#### MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

# **Department of Chemical Engineering Minutes of BOS Meeting**

Date: 16/12/2022

The BOS Meeting was held on 16 December 2022 through online on Google Meet at 12:00 PM Onwards. During the meeting following were present

#### **External Members:-**

1. Dr. Ashok Sharma, Professor, Department of Chemical Engg, UEC, Ujjain (Expert nominated by the Vice Chancellor, RGPV)

#### Subjects experts from outside RGPV nominated by Academic Council

1. Dr. Pankaj Tiwari, Associate Professor, Department of Chemical Engg.IIT Guwahati

#### Representative from industry

1. Mr. Rakesh Agarwal, Director, Myriadly Engineering and Business Solutions Pvt Ltd, Malanpur, Gwalior

#### **Internal Members:-**

- 1. Prof. Swati Gupta, Assistant Professor& Co-ordinator, Dept. of Chemical Engg., MITS
- 2. Prof. Anish P. Jacob, Assistant Professor, Dept. of Chemical Engg., MITS
- 3. Dr. Shourabh Singh Raghuwanshi, Assistant Professor, Dept. of Chemical Engg., MITS
- 4. Dr. R.K. Dubey, Assistant Professor, Dept. of Chemical Engg., MITS
- 5. Prof. Shivangi Sharma, Assistant Professor, Dept. of Chemical Engg., MITS

#### The following points were discussed and resolved & item wise discussion as follows:-

Item CM	To confirm the minutes of previous BoS meeting held in the month of June 2022.  The minutes of previous meeting Board of studies (BoS) held on 7 <sup>th</sup> June 2022 (Through Google meet)
1	were confirmed.
Item CM 2	To propose the scheme structure of VIII Semester with the provision of ONE DE & ONE OC course tobe offered in online mode with credit transfer for the batch admitted in 2019-20. (The total credits from I-VIII semester should be 170 for this batch)  Scheme structure of B.Tech. VIII Semester with the provision of ONE DE & ONE OC course tobe offered in online mode with credit transfer for the batch admitted in 2019-20. (The total credits from I-VIII semester should be 170 for this batch) has been proposed.
Item CM 3	To propose the list of courses which the students can opt from SWAYAM/NPTEL/ other MOOC Platforms/ Institution (MITS) MOOC, to be offered in <i>online mode under Departmental Elective (DE) category courses (DE-5) and open category (OC4)</i> for credit transfer in the <i>VIII Semester</i> under the flexible curriculum (Batch admitted in 2019-20)  The list of courses which the students can opt from SWAYAM/NPTEL/ other MOOC Platforms/Institution (MITS) MOOC, to be offered in <i>online mode under Departmental Elective (DE) category courses (DE-5) and open category (OC4)</i> for credit transfer in the <i>VIII Semester</i> under the flexible curriculum (Batch admitted in 2019-20) were discussed and finalized.  As per the following detail:-

### MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

DE-V	OC-IV
1. Optimization in Chemical	1. Environmental Quality
Engg.(170851) 2. Biomass Conversion and Biorefinery(170853) 3. Chemical Process Utilities (170855)	Monitoring & Analysis 900623
	2. Electrochemical Technology in Pollution Control 900624

To propose the list of "Additional Courses" which can be opted for getting an

- (i) Honours (for students of the host department)
- (ii) Minor Specialization (for students of other departments)

[These will be offered through SWAYAM/NPTEL/MOOC based Platforms for the VI semester (for the batch admitted in 2020-21) and for VIII semester students for the batch admitted in 2019-20. The list should be additive; such that those MOOCs which were offered in previous semesters are also included provided they are being offered on the platform during Jan-June 2023 semester]

The list of "Additional Courses" which can be opted for getting an

- (i) Honours (for students of the host department)
- (ii) Minor Specialization (for students of other departments)

[These will be offered through SWAYAM/NPTEL/MOOC based Platforms for the VI semester (for the batch admitted in 2020-21) and for VIII semester students for the batch admitted in 2019-20 were proposed.

The courses available on SWAYAM/NPTEL/MOOC based Platforms for the VI semester and for VIII Semester for Honours & Minor specialization were discussed & recommended are as follows

	S.No.	Purpose	Name of Course
Item CM 4	1	For Honours (VIII Semester)	Computer Aided Applied Single Objective Optimization
			Polymer Reaction Engineering
			Biological process design for wastewater treatment
	2. For Minor Specialization (Others Department)	Inorganic Chemical Technology	
		1 -	Chemical Engineering Thermodynamics
		(VIII Semester)	Chemical Process Instrumentation
	3.	For Honours	Environmental Quality Monitoring & Analysis
		(VI Semester)	Electrochemical Technology in Pollution Control
			Soft Nano Technology
			Renewable Energy Engineering: Solar, Wind and Biomass Energy Systems
	4.	For Minor	Process Control - Design, Analysis and Assessment
		Specialization	Membrane Technology

# MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR (A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

	(Others Department) (VI Semester)  Basic Principles and Calculations in Chemical Engineering		
Item CM	To review and finalize the syllabi for all <i>Departmental Core (DC) Courses</i> of <i>VI Semester (for batches admitted in 2020-21)</i> under the flexible curriculum along with their Cos  The syllabi for all <i>Departmental Core (DC) Courses</i> of <i>VI Semester (for batchesadmitted in 2020-21)</i>		
5	under the flexible curriculum along with their Cos has been reviewed and finalized.		
Item CM 6	To review and finalize the courses & syllabi to be offered (for batches admitted in 2020-21) under Departmental Elective (DE) Course in the VI Semester  The courses & syllabi to be offered (for batches admitted in 2020-21) under Departmental Elective  (DE) Course in the VI Semester based for Batches admitted in 2020-21)		
	(DE) Course in the VI Semester has been discussed and finalized.  To propose the list of courses from SWAYAM/NPTEL/MOOC Platforms to be offered (for batchesadmitted)		
	in 2020-21) in online mode under Departmental Elective (DE) Course with credit transfer, in the VI		
Item	Semester The list of courses from SWAYAM/NPTEL/MOOC Platforms to be offered (for batchesadmitted in 2020-21) in online mode under Departmental Elective (DE) Course with credit transfer, in the VI Semester has been		
CM	proposed. As per the following detail:-		
7	DE Course (Online Mode)		
	170652- Multiphase Flow		
	170653-Membrane Technology		
	170654-Physical and Electrochemical Characterizations in Chemical		
	Engineering		
Item	To review and finalize the courses & syllabi to be offered (for batches admitted in 2020-21) under the <b>Open Category (OC) Courses</b> (in traditional mode) for <b>VI semester</b> students of other departments along with their Cos		
<b>CM</b> 8	The courses & syllabi to be offered <i>(for batches admitted in 2020-21)</i> under the <i>Open Category (OC)</i> Courses (in traditional mode) for VI semester students of other departments alongwith their Cos has been reviewed and finalized.		
Item CM	To review and finalize the Experiment list/ Lab Manual for Laboratory Courses to be offered in VI semester (for batches admitted in 2020-21)		
9	The Experiment list/ Lab Manual for Laboratory Courses to be offered in VIsemester (for batches admitted in 2020-21) has been finalized.		
Item CM	To review and finalize the scheme and syllabi of <b>B. Tech.</b> <i>IV Semester (for batches admitted in 2021-22)</i> under the flexible curriculum along with their Cos.		
10	The scheme and syllabi of <b>B. Tech.</b> <i>IV Semester (for batches admitted in 2021-22)</i> under the flexible curriculum along with their Cos has been reviewed & finalized.		
Item	To review and finalize the Experiment list/ Lab Manual for Laboratory Courses to be offered in <b>IV</b> (for batch admitted in 2021-22)		
CM 11	The Experiment list/ Lab Manual for Laboratory Courses to be offered in <b>IV</b> (forbatch admitted in 2021-22) were discussed & finalized.		
Item CM 12	To review and finalize the suggestive list of projects under the 'Skill based mini-project' category in various laboratory courses to be offered in Jan - June 2023 semester during <b>IV Semester</b> (for the batch admitted in 2021-22).		

### MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

	The suggestive list of projects under the 'Skill based mini-project' category in variouslaboratory courses to be offered in Jan - June 2023 semester during <b>IV Semester</b> (for the batch admitted in 2021-22) were reviewed & finalized.		
Item CM	To ratify the Scheme & Syllabi, list of experiments and skill based mini projects of First Semester & Second Semester B. Tech. programmes [admitted batch 2022-23 Session]		
13	The Scheme & Syllabi, list of experiments and skill based mini projects of First Semester & Second Semester B. Tech. programmes [admitted batch 2022-23 Session]has been finalized.		
Item CM	To review the CO attainments, to identify gaps and to suggest corrective measures for the improvement in the CO attainment levels for Jan-June 2022.		
14	The CO attainments, to identify gaps and to suggest corrective measures for the improvement in the CO attainment levels for Jan-June 2022 has been reviewed.		
Item CM 15	To review curricula feedback from various stakeholders, its analysis and impact  {Stakeholder feedback analysis must also contain an action taken report (ATR) and the details/data of the stakeholder who have responded through GOOGLE form (such as Name, organization, mail id, phone no if available) must also be shared along with the feedback for the alumni/employer.}  The curricula feedback from various stakeholders, its analysis and impact has been done & reviewed.		
Item CM	To review Course Outcomes (COs) feedback of various courses, its analysis and impact		
16	The Course Outcomes (COs) feedback of various courses, its analysis, and ATR has been Reviewed.		

## The meeting ended with the vote of thanks to all the members Suggestion & Comment

- 1. The experts suggested including Process Equipment Design as a core subject in the  $6^{\rm th}$  Semester.
- 2. The experts appreciated the proposed scheme and were satisfied with the list of Electives, Open courses and the Core courses included in the curriculum.

Prof. Swati Gupta (Assistant Prof. & Coordinator)