



Meeting of Board of Studies (BoS)

Domain Name: Computer Science Engineering, AI-ML, AI-DS

Name of the Institution: Pimpri Chinchwad University, Pune

Date : 02/12/2023

Time (24 hrs. format):10:30am Venue: Board Room, PCU

Agenda for the meeting:

Official welcome and introduction of Members of Board of Studies.

1. Objectives of the Board of Studies and the role of the members.
2. Presentation on Pimpri Chinchwad University and PCU School of Engineering.
3. Presentation on the New Education Policy 2020 guidelines and Curriculum Benchmarking.
4. Discussing the proposed Programs and Credit structure as per NEP guidelines.
5. Course detailing for S. Y. B Tech CSE.
6. Assessment policy for assuring quality of academic outcomes.
7. Open floor for any other points to be discussed by the members.

Agenda for the meeting:

Part-A

1. Introduction and context setting

This the first BOS meeting of Computer Science Engineering held on date , 02/12/2023

- a. Objective: To review, develop, and update the curriculum to ensure that it remains relevant and aligned with the institution's mission and educational goals.
Established and maintained high academic standards by monitoring the quality of courses and programs, which includes assessments and teaching methodologies.
- b. Benchmarking: (Details Attached, Annexure A)
In India: MIT-WPU-Pune,BML Munjal University Gurugram Haryana, Amity University, NIT Bhopal.

Outside India: University of California, Berkley .

2. Presentation about PCU Academic System covering:

- a) Design of Course Curriculum & Programme structuring
- b) Course Curriculum requirements of various National & International Accreditation bodies.
- c) Discussion on curriculum changes, additions, or modifications
- d) Development of Curriculum & Programme Structure
- e) Model Framework.
- f) Programme Learning Outcomes (PLOs)
- g) Programme Outcomes (COs)
- h) Mapping of PO with PLOs
- i) Competency Mapping

Part-B

1. Programme and Curricula has relevance to the local / national / regional/global developmental needs. Yes (**Programme Structural Design and Development Point 1.1**)
2. Integration of cross cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Programme Structure and Curriculum. **Yes (Programme Structural Design and Development Point 2)**
3. Percentage of courses having focus on employability/ entrepreneurship/ skill development. 60% (**List of courses (Programme Structural Design and Development Point 3)**)
4. Percentage of new courses introduced of the total number of courses in the programs. _ **All courses are proposed for first time. Hence all are new courses.**
5. Number of Value Added Courses (other than BC/CS/TC, BS, EVS & FBL) imparting transferable and life skills. NO. Of Courses – 7 (17.5%) (**Programme Structural Design and Development Point 5**)
6. (a) Structured feedback received from stakeholders for design of syllabus Semester wise/year wise- **yes**

(b) Feedback collected, analysed and action taken, feedback is available on ERP **NA**
7. a) No. of Industry 4.0 courses integrated in Programme Structure. (8)
b) Input/outcome skill competency for Programme as per Industry 4.0-- **(8)**

(Programme Structural Design and Development Point 7)

8. Integration of results of OAP during review and development of Programme Structure and Curriculum NA
9. Benchmarking of programme with programme and institutions (**Agenda No. 4 in BoS MoM and attached herewith as attachment**)
10. Details of MoU signed with Industry/Skill Council at programme/course level, if any. IIT spoken tutorials. (**Programme Structural Design and Development Point 11**)
11. Detailed Annual Academic Calendar (All the calendars shall be aligned with University Academic Calendar, Event calendar,)

Minutes of Meeting

Dear All,

The inaugural meeting of the Board of Studies of PCU School of Engineering and Technology was held on 2nd Dec 2023 on the PCU Campus to discuss and plan the new curriculum for Bachelor of Design Programs as per the NEP and NHEQF.

The following list of members was present for the meeting.

Sr	Name	Designation	Categories of External & Internal Stakeholders	Email
1	Dr. V.N. Patil	Head Of Department Computer Science Engineering- PCU	Chairperson	vijay.patil@pcu.edu.in 9822431147
2	Dr. Sudeep Thepade	Dean Quality Assurance and Professor CSE, PCET's Pimpri Chinchwad College of Engineering	VC Nomimnee	sudeepthepade@gmail.com 99766258833
3	Dr Sachin Jadhav	Assistant Professor- Computer Science Engineering- PCU	Member	Sachin.jadhav@pcu.edu.in 9881426241
4	Prof. Dilip Saini	Assistant Professor- Computer Science Engineering- PCU	Member	Dilip.saini@pcu.edu.in 8669030800
5	Dr. Yudhishtir Raut	Assistant Professor- Computer Science Engineering- PCU	Member	Yudhishtir.raut@pcu.edu.in 9009255611
6	Dr. Ardaman Singh	Principal, Axtria Ingenious Insights, Delhi.	External Member (Academics)	ardamansingh@gmail.com 0124 450 0870
7	Dr. Aditi Sharma	Associate Professor Department of Computer Science and Engineering Symbiosis International University, Pune, India	External Member (Academics)	aditi11121986@gmail.com aditi.sharma@sitpune.edu.in +918058940685
8	Dr. Sheetalkumar Rawandale	Dean Training Placement Officer	External Member (Training and Placement)	s.rawandale@gmail.com 9422792663
9	Dr.S.S Das	Professor Indira College of Engineering and Management	External Member (Academics)	Soumitra_das@yahoo.com 9270364627
10	Dr.S.D. Shirbahadurkar	BOS Chairman (Electronics),SPPU Pune	External Member (Research)	sshir00@yahoo.co.in 9763722260
11	Mr. Chittaranjan Mahajan	Director, Dolphin lab Pvt. Ltd	External Member (Industry)	cpmahajan@gmail.com 9763714860
12	Rahul H Phatangare	Asset Analytix Pvt. Ltd, Senior Manager- Data Science	External Member (Industry)	rahul.phatangare@gmail.com 9766695155

13	Dr. Prakash Pandurang Kajawe	TechMahindra Role: Principal Training Consultant	External Member (Industry)	kprakash6769@gmail.com, 9096083035
14	Dr. Shubhajit Jagadev	Founder Chairman & CEO, Eduskillsfoundation.org	External Member (Industry)	shubhajit@eduskillsfoundation.org 8093254900
15	Dr. Ajantha Devi	Research Head University of Madras	External Member (Research)	pvvirparia@yahoo.com, 9426533146
16	Dr. Archana Chaugule	Professor and Head Computer Engineering, PCCOER pune	External Member (Academics)	Acharna.chaugule@pccoer.in , 8007773086
17	Dr. Anand Kolharkar	Founder, Opine Group, Pune	External Member (Research)	Anand.kolharkar@opinegroup.com, 9850837305

Agenda 1: Official welcome and introduction of Members of Board of Studies

1. A warm welcome and introduction of the esteemed members of the Board of Studies was delivered by Dr. Vijay N. Patil, HoD Computer Science Engineering Department PCU.
2. The welcome and introduction of Board of Studies (BOS) members involved acknowledging and introducing the members who had accepted the responsibility of guiding, reviewing, and contributing to the continuous improvement of the institution's academic programs.
3. Their significant expertise and experience in their respective fields were highlighted, emphasizing their potential impact on academic offerings and the institution's commitment to excellence.
4. PCU School of Engineering expressed confidence in the BOS members' expertise and dedication to contribute to academic growth.
5. A formal introductory meeting was arranged to provide the BOS members with a comprehensive overview of the institution, its programs, and their roles and responsibilities.
6. The institution reiterated its enthusiasm for a productive partnership with the BOS members as stated by Dr. Vijay N. Patil.

Agenda 2: Objectives of the Board of Studies and the role of the members

1. As this was the inaugural meeting of the Board of Studies, a detailed discussion was held on the roles of the members in sculpting and nurturing the Program Curriculum.
2. Post the introduction of individual members, HoD of Computer Science Engineering of PCU School of Engineering presented the following objectives of Board of Studies.

The following Objectives of the Board of Studies members as discussed:

- a) To review, develop, and update the curriculum to ensure that it remains relevant and aligned with the institution's mission and educational goals. Established and maintained high academic standards by monitoring the quality of courses and programs, which includes assessments and teaching methodologies.
- b) To ensure that academic programs comply with regional or national educational regulations, accreditation requirements, and other relevant guidelines.

- c) To identify areas for program improvement and make recommendations to enhance the overall quality of education offered by the institution. Also BOS members have added that faculties should promote innovation in teaching and learning methods, including the integration of new technologies and emerging best practices in education.
- d) To ensure that academic programs are in sync with the requirements and expectations of the job market and various industries. The BOS members revealed that the faculties should maintain a focus on the best interests of students, including their learning experience, skill development, and overall academic welfare
- e) To encourage interdisciplinary collaborations and interdepartmental coordination to offer comprehensive educational experiences.
- f) Role of BOS Members:
 - i. BOS members are typically experts in their respective fields. Their primary role is to provide subject-specific knowledge and insights to help shape the curriculum.
 - ii. BOS members review and assess existing course offerings and program structures, identifying areas that require improvement or modification.
 - iii. BOS members make recommendations regarding changes to course content, structure, assessment methods, and program outcomes to enhance academic quality.
 - iv. They are responsible for evaluating the quality and relevance of courses and programs, ensuring that they meet or exceed established academic standards.
 - v. BOS members may be involved in developing and reviewing assessment criteria to measure student learning outcomes.
 - vi. They bring insights from their respective industries to ensure that academic programs align with current industry trends and expectations.
 - vii. BOS members promote interdisciplinary collaboration and the integration of various subjects to provide holistic education.
 - viii. They offer valuable feedback and contribute to the continuous improvement of academic programs. BOS members also encourage innovation in teaching and learning methods.
 - ix. BOS members may engage in professional development activities to stay updated on the latest developments in their fields, which can inform their contributions to curriculum development.
 - x. They maintain open communication with the institution's faculty, administration, and other stakeholders to ensure that their recommendations are effectively implemented.
 - xi. Above all, BOS members have a commitment to the welfare and academic success of students, and they play a critical role in shaping the educational experience.

Agenda 3: Presentation on Pimpri Chinchwad University and PCU School of Engineering and Technology

- a) A Presentation was made by, Dr. Vijay N. Patil, HoD Computer Science Engineering Department, PCU before the members giving them insights on the Pimpri Chinchwad University and ideology and concept of PCU School of Engineering and Technology.
- b) The core idea and philosophy of PCU School of Engineering and Technology and how it is placed amongst the other Schools of Engineering and Technology of the Country was discussed by the Department with the external members.
- c) The following Program Educational Objectives and Program Learning Outcomes were presented to the members and were agree by all.

Program Educational Objectives (PEO)

PEO 1: To impart science based engineering education to develop professional skills that will prepare the students for immediate employment, as against the model that just prepares them for post-graduate.

PEO 2: To develop an ability to work in teams, innovate, design and evolve project implementing capabilities and skills of Production and Industrial Engineering.

PEO3: To inculcate the ability to prepare scientific reports and technical proposals.

PEO4: To develop and train for employment in engineering profession with active engagement in learning, understanding and applying new ideas and technologies as the field evolves.

PEO5: To develop a global view among students so that they can appreciate diversity in the world and in intellectual pursuits.

Program Outcomes

PO1: **Engineering knowledge:** Apply the knowledge of engineering fundamentals, science, mathematics and an engineering specialization to the solution of complex engineering problems.

PO2: **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4: **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5: **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

P08: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

P09: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Agenda 4: Presentation on the New Education Policy 2020 guidelines and Curriculum benchmarking

- a) The Director of PCU School of Engineering and Technology presented the guidelines of the New Education Policy 2020 which are used for drafting the Program Structure.
- b) The Faculty team presented their research and benchmarking of curriculums of various Schools of Engineering and Technology in India and Abroad to arrive at the proposed Program structure for PCU School of Engineering and Technology Curriculum of various reputed Schools of Engineering and Technology were discussed by the members, including level of graduates produced by the schools and how they are fared in the industry.
- c) The Four-year Bachelor's Multidisciplinary Engineering Degree Programme allows the students to experience the full range of holistic and multidisciplinary education in addition to a focus on the chosen major and minors as per their choices and the feasibility of exploring learning in different institutions. The minimum and maximum credit structure for different levels under the Four-year Bachelor's Multidisciplinary Engineering UG Programme with multiple entry and multiple exit options are available.
- d) **Structure of UG Program in CSE:** The structure of UG program in Computer Science and Engineering shall have essentially the following categories of courses with the breakup of credits as given with Ref AICTE guidelines

S. No.	Category	Credit Breakup for CSE students	Percentage (160)	Percentage (171)
1	Humanities and Social Sciences including Management courses	16	9.81%	9.35%
2	Basic Science courses	23	14.11%	11.69%
3	Engineering Science courses including workshop, drawing, basics of electrical/mechanical/computer etc.	29	17.79%	14.03%
4	Professional core courses	59	36.19%	34.5%
5	Professional Elective courses relevant to chosen specialization/branch	12	7.3%	8.18%
6	Open subjects – Electives from other technical and /or emerging subjects	9	5.5%	4.6%
7	Project work, seminar and internship in industry or elsewhere	15	9.2%	11.69%
8	Mandatory Courses [Environmental Sciences, Induction Program, Indian Constitution, Essence of Indian Knowledge Tradition]	(non-credit)		

Agenda 5: Discussing the proposed Programs and Credit structure as per NEP guidelines.(Annexure B)

- a) A presentation was made by the Head of Computer Science Engineering of PCU School of Engineering and Technology on the guidelines of the New Education Policy 2020 and the requirements of the Choice Based Credit System to all the members present.
- b) Based on the NEP guidelines, the Proposed Program Structures were presented before the members.
- c) Dr. Ardaman Singh had generic feedback on the program structures stating that the more focus on the outcome of every course.
- d) A detailed discussion followed the above feedback in terms of the requirement of additional courses like Ability Enhancement and Value Addition Course as per the NEP 2020 which led to the list of courses to be longer.
- e) Mr. Dr.Shubhajit Jagadev also added with a suggestion of having dedicated MOOC courses as credited course to place higher value to the Online Certification Courses as part of the Academic Structure.

- f) Agreeing with Mr. Chittaranjan Mahajan added that there could be more emphasis on Entrepreneurship skill development throughout the 4 years to develop strong enterprise methodology within the students.
- g) Further discussions were made on the implementation of local / national / regional/global developmental needs within the curriculum structure emphasizing on the new age of Engineering Education trying to have global outlook.
- h) The Internal Faculty team emphasized that Courses directly relating to Employability, Skill development and Entrepreneurship should be the backbone of the Curriculum structure, while course covering Sustainability, Human Values and Professional Ethics shall form a composition of strong support to the curriculum structure.
- i) Dr. Sheetalkumar Rawandale suggested that all the courses of the Programs should align with the Industry 4.0 requirements, while still covering the basics of Engineering.
- j) Dr. Sachin Jadhav also seconded Dr. Sheetalkumar Rawandale's thought, that the curriculum should adopt the Industry 4.0 Values in the implementation of the courses so as to prepare the students for the future of the Industry practice.
- k) In addition to Dr. V. N. Patil presentation on the UG and PG courses, Dr. Sachin Jadhav presented on the PhD program and its structure.
- l) A Board of Studies (BoS) meeting for a Ph.D. course in Computer Science Engineering is a critical component of the doctoral education process, especially in the field of Engineering. These meetings are conducted to monitor and evaluate the course structure for the PhD program. Here's what typically happens during a BoS meeting for a PhD program:

Proposal to start PhD in Engineering and Technology at PCU

Eligibility criteria for universities approved by the council to start Ph.D. program in Engineering. The minimum criteria for a university to have approved Ph.D. degree program in Engineering comparing with IITs, NIDs, NITS also Dr. Dr. S. D. Shirbahadurkar have recommended to add criteria's from both private and government Institutions.

- It was suggested to highlight the resources, facilities, and infrastructure that PCU will provide to support research in engineering.
- Each BoS member mentioned outlining the expected outcomes of the Ph.D. program, such as generating new knowledge, making contributions to the field, and collaborating with industry.
- Dr. Sudeep Thepade included that the faculty members who will be supervising Ph.D. candidates and should be expertise in various discipline of engineering.

- Define the admission criteria for Ph.D. candidates by the Bos members they urge to include prerequisites, eligibility, and entrance exams and personal interviews.
- The BoS members specify the research areas that the program will focus on. This could include critical thinking, sustainable research, user experience, or any other relevant areas of engineering and emphasize any unique features or specializations.
- Prof. Dilip Saini has explained how the program will ensure and maintain quality in terms of curriculum, faculty, and assessment.
- The valuable feedback from the members was noted and it was concluded that the Value addition courses could be utilized to fulfill them.

Agenda 6: Course detailing for B. Tech second year CSE, AI-ML and AI-DS

- a) The HOD of PCU School of Engineering and Technology, Dr. V.N Patil, presented the curriculum structure for the second year before the members.
- b) All members agreed upon the structure formed with the feedback from all the members.
- c) As per the formed structure, the course details were further discussed by the members.
- d) Dr. Ardman singh suggested that the new age technology such as Problem Solving using C and Pthyon programming , should be included in the second Year itself, so that the graduates are prepared for the future from the inception of the program.
- e) Dr. Aditi Sharma also added that the professional skill development should also be given equal importance in the second year.
- f) Mr. Rahul H Phatangare suggested to give more weight for probability and statistics in Applied mathamatics subject.
- g) Dr.Shirbahadur suggested that total marks must should be 750 per semester instead of 850.
- h) Dr.Shital kumar Rawandale has suggested to include Aptitude course under HSSM category to improve problem solving ability of students.
- i) Mr.Kajve has suggested to change the name of English communication course to Basic and Advanced communication.
- j) Dr. Sudeep Thepade proposed to introduce Design analysis and algorithm course in second year syllabus structure instead of communication systems course but as per suggestion of other members at second year level the communication engineering course is also have importance.
- k) As part of the course of Material Exploration, Dr. V.N Patil elaborated on the content of the course along with the experimental approach towards the exploratory part of execution. All members supported the concept.

Agenda 7: Assessment policy for assuring quality of academic outcomes.

- a) A structured framework of the evaluation policy was presented and discussed with the members student learning as the purpose of this assessment policy is to outline the principles, procedures, and responsibilities related to assessing student learning, program effectiveness, and overall academic quality.
- b) Assessment activities are aligned with institutional mission and program goals as stated by Dr. Sudeep Thepade. He has also mentioned that a continuous process designed to

identify areas for improvement and to make evidence-based decisions could be a better idea for assessment.

- c) Assistant professor Dr. Yudhishtir Raut has added that the assessment process and results should be transparent, accessible, and understandable to all stakeholders.
- d) Dr. Suresh Shirbahadurkar has mentioned that the academic programs should be reviewed at regular intervals to assess their effectiveness. He has also concluded that faculty members are responsible for developing and accessing course and program-level learning outcomes.
- e) The evaluation scheme for the courses is decided as
 - Internal Evaluation: 40 Marks
 - End Semester Exam: 60 Marks
 - Total: 100 Marks

Agenda 8: Open floor for any other points to be discussed by the members.

At the conclusive end of the meeting, there are several additional points that BOS members discussed to further enhance the educational experience and betterment of students.

- a) Dr. S.S Das addressed to assess the current curriculum's relevance in terms of addressing emerging IT trends, technology advancements, and industry demands. Also he has discussed whether any new courses or modifications are needed to align with the rapidly changing engineering trends.
- b) Dr. Sachin Jadhav have mentioned how there will be a exploring opportunities for interdisciplinary collaborations within the institution or with other departments, which can provide students with a broader perspective and unique skill sets.
- c) Mr. Prakash Kajale has deliberated that accreditation processes and benchmarking the program against other leading engineering schools to ensure that it meets or exceeds industry standards.
- d) Considering international exchange programs, study abroad opportunities, or partnerships with foreign design institutions to offer students a global perspective is equally important as stated by Mr. Dilip Saini.
- e) Dr V.N Patil mentioned about the encouraging faculties and students to engage in design research and innovation projects to advance the field and the program's reputation Dr. Yudhishtir Raut confers many ways to strengthen connections with industry partners and increase opportunities for students to engage in internships, real-world projects, and networking.
- f) Dr V.N Patil enriched with the effectiveness and relevance of capstone projects and explore how they can be improved to better prepare students for their careers.

Part-B

12. Programme and Curricula has relevance to the local / national / regional/global developmental needs. Yes (**Programme Structural Design and Development Point 1.1**)
13. Integration of cross cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Programme Structure and Curriculum. **Yes (Programme Structural Design and Development Point 2)**
14. Percentage of courses having focus on employability/ entrepreneurship/ skill development. 60% (**List of courses (Programme Structural Design and Development Point 3)**)
15. Percentage of new courses introduced of the total number of courses in the programs. _
All courses are proposed for first time. Hence all are new courses.
16. Number of Value Added Courses (other than BC/CS/TC, BS, EVS & FBL) imparting transferable and life skills. NO. Of Courses – 7 (17.5%) (**Programme Structural Design and Development Point 5**)
17. (a) Structured feedback received from stakeholders for design of syllabus Semester wise/year wise- **yes**

(b) Feedback collected, analysed and action taken, feedback is available on ERP **NA**
18. a) No. of Industry 4.0 courses integrated in Programme Structure. (8)
b) Input/outcome skill competency for Programme as per Industry 4.0-- **(8)**
(Programme Structural Design and Development Point 7)
19. Integration of results of OAP during review and development of Programme Structure and Curriculum **NA**
20. Benchmarking of programme with programme and institutions (**Agenda No. 4 in BoS MoM and attached herewith as attachment**)
21. Details of MoU signed with Industry/Skill Council at programme/course level, if any. IIT spoken tutorials. (**Programme Structural Design and Development Point 11**)
22. Detailed Annual Academic Calendar (All the calendars shall be aligned with University Academic Calendar, Event calendar,)

Conclusion:

The inaugural meeting of the PCU School of Engineering Board of Studies was a success in terms of the fruitful feedback and suggestion received from all the members. The same will be considered and discussed within the internal team to conclude on how to accommodate them while refining the curriculum structure.

**Dr. V.N. Patil
Bhardwaj**

Head Of Department and Chairman BOS
CHANCELLOR

Computer Science Engineering ,
Pune
Pimpri Chinchwad University, Pune

Dr. Rajeev

PRO VICE

Pimpri Chinchwad University,