The following BOS Members could not attend the meeting:

-Dr. Manoj Kumar. Principal, DAVIET Jalandhar.

-Dr. Amarpal Singh. Associate Professor, BCET, Gurdaspur

-Dr. Balwinder Singh Dhaliwal, Assistant Professor, GNDEC Ludhiana

The Agenda of the meeting was to deliberate and finalize:

1)To discuss and finalize the 6th semester syllabus of B.Tech ECE (Electronics and Communication Engineering), B.Tech ETE (Electronics and Telecommunication Engineering) and B.Tech EIE (Electronics and Instrumentation Engineering), with the inclusion of 6-months training in 7th/8th semester as per the University's notification.

2)To finalize the drafted scheme and syllabus of 1s1/2nd sem of B.Voc. (Electronics & Information Technology) on the lines of AICTE.

The Proceedings of the meeting are as under:

The Board discussedand finalized the course contents of the subjects of 6th semester of 1. B.Tech. ECE(Electronics & Communication Engineering). B.Tech ETE (Electronics

2 Althe

Head Department of Electronics & Communication Engineering IK Gujral Punjab Technical University Main Campus, Kapurthala (Punjab)-144603

182



Minutes of Meeting03 December 2020 Board of Studies - Electronics & Communication Engineering (Affiliated Colleges) L.K.Gujeal Paujab Technical University, Kaporthala

and Felecommunication Engineering)and B.Tech. EIEO/Jectronics &Instrumentation Engineering) including the Professional Electives as well as Course Objectives and Course Outcomes.

2. The Board also discussed and finalized the course contents of the drafted scheme and syllabus of 1<sup>st</sup>/2<sup>nd</sup>sem of B.Voc.(Electronics & Information Technology). The Board suggested to add the List of Industry Oriented courses at the end of the semesters.

The BOS FCF meeting ended with a vote of thanks.

Pr. Mar Singh Buttar

Chairman BOS ECE Affiliated colleges

Dr.Dalveer Kaur Coordinator BOS ECE Affiliated colleges

to Asser

F Head Department of Electronics & Communication Engineering IK Gujral Punjab Technical University Main Campus, Kapurthala (Punjab)-144003

181

# IK Gujral Punjab Technical University

Jalandhar-Kapurthala Highway, Kapurthala-144603 (PB)

Department of Electronics & Communication Engineering

## Minutes of Meeting

## Subject: Minutes of BOS ECE Meeting held on 25.05.2018.

On 25.05.2018 at 10:00am, a meeting of Board of Studies (Electronics and Communication Engineering) was held under the chairmanship of Dr A S Buttar to deliberate and update UG & PG schemes of following degree courses:

1. B.Tech. in Electronics & Communication Engineering

- 2. B.Tech. in Electronics & Instrumentation Engineering
- 3. B.Tech. in Electronics & Telecommunication Engineering
- 4. M.Tech. in Electronics & Communication Engineering
- 5. M.Tech. in ECE (Wireless Communication)
- 6. M.Tech. in Electronic Product Design & Technology
- 7. M.Tech. in Embedded Systems
- 8. M.Tech. in VLSI

Following members of the BOS & Special Invitees were present in the meeting to give their inputs:

Assistant Professor

- 1. Dr Avtar Singh Buttar, M Chairman BOS ECE
- 2. Dr J S Sahambi Professor
- Dr Dilbag Singh 3. Associate Professor
- Dr Rajesh Khanna 🕈 4. Professor 5.
- Dr Harbhajan Singh Professor 6.
- Dr Charanjit Singh Professor 7. Dr Satvir Singh Associate Professor
- 8. Dr Dalveer Kaun
- 9. Dr Rakesh
- Assistant Professor 10. Dr Amit Gupta Assistant Professor
- 11. Dr Kamaljit Singh Bhatia
- Assistant Professor 12. Dr Jagroop Singh SIA
- Associate Professor
- 13. Dr Gagandeep Kaur Associate Professor EE

Head ECE, IKGPTU Main Campus IIT Ropar, Special Invitee NIT Jalandhar, Special Invitee Thapar University, Special Invitee SSIET Derrabassi **RBIET Hoshiarpur IKGPTU Main Campus IKGPTU Main Campus IKGPTU Main Campus IKGPTU Main Campus** Batala Campus, Special Invitee DAVIET Jalandhar **IKGPTU Main Campus** 

The following members were absent in the meeting:

- 1. Dr.Sandeep Singh Gill, GNDEC, Ludhiana
- 2. Dr. Rakesh Kumar, IKGPTU-Bhikhiwind campus
- 3. Dr. Balwinder Singh, CDAC Mohali
- 4. Dr. Nina Gupta, PEC, Chandigarh,
- 5. Dr. Dharminder Singh, IIT Roorkee,

Page 1 of 2

Head Department of Electronics & Communication Engineering IK Gujral Punjab Technical University Main Campus, Kapurthala (Punjab)-144603

- 6. Dr. A.K.Chatterjee, Thapar University, Patiala
- 7. Er. Navdeepak Singh, IKGPTU, Kapurthala
- 8. Dr. Jaswinder Singh, BCET, Gurdaspur
- 9. Dr. Monika Sachdev, IKGPTU, Kapurthala

Board members deliberated and agreed on the following recommendations:

- 10. Board observed and finalized the Study schemes and syllabus contents for second year of B.Tech. in (1) Electronics & Communication Engineering (2) Electronics & Instrumentation Engineering and (3) Electronics & Telecommunication Engineering along with the course objectives and course outcomes.
- 11.2. Lab syllabil of B.Tech. ECE (3rd to 8th semesters) along with their Course Objectives & Outcomes were also discussed in the meeting and approved.
- 12.3 The Board deliberated on the subjects Engineering Mathematics III/Biology/Engineering Mechanics and decided that these subjects are not required in B.Tech. (1) Electronics & Communication Engineering (2) Electronics & Instrumentation Engineering and (3) Electronics & Telecommunication Engineering (as per AICTE Model/Curriculum 2018).
- 13.1 The Board also reviewed & approved syllabil of (1) M.Tech. in Electronics & Communication engineering (2) M.Tech. in ECE (Wireless Communication) New/Old schemes, (3) M.Tech. in VLSI Design, (4) M.Tech. in Electronics Product Design and Technology, (5) M.Tech. in Embedded Systems along with course objectives and course outcomes.

14.5. Non-credit Mandatory & audit courses will be treated as non-credited courses.

Meeting ended with vote of thanks

10-05

Dr Rajesh Khanna

Dr Kamallit Singh Bhatia

HD Jugh

Dr Harbhajan Singh

113 Dr Dalveer Kaur

Dr Dilbag Singh

bop Singh

Dr Amit Gupta 5-15

Jogender

Dr Gagandeep Kaur

**Dr** Charaniit Singh

Dr Satvir Singh

Dr Rakesh

**Dr Avtar Singh Buttar** 

Dean (Acad.) Pa th A

Page 2 of 2

Head Department of Electronics & Communication Engineering IK Gujral Punjab Technical University Main Campus Kanudhala (Duniah) 44461

19

IKG PTU (ELE) 203

Date -25/04/18

25/4/2018.

# IK Gujral Punjab Technical University

Jalandhar-Kapurthala Highway, Kapurthala-144603 (PB)

## Minutes of Meeting

# Subject: 2<sup>nd</sup> Meeting of Board of Studies Electronics and Communication Engineering

Mr. Sam

On 24.04.2018 at 10:00am, 2<sup>nd</sup> meeting of Board of Studies (Electronics and Communication Engineering) was conducted under chairmanship of Dr A. S. Buttar to deliberate and update UG & PG schemes of following degree/giploma courses

- 1. B.Tech in Electronics & Communication Engineering
- 2. B.Tech. in Electronics & Instrumentation Engineering
- 3. B.Tech. in Electronics & Telecomm. Engineering
- 4. M.Tech. in Electronics & Communication Engineering
- 5. M.Tech in ECE (Wireless Communication)
- 6. M.Tech. in Electronic Product Design & Technology
- 7. M.Tech. in Embedded Systems
- 8 M.Tech. in VLSI
- 9 B.Tech. in Electronics & Computer Engineering
- 10 Post Graduate Diploma in Electronic Product Design & Technology

In the meeting of BOS Chairpersons, held on April 13, 2018 at 4:30pm it is decided to update curriculums of all degree courses running in all department. Students of coming first year (Batch 2018) in Main Campus and all affiliated colleges (except UGC autonomous colleges) will undertake revised curricula. Accordingly, the study schemes for degree courses listed above at Sr. No. 1-8 and syllabus contents for first year were deliberated at length for finalization. Degree/Diploma courses from Sr. No. 9-10 are not running in any institute under IKGPTU Kapurthala and, therefore, not considered in this meeting.

Following members of the BOS & special invitees were requested to attend said meeting for expert inputs:

- 1 Dr Avtar Singh Buttar
- 2. Dr Sandeep Singh Gill
- 3. Dr Harbhajan Singh
- 4. Dr Satvir Singh
- S Dr Dalveer Kaur
- 6. Dr Rakesh Kumar
- 7. Dr Amit Gupta

Chairman BOS ECE Professor Professor Associate Professor Assistant Professor Assistant Professor Assistant Professor

Head ECE, IKGPTU Main Campus GNDEC Ludhiana SSIET Derbassi IKGPTU Main Campus IKGPTU Main Campus IKGPTU Main Campus

Page 1 of 7 June Adul Head Department of Electronics & Communication Engineering

Department of Electronics & Communication Engineering IK Gujral Punjab Technical University Main Campus, Kapurthala (Punjab)-144603

8.	Dr Kamaljit Singh Bhatia	Assistant Professor	Batala Campus, Special Invitee
9.	Dr Rakesh Kumar	Assistant Professor	Bhikhiwind Campus, Special Invitee
10.	Dr Balwinder Singh	Principal Engineer	CDAC Mohali, Special Invitee
11.	Dr J S Sahambi	Professor	IIT Ropar, Special Invitee
12.	Dr Rajesh Khanna	Professor	Thapar University, Special Invitee
13.	Dr Dilbag Singh	Associate Professor	NIT Jalandhar, Special invitee
14.	Dr Charanjit Singh	Professor	RBIET Hoshiarpur
15.	Dr Nina Gupta	Professor	PEC Chandigarh
16.	Dr Dharminder Singh	Professor	IT Roorkee
17.	Dr A K Chatterjee	Professor	Thapar University
18.	Er Navdeepak Singh	T&P Officer	IKGPTU Kapurthala
19.	Dr Jagroop Singh	Associate Professor	DAVIET Jalandhar
20.	Dr Jaswinder Singh	Associate Professor	BCET Gurdaspur

Members of BOS from Sr. No. 14-20 could not attend the meeting. Board members deliberated on many issues and finally following decisions were taken unanimously:

- The board accepted the credit-based system in line with AICTE Model Curriculum 1. January 2018 for all UG & PG degree courses under consideration.
- 2. Students of batch 2018 onwards at IKGPTU main campus, constituent campuses, affiliated colleges (except UGC autonomous college) will undertake new curriculum.
- 3. Study scheme and course contents for first year will be same for all B.Tech. degree courses as decided by the office of Dean Academics. Board has observed that course contents of Basic Electrical Engineering are heavy for first year students, therefore, board recommended to remove Module 5 & 6 and replace with basic topics from electronics engineering.
- 4. Students will undertake three trainings of total 12 weeks: (a) 4-week institutional Training, (b) 4-week industrial Training after 4th sem and (c) 4-week industrial Training after 6th sem. Six months industrial training will be eliminated from the curriculum.
- 5. To enhance soft skills among students three practical courses (of 1 credit each) on Professional Skills have been introduced in 4th, 5th and 6th semesters.
- Under the supervision of course teacher, each student will design and submit a relevant 6. (hardware/software) project in each practical course. Distribution of practical course assessment will be as follows:

S. No.	Description	Percentage	Marks	
1.	Practical File	10%	3	
2.	Attendance	10%	3	
3.	Mid-Sem-Test	20%	6	
4.	Viva	20%	6	
5.	Lab Project	40%	12	
	Total	100%	30	

Department of Electronics & Communication Engineering IK Guiral Puniab Technical University

- 6. Board recommends that course contents and credits, if any, of all mandatory courses should be same for all B.Tech. disciplines
- 7. Board also discussed and approved the departmental Vision & Mission statements, Programme Education Objectives (PEOs), Programme Outcomes (POs) and Programme Specific Outcomes (PSOs) for the Department of ECE at IKGPTU Main Campus (attached at Annexure-I).

Other constituent campuses and affiliated institutes are free to adopt/modify PEOs and PSOs statements as per respective vision and mission statements. Board of studies recommends all institutes to adopt Outcome Based Education system and get accredited by National Board of Accreditation.

Further, in the meeting member directed to the departmental faculty to update 8. propose Study Scheme for B.Tech. degree course and Course Outcomes (4 to 6 in number) for each theory and practical course of 3rd semester onwards. Board will deliberate and finalize the same in up coming BOS Meetings.

Meeting ended with vote of thanks

Dr Sandeep Singh Gill

Dr Rakesh Goyal

Dr Dalveer Kaur

Dr Harbhajan Singh

Dr Batwinder Singh

Dr Kamaljit Singh Bhatia

akesh Kumar

Or Rajesh Khanna

Dr Avtar Singh Buttar

Department of Electronics & Communication Engineering IK Gujral Punjab Technical University Main Campus, Kapurthala (Punjab)-144603

Page 3 of 7

## IK Gujral Punjab Technical University Jalandhar-Kapurthala Highway, Kapurthala-144603 (PB) Department of Electronics & Communication Engineering

#### **Minutes of Meeting**

## Subject: 4<sup>th</sup> Meeting of Board of Studies Electronics and Communication Engineering

On 19.07.2018 at 10:00am, a meeting of Board of Studies (Electronics and Communication Engineering) was conducted under the chairmanship of Dr A. S. Buttar to finalize the scheme and syllabus of B.Voc' D.Voc in Electronics Manufacturing Services and requirements of Labs of Department of Electronics & Communication Engineering as per new AICTE Model Curriculum and any other matter with the permission of the Board. The agenda of the meeting was to finalize the scheme and syllabus of B.Voc. in (Electronics

Manufacturing Services) as required by Department of Academics IKGPTU Main Campus Kapurthala vide letter no. IKG-PTU/DA/1321 as per the requirement of AICTE to prepare the syllabus for 2018-2019 admission to various B.Voc. courses. Accordingly, the study scheme and Syllabus contents for B.Voc./ D.Voc. course of Electronics Manufacturing Services is presented in this meeting.

Following members of the BOS & Special Invitees were requested to attend said meeting for expert inputs:

1.	Dr Avtar Singh Buttar	Chairman BOS ECE	Head ECE, IKGPTU Main Campus Kapurthala
2.	Dr Sandeep Singh Gill	Professor	GNDEC Ludhiana
3.	Dr Satvir Singh	Associate Professor	IKGPTU Main Campus Kapurthala
4.	Dr J S Sahambi	Professor	HT Ropar, Special Invitee
5.	Dr Rajesh Khanna	Professor	Thapar University, Special Invitee
6.	Dr Dilbag Singh	Associate Professor	NIT Jalandhar, Special Invitee
7.	Dr Dalveer Kaur	Assistant Professor	IKGPTU Main Campus Kapurthala
8.	Dr Rakesh	Assistant Professor	IKGPTU Main Campus Kapurthala
9.	Dr Amit Gupta	Assistant Professor	IKGPTU Main Campus Kapurthala
10.	Dr Kamaljit Singh	Assistant Professor	Batala Campus, Special Invitee
	Bhatia		
11.	Dr Rakesh Kumar	Assistant Professor	IKGPTU Bhikhiwind Campus
	M		Special Invitee
12.	Dr Ashish Arora	Associate Professor	KGPTU Main Campus.
1 M	A Department of E	edial al on metistelin biogences	Sacurthala (Special Invitee on the
1.4	M IK Gujral P	unjab Technical University s, Kapurlhala (Punjab)-144603	spot) OLP
Jary	Main Campu	AA 1917/18. A	Aprile Pigrilis Sulla
10	100/	Page 1 of 3	Jeschanntsi
1. 6	t are a	the the	2 O D
/	en	alle -	y X

 13.	Dr Gagandeep Kaur	Associate Professor	IKGPTU Main Campus,
		Electrical Engineering	Kapurthala (Special Invitee on the spot)
14.	Dr Niteeka	Assistant Professor	IKGPTU Main Campus,
		(Physics)	Kapurthala (Special Invitee on the spot)
15.	Dr Priyanka Mahajan	Assistant Professor	IKGPTU Main Campus,
		(Languages)	Kapurthala (Special Invitee on the spot)
16.	Dr Rupesh	Assistant Professor	IKGPTU Main Campus,
		(Chemistry)	Kapurthala (Special Invitee on the spot)
17.	Er. Reetipal Singh	Associate Professor	IKGPTU Main campus Kapurthala
			(Special Invitee)
18.	Sh. Devinder Kumar	Assistant Registrar	Store & Purchase, IKGPTU Main campus, Kapurthala (Special Invitee)
19.	Er Navdeepak Sandhu	Deputy Director,	IKGPTU Kapurthala
		Training Placement	
20.	Dr Nina Gupta	Professor	PEC Chandigarh
	Dr Charanjit Singh	Professor	<b>RBIET</b> Hoshiarpur
22.	Dr Jaswinder Singh	Associate Professor	BCET Gurdaspur
23.	Dr Harbhajan Singh	Professor	SSIET Derrabassi
24.	Dr Dharminder Singh	Professor	11 Roorkee
25.	Dr A.K.Chatterjee	Protessor	Thapar University
26.	Dr Balwinder Singh	Principal Scientist	CDAC-Mohali
27.	Dr B.S.Saini	Professor	NIT Jalandhar
28.	Dr Jagroop Singh Sidhu	Associate Professor	DAVIET Jalanohar

Members of BOS from Sr. No. 20-28 could not attend the meeting.

Board members deliberated and took the following decisions:

Totalis

 Members of the BOS discussed and finalised the curriculum in line with AICTE Model Curriculum for B.Voc/ D.Voe in Electronics Manufacturing Services for Level 3 semester 1 and Level 3 semester II only and a unit of Ultrasonics has been removed from the syllabus of (3.GE.03) Applied Physics of Level 3 (Semester I). The curriculum for Level 4, Level 5, Level 6 and Level 7 will be discussed in subsequent BOS meetings.

2. The Board also discussed and finalized the syllabus for Research Methodology and IPR with minor changes for M.Tech ECE courses - M.Tech ECE (Wireless Communication), Matech Electronics and Communication Engineering, M.Tech

IK Gujral Punjab Technical Unive Main Campus, Kapurthala (Punjab)-

12/7118

VLSI Design, M.Tech Embedded Systems, M.Tech Electronics Product Design and Technology courses as per the credits allocated by New AICTE Model Curriculum 2018.

Meeting ended with vote of thanks

Dr Avtar Singh Buttar

Dr Sandeep Singh Gill

Sah 19.07.2018 Dr J S Sahambi

Dr Rakes

Dr Ashish Arora (Or. R. K. Washly)

Dr Ditbag Singh

Dr Satvir Singh

**Dr Rajesh Khanna** 

Lagendey 9/7/18

Dr Gagandeep Kaur

Wighlik Dr Rupesh

Dr K Bhatia

Er Reetipal Singh

Dr Niteel

Dr Priyanka Mahajan

19/07 Sh Devinder Kuma

DrA

Dr akesh Kumar

18 Er Navdeepak Sandhu

Department of Electronics & Communication Engineering IK Gujral Punjab Technical University Main Campus, Kapurthala (Punjab)-144603





Minutes of Meeting 13th September, 2019 Board of Studies - Electronics & Communication Engineering (Affiliated Colleges) I.K.Gujral Punjab Technical University, Kapurthala

#### Minutes of Meeting

As per the University BOS notification no. IKGPTU/Reg/Notification/203 dated 13/05/2019. the 2nd meeting of the notified Board of Studies of Electronics & Communication Engineering (BOS ECE) (Affiliated Colleges). I.K.Gujral Punjab Technical University. Kapurthala was held under the Chairmanship of Dr. Manoj Kumar. Principal DAVIET, Jalandhar and Vice-Chairmanship of Dr. Avtar Singh Buttar. Associate Professor. Department of Electronics and Communication Engineering IKGPTU at Department of Academics, Conference room, 2nd Floor, IKGPTU, Kapurthala on 13.09.2019 at 10:00am.

The meeting started with the welcome address to the members of BOS (ECE) affiliated colleges by the Dr Manoj Kumar.

The following BOS Members were present:

1.Dr. Manoj Kumar, Chairman, Principal, DAVIET, Jalandhar

2.Dr. Avtar Singh Buttar, Vice Chairman, Associate Professor, IKGPTU Main Campus, Kapurthala 3.Dr. Vinay Bhatia, Professor, CGC, Landran Mohali

4.Dr. Amarpal Singh, Associate Professor, BCET, Gurdaspur 5.Dr. Jagjit Singh, Associate Professor, DAVIET, Jalandhar

6.Dr. Narinder Sharma, Professor, ACET, Amritsar

7.Dr. Baljeet Kaur, Assistant Professor, GNDEC, Ludhiana

8.Dr. Tripatjot Singh Panag. Assistant Professor, BBSBEC, Fatehgarh Sahib.

9. Dr. Anshu Bhasin. Assistant Professor, Depti, Of CSE, IKGPTU Main Campus, Kapurthala

10.Er. Gurpreet Singh. Industry Expert, EdGate Technologies Pvt. Ltd., Banglore

11.Dr. Rakesh Kumar. Assistant Professor. Deptt. of ECE, IKGPTU Kapurthala (Special Invitee) 12.Dr. Dalveer Kaur, Assistant Professor, Deptt of ECE, IKGPTU Kapurthala (BOS Coordinator)

13.Er.Meenakshi Sansoy, Student Member, Deptt. Of ECE, IKGPTU Main Campus, Kapurthala. 14.Er.Jyotsana. Alumni Member, Deptt. Of ECE, IKGPTU Main Campus, Kapurthala.

The following BOS Members could not attend the meeting:

1. Dr. Ravindra Kumar Sharma, Professor, Ambedkar Instt. of Advance Communication Technologies & Research Geeta Colony, Delhi.

2. Dr. B.S. Saini, Professor, NIT Jalandhar.

3.Dr. Rajni, Professor, SBSSTC Ferozpur

4.Dr. Suyeb Ahmed Khan, Professor, BKSJEC, Amritsar

5.Er. Navdeepak Sandhu, Deputy Director, Department of CR&A, IKGPTU,

6. Dr. Balwinder Singh Dhaliwal. Assistant Professor, GNDEC Ludhiana.

7.Dr. N.S. Raghava, Professor, Department of ECE, Delhi Technological University, Delhi,

## The Agenda of the meeting was to deliberate and finalize:

1) To discuss and finalize the syllabus of the courses of 5th Semester of B.Tech ECE (Electronics and Communication Engineering), B.Tech ETE (Electronics and Telecommunication Engineering) and B.Tech EIE (Electronics and Instrumentation Engineering).

2) To finalize the Professional and Open Electives for B.Tech ECE, B.Tech ETE and B.Tech EIE.

3) Any other agenda with permission of the Chair.

t of Electronics & Communication Engineering IK Gujral Punjab Technical University

Main Campus, Kapurthala (Punjab)-144603



Minutes of Meeting 13th September, 2019 Board of Studies - Electronics & Communication Engineering (Affiliated Colleges) I.K.Gujral Punjab Technical University, Kapurthala

The Proceedings of the meeting were recorded as under: 1.

- The Board discussed and finalized the course contents of the subjects of 5th semester of B.Tech. ECE (Electronics & Communication Engineering), B.Tech ETE (Electronics and Telecommunication Engineering) and B. Tech. EIE (Electronics & Instrumentation Engineering) along with the Course Objectives and Course Outcomes.
- The Board deliberated and finalized the subjects of Professional and Open Electives of 2. B.Tech. Electronics & Communication Engineering (ECE), B.Tech ETE (Electronics and Telecommunication Engineering) and B.Tech. Electronics & Instrumentation Engineering (EIE).
- The Board finalized that the final course contents along with the Course Objectives and 3. Course Outcomes of Professional Electives-ICT will be sent by Dr. Manoj Kumar. Dr. Jagjit Singh, Er. Gurpreet Singh by 18.09.2019.
- The List of Experiments of DSP Lab and LIC Lab will be prepared and submitted by 4. Er. Gurpreet Singh and Dr. Jagjit Singh, respectively by 18.09.2019.
- 5. The Preface/Acknowledgement will be prepared by Dr. Vinay Bhatia for the scheme and syllabus of B.Tech ECE and submitted before the next BOS ECE meeting on 01.11.2019 at 10:00am.

The BOS ECE meeting ended with a vote of thanks.

#### Present Members of BOS

Dr. Avtar Singh 13 Dr. Jagjit Singh Dr. Manoj Kumar Buttar

Dr. Tripatiol 3191

Singh Panag

Dr. Narinder

Sharma



Dr. Amarpal Singh

Dr. Baljeet Kaur

Dr.Anshu Bhasin

Dr. Rakesh Kumar Er. Gurpreet Singh

Er. Meenakshi Sansov

Head Department of Electronics & Communication Engineering IK Gujral Punjab Technical University Main Campus, Kapurthala (Punjab)-144603