Tatyasaheb Kore Institute of Engineering and Technology, Warananagar

(An Autonomous Institute, Affiliated to Shivaji University, Kolhapur)

Department of Chemical Engineering

Board of Studies Meeting No.01 and Resolution

Day & Date: Saturday, 3rd April 2021 **Time:** 10.00AM

Venue: Vinayraoji Kore Krida & Sanskrutik Vikas Kendra ,Building, Conference Hall

AGENDA

1.1 To welcome and approve the nomination of members in the BoS

1.2 To Discuss on objectives of First Meeting, duties and responsibilities of each members

1.3 To discuss and approve the syllabi structure of III- VIIII semester of B.Tech Chemical Engineering.

1.4 To discuss and approve the syllabi structure and syllabus of I & II semester of M. Tech Chemical Engineering.

1.5 Approval of SY B Tech syllabus preparation to be implemented wef 2021-22

1.6 To discuss and approve the examination pattern, nature of question paper, submission of Model answers and their pattern

1.7 To appoint the panel of Examination of III- VIIII semester of B.Tech and I-II semester of M.Tech courses and forward to Board of Examination.

1.8 Discussion on Honors course to be implemented from T.Y. B Tech.

1.9 Any other points with the permission of chair.

WELCOME ADDRESS AND INTRODUCTORY REMARKS BY THE BoS Chairman

The Board of Studies of Chemical Engineering held on Saturday 3rd April 2021 at 10 am at Vinayraoji Kore Krida & Sanskrutik Vikas Kendra, Building, Conference Hall, TKIET campus, Warananagar. At the outset BoS Chairmen Prof. S.T.Patil and Prof. N.H.Shinde welcomed all the BoS members present for the first meeting (01 Meet) physically and Online. The following members were present

External Members:

	Name	Designation	Mode of Attend
1.	Dr. Amar L. Jadhav	VC Nominee S.U.Kolhapur	Physical
2.	Mr. Shashank Deshapande	Corporate Representive	Physical
3.	Mr. Seshu	Corporate Representive	Online
4.	Dr. Mohan Rampure	PG Meritorious Alumnus	Online
5.	Mr. Sunil Patil	PG Meritorious Alumnus	Online

Internal Members:

1.	Dr. S.V. Anekar	Principal & Chairmen, Academic Council
2.	Dr. K.I.Patil	Dean Academic & BoS member
3.	Prof. S.T.Patil	HoD & BoS Chairman
4.	Prof. J.K.Shinde	BoS member
5.	Prof. N.H.Shinde	BoS member
6.	Prof. S.A.Desai	BoS member
7.	Prof. V.A. Bhosale	BoS member
8.	Prof. P.J.Patil	BoS member
9.	Prof. P.B.Dehankar	BoS member
10.	Prof. S.U.Patil	Invitee
11.	Prof. Mrs. S.S.Patil	Invitee

The members who could not attend the meeting are as follows.

1.	Dr.Sanjay Mahajani	I.I.T. Powai
2.	Dr. Sanjay Kamble	N.C.L., Pune
3.	Dr. Srinivas Krishnaswami	B.I.T.' Goa Campus

1.1 To welcome and approve the nomination of members in the BoS

Resolution: BoS Chairmen Prof. S.T.Patil and Prof. N.H.Shinde welcomed all the BoS members present for the first meeting physically and Online. And resolved to approve the nomination of BoS members.

1.2 To Discuss on objectives of First Meeting, duties and responsibilities of each Member.

Resolution: The objectives of BoS meeting was discussed to consider the agenda of first meet and to bridge the gap between the Industry & Academia and to set the syllabus structure & syllabi accordingly. BoS Chairmen deliberated the duties and responsibilities of each Member and resolved to approve the 1.2 agenda of BoS 01 meet.

1.3 To discuss and approve the syllabi structure of III-VIIII semester of B.Tech Chemical Engineering**.**

Resolution: All present BoS members have participated into the discussion of syllabi structure of III-VIII semester of B.Tech Chemical programme and suggested to check the credits distributed with the Apex body of Technical Institution & decision left to BoS chairmen and resolved to approve.

1.4 To discuss and approve the syllabi structure and syllabus of I & II semester of M. Tech Chemical Engineering.

Resolution: All present BoS members have participated into the discussion of syllabi structure of I-IV semester of M.Tech Chemical programme and suggested to check the credits distributed with the Apex body of Technical Institution & decision left to BoS chairmen and resolved to approve.

1. Mr. Shashank Deshpande, brought to the notice of the members that the MTech students should be given Teaching Assistant Program to assist BTech Projects.
2. Dr. Amar Jadhav advised that M.Tech students should present at least one paper in peer reviewed or any other journal.
3. Dr.Mohan Rampure suggested that in M.Tech curriculum add I possible any language like German/ Japanese language and Professional training should be included.

1.5 Approval of S.Y. B. Tech syllabus preparation to be implemented with effect from 2021-22

Resolution: It has been discussed in BoS meet to prepare the courses & their syllabi of S.Y.B.Tech according to the requirement of Industry in concern with the constraints of University/ Institute/Department. The following members have suggested to incorporate (if possible) the certain courses throughout from III semester to VIII semester and syllabi & decision left to BoS chairmen and resolved to approve.

1. Mr. Shashank Deshpande, brought to the notice of the members that the students should be made aware of Open book exam, Instrumentation Products Like, Pressure transmitters, MOC for gaskets, pumps, flanges, reducers, Elbows. The student should be given the flavor of Industrial process safety ,6-Sigma,TQM,Lawa in the Industries, factory acts, Pollution board norms. He also added there should be defined methodology according to the schedule & some professional trainings should be given to the students. Student should visit the Exhibitions & exposes organized by Chemcon, IIChE etc. MTech students should be given Teaching Assistant Program to assist BTech Projects.
2. Dr. Amar Jadhav brought to the notice of the members that the students should be made aware IoT, software's mostly used in industry like AutoCAD, Aspen, Hysis and PDMS.
3. Mr.Seshu Murty suggested that the approach to curriculum should bridge the gap between industry and academia & it should be application oriented .The industry connect should start from second year onwards. He suggested that Maths-IV can be reduced and more Chemistry such as operating chemistry, industrial chemistry, Engg.chemistry & organic chemistry should include. He added that industry oriented courses such as design & material at least two separate courses should be included (refer ICT Syllabus). The syllabus should include piping, economics, data analysis. Interpretation/instrumentation & analysis, electives should be industry oriented. Industry internship - more credits should be given & duration should be minimum 3

months. The experts from the industry should be called to guide the students and some part of lectures on syllabus such as fluid mechanics, distillation should be conducted. More industrial projects should be taken by the students to enhance the problem solving skills.

4. Dr.Mohan Rampure, addressed about limitations of change in syllabus & connect the books with professionals .The students should be aware of software such as Excel, Aspen & should have knowledge of GC, HPLC. The student should be given the inputs of writing emails /communication in course such as professional skills. Some awards should be kept for best mini / mega projects. The students should be given practical assignments such as to know how about sensors by reaching to vendors. Such assignments should include in each courses instead of theoretical assignments. Expert lectures should be arranged on PFD, P&ID etc.
5. Mr.Sunil Patil brought to the notice of the members that the students should be made aware of Aspen plus Simulation, Data Analysis, AI & ML, Introduction to python as an open elective. Assign industrial projects such as CO_2 Reduction, Carbon Capture, Carbon credit, Waste reduction, Toxic reduction since the industries are growing towards green energy, Hydrogen can be option for fuel. He suggested that some percentage (20 %) of the syllabus should include software's from the III semester to VIII semester such as PDMS, ASPEN, CFD, Modeling & simulation etc.
6. Dr. S.V.Anekar, Principal, Presented keynote address to all the BoS members & reviewed the difference between affiliated & autonomous status & also after every three years curriculum should be updated .The students should be aware of lifelong learning to fill the gap according to the change in technology & industry. The curriculum should focus on Entrepreneurship & startup. New fields such as nanotechnology, biotechnology, innovative materials should be added in the curriculum without hampering basic concepts and fundamentals of chemical engineering.

1.6 To discuss and approve the examination pattern, nature of question paper, submission of Model answers and their pattern

Resolution: All present BoS members have participated into the discussion of examination pattern, nature of question paper, submission of Model answers and their pattern and suggested that it is the internal & confidential matter and is to be decided by the Internal BoS members, BoS chairmen in concern with BoE and should be approved by BoS chairmen and resolved to approve.

1.7 To appoint the panel of Examination of III- VIIII semester of B.Tech and I-II semester of M.Tech courses and forward to Board of Examination.

Resolution: All BoS members have participated into the discussion on panel of Examination of III- VIIII semester of B.Tech and I-II semester of M.Tech courses and suggested that it is to be decided by the Internal BoS members, BoS chairmen in concern with BoE by keeping in mind the view of guidelines given by UGC and University and resolved to approve.

1.8 Discussion on Honors course to be implemented from T.Y. B Tech.

Resolution: It has been discussed and decided by all the BoS members though it has to be implementing from the V^{th} semester and thorough information is to be collected about the Honors degree, Credits to be assigned and the honors degree specialization. All the BoS members came to the common conclusion regarding honors course should include waste management technology (sustainability & circular economy) out off Bio Engineering, Aqua & Food, Green Chemistry BoS chairmen are agreed and decision on Honors degree is to be taken into the next BoS meet and resolved to approve.

1.9 Any other points with the permission of chair.

Resolution: All the BoS members came to the common conclusion the syllabi is to be prepared in such a way that to reduce the bridge the gap between the world of Academician and Corporate.

Prepared and signed by

Prof. S.T.Patil
BoS, Chairman
Chemical Engineering

CC to:

1.Principal

2.Dean Academic

3. Member Secretary , Chemical Engg.

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Minutes of the BoS meeting

1.Prof. N.H.Shinde ,Member of BoS, welcomed all the honorable members of the meeting.

2.Prof. S.T.Patil ,Chairman of the meeting, Addressed about importance of BoS meeting and invited suggestions from members.

3.Dr. K.I.Patil , Dean Academic & Member of BoS ,Delivered the objectives of BoS meeting and highlighted the today's Engineering education and professional in the globalised & digitalized world.

4. Dr. S.V.Anekar, Principal, Presented keynote address to all the BoS members & reviewed the difference between affiliated & autonomous status & also discussed about the credits for the academic course & honors course. The total credits were limited to 176 for four year chemical engineering course. After every three years curriculum should be updated .The students should be aware of life long learning to fill the gap according to the change in technology & industry.

The curriculum should focus on Entrepreneurship & startup .New fields such as nanotechnology, biotechnology, innovative materials should be added in the curriculum without hampering basic concepts and fundamentals of chemical engineering.

5. Prof.S.A.Desai ,Member secretary of BoS , Presented the syllabus structure from Sem-III to Sem-VIII and invited suggestions from members.

6. Mr. Shashank Deshpande, brought to the notice of the members that the students should be made aware of Open book exam, Instrumentation Products Like, Pressure transmitters, MOC for gaskets, pumps, flanges, reducers, Elbows. The student should be given the flavor of Industrial process safety ,6-Sigma,TQM,Lawa in the Industries, factory acts, Pollution board norms. He also added there should be defined methodology according to the schedule & some professional trainings should be given to the students. Student should visit the Exhibitions & exposes organized by Chemcon, IIChE etc. MTech students should be given Teaching Assistant Program to assist BTech Projects.

7. Dr. Amar Jadhav brought to the notice of the members that the students should be made aware IOT, softwares mostly used in industry like Autocad,Aspen ,Hysis,PDMS & also addressed regarding structure of syllabus. He added M.Tech students should present at least one paper in peer reviewed journal

8. Mr.Seshu Murty , suggested that the approach to curriculum should bridge the gap between industry and academia & it should be application oriented .The industry connect should start from second year onwards ,he suggested that Maths-IV can be reduced and more Chemistry such as operating chemistry, industrial chemistry, Engg.chemistry & organic chemistry should included. He added that industry oriented courses such as design & material at least two separate courses should be included (refer ICT Syllabus). The syllabus should include piping, economics, data analysis. Interpretation/instrumentation & analysis,electives should be industry oriented. Industry internship - more credits should be given & duration should be minimum 3 months.The experts from the industry should be called to guide the students and some part of lectures on syllabus such as fluid mechanics,distillation should be conducted.More industrial projects should be taken by the students to enhance the problem solving skills.

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Assign industrial projects such as Co2 Reduction, Carbon Capture, Carbon credit, Waste reduction, Toxic reduction since the industries are growing towards green energy ,Hydrogen can be option for fuel. He suggested that some percentage (20 %) of the syllabus should include

software's from the III semester to VIII semester such as PDMS ,ASPEN ,CFD ,Modelling & simulation etc.

All the BoS members came to the common conclusion regarding honors course should include waste management technology (sustainability & circular economy) out off bio engg., Agro & Food ,Green Chemistry It was decided to take the feed-back on M. Tech Structure & Syllabus On first Sem.through email communication.

Prof.S.A.Desai expressed a vote of thanks and the meeting was over.

A separate copy of Resolution is prepared.

Prof.S.A.Desai	**Dr. K.I.Patil**	**Prof.S.T.Patil**
Member Secretary	**Academic Dean**	**Head & BoS Chairman**