

Ref: PU-SOE-MEC/2021-2022/BOS-12/CIRCULAR

Date: 28/07/2021

12th BOS MEETING NOTICE

The 12th Meeting of the Board of Studies in Mechanical Engineering, School of Engineering, Presidency University, is convened on Friday, 6th August 2021, at 10:30 AM. The meeting will be hosted online on Microsoft Teams from the Presidency University Campus, Itgalpura, Rajanakunte, Yelahanka, Bengaluru.

Kindly make it convenient to attend the meeting.

Agenda

Agenda SOE-MEC 12.1	To approve the minutes of the 11 th Board of Studies Meeting held on September 5th, 2020.
Agenda SOE-MEC 12.2	Discussion on the Program Regulations & Curriculum [PRC] for the 2020 admitted students- Annexure 1
Agenda SOE-MEC 12.3	Discussion on the Program Regulations & Curriculum [PRC] for the 2019 admitted students- Annexure 2
Agenda SOE-MEC 12.4	Discussion on the Program Regulations & Curriculum [PRC] for the 2018 admitted students- Annexure 3
Agenda SOE-MEC 12.5	Discussion on the Feedback obtained on curriculum from Industry, students, alumni & faculty members - Annexure 4
Agenda SOE-MEC 12.6	Discussion on the Proposed CBCS Course grid and the Course catalogues for the 2021 admitted students- Annexure 5
Agenda SOE-MEC 12.7	Discussion on the feedback obtained from the Industry, students, faculty members and alumni on the proposed CBCS Course grid- Annexure 6
Agenda SOE-MEC 12.8	Any other matter with the permission of the Chairperson

To,

Members and Invitees

Sl. No.	Name of the Member	Designation with Affiliation	Status
1	Dr. Abdul Sharief	Chairman	Dean, School of Engineering
2	Dr. Mahesha K	Head of the Department & Professor	Member Secretary
3	Mr. Shivaprakash M S	Deputy General Manager, Kennametal Shared Services Pvt. Ltd., Bengaluru	Senior Professional
4	Dr. Shanmugam S	Professor, Department of Mechanical Engineering, National Institute of Technology, Trichy	External Expert
5	Dr. M. P. Maiya	Professor, Mechanical Engineering Dept., IIT Madras, Chennai	External Expert
6	Dr. Ramesh C S	Dean, R&I, PU	Special Invitee
7	Dr. Udaya Ravi M	Professor	Special Invitee
8	Dr. Sudheer R	Assistant Professor	Special Invitee
9	Dr. Madhusudhan M	Assistant Professor	Member

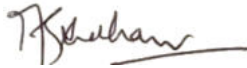
Permanent Invitees

Shri. Nissar Ahmed, Hon'ble Chancellor, Presidency University


Shri. Salman Ahmed, Hon'ble Board Member, PGI

Dr. D. Subhakar, Vice Chancellor, Presidency University

Dr. Surendra Kumar, Pro Vice Chancellor, Presidency University



Dr. Madhusudhan M
Member



Dr. Mahesha K
Member Secretary



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SCHOOL OF ENGINEERING

Department of Mechanical Engineering

Ref. No.: PU/SOE/MEC/BOS-12/2021-22/MOM-01

Date: 06/08/2021

Minutes of the 12th Meeting of Board of Studies (Mechanical Engineering)

The 12th meeting of the Board of Studies of the Mechanical Engineering was held on 06-08-2021 at 10.30 am in Online Mode via the MS Teams link, https://teams.microsoft.com/l/meetup-join/19%3aK0-b94rfLXb_U9ODY18xpyDSjj3ETkpDj9M67x3wFM81%40thread.tacv2/1628162205176?context=%7b%22Tid%22%3a%22bf93bb5e-ecf0-4e3d-be0e-79b5cc527a48%22%2c%22Oid%22%3a%22380108ba-f4ce-4418-acc5-d0d9acb30dd5%22%7d, hosted by Presidency University Itgalpur, Rajankunte, Yelahanka, Bengaluru.

12th BoS committee members:

Sl No.	Name	Affiliation	Position
1	Dr. Abdul Sharief	Chairman	Dean, School of Engineering
2	Dr. Mahesha K	Head of the Department & Professor	Member Secretary
3	Mr. Shivaprakash M S	Deputy General Manager, Kennametal Shared Services Pvt. Ltd., Bengaluru	Senior Professional
4	Dr. Shanmugam S	Professor, Department of Mechanical Engineering, National Institute of Technology, Trichy	External Expert
5	Dr. M. P. Maiya	Professor, Mechanical Engineering Dept., IIT Madras, Chennai	External Expert
6	Dr. Ramesh C S	Dean, R&I, PU	Special Invitee
7	Dr. Udaya Ravi M	Professor	Special Invitee
8	Dr. Sudheer R	Assistant Professor	Special Invitee
9	Dr. Madhusudhan M	Assistant Professor	Member



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The member secretary/ HoD extended a warm welcome to the members, particularly to the external members and introduced all the members in the committee. The chairman of 12th BoS meeting, Dr Abdul Sharief delivered the opening remarks by requesting BoS members to deliberate on each agenda and to provide constructive suggestions for the effective implementation of the proposed CBCS system.

With the permission of chairperson, the member secretary had presented the following agenda points and deliberations were recorded.

Agenda SOE-MEC 12.1: To approve the minutes of 11th Board of Studies Meeting held on 5th Sept 2020

Resolution SOE-MEC 12.1: The Minutes of 11th BoS meeting held on 5th September 2020 and its Action taken report (ATR) was discussed and approved by the members.

Agenda SOE-MEC 12.2: Discussion on the Program Regulations & Curriculum [PRC] for the 2020 admitted students

Resolution SOE-MEC 12.2: The proposed changes in Program Regulations & Curriculum [PRC] for the 2020 admitted students was presented as in Annexure 1 by the member secretary and the same had been discussed and approved

Table 1: Illustrating the proposed changes in PRC for 2020 admitted students

TABLE 3.1.1 B.Tech (Mechanical Engineering) 2020-2024: Mandatory Courses and Credits				
S. No.	TYPE OF COURSES	NO. OF COURSES	CREDITS	
1	Humanities (HS)	3	6	
2	Basic Sciences (BS)	9	27	
3	Engineering Sciences (ES)	7	21	
4	Core (Professional) Course (CC)	13	43	
5	Discipline (Professional) Elective (DE)	Minimum of 15	43	
6	Open Elective (OE)	Management Sciences (MS)	Minimum of 2	6
		Other Open Elective (OE) courses	Minimum of 5	14
7	Professional Practice (PP)	2	20	
8	Personal and Professional Skills (PPS) (Compulsory to be audited.)	4	-	
TOTAL		Minimum of 60	180	
The mandatory minimum Credits required for the award of the B. Tech. (Mechanical Engineering) Degree is 180 Credits.				



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Agenda SOE-MEC 12.3: Discussion on the Program Regulations & Curriculum [PRC] for the 2019 admitted students

Resolution SOE-MEC 12.3: The member secretary presented the Program Regulations & Curriculum [PRC] for the 2019 admitted students as listed in Annexure-2.

The changes are listed as follows:

1. MEC 261 Modeling, Simulation and Analysis Lab moved from 6th sem to 7th sem.
2. In 6th sem total credits changed from 24/25 to 23/24 credits.
3. In 7th sem total credits changed from 15 to 16 credits.

They had been discussed and approved after the following discussion point.

- (i) Dr. Maiya raised concern over the evaluation scheme for the Social Immersion course. He observed that the course was relevant, but it appeared more suitable to be assessed assatisfactory or unsatisfactory based on the student performance, and requested for the evaluationscheme for the allotment of credits for it.

The recommendations of the experts were considered and addressed as follows:

The Member Secretary briefed him about the evaluation scheme followed, and assured that the matter would be discussed in the DAC.

Table 2: Illustrating the revised Course list for the 6th Semester.

VI SEMESTER									
S. NO.	COURSE CODE	COURSE NAME	CREDIT STRUCTURE				CONTACT HOURS	TYPE OF SKILL	COURSE ADDRESSES TO
			L	T	P	CREDITS			
1	MEC 209	Heat and Mass Transfer	3	1	0	4	4	F	-
2	MEC 212	Mechanical Vibrations	3	1	0	4	4	F	-
3	MEC 219	Design of Machine Elements-II	3	1	0	4	4	F	-
4	MGT 1XX	Management Sciences-II	3	0	0	3	3	E	-
5	MEC 3XX	Discipline Elective-III	3	0	0	3	3	-	-
6	XXX XXX	Open Elective-I	3	0	0	3	3	-	-
7	MEC 259	Mechanisms, Machines and Design Lab	0	0	2	1	2	F	-
8	MEC 260	Heat and Mass Transfer Lab	0	0	2	1	2	F	-
9	SIC 501	Social Immersion Course	-	-	-	1	-	P	G/Enw/S
TOTAL			15	3	6	23/24	25		



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VII SEMESTER									
S. NO.	COURSE CODE	COURSE NAME	CREDIT STRUCTURE				CONTACT HOURS	TYPE OF SKILL	COURSE ADDRESSES TO
			L	T	P	CREDITS			
1	MEC 213	I. C. Engine and Fuels	3	1	0	4	4	E	-
2	MEC 218	Mechatronics	3	1	0	4	4	E	-
3	MEC 3XX	Discipline Elective-IV	3	0	0	3	3	-	-
4	XXX XXX	Open Elective-II	3	0	0	3	3	-	-
5	MEC 256	Mechatronics Lab	0	0	2	1	2	E	-
6	MEC 261	Modeling, Simulation and Analysis Lab	0	0	2	1	2	E	-
TOTAL			12	2	2	16	18		

Agenda SOE-MEC 12.4: Discussion on the Program Regulations & Curriculum [PRC] for the 2018 admitted students

Resolution SOE-MEC 12.4: The member secretary presented the Program Regulations & Curriculum [PRC] for the 2018 admitted students as listed in Annexure-3

The introduction of the extra Open Elective Course with respect to recent trends in Mechanical Engineering. They felt that the addition of an Open Elective Course gave the students more choice to plan their academic journey and further specialize in areas of their choice, and the same had been discussed and approved. Mr. Shivaprakash advised that such a provision will improve the employability rate at the entry level. Extra Open Elective Course listed in Annexure-3. All the members have appreciated the efforts.

Agenda SOE-MEC 12.5: Discussion on the Feedback obtained on curriculum from Industry, students, alumni & faculty members

Resolution SOE-MEC 12.4: The member secretary presented the gist of feedback obtained on existing curriculum from Industry, students, alumni & faculty members as listed in Annexure 4 and highlighted the necessity of revamping the curriculum towards flexible Choice based Credit System (CBCS). All the members have appreciated the efforts.

Agenda SOE-MEC 12.6: Discussion on the Proposed CBCS Course grid and the Course catalogues for the 2021 admitted students

The member secretary presented the salient features of proposed program structure and CBCS Course grid including course catalogues for both B.Tech and M.Tech program, given in Annexure 5. The changes in the program outcome for the M.Tech program was highlighted as well. They were duly approved after much deliberations with following discussion points:

- (i) Mr. Shivaprakash observed that the courses under the School Core would be beneficial for the



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- students of mechanical engineering. Further, he suggested that the CAD based courses like Engineering Graphics can be very useful for the students from Computer Science Department.
- (ii) Mr. Shivaprakash suggested an inclusion of B.Tech program in Mechanical Engineering with minors in Thermal Engineering.
 - (iii) Mr. Shivaprakash advised on inclusion of courses related to; 1) Materials for Aerospace, 2) Motors, and 3) Power Transmission Techniques and their design, into the course grid during its next revision. In response to this, Dr. Maiya sought Mr. Shivaprakash's opinion on the grade/extend of information to be delivered in such courses. Mr. Shivaprakash, in reply, suggested that the courses shall train students for the entry level positions in industry.
 - (iv) Dr. Maiya raised his concern on whether industrial internship could be provided for all the M.Tech students in the department.
 - (v) Mr. Shivaprakash enquired if the open elective courses offered for the B.Tech student could be accessed by the M.Tech students too. He advised that such a provision will improve the curriculum for M.Tech program.
 - (vi) Dr. Maiya observed that the proposed CBCS curriculum would be difficult for the first year students to comprehend, which was supported by Mr. Shivaprakash too.
 - (vii) Both Mr. Shivaprakash and Prof. Maiya appreciated the proposed CBCS scheme, especially for the inclusion of computer based courses, and recommended the inclusion of more industrially relevant courses in the next revision.

The recommendations of the experts were considered and addressed as follows:

- (i) Inclusion of CAD based course under School Core: The Member Secretary welcomed his suggestion, and committed to convey it to the Office of Dean Academics.
- (ii) Inclusion of a Program in mechanical engineering with minors in Thermal Engineering: The Member Secretary appreciated the suggestion, and offered to discuss the matter with the Office of Dean Academics.
- (iii) Inclusion of select courses: The suggestions were well conceived, and their inclusion in the form of VACs and Open Elective courses were offered, to be discussed in DAC for further approval.
- (iv) Internship for all students in M.Tech program: The concern was addressed by the Dr. Ramesh C S, Dean R&C. He briefed the committee members about the MoUs that presidency university has established for similar student programs, and assured that every student would avail an internship.
- (v) Access of Open Elective courses from the B.Tech course grid: The Member Secretary illustrated the courses offered under the M.Tech program, which were represented under the B.Tech curriculum as well. He offered to discuss its extension with the DAC.
- (vi) Difficulty in understanding the CBCS scheme: The Member Secretary assured them that The University had an effective mentoring system by the faculty advisors, and the same can be further strengthened/ trained in order to guide the students for selecting the appropriate courses.



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- (vii) Appreciation of the proposed CBCS scheme: The Member Secretary thanked the BoS members for their comments, and assured them of timely revisions to improve the curriculum.

Agenda SOE-MEC 12.7: Discussion on the feedback obtained from the Industry, students, faculty members and alumni on the proposed CBCS Course grid.

Resolution SOE-MEC 12.7: The feedback questionnaires which were shared to the stake holders, its responses, recommendations and action taken on recommendations was presented by the member secretary as listed in Annexure 6. The committee has appreciated the motive of the exercise.

Agenda SOE-MEC 12.8: Any Other Matter with the permission of the chair

- (i) To ratify the proposal of offering of soft skills course of 3 credits and Coding Training of 2 credits for the 2018 admitted students in lieu of the 5 credits course of Professional Practice 1 (Annexure 7)

Resolution SOE-MEC 12.8.1:

The member secretary presented the course handouts of soft skill course of 3 credits and coding training course of 2 credits for the 2018 admitted students in lieu of PP-1 and the same has been approved by the committee members and recorded in Annexure 7.

- (ii) To ratify the proposal of allowing the students to register for the "SMART MANAGERS" Certificate programs through different courses offered by AIU- CII for the 2019 admitted students in lieu of the 5 credits course of Professional Practice-1 (Annexure 8)

Resolution SOE-MEC 12.8.2:

The course handouts for the "SMART MANAGERS" Certificate programs through different courses offered by AIU- CII for 1 credit and soft skill course & coding training course for 4 credits in lieu of PP-1 for 2019 admitted students was presented by member secretary and the same was ratified by the committee.

- (iii) To ratify the course contents of 2019-2020 & 2020-2021 academic year courses of various programs and semesters as approved by the BOS chairpersons based on the approval of the respective Departmental Academic Committees [DAC].

Resolution SOE-MEC 12.8.3:

The course contents/ course handouts for the Academic Year 2019-2020 & 2020-2021 were approved.

- (iv) To ratify the list of MOOC Courses from SWAYAM-NPTEL offered as Discipline and Open Elective Courses

Resolution SOE-MEC 12.8.4:

The list of MOOC courses from Swayam-NPTEL offered as Discipline and Open Elective Courses were presented by the member secretary and the same was ratified by the committee.

- (v) To ratify the list of nominated external examiners for the End Term Final Examination.



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Resolution SOE-MEC 12.8.5:

The list of nominated external examiners for the End Term Final Examination was presented by the member secretary and the same was ratified by the committee after the following discussion point.

- (i) Dr. Maiya and Mr. Shivaprakash advised that external examiners from IISc and National Institute of Design can be included in the list of examiners.

The recommendations of the experts were considered and addressed as follows:

The member secretary informed them that Dr. Anandya Dev from IISc had been involved in the process with the Presidency University, and more experts in the field would be brought in to this.

The BOS Chairperson has assured that the decisions taken during the 12th BoS meeting for Mechanical Engineering will be implemented as early as possible and will be conveyed. The Chairperson and member secretary had expressed special thanks to all the members and requested to extend the same support for the future activities.

The meeting ended with Vote of Thanks by Dr. Mahesha K.

BoS Committee Members:

Sl No	Name	Position	Signature with Date
1	Dr. Abdul Sharief	Chairman	
2	Dr. Mahesha K	Head of the Department & Professor	
3	Mr. Shivaprakash M S	Deputy General Manager, Kennametal Shared Services Pvt. Ltd., Bengaluru	
4	Dr. Shanmugam S	Professor, Department of Mechanical Engineering, National Institute of Technology, Trichy	21/9/21
5	Dr. M. P. Maiya	Professor, Mechanical Engineering Dept., IIT Madras, Chennai	Maiya MP
6	Dr. Ramesh C S	Dean, R&I, PU	
7	Dr. Udaya Ravi M	Professor	M. U. Ravi 21/9/21
8	Dr. Sudheer R	Assistant Professor	
9	Dr. Madhusudhan M	Assistant Professor	



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The 12th BoS meeting was hosted online via the MS Teams https://teams.microsoft.com/l/meetup-join/19%3aK0-b94rfLXb_U9ODY18xpyDSjj3ETkpDj9M67x3wFM81%40thread.tacy2/1628162205176?context=%7b%22Tid%22%3a%22bf93bb5e-ecf0-4e3d-be0e-79b5cc527a48%22%2c%22Oid%22%3a%222380108ba-f4ce-4418-acc5-d0d9acb30dd5%22%7d

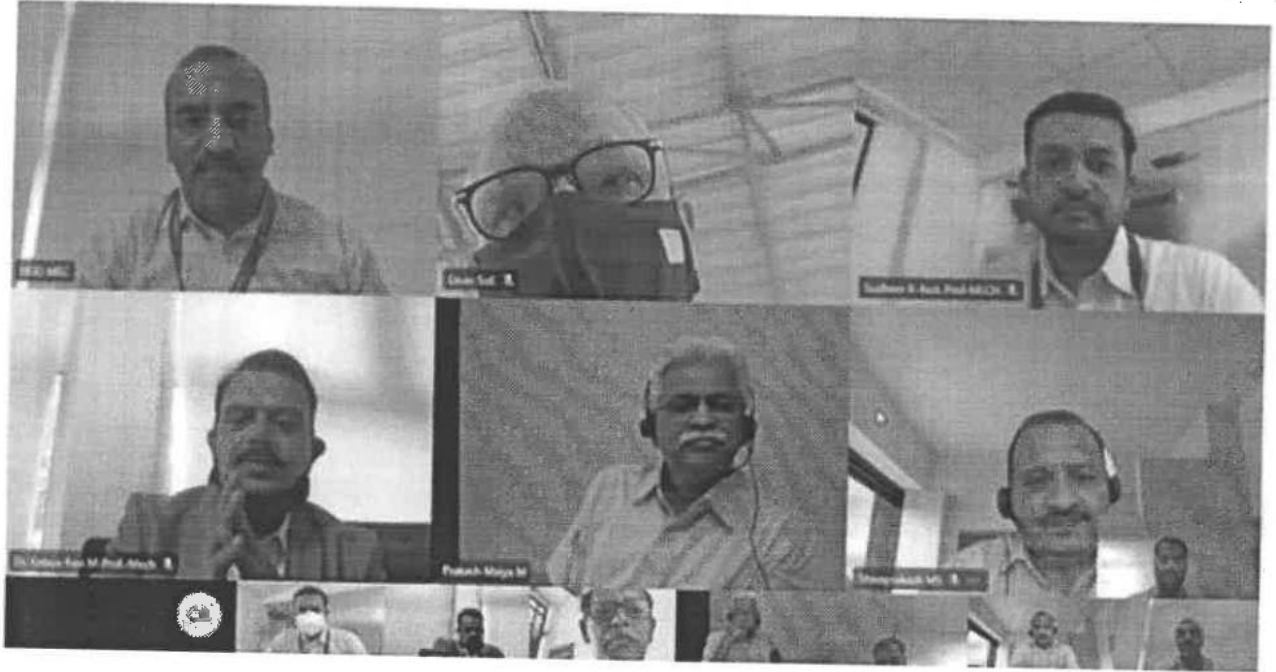


Fig. 1. The screenshot of 12th BoS meeting on MS Teams

First row L to R- Dr Mahesha K, Dr. Abdul Sharief and Dr Sudheer R

Second row L to R- Dr Udaya Ravi M, Dr. M P Maiya and Mr. Shivaprakash M S

Third row L to R-Dr. Shanmugam S, Dr. Madhusudhan M

..... **Thank You**

Annexure MEC 12.6.2



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Presidency University Act, 2013 of the Karnataka Act No. 41 of 2013 | Established under Section 2(f) of UGC Act, 1956
Approved by AICTE, New Delhi



School of Engineering

Department of Mechanical Engineering

Master of Technology Degree

Program Regulations and Curriculum 2021-2023

M. Tech. (Product Design and Development)

2021-2023



M. Tech. (Product Design and Development)

Semester 1						
Sl. No	CourseCode	Course Name	Credit Structure			Contact Hours
			L	P	C	
1	MAT6001	Advanced Engineering Mathematics	3	0	3	3
2	ENG5001	English for Employability	2	2	3	3
3	MEC5005	Introduction to Product Development	3	0	3	3
4	MEC5006	Additive Manufacturing	2	2	3	3
5	MEC5007	Industrial Design	3	0	3	3
6	MEC5008	Integrated Product Design and Process Development	3	0	3	3
7	MECXXXX	Discipline Elective - I	3	0	3	3
8	SEM 5001	Seminar-I	0	0	1	1
		Total	19	0	22	22

Semester 2						
Sl. No	CourseCode	CourseName	Credit Structure			Contact Hours
			L	P	C	
1	MEC 5009	Creativity in Design	2	2	3	3
2	MEC XXXX	Discipline Elective - II	3	0	3	3
3	MEC XXXX	Discipline Elective - III	3	0	3	3
4	MEC XXXX	Discipline Elective - IV	3	0	3	3
5	MEC XXXX	Discipline Elective - V	3	0	3	3
6	XXX XXXX	Open Elective- I	3	0	3	3
7	XXX XXXX	Open Elective- II	3	0	3	3
8	SEM 5001	Seminar-II	0	0	1	1
		Total	21	2	22	22

Semester 3						
Sl. No	Course Code	Course Name	Credit Structure			Contact Hours
			L	P	C	
1	PIP 6001	Dissertation/Internship I	0	0	10	-
		Total	0	0	10	-

Semester 4						
Sl. No	Course Code	Course Name	Credit Structure			Contact Hours
			L	P	C	
1	PIP 6002	Dissertation/Internship II	0	0	14	-
		Total	0	0	14	-


 REGISTRAR
