Teerthanker Mahaveer University
Faculty of Engineering
Department of Applied Sciences
<u>Minutes of Meeting</u>

A meeting of Board of Studies has been held in Director's office, Faculty of Engineering on 06/03/2020. Following points have been discussed regarding revision in syllabus and scheme for existing B.Sc. (H) Physics (P), Chemistry (C) & Mathematics (M) program, batch 2019-20. Following members were present in meeting:

1. Prof R K Dwivedi,
2. Dr. Vivekanand (External Expert)
3. Dr A K Shukla (External Expert)
4. Dr Varun Kr Singh
5. Dr. K A Gupta
6. Dr Ajit Kumar Chauhan
7. Dr. S P Pandey
8. Dr. Navneet Kumar
9. Dr Parag Agarwal

The following points were discussed in BoS:

1. BoS recommended to Course matrix/structure based upon CBCS model frame work for 2019-20 batch onwards for B.Sc. (H) Physics (P), Chemistry (C) & Mathematics (M).
2. BoS recommended to minor typographical error in title of Engineering Physics-I to be corrected as Engineering Physics in all branches of B.Tech. from 2020-21 onwards.
3. Two experiments are needed to be replaced in Engineering Physics lab from 2020-21 onwards for further modification.

S. No.	Experiment to be replaced	Remarks/Justifications	Replaced with
1.	To determine the Flashing & Quenching of Neon bulb.	Instrument set up **is not working properly** and needs thorough investigation by company's service engineer	To determine Resolving power of a telescope.
2.	To determine the value of Boltzmann Constant by studying Forward Characteristics of a Diode.	Instrument set up is **showing large error during handling** and needs thorough investigation by company's service engineer	To determine wavelength of spectral lines of Hg source using plane diffraction grating.

4. BoS has also approved the proposed syllabus with listed amendments.

Meeting ended with a vote of Thanks.

(Dr. Vipin Kumar)

Minutes of Meeting:

A meeting of Board of Studies was held on 19th April 2019 in Committee Room, FoE. Following members were present.

1. Prof Ajay Ruhela
2. Dr. Vivekanand (External Expert)
3. Dr Varun Singh
4. Dr. Amit K Sharma
5. Mr. VS Rawat
6. Dr. Vipin Kumar
7. Dr. Arun Prakash
8. Ms Indu Tripathi
9. Dr. Alok Gahlot
10. Mr CB Singh
11. Mr Ashok Kumar

Agenda:

1. **Department of Chemistry:**
   (i) To dilute the content of MCH 212 (Organic Chemistry II) by removing the last unit from the syllabus& dividing Unit II in two parts.
   (ii) Correction of Typographical error of BAS 206 & BAS 256: **Basic Physics** is written as **Basics Physics in the syllabus of academic session 2016-17.**
   (iii) Reallocation of credits of MOOC course in B.Sc(H) Chemistry & M.Sc Chemistry from academic session 2019-20
   (iv) Inclusion of Soft Skills & Aptitude in The syllabi of B.Sc(H) Chemistry
2. **Department of Mathematics:** To introduce a new course of M.Sc in Data Science
3. **Department of Physics:** Proposed an open elective paper at university level from 2017-18 onwards.

Following points were discussed & agreed: Previous minutes of "Board of Studies: reviewed & confirmed.

1. Previous minutes of "Board of Studies: reviewed & confirmed.
2. Department is planning to introduce Aptitude course under CTLD as audit course in B.Sc Syllabus for enhancement of aptitude skills of students. This course is proposed to be added in 2nd, 3rd, 4th semester with 20 hours lectures twice per week in each semester. Also Boot Camp for aptitude will follow in 5th semester and will be scheduled in the time table for full semester.
3. Department is planning to introduce Boot Camp for soft skill in 5th semester and will be scheduled in the time table for full semester.
4. Two open electives needed to be added in B.Sc 5th & 6th semester in existing open electives with same credit.
5. MOOC Credits need to rectify in exiting MOOC policy as 1 credit up to 20 hrs. & 2 credit up to 40 hrs. We plan to take approval up to 40hrs MOOC course due to limitation of semester timing.

   (will be implemented from Session 2019-20 onwards)

6. All MOOC Courses would be as an optional in B.Sc & M.Sc. Credit of theses MOOC courses would be helpful in case a student fails to secure minimum required credits then the additional subjects shall be considered for calculating the minimum credits required for the award of degree.

    (will be implemented from Session 2019-20 onwards)

7. **Department of Chemistry:**
    a) All members agreed to dilute the content of MCH 212 (Organic Chemistry II) by removing the content of UNIT V from the syllabus. The Unit II will be divided in two parts, because it is lengthy.
    b) Correction of Typographical error in the subject code of BAS 206 & BAS 256: Basic Physics is written as Basics Physics in the syllabus of Academic Year 2016-17.
    c) The MOOC Courses in B.Sc (H) Chemistry & M.Sc Chemistry will be considered as an optional subject from academic session 2019-20. the MOOC course Credits will be awarded accordingly as :

    For successful completion of Course upto 20 hrs, one credit will be given.

    For successful completion of Course up to 40 hrs, two credits will be given

    The Credit earned by the student will be adjusted in case a student fails to secure the minimum credits required by a student to get his/her degree from academic Session 2019-20.
    d) The course of Soft Skill & Aptitude syllabi have been proposed to introduce in B.Sc (H) Chemistry from semester IInd, IIIrd & Vth with zero credit.

8. **Department of Physics:**
    a) Common consensus for no changes on syllabi of B.Sc (H) Physics & M.SC Physics.
    b) Inclusion of new major subject entitled, "Learning Science through Games & Computer Simulations" is proposed as open elective from 2017-18 onwards.

9. **Department of Mathematics:**
    a) All points of last BoS were reviewed & implemented.
    b) Department have no change in existing syllabus, decided in department meeting.
    c) Following point regarding new proposed syllabus of M.Sc. Data Science were discussed for correction/updation/addition-
       (i) Subject descriptive Statics in 1st semester would be replaced by Research methodology which was in 3rd semester. Most of contents of descriptive Statics was repeated in Research Methodology.
       (ii) Data Structure with lab would be shifted in 2nd semester.
       (iii) BoS suggested to add the lab of Database Management System with theory paper in 1st semester.
       (iv) Probability & Mathematical Statistics would be shifted in 2nd semester from 1st semester.
       (v) Numerical Techniques with its Lab (programming in C++) would be shifted from 2nd semester to 1st semester for awareness of basic concepts of technique to solve numerical & complex data.
       (vi) BoS suggested to added few contents of process control in existing paper Statistical Quality Control. Committee suggested to modify the subject name as Statistical Quality & Process Control.
       (vii) Syllabus of Artificial Intelligence, Python, Data Visualization should be modified with latest concepts.

(viii) All MOOC Courses in would be as an optional. Credit of theses MOOC courses would be helpful in case a student fails to secure minimum required credits then the additional subjects shall be considered for calculating the minimum credits required for the award of degree.

(ix) Subject R-Programming should be as a lab with tutorial.

(x) Machine learning should be added in 4th semester.

(xi) Data ware house & Data Mining should be added in 3rd semester.

(xii) BoS suggested to modify the subject name and contents of Big Data.

(xiii) Latest Text & Reference books should be added in all subjects.

Civil Engineering Department, FoE

Minutes of Meeting

BoS Meeting held on 09/04/2019

The following points are proposed in BoS and recommended for BoF:

1. The points of last BoS meeting were reviewed and discussed.

2. Department is planning to introduce Aptitude course under CTLD as audit course in B.Tech Syllabus for enhancement of aptitude skills of students. This course is proposed to be added in 3rd, 4th, 5th and 6th semester with 20 hours lectures twice per week in each semester from session 2017-18 onwards. Also Boot Camp for aptitude will follow in 7th semester and will be scheduled in the time table for full semester.

3. Department is planning to introduce Soft Skill under CTLD as audit course in 3rd semester & 5th semester. Soft Skill-III/IV in 3rd semester and Soft Skill-V/VI in 5th semester will introduce with 1 lecture & 1 Tutorial. Also Boot Camp for soft skill will follow in 7th semester and will be scheduled in the time table for full semester.

4. Two open electives needed to be added in B.Tech 7th & 8th semester in existing open electives with same credit.
   (will be implemented from Session 2016-27 onwards)

5. MOOC Credits need to rectify in exiting MOOC policy as 1 credit up to 20 hrs. & 2 credit up to 40 hrs. We plan to take approval up to 40hrs MOOC course due to limitation of semester timing.
   (will be implemented from Session 2019-20 onwards)

6. All MOOC Courses would be as an optional. Credit of theses MOOC courses would be helpful in case a student fails to secure minimum required credits then the additional subjects shall be considered for calculating the minimum credits required for the award of degree.
   (will be implemented from Session 2019-20 onwards)

7. Credit of Project Phase- I & II would be reduced to 5 & 3 respectively in B.Tech. 60% project work should be completed in 7th semester & remaining 40% would be completed in final semester.
   (will be implemented from Session 2019-20 onwards)

8. Contact hours of Practical Subjects would be reduced from 3hr to 2hr with one credit except Engineering drawing & workshop practice in all B.Tech.
   (will be implemented from Session 2019-20 onwards)

9. Course of Environmental Studies will be shifted from 1st to 3rd semester with same credits and No subject will be added in replacement.
   (will be implemented from Session 2019-20 onwards)

10. Virtual lab can be offered to students with at least one practical in each program without mentioned in syllabus.

Teerthanker Mahaveer University, Moradabad

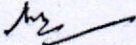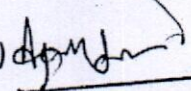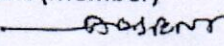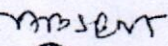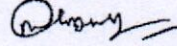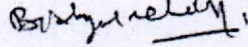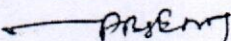## Faculty of Engineering

Department of Electronics and Communication Engineering,

Minutes of Meeting- "Board of study"

Dated: 10 April 2019

The Meeting of "Board of Study" (BoS) of Electronics and Communication Engineering Department scheduled on 04 April 2019 in Department of Electronics and Communication Engineering, FoE. The following faculty members were present in meeting:

1. Prof Ajay Ruhela, Director FoE (Chairperson)
2. Dr Ajay Srivastava,Dept.of EE,Pantnagar University(External Expert)
3. Mrs. Sakshi Singh, Coordinator, ECE Department (Member)
4. Mr. Rahul Vishnoi, Dept. of ECE(Member) — ABSENT
5. Mr. Neeraj Kaushik, Dept. of ECE (Member)
6. Mr. Vineet Jaiswal, Dept. of ECE — ABSENT
7. Mr. Manish Dhingra, Dept. of Mechanical Engg.
8. Dr. RN Krishnia, Director CTLD
9. Dr. Vipin Kumar, Dept. of Mathematics.
10. Prof. Bidyut Chatterjee, Dept of Electrical Engineering.
11. Mr. Raghvendra Kumar Singh , Dept of Electrical Engineering. — PRESENT

The following points are proposed in BoS and recommended for BoF:

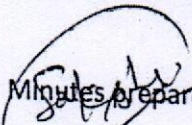Review meeting of BoS held on 14/1/19 reviewed and confirmed.

1. One subject named **Signals and Systems (EEC611)** is transferred to third semester from sixth semester reason is that the contents of this subject should be covered earlier so the changes should be made from session 2018-19 onwards.

2. **(EEC313) Instruments & Measurements** is shifted to forth semester from third semester in order to balance the number of subjects and credits.

3. Department is planning to introduce Aptitude course as audit course in B.Tech Syllabus for enhancement of aptitude skills of students. This course is proposed to be added in 4th, 5th and 6th semester with 20 hours lectures in each semester from session 2017-18 onwards and Bootcamp for aptitude will follow in 7th semester scheduled in time table.

4. Two open electives (discussed in last Academic review meeting) needed to be added in B.Tech 7th & 8th semester in existing open electives with same credit. (will be implemented in B.Tech all branch from Session 2016-17 onwards)

5. Course of Environmental Studies will be shifted from 1st to 3rd semester with same credits and No subject will be added in replacement. (will be implement in B.Tech all branch from Session 2019-20 onwards)
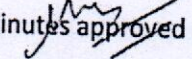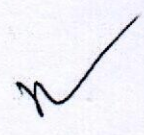
6. Contact hours of Practical Subjects would be reduced from 3hr to 2hr with one credit except Engineering drawing & workshop practice in all B.Tech.(will be implement in B.Tech all branch from Session 2019-20 onwards)

7. Credit of Project Phase- I & II would be reduced to 5 & 3 respectively in B.Tech. 60% project work should be completed in 7th semester & remaining 40% would be completed in final semester. (will be implement in B.Tech all branch from Session 2019-20 onwards)

8. All MOOC Courses in B.Tech, would be an optional. Credit of theses MOOC courses would be helpful in case a student fails to secure minimum required credits then the additional subjects shall be considered for calculating the minimum credits required for the award of degree.(will be implemented in B.Tech all branch from Session 2019-20 onwards)

9. MOOC Credits need to rectify in exiting MOOC policy as 1 credit upto 20 hrs & 2 credit upto 40 hrs. HoDs insure to take approval upto 40hrs MOOC course.(will be implemented in B.Tech all branch from Session 2019-20 onwards)

10. A soft skill course will introduce as audit course in B.Tech Syllabus for enhancement of soft skills of students. This course is proposed to be added in 4th and 6th semester. Bootcamp for soft skill will follow in 7th semester scheduled in timetable for 2hrs per week.

Meeting ended with a vote of Thanks.

Minutes prepared by

Sakshi Singh
Coordinator
ECE Department

Minutes approved by

Prof. Ajay Ruhela
Director,FoE

FACULTY OF ENGINEERING

TEERTHANKER MAHAVEER UNIVERSITY
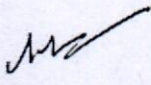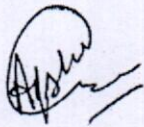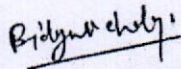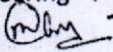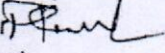
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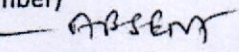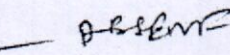
(E-Mail: dir.engg@tmu.ac.in)

Date: 06/04/2019

Minutes of Meeting: - EE Dept., Faculty of Engineering

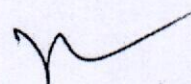|		
Date	:	April 6, 2019
Time	:	1:30 PM
Venue	:	Committee Room, FoE
Chaired By	:	Prof. Ajay Ruhela

Members Present were in the meeting:

1. Prof. Ajay Ruhela, Director FoE (Chairperson)
2. Dr. Ajay Srivastava, Dept.of EE, Pantnagar University (External Expert)
3. Dr. R.N. Krishnia, Director CTLD
4. Prof. Biduyt Chatarjee, Dept of Electrical Engineering
5. Mr. Manish Dingra, Dept. of Mechanical Engg.
6. Mrs. Sakshi Singh, Coordinator, ECE Department (Member)
7. Mr. Rahul Vishnoi, ECE Department (Member)
8. Mr. Neeraj Kaushik, ECE Department (Member)
9. Dr. Vipin Kumar, Dept. of Mathematics
10. Mr. Vineet Jaiswal, ECE Department (Member)
11. Mr. Abhinav Srivastava, Member, CTLD — ABSENT
12. Mr. Raghvendra Kumar Singh, Dept of Electrical Engineering — ABSENT
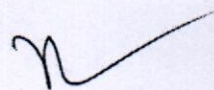
Minutes of Meeting:

Following points were discussed in BoS & proposed for BoF:

1. The points of last BoS meeting were reviewed and discussed.
2. Interchange "Analog and Digital Communication (3rd sem)" with "Signal and Systems (6th sem)" from 2018-19 onwards.
3. In Unit-5, "Single Phase Induction Motor: Double revolving Field Theory, Equivalent circuit, No Load & Blocked Rotor Test, Starting Methods" is required to include with the contents of Electrical Machines II (EEE411) from 2018-19 onwards.
4. Network Analysis & Synthesis (EEE413) – B. Tech. IV Semester: In Unit-III change "frequency response & Bode Plot" with "Transient Analysis & Initial Conditions" from 2018-19 onwards.
5. Introduction of an elective course with "Control System Using MATLAB (EEC662) – B. Tech. VI semester i.e. "Modelling & Simulation using MATLAB-Simulink" applicable from session 2017-18 onwards.
6. Introduction of optional courses as "Vehicle Dynamics and Energy Storage" in VIth semester, Electric Vehicle in VIIth semester and Electric Vehicle Design and Assembly as practical course in VIIIth semester from session 2017-18 onwards.
7. Department is planning to introduce Aptitude course under CTLD as audit course in B.Tech Syllabus for enhancement of aptitude skills of students. This course is proposed to be added in 3rd, 4th, 5th and 6th semester with 20 hours lectures twice per week in each semester from session 2017-18 onwards. Also Boot Camp for aptitude will follow in 7th semester and will be scheduled in the time table for full semester.

8. Department is planning to introduce Soft Skill under CTLD as audit course in 4th semester & 6th semester. Soft Skill-III/IV in 4th semester and Soft Skill-V/VI in 6th semester will introduce with 1 lecture & 1 Tutorial. Also Boot Camp for soft skill will follow in 7th semester and will be scheduled in the time table for full semester.

9. Two open electives needed to be added in B.Tech 7th & 8th semester in existing open electives with same credit.

   (will be implemented from Session 2016-27 onwards)

10. MOOC Credits need to rectify in exiting MOOC policy as 1 credit up to 20 hrs. & 2 credit up to 40 hrs. We plan to take approval up to 40hrs MOOC course due to limitation of semester timing.

    (will be implemented from Session 2019-20 onwards)

11. All MOOC Courses would be as an optional. Credit of theses MOOC courses would be helpful in case a student fails to secure minimum required credits then the additional subjects shall be considered for calculating the minimum credits required for the award of degree.

    (will be implemented from Session 2019-20 onwards)

12. Credit of Project Phase-I & II would be reduced to 5 & 3 respectively in B.Tech. 60% project work should be completed in 7th semester & remaining 40% would be completed in final semester.

    (will be implemented from Session 2019-20 onwards)

13. Contact hours of Practical Subjects would be reduced from 3hr to 2hr with one credit except Engineering drawing & workshop practice in all B.Tech.

    (will be implemented from Session 2019-20 onwards)

14. Course of Environmental Studies will be shifted from 1st to 3rd semester with same credits and No subject will be added in replacement.

    (will be implemented from Session 2019-20 onwards)

Teerthanker Mahaveer university, Moradabad

Faculty of Engineering

Department of Mechanical Engineering,

Minutes of Meeting- "Board of Studies"

Dated: 04 April 2019

The meeting of "Board of Studies" (BoS) of Mechanical Engineering Department was scheduled on 04 April 2019 in Department of Mechanical Engineering, FoE. The following faculty members were present in meeting:

1. Prof Ajay Ruhela, Director FoE (Chairperson)
2. Mr. Manish Dhingra, HoD, Dept. of Mechanical (Member)
3. Mr. K.B. Anand, Dept. of Mechanical (Member)
4. Mr. Mahir Hussain, Dept. of Mechanical (Member)
5. Mr. Sunil Kumar, Dept. of Mechanical
6. Mr. Arun Gupta, Dept. of Mechanical
7. Mr. Anurag Srivastav, Dept. of Mechanical

The following points are proposed in BoS and recommended for BoF:

1. The points of last BoS meeting were reviewed and discussed.
2. Few contents of Dynamics of Machines, EME 512 are in duplication- covered by Mechanical Vibration, EME612. So, EME512 needs to modify in contents with same name & code.

(will be implemented from Session 2019-20 onwards)

3. Department is planning to introduce Aptitude Aptitude course under CTLD as audit course in B.Tech Syllabus for enhancement of aptitude skills of students. This course is proposed to be added in 3rd, 4th, 5th and 6th semester with 20 hours lectures twice per week in each semester from session 2017-18 onwards. Also Boot Camp for aptitude will follow in 7th semester and will be scheduled in the time table for full semester.

4. Department is planning to introduce Soft Skill under CTLD as audit course in 3rd semester & 5th semester. Soft Skill-III/IV in 3rd semester and Soft Skill-V/VI in 5th semester will introduce with 1 lecture & 1 Tutorial. Also Boot Camp for soft skill will follow in 7th semester and will be scheduled in the time table for full semester.

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subjects shall be considered for calculating the minimum credits required for the award of degree.
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(will be implemented from Session 2019-20 onwards)

10. Course of Environmental Studies will be shifted from 1st to 3rd semester with same credits and No subject will be added in replacement.
(will be implemented from Session 2019-20 onwards)

Aptitude/Soft skill course would be introduced as audit course in the following semesters.

Implemented Session	Semester	Aptitude Course	Soft Skills Course
-	VIII	x̄	x̄
-	VII	Boot Camp	Boot Camp
2017-18, 2018-19, 2019-20	VI	Yes	x̄
2017-18, 2018-19, 2019-20	V	Yes	Yes
2018-19, 2019-20	IV	Yes	x̄
2018-19, 2019-20	III	Yes	Yes
2019-20	II	x̄	x̄
2019-20	I	x̄	x̄

Meeting ended with a vote of Thanks.