

DAV University, Jalandhar
Department of Chemical Engineering

Ref. No. : DAVU\2015\CHL\02

Dated: November 21, 2015

Subject: Minutes of 2nd Board of Studies (BoS) meeting held on 21/11/15

The Second meeting of Board of Studies (BoS) of Department of Chemical Engineering was held on 21/11/2015 at 11:00 a.m. in the committee room (Administrative Block). The following members were present:

Following members were present in the meeting:

- | | |
|------------------------|---|
| 1. Dr. Naresh Sahajpal | Dean Academics (Chairperson) |
| 2. Prof. A. P. Toor | Prof. Dr. SSB UICET, Panjab university, Chandigarh
(External Expert) |
| 3. Er. Vidya Pandey | Convener (Assistant Professor) |
| 4. Er. Preeti Mahajan | Member (Assistant Professor) |

The members of the BoS discussed and deliberated on the various items of the agenda. Following points emerged out of the meeting:

Item 1: Approval of Course Schemes and Syllabi of 2015 batch and onwards for Bachelor of Technology (Pass & Hons.)-Chemical Engineering.

The Course Scheme and detailed Syllabi of 2015 batch and onwards for Bachelor of Technology (Pass & Hons.)-Chemical Engineering (*prepared according to Choice Based Credit System proposed by University Grants Commission*) was presented to the Board of studies for its approval.

Decision: The BoS approved the Course Schemes and the Syllabi of the above mentioned course emphasizing on the following points:

- The Course Schemes and Syllabi of B. Tech (Pass / Hons.)-Chemical Engineering was as per the norms and approved as put up.
- The BoS suggested that the syllabi of PED I (CHL404) and PED II (CHL407) must be revised and also the syllabi of Fluid Flow (CHL203) should be in detail.
- The BoS suggested that the latest alternate source of energy like OTEC should be introduced in the syllabus of Energy Engineering (CHL211).



Item 2:

To consider *post facto* approval to the proposed Course scheme and Syllabi for the first semester 2015 batches of Bachelor of Technology (Pass/Hons.) – Chemical Engineering.

Decision:

It was discussed and unanimously resolved to give post facto approval to the proposed Course Scheme and Syllabi for the first semester 2015 batches of Bachelor of Technology (Pass/Hons.) – Chemical Engineering.

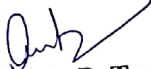
Item 3:


The other items of discussion

- Prof. A. P. Toor suggested that B. Tech (Chemical Engineering) awarded as Hons /Pass degree should be considered in favour of a common degree i.e., B. Tech (Chemical Engineering)
- Prof A. P. Toor advised that department should enrich its library with latest reference books and journals.
- Prof. A.P. Toor suggested that the department should organize special talks and seminars by experts from industries as well as from universities.

The Dean welcomed the suggestions of the Expert and assured her that the University would take the cognizance of her valuable input and would put up the same for the consideration of the University Academic Council.

Meeting ended with thanks to all those present.


Prof. A. P. Toor
(External Expert)


Ms Vidya Pandey
(Assistant Professor)

Dr. Naresh Sahajpal
(Dean Academics)


Ms Rreeti Mahajan
(Assistant Professor)

DAV UNIVERSITY, JALANDHAR

DAV UNIVERSITY JALANDHAR



Course Scheme & Syllabus

For

B. Tech. in Chemical Engineering

Honours/Pass

1st TO 8th SEMESTER
Examinations 2015-2016 Session

Syllabi Applicable For Admissions in 2015

Page 1 of 118

DAV UNIVERSITY, JALANDHAR

Scheme of Courses
B. Tech. in Chemical Engineering
Semester-1

S.N O.	Paper Code	Course Title	L	T	P	Cr	Nature of Course
1	MTH151A	Engineering Mathematics-I	4	0	0	4	Core
2	CHE151A	Chemistry	4	0	0	4	Core
3	CSE101A	Computer Fundamentals and Programming	4	0	0	4	Core
4	EVS100	Environmental Studies	4	0	0	4	AECC
5	MEC101A	Engineering Drawing	2	0	4	4	Core
6	ENG151A	Basic Communication Skills	3	0	0	3	AECC
7	CHE152	Chemistry Lab	0	0	2	1	AECC
8	CSE103	Computer Fundamentals and Programming Lab	0	0	2	1	Core
9	ENG152	Basic Communication Skills Lab	0	0	2	1	Core
TOTAL						26	

L: Lectures T: Tutorial P: Practical Cr: Credits

Scheme of Courses
B. Tech. in Chemical Engineering
Semester-2

S.N O.	Paper Code	Course Title	L	T	P	Cr	Nature of Course
1	MTH152A	Engineering Mathematics-II	4	0	0	4	Core
2	PHY151A	Engineering Physics	4	0	0	4	Core
3	MEC103	Mechanical Engineering Fundamentals	4	0	0	4	Core
4	ELE101	Electrical and Electronics Technology	4	0	0	4	Core
5	SGS107	Human Values and General Studies	4	0	0	4	AECC
6	MEC104	Manufacturing Practice	0	0	4	2	Core
7	PHY152	Engineering Physics Lab	0	0	2	1	Core
8	ELE102	Electrical and Electronics Technology Lab	0	0	2	1	Core
TOTAL						24	

L: Lectures T: Tutorial P: Practical Cr: Credits

DAV UNIVERSITY, JALANDHAR

Scheme of Courses B. Tech. in Chemical Engineering Semester-3

S.N O.	Paper Code	Course Title	L	T	P	Cr	Nature of Course
1	CHL211	Energy Engineering	3	0	0	3	Core
2	MTH252A	Engineering Mathematics-III	4	0	0	4	Core
3	CHL201	Mechanical Operations	4	0	0	4	Core
4	CHL202	Chemical Process Calculations	4	0	0	4	Core
5	CHL203	Fluid Flow	4	0	0	4	Core
6	CHL222	Mechanical Operations Lab	0	0	3	2	Core
7	CHL223	Fluid Flow Lab	0	0	3	2	Core
TOTAL						23	

L: Lectures T: Tutorial P: Practical Cr: Credits

Scheme of Courses B. Tech. in Chemical Engineering Semester-4

S.N O.	Paper Code	Course Title	L	T	P	Cr	Nature of Course
1	CHL204	Chemical Technology-I (Inorganic)	4	0	0	4	Core
2	CHL205	Chemical Engineering Thermodynamics	4	0	0	4	Core
3	CHL206	Heat Transfer	4	0	0	4	Core
4	CHL207	Chemical Process Instrumentation	4	0	0	4	Core
5	CHL208	Material Science & Technology	3	0	0	3	Core
6	CHL225	Chemical Engineering Thermodynamics Lab	0	0	3	2	Core
7	CHL226	Heat Transfer Operations Lab	0	0	2	1	Core
TOTAL						22	

L: Lectures T: Tutorial P: Practical Cr: Credits

Note: At the end of the examination of 4th Semester the students will undergo compulsory industrial training for a period of 4 weeks duration in reputed industries. Every student will submit the Training Report within two weeks from the start of teaching for 5th Semester. The marks for this will be included in the 5th Semester.



DAV UNIVERSITY, JALANDHAR

Scheme of Courses B. Tech. in Chemical Engineering Semester-5

S.N O.	Paper Code	Course Title	L	T	P	Cr	Nature of Course
1	CHL301	Mass Transfer I	4	0	0	4	Core
2	CHL302	Chemical Reaction Engineering I	4	0	0	4	Core
3	CHL303	Chemical Technology-II (Organic)	4	0	0	4	Core
4	CHL304	Process Dynamics & controls	4	0	0	4	Core
5	MTH256A	Numerical Methods	3	0	0	3	Core
6	CHL323	Chemical Technology Lab	0	0	3	2	Core
7	CHL330	Instrumentation & Controls Lab	0	0	2	1	Core
8	MTH257A	Numerical Methods Lab with C/C++	0	0	2	1	Core
9	CHL300	Industrial Training	0	0	0	2	Training, D & P
TOTAL						25	

L: Lectures T: Tutorial P: Practical Cr: Credits

Scheme of Courses B. Tech. in Chemical Engineering Semester-6

S.N O.	Paper Code	Course Title	L	T	P	Cr	Nature of Course
1	CHL305	Mass Transfer II	4	0	0	4	Core
2	CHL306	Chemical Reaction Engineering II	4	0	0	4	Core
3	CHL308	Environmental Engineering	4	0	0	4	Core
4	CHL310	Process Engineering Economics	3	0	0	3	Core
5		Department Specific Elective-I	4	0	0	4	DSE-I
6	CHL325	Mass Transfer Lab	0	0	3	2	Core
7	CHL327	Reaction Engineering Lab	0	0	2	1	Core
8	CHL329	Environment Technology Lab	0	0	2	1	Core
TOTAL						23	

L: Lectures T: Tutorial P: Practical Cr: Credits

Note:

- Department specific elective-I should be from the basket of Department Specific Elective-I".
- At the end of the examination of 6th Semester the students will undergo compulsory industrial training for a period of 6 weeks duration in reputed industries. Every student will submit the training report within two weeks from the start of teaching of 7th Semester. The marks for this will be included in the 7th semester.

JW

DAV UNIVERSITY, JALANDHAR

Scheme of Courses B. Tech. in Chemical Engineering Semester-7

S.N O.	Paper Code	Course Title	L	T	P	Cr	Nature of Course
1	CHL402	Transport Phenomenon	4	0	0	4	Core
2	CHL404	Process Engineering Design-I	3	0	2	4	Core
3	CHL406	Industrial Safety & Hazardous Management	4	0	0	4	Core
4		Department Specific Elective-II	4	0	0	4	DSE-II
5		Generic Elective-I	4	0	0	4	GE-I
6	CHL400	Industrial Training	0	0	0	2	Training, D & P
7	CHL500	Project	0	0	8	4	Core
TOTAL						26	

L: Lectures T: Tutorial P: Practical Cr: Credit

Note:

- Department specific elective-II should be from the basket of "Department specific Elective-II".
- Generic elective-I should be from the "Generic Elective Basket"

Scheme of Courses B. Tech. in Chemical Engineering Semester-8

S.N O.	Paper Code	Course Title	L	T	P	Cr	Nature of Course
1		Department Specific Elective-III	4	0	0	4	DSE-III
2		Department Specific Elective-IV	4	0	0	4	DSE-IV
3		Generic Elective-II	4	0	0	4	Generic Elective-II
4	CHL405	Process Modeling & Simulation	4	0	0	4	Core
5	CHL407	Process Engineering Design-II	3	0	2	4	Core
6	CHL425	Process Modeling & Simulation Lab	0	0	2	1	Core
6	CHL450	Seminar	0	0	4	2	Training, D & P
7	ENG351	Technical Communication	3	0	0	3	AECC
TOTAL						26	

L: Lectures T: Tutorial P: Practical Cr: Credit

Note:

- Department specific elective-III & IV should be from the basket of "Department Specific Elective-III & IV" respectively.
- Generic elective-II should be from the "Generic Elective Basket"



DAV UNIVERSITY, JALANDHAR

Department Specific Elective-I

S.N O.	Paper Code	Course Title	L	T	P	Cr
1	CHL446	Optimization Techniques	4	0	0	4
2	CHL447	Electrochemical Technology	4	0	0	4
3	CHL448	Hazardous Waste Management	4	0	0	4

Department Specific Elective-II

S.N O.	Paper Code	Course Title	L	T	P	Cr
1	CHL451	Biochemical Engineering	4	0	0	4
2	CHL452	Membrane Separation	4	0	0	4
3	CHL453	Polymer Processing	4	0	0	4

Department Specific Elective-III

S.N O.	Paper Code	Course Title	L	T	P	Cr
1	CHL454	Fertilizer Technology	4	0	0	4
2	CHL455	Petrochemical Technology	4	0	0	4
3	CHL456	Corrosion Engineering	4	0	0	4

Department Specific Elective-IV

S.N O.	Paper Code	Course Title	L	T	P	Cr
1	CHL457	Alternate Energy Technology	4	0	0	4
2	CHL458	Application of Nano Technology in Chemical Engineering	4	0	0	4
3	CHL459	Paint Technology	4	0	0	4

DAV UNIVERSITY, JALANDHAR

Generic Elective Basket

S.NO.	Paper Code	Course Title	L	T	P	Cr
1	ELE801	Electro-Mechanical Energy Conversion	4	0	0	4
2	ELE802	Transducers and Signal Conditioning	4	0	0	4
3	CHL801	Industrial Pollution Control	4	0	0	4
4	CHL802	Fuel Cell Technology	4	0	0	4
5	MEC801	Industrial Engineering Techniques	4	0	0	4
6	MEC802	Energy Resources	4	0	0	4
7	CSE801	Software Engineering & Project Management	4	0	0	4
8	CSE802	Computer Networks	4	0	0	4
9	ECE801	Communication and Media Foundations	4	0	0	4
10	ECE802	Electronic Displays	4	0	0	4
11	ECE803	Everyday Electronics	4	0	0	4
12	CIV801	Construction Materials and Techniques	4	0	0	4
13	CIV802	Railway and Tunnel Engineering	4	0	0	4
14	MGT151A	Fundamentals of Management	4	0	0	4
15	MGT152	Fundamentals of Advertising	4	0	0	4
16	MGT153	Fundamentals of Stock Market	4	0	0	4
17	MGT154	Fundamentals of Research Methods	4	0	0	4
18	MGT155	Fundamentals of Accounting & Finance	4	0	0	4

DAV UNIVERSITY, JALANDHAR

B Tech Course Structure

CBCS	Nature of Courses	Core	Elective Courses			Ability Enhancement Courses		Total Credits
			Dissertation/Project	Generic Elective	Discipline Specific Elective	Ability Enhancement Compulsory Courses	Skill Enhancement Courses	
2015	Chemical	146	10	8	16	15	0	195

Core	Basic Sciences (BS) including Mathematics, Physics, Chemistry, Biology	Engineering Sciences (ES) including Materials, WS, ED, Basics of EE/ME/CSE	Interdisciplinary Core	Discipline Core	Total Credits
146	18-26	20	04-20	80-104	146
	22	20	04	100	146



Generic Elective Basket

S.NO.	Paper Code	Course Title	L	T	P	Cr
1	ELE801	Electro-Mechanical Energy Conversion	4	0	0	4
2	ELE802	Transducers and Signal Conditioning	4	0	0	4
3	CHL801	Industrial Pollution Control	4	0	0	4
4	CHL802	Fuel Cell Technology	4	0	0	4
5	MEC801	Industrial Engineering Techniques	4	0	0	4
6	MEC802	Energy Resources	4	0	0	4
7	GSE801	Software Engineering & Project Management	4	0	0	4
8	GSE802	Computer Networks	4	0	0	4
9	ECE801	Communication and Media Foundations	4	0	0	4
10	ECE802	Electronic Displays	4	0	0	4
11	ECE803	Everyday Electronics	4	0	0	4
12	CIV801	Construction Materials and Techniques	4	0	0	4
13	CIV802	Railway and Tunnel Engineering	4	0	0	4
14	MGT151A	Fundamentals of Management	4	0	0	4
15	MGT152	Fundamentals of Advertising	4	0	0	4
16	MGT153	Fundamentals of Stock Market	4	0	0	4
17	MGT154	Fundamentals of Research Methods	4	0	0	4
18	MGT155	Fundamentals of Accounting & Finance	4	0	0	4

DAV UNIVERSITY, JALANDHAR

B Tech Course Structure

CBCS	Nature of Courses	Core	Elective Courses			Ability Enhancement Courses		Total Credits
Year	Course Structure	Core	Dissertation/ Project	Generic Elective	Discipline Specific Elective	Ability Enhancement Compulsory Courses	Skill Enhancement Courses	
2015	Chemical	146	10	8	16	15	0	195

Core	Basic Sciences (BS) including Mathematics, Physics, Chemistry, Biology	Engineering Sciences (ES) including Materials, WS, ED, Basics of EE/ME/CSE	Interdisciplinary Core	Discipline Core	Total Credits
146	18-26	20	04-20	80-104	146
	22	20	04	100	146

