

(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI)
S.P.G.Childambara Nadar - C.Nagammal Campus
S.P.G.C. Nagar, K.Vellakulam - 625 701 (Near VIRUDHUNAGAR).

MINUTES OF THE MEETING OF THE POLYMER TECHNOLOGY $-3^{\rm RD}$ BOARD OF STUDY (PT-BOS) HELD ON 13-11-2021 AT 10:30 AM IN ONLINE.

Platform: Microsoft Teams

Meeting Link: https://tinyurl.com/3rd-PT-BOS-Meeting

Members:

	BOS – External members	
	Dr.K.Ravichandran	ACCOUNT OF THE PROPERTY OF THE
	Professor	
	Department of Rubber & Plastic Technology	Anna University
1.	MIT Campus-Anna University,	Nominee
	Chennai &	
	Dean, Anna University	
	Coimbatore	
	Dr.S.N. Jaisankar	
	Sr. Principal Scientist	Academic Council
2.	Polymer Science & Technology	Nominee
	CSIR-Central Leather Research Institute	
	Adyar, Chennai – 600 020	
	Er. M.Pandian	
3.	Deputy General Manager	Industrialist
σ.	M/s.Fenner (India) Ltd,	
	Kochadai, Madurai	

	Er. J.Muthuvijayan	
4.	Material Leader- Engineering	Alumni
7.	M/s. TPI Composites India Pvt Ltd	7 Hanni
	Indira Nagar, Gandhi Nagar, Chennai	
	BOS – Internal Members	
5.	Dr.S.Gandhi	
5.	HOD / PT	Chairman
6.	Dr.C.T.Vijayakumar	
0.	Professor/PT	Member
7.	Dr.S.Vinayagamoorthi	711
/.	Associate Professor/PT	Member
8.	Dr.R.Baskaran	0
0.	Associate Professor / PT	Member do mohim
9.	Dr.M.G.Sribala	2
<i>j</i> .	Assistant Professor/ PT	Member
10.	Er.S.Sivakumaravel	
10.	Assistant Professor/ PT	Member 86~~
11.	Dr.K.Ponprabhakaran	0
11.	Assistant Professor/ PT	Member 1

83

 φ

1. Welcome address:

Dr.S.Gandhi, HOD/PT welcomed all the members of Polymer Technology - Board of studies.

2. Information:

- i. The Gist of following points discussed in Third Academic council meeting which held on 3.6.2021 was informed to PT- BOS members.
 - Approved the B.Tech Polymer Technology syllabus for the Sem III to Sem IV as recommended by the Board of Studies in its meeting held on 08.05.2021.
 - Approved the three member formation committee at the department level for monitoring, Evaluation of in plant training and industrial internships, value added program, online courses and reporting of grades obtained by students to the exam cell.
 - Item no: 003.01.09 To inform the Revision in intake of seats of various programmes/change of names of programmes/start of new PG programme/closure of programmes.
- ii. Discussion of new amendment in Regulation -2017 introduced by Anna university to its affiliated colleges
 - If a student fails to secure a pass in theory courses and laboratory courses in the current semester examinations, he/she is allowed to write arrear examinations and their internal marks obtained during the regular attempt will be considered for the first arrear attempt (Regular Registration + 1st Arrear Attempt). The end-semester examination marks alone will be considered for the subsequent arrear attempts (from second arrear attempt onwards)

3. Approval of II nd BOS Minutes:

 Second PT-BOS meeting was conducted on 8th August 2021 in online mode. The minutes of meeting of the Second PT-BOS was sent to all PT-BOS member in mail earlier. Approval of the Minutes of meeting for the Second PT-BOS meeting was raised and it was approved by all BOS members.

4. Discussion and Approval:

i. Curriculum and syllabi for III year UG programme

- Proposed curriculum and Syllabus for III Year B.Tech Polymer Technology
 5th Semester and 6th Semester was discussed.
- The list of professional elective courses, open elective courses, value added courses and online courses were also discussed.

Suggestions and Recommendations received from the Members for 5th and 6th semester B.Tech Polymer Technology curriculum and syllabus:

- **Dr.S.N.Jaisankar** appreciated 5th Semester and 6th semester curriculum and syllabus for B.Tech Polymer Technology course. He insisted to include reference books with latest edition. He insisted to minor mistakes in curriculum alignment.
- Dr.S.Gandhi agreed to correct alignment and to include reference books.
- All the panel members appreciated curriculum and Syllabus for III year B.Tech Polymer Technology.
- As per the BOS members recommended and approved III rd year B.Tech Polymer Technology is here.

SEMESTER V

Sl.No	Course Code	Course Name		Cro	edits	
	Course Cour	L	T	P	C	
Theory						
1	PT1501	Design of Moulds and Dies for Polymers	3	0	0	3
2	PT1502	Plastics Processing Technology-II	3	0	0	3
3	PT1503	Polymer Compounding	3	0	0	3
4	PT1504	Testing of Polymers	3	0	0	3
5		Professional Elective I	3	0	0	3
6		Open Elective I	3	0	0	3
Practical	ls					
7	PT1511	Polymer Testing Lab	0	0	4	2
8	PT1512	Plastics Processing Laboratory	0	0	4	2
9	HS1521	Professional Communication	0	0	1	1
		Total Credits	18	0	9	23

SEMESTER VI

Sl.No	Course Code	Course Name	Credits					
51.140	Course Code	L	Т	P	C			
Theory						L		
1	PT1601	Characterization of Polymers	3	0	0	3		
2	PT1602	Polymer Blends and Alloys	3	0	0	3		
3	PT1603	Polymer Product Design	3	0	0	3		
4	PT1604	Rubber Processing and Testing	3	0	0	3		
5		Professional Elective II	3	0	0	3		
6		Online course-I	3	0	0	3		
Practicals	S		#8		l .			
7	PT1611	Computer Aided Mold Design Laboratory -I	0	0	4	1		
8	PT1612	Rubber Processing and Testing Laboratory	0	0	4	1		
9	PT1621	Technical Seminar	0	0	2	1		
		Total Credits	18	0	10	23		

Professional Elective Courses (Odd Semester)

Sl.No.	Course	Course Name	Credits				
	Code	Course Hame	L	T	P	C	
1	PT1531	Fundamentals of Nano Science	3	0	0	3	
2	PT1532	Latex Technology	3	0	0	3	
3	PT1533	Plastics Recovery And Recycling Techniques	3	0	0	3	
4	PT1534	Polymers for Biomedical applications	3	0	0	3	
5	PT1535	Polyurethane Technology	3	0	0	3	

Professional Elective Courses (EVEN Semester)

Sl.No.	Course	Course Name	Credits				
	Code	L	Т	P	C		
1	PT1631	Footwear Technology	3	0	0	3	
2	PT1632	Polymer Reaction Engineering	3	0	0	3	
3	PT1633	Polymers in Electrical and electronics applications	3	0	0	3	
4	PT1634	Specialty Polymers	3	0	0	3	
5	PT1635	Thermoplastic Elastomers	3	0	0	3	

Methodology to offer Open Electives

Candidates shall register for Open Electives offered by other departments of the Institute in the 5th and 6th semesters. If one or more professional electives (listed above) are offered by other departments, those courses are also registered by the candidates as open electives with the prior approval from HoD of Department of Polymer Technology and Dean (Academic Courses) taking into account of perquisite requirement. The course codes for those courses should be changed as "OPT15X" and included in the Suggested list of Open Electives in sequence without actually removing those courses from the list of professional electives.

OPEN ELECTIVES (to be offered to Mechanical, Civil and Mechatronics Departments)

Sl.No.	Course	Course Name		Cre	edits	
	Code		L	T	P	C
1	OPT151	Basics of Polymer Recycling	3	0	0	3
2	OPT152	Fiber Reinforced Plastics	3	0	0	3

OPEN ELECTIVES (to be offered to Mechanical, Civil and Mechatronics Departments)

Sl.No.	Course	Cours	Course Name					Credits				
	Code				L	Т	P	C				
1	OPT153	Fundamentals Packaging	of	Plastic	3	0	0	3				
2	OPT154	Introduction Engineering	to	Elastomer	3	0	0	3				

ii) Introduction of new Curriculum for Chemical Engineering (Plastic and Polymer):

Dr.S.Gandhi, HoD, Department of Polymer Technology gave a brief presentation about the proposed curriculum for the new programme on Chemical Engineering (Plastic and Polymer). He insisted that the introduction of curriculum and syllabus meets the requirements of Outcome Based Education as well as the National Education Policy 2020. He pointed out the importance of having common curriculum for the first year of all degree programmes so as to enable the students to acquire knowledge in the fundamentals of the courses pertaining to thrust areas. Also, he stated to introduce Employability Enhancement courses, value added and skill development programmes, Open Electives and Online courses to improve self-learning skills. Accordingly, the credit requirement for the programme B.Tech. Chemical Engineering (Plastic and Polymer) is outlined below:

Sl. No.	Category of Courses	Credits
1.	Foundation Courses (Humanities and Social Sciences including Management Courses, Basic Science and Engineering Science Courses)	60
2.	Professional Core Courses	60
3.	Professional Elective Courses	18
4.	Open Elective Courses	9
5.	Employability Enhancement Courses	27
6.	Online Courses	6
7.	Audit Courses*	

*Note: Audit Courses such as Life Science, Indian History, Motivational programme, etc., shall be introduced as it mandates the requirement of Outcome Based Education.

The following curriculum design for the first year is proposed and suggestions are invited from the members.

SEMESTER I

Sl.No	Course Code Course Name			Credits				
		L	Т	P	C			
Theory			-					
1	SH101	Technical English	3	0	0	3		
2	MA101	Matrices and Differential Calculus	3	0	0	3		
3	PH101	Engineering Physics	3	0	0	3		
4	GE101	Principles of Engineering	3	1	0	4		
5	EM101	Coding Techniques - I	3	0	0	3		
6	GE102	Biology for Engineers	3	0	0	3		
Practicals			l.					
7	MA102	Mathematics Laboratory (using MATLAB)	0	0	3	1		
8	PH102	Physics Laboratory	0	0	3	1		
9	EM102	Coding Techniques - I Laboratory	0	0	3	1		
		Total Credits	18	1	9	22		

SEMESTER II

Sl.No	Course Code	C. N		Cr	edits	
51.110	Course Code Course Name		L	T	P	C
Theory						
1	SH151	Technical Communication Skill Development	3	0	2	4
2	MA151	Vector Calculus and Laplace Transforms	3	0	0	3
3	CY151	Engineering Chemistry	3	0	0	3
4	GE151	Design Thinking	3	0	0	3
5	EM151	Coding Techniques - II	3	0	0	3
6	GE152	Engineering Graphics	3	0	2	4
Practicals	3					
7	GE153	MATLAB & LabVIEW Simulation Laboratory	0	0	4	2
8	CY152	Chemistry Laboratory	0	0	3	1
9	EM152	Coding Techniques – II Laboratory	0	0	3	1
		Total Credits	18	0	14	24

The semester-wise breakup of credits is given in the following table and the total number of credits shall be 180, as per the credit requirement of each category of courses. It provides a more flexible system to the students to choose their learning curve on their areas of interest. Almost, 60 credits are in the hands of the students to choose their career path, except 8 credits in the first and second semesters together and 12 credits for projects in the seventh and eighth semesters.

Sl. No.	Category of Courses	Credits	I	II	Ш	IV	V	VI	VII	VIII
1.	Foundation Courses	60	18	20	7 .	4	4	4	3	0
2.	Professional Core Courses	60	0	0	16	15	9	7	13	0
3.	Professional Elective Courses	18	0	0	0	0	6	6	6	0
4.	Open Elective Courses	9	0	0	0	3	3	3	0	0
5.	Employability Enhancement Courses	27	4	4	0	3	2	2	4	8
6.	Online Courses	0	0	0	0	0	0	0	0	0
7.	Audit Courses	6	0	0	0	0	0	3	0	3

The proposed curriculum for higher semesters is listed below.

SEMESTER III

Sl.No	Course Code	Course Name		Cr	edits	
		Course Ivame	L	Т	P	C
Theory						
1	MA201	Multivariate Calculus and Linear Algebra	3	1	0	4
2	CH201	Fundamentals of Polymer Science	3	0	0	3
3	GE201	Environmental Engineering and Science	3	0	0	3
4	CH202	Physical and Organic Chemistry	3	0	0	3
5	CH203	Fluid mechanics	3	0	0	3
6	CH204	Strength of Materials	3	0	0	3
Practicals	3					-
7	CH205	Polymer Identification and Analysis Laboratory	0	0	3	1
8	CH206	Fluid Mechanics Laboratory	0	0	4	2
9	CH207	Physical and Organic Chemistry Laboratory	0	0	3	1
,		Total Credits	18	1	10	23

SEMESTER IV

Sl.No	Course Code	Course Name		Cr	edits	
	- Surpe Couc	Course Name	L	Т	P	C
Theory						
1	MA251	Numerical Methods	3	1	0	4
2	CH251	Mould Manufacturing Technology	3	0	0	3
3	CH252	Polymer Materials	3	0	0	3
4	CH253	Process Calculation and Mechanical Operations in Chemical Engineering	3	0	0	3
5	CH7XX	Open Elective-I	3	0	0	3
6	CH254	Industrial Chemical Process	3	0	0	3
Practicals	S					
7	CH255	Mould Manufacturing Technology Laboratory	0	0	3	1
8	CH256	Mechanical Operation & Chemical Analysis laboratory	0	0	4	2
9	EM251	Internship / Practical Training / Value Added Courses	0	0	3	3
		Total Credits	18	1	10	25

SEMESTER V

Sl.No	Course Code	Course Name		Cro	edits	
	Course Cour	Course Ivame	L	Т	P	С
Theory			•			
1	MA302	Transforms and Partial Differential Equation	4	0	0	4
2	CH301	Polymer Processing Technology	3	0	0	3
3	CH7XX	Open Elective -II	3	0	0	3
4	CH302	Heat Transfer and Mass Transfer	3	0	0	3
5	CH9XX	Elective I	3	0	0	3
6	CH9XX	Elective II	3	0	0	3
Practical	S					
7	CH303	Heat and Mass Transfer Lab	0	0	4	2
8	CH304	Processing Laboratory	0	0	3	1
9	EM301	Value Added Course(s)	2	0	0	2
		21	0	7	24	

SEMESTER VI

Sl.No	Course Code	Course Name		Cr	edits	
	0		L	Т	P	C
Theory						
1	MA352	Applied Mathematics For Chemical Engineering	4	0	0	4
2	CH351	Characterization and Testing of Polymers	3	0	0	3
3	CH352	Chemical Engineering Thermodynamics	3	0	0	3
4	CH16X	Open Elective-III	3	0	0	3
5	СН9ХХ	Elective III	3	0	0	3
6	СН9ХХ	Elective IV	3	0	0	3
7	CH8XX	Online course-I	3	0	0	3
Practicals	5					
8	CH354	Testing and Characterization Lab	0	0	3	1
9	EM351	Skill Development in Chemical/Polymer/ Value Added Courses	1	0	2	2
		Total Credits	23	0	5	25

SEMESTER VII

Sl.No	Course Code	Course Name		Cr	edits	
		Course Ivame	L	Т	P	C
Theory						
1	CH401	Polymer Blends and Composites	3	0	0	3
2	CH402	Design of Product, Mould and die	3	0	0	3
3	CH401	Reaction Engineering	3	0	0	3
4	CH9XX	Elective V	3	0	0	3
5	СН9ХХ	Elective VI	3	0	0	3
6	GE351	Professional Ethics	3	0	0	3
Practical	s					
7	CH403	Computer Aided Mould Design Laboratory	0	0	4	2
8	CH404	Rubber Processing and Testing Laboratory	0	0	4	2
9	EM401	Project phase I	0	0	8	4
		Total Credits	18	0	8	26

SEMESTER XVIII

Sl.No	Course Code	Course Name	Credits				
5555555		Course Ivame	L	Т	P	С	
Theory			ı				
1	CH8XX	Online course-II	3	0	0	3	
Practical	s						
2	EM451	Project Phase-II	0	0	16	8	
		Total Credits	3	0	16	11	

The number of credits (totaling to 180) in each semester is summarized as follows:

Course	I	II	III	IV	V	VI	VII	VIII
B.Tech. Chemical Engineering (Plastic and Polymer)	22	24	25	25	24	25	26	11

Professional Elective Courses (Odd Semester)

Sl.No.	Course	Course Name		Cr	edits	
	Code	Course Ivame	L	Т	P	C
1	CH901	Fundamentals of Nano Science	3	0	0	3
2	CH902	Polyurethane Technology	3	0	0	3
3	СН903	Plastics Recovery And Recycling Techniques	3	0	0	3
4	CH904	Food Technology	3	0	0	3
5	CH905	Petroleum Refining and Petrochemicals	3	0	0	3
6	CH906	Biodegradable Polymers	3	0	0	3
7	CH907	Plastics Packaging Technology	3	0	0	3
8	CH908	Process Modeling and Simulation	3	0	0	3
9	CH909	Cloud Computing	3	0	0	3
10	CH910	Optimization of Chemical Processes	3	0	0	3
11	CH911	Compounding Technology	3	0	0	3
12	CH912	Industrial IoT	3	0	0	3
13	CH913	Additive manufacturing	3	0	0	3
14	CH914	Liquid Crystalline Polymers	3	0	0	3
15	CH915	Specialty Polymers & Applications	3	0	0	3
16	CH916	Smart Materials	3	0	0	3
17	CH917	Membrane Technology	3	0	0	3
18	CH918	Process Automation	3	0	0	3
19	СН919	Electrochemical Engineering	3	0	0	3
20	CH920	Drugs and Pharmaceuticals Technology	3	0	0	3

Professional Elective Courses (Even Semester)

Sl.No.	Course	Course Name		Cr	edits	
	Code	Course Name	L	T	P	C
1	CH951	Data Science and Machine Learning	3	0	0	3
2	CH952	Artificial Intelligence in Chemical Engineering	3	0	0	3
3	CH953	Pulp and Paper Technology	3	0	0	3
4	CH954	Computer Applications in Chemical Engineering	3	0	0	3
5	CH955	Synthesis and Applications of Nanomaterials	3	0	0	3
6	CH956	Advanced Moulding Technology	3	0	0	3
7	CH957	Paints and Surface Coatings	3	0	0	3
8	CH958	Specialty Elastomers	3	0	0	3
9	CH959	Process Control & Instrumentation	3	0	0	3
10	CH960	Principles of Chemical Engineering	3	0	0	3
11	CH961	Industrial Process Plant Safety	3	0	0	3
12	CH962	Rubber Engineering	3	0	0	3
13	CH963	Adhesive Technology	3	0	0	3
14	CH964	Modern Separation Techniques	3	0	0	3
15	CH965	Energy Management in Chemical Industries	3	0	0	3
16	СН966	Integrated Design of Chemical Processes	3	0	0	3
17	CH967	Augmented reality and Virtual reality	3	0	0	3
18	CH968	Industrial Waste Water Treatment	3	0	0	3
19	CH969	Advanced materials for Automobiles	3	0	0	3
20	CH970	Polymers in Aerospace application	3	0	0	3

Methodology to offer Open Electives

Candidates shall register for Open Electives offered by other departments of the Institute in the 4th, 5th and 6th semesters. If one or more professional electives (listed above) are offered by other departments, those courses are also registered by the candidates as open electives with the prior approval from HoD of Department of Chemical Engineering and Dean (Academic Courses) taking into account of perquisite requirement. The course codes for those courses should be changed as "CH7XX" and included in the Suggested list of Open Electives in sequence without actually removing those courses from the list of professional electives.

Suggested List of Open Electives

Sl.No.	Course	Course Name	Credits				
	Code	Course Ivame	L	T	P	C	
1	CH701	Macromolecular Science	3	0	0	3	
2	CH702	Destructive and Non-destructive Testing	3	0	0	3	
3	CH703	Fiber Reinforced Plastics	3	0	0	3	
4	CH704	Nanocomposite	3	0	0	3	
5	CH751	Chemical Process Plant Safety	3	0	0	3	
6	CH752	Instrumental Methods of Chemical Analysis	3	0	0	3	
7	CH753	Biopolymers	3	0	0	3	
8	CH754	Petrochemicals Technology	3	0	0	3	

Additional courses shall be added to this list, when appropriate courses as approved by Dean (Academic Courses) are offered by other departments and registered by the candidates.

Methodology to offer Value Added Courses

Candidates shall register for Value Added Courses which shall be organized by the Institute or by the Department during any time from 3rd Semester onwards for a maximum of 7 credits. Value Added Courses shall be offered for 1 credit or 2 credits for the duration of 15 hours or 30 hours respectively. All Value Added Courses are considered as Employability Enhancement Courses and the credits earned are included in the 4th Semester (CE251, CE25X....) or in the 6th Semester (CE351, CE352, CE35X....). All the other Value Added Courses (more than required as well as registered after 6th Semester) are being treated as Audit Courses for which no credits will be assigned. All the Value Added Courses are to be approved by the HoD of Department of Chemical Engineering and Dean (Academic Courses).

Suggested List of Value Added Courses

Sl.No.	Course Code	Course Name	in tw		its (to be acquired to or three spells or bed with more ses)			
			L	T	P	C		
1	CH251	Molecular simulation in chemical Engineering	3	0	0	3		
2	CH25X	Mould Flow Analysis	0	0	3	3		
3	CH351	Process Modeling, Simulation & Optimization	3	0	0	3		
4	CH352	Computer Aided Product Design using Solid Works	0	0	3	3		
5	CH35X	Computational Fluid Dynamics	3	0	0	3		
6	CH35X	Biochemical engineering	3	0	0	3		
7	CH35X	Rubber Product Technology	1	0	2	3		

Additional courses shall be added to this list, when appropriate courses as approved by Dean (Academic Courses) are offered by other departments or by the Institute and registered by the candidates.

Methodology to offer Online Courses

Candidates shall register for Online Courses offered by NPTEL, SWAYAM or other reputed institutes in the 6th and 8th semesters to a maximum of 6 credits. If one or more professional electives (listed above), approved open electives and value added courses (listed above) are offered online, those courses are also registered by the candidates as online courses with the prior approval from HoD of Department of Chemical Engineering and Dean (Academic Courses) taking into account of perquisite requirement. The course codes for those courses should be changed as "CH8XX" and included in the Suggested list of Online Courses in sequence without actually removing those courses from the list of professional electives, open electives and value added courses.

Suggested List of Online Courses

Sl.No.	Course Code	Course Name	Credits (to in two or the clubbed with courses)		be acquired aree spells or th more		
			L	T	P	C	
1	CH751	Fluid And Particle Mechanics	3	0	0	3	
2	CH752	Advanced Thermodynamics And Molecular Simulations	3	0	0	3	
3	CH75X	Processing of Polymer and polymer composites	3	0	0	3	
4	CH75X	Computational Techniques	3	0	0 .	3	
5	CH75X	Finite Element Analysis	3	0	0	3	

Additional courses shall be added to this list, when appropriate courses as approved by Dean (Academic Courses) are offered by online and registered by the candidates.

Key Points

- Employability Enhancement Courses shall include internship, mini-projects, capstone project, value added and related skill development programme with practicals.
- 2. The courses pertaining to employability enhancement activities shall spread over all the semesters including first semester. Even though, there are no employability enhancement courses included in the third semester in the draft curriculum design as shown in the following table, students shall be permitted to do value added courses for 1 or 2 credits (15 hours to 30 hours of lectures). The credits thus accumulated shall be shown in the consecutive semesters where slots for value added programme are included. Students shall be permitted to do as many value added or skill development programme as required for their career development. The additional value added courses attended by the candidates more than 7 credits are to be treated as audit courses. For the requirement of earning 7 credits through value added courses, the students has to go through regular assessment and examination as per regulations. New value added courses shall be included every semester as per requirement to meet the current industrial needs especially in the thrust areas and to enhance the research potential of the students in their fields of interest.

Category of Courses	Credits	I	П	Ш	IV	v	VI	VII	VIII
Employability Enhancement Courses	27	4	4	0	3	2	2	4	8

- 3. The faculty advisor / mentor of each student shall suggest or recommend to register for value added courses offered by the department or by other departments or by the Institute. Further, the faculty advisor / mentor of all group of students shall support their initiative for organizing new value added courses by recommending the same to the Dean (Academic Courses) through Head of the Department. The course coordinator for each value added course shall monitor the progress of the students through continuous assessment and examination as per regulations.
- 4. This curriculum design insists more importance to employability enhancement courses through experiential learning than the professional core or elective courses even though there are less credits considering the overall curriculum credits. The department has to play an important role in offering these type of courses and also monitoring the performance of the students as per the expected outcomes.
- 5. The curriculum paves a pathway to improve the self-learning skills of the students on their areas of interest, especially to carry out innovative capstone projects. The courses to be registered online by each student should be with the consent of the respective faculty advisor / mentor and through the course coordinator from the department.
- 6. If the students are having regular assessment and final examination for the registered online courses and if the course provider issues grade card, the credits earned by the candidate thus validated by a Credit Equivalence or Credit Transfer Committee as per the Institute regulations. If there is no evaluation by the course provider, the department has the responsibility to assess the candidate performance through course coordinator as per regulations.

- 7. Students shall be permitted to register a course as online course from the Professional Elective Courses list if it not being offered in regular elective slots. Similarly if a course in the Professional Elective Courses list of the department is offered by other departments in the Institute, students shall register the same assuring the pre-requisite as open elective.
- 8. A course in the Professional Elective Courses list shall be offered as value added course by splitting the syllabus into two or three sections appropriately so as to offer as one credit or two credit (15 hours or 30 hours) courses.
- 9. The first year curriculum should be common and cover the maximum foundation courses not only for engineering but also for any stream like arts and science as well as to meet the requirement of industries so that a student shall become eligible to get the Certificate from the Institute along with grade cards.
- 10. More mathematical subjects are introduced to meet the requirement of current trends in Artificial Intelligence and Data Analytics but confines to the department.
- 11. The list of professional elective courses, open elective courses, value added courses and online courses given in the curriculum is not restricted to any limit and the contents may dynamically vary i.e., the obsolete courses shall be removed and new courses shall be included.
- 12. The entire eight semesters is for project work and for self-learning online course and hence the student has the flexibility to do the project in any industry or any other premier institutions in India or abroad.

Suggestions and Recommendations received from the Members:

Dr. S.N. Jaisankar started the discussion and he appreciated the decision for the proposal of renaming of course as "Chemical Engineering (Plastics and Polymer). He insisted to look for other possibilities for renaming of course like "Chemical Technology" or "Polymer Science and Chemical Technology". He insisted to include chemical engineering courses in seventh semester curriculum and to give equal weightage for chemical engineering and polymer courses

Then, **Dr. K. Ravichandaran** appreciated management decision to restart the program with generous kindness renaming of course as "Chemical Engineering (Plastics and Polymer). He advised to look for the possibilities for renaming of course as "Polymer Science and Chemical Technology" as its in AICTE Guidelines

Dr.S.Gandhi expressed his concern that since there is no popularity about plastic & polymer, we move to new Chemical Engineering (Plastic and Polymer) programme. However, the new course name Chemical Engineering programme also has Plastic & Polymer word in parenthesis. In addition to that there is no other choice of courses name in AICTE guidance to rename the programme towards utilizing our facility and faculty.

Er.M.Pandian recommended starting with B.Tech Chemical Engineering (Plastic and Polymer). The employment opportunities for the students will be in both chemical and polymer industries. However, industry may be preferred either polymer or chemical graduate.

Er. J.Muthuvijayan appreciated the decision for the proposal of renaming of course as "Chemical Engineering (Plastics and Polymer). He suggested to look for the possibilities for renaming of course as "Chemical Technology" alone or "Polymer Science and Chemical Technology" as its in AICTE Guidelines

Dr.S.Gandhi expressed software related courses included in curriculum to attract the admission and to enhance the opportunities for students in software field.

Dr.R.Baskaran proposed vote of thanks. He thanked all the panel members for their participation and valuable suggestion.

Lo homoshami (R. Baskaran) Bos coordinator Signal.
HODIOT