

Date- 27/06/2020

Hindustan College of Science & Technology

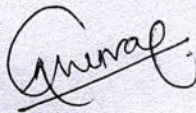
(Farah, Mathura)

Chemical Engineering Department

Notice

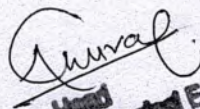
This is for information to all the students of 2nd, 3rd year that the Value Added Course (**Process Equipment Design & Solid Waste Management**) shall begin from 18th of July 2020. All the students of 2nd, 3rd year are directed to register themselves and fill up the registration form in the departments before start of the regular classes for the above courses.

The registration can be done from 6th July 2020 up to 10th July 2020.

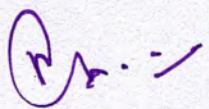


Mr. Anurag Bajpai

Head, Department of Chemical Engineering



Head
Department of Chemical Engg.
Hindustan College of Science & Technology
Farah, Mathura



Director
Hindustan College of
Science & Technology
FARAH (MATHURA)



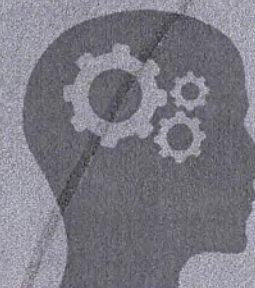
**HINDUSTAN COLLEGE OF SCIENCE & TECHNOLOGY,
FARAH -MATHURA**

DEPARTMENT OF CHEMICAL ENGINEERING



Value Added Course
VAC-1702-Solid Waste Management

18th July '2020 – 28th Nov 2020 - Every Saturday: 3:10 PM – 4:50 PM



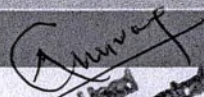
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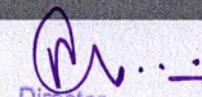
Mr. Sandeep Kumar Verma
Chemical Engineering



Registration Dates
6th July 2020 – 10th July 2020

For Registration: Please contact
Mr. Raj Kumar, Office Staff, Department of Chemical Engineering


Head
Department of Chemical Engg.
Hindustan College of Science & Technology
Farah, Mathura


Director
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HINDUSTAN COLLEGE OF SCIENCE & TECHNOLOGY, FARAH -MATHURA



DEPARTMENT OF CHEMICAL ENGINEERING

Value Added Course

VAC -1702 -Solid Waste Management

18th July '2020 – 28th Nov 2020 - Every Saturday: 3:10 PM – 4:50 PM

Course Objectives

The main objective of this value added course are as follows:

1. Plan logistics for waste collection and disposal .
2. Formulate strategies for segregation of waste and waste reduction.
3. Plan appropriate recycles facility for heterogeneous wastes.
- 4 Plan and design waste collection systems.

Course Syllabus

Units	Details	Course Out comes
1	Introduction to waste management Logistics, importance, methods of logistics, human components, technological components- waste handling equipment and technology, and managerial goals, steps in waste management logistics	CO1
2	Waste collection system and organization Environmental aspects of waste collection, role of public authority and private sector in waste collection, organizing collection of residential waste, fee schemes, public awareness programs	CO2
3	Source segregation and collection source-segregated waste, Purpose of source segregation, segregation criteria and guidance, segregation potential and efficiencies, systems for collecting segregated fraction	CO3
4	Waste transfer stations Waste delivery, waste transfer, transportation of the reloaded waste, siting and Design of waste transfer station, economical considerations, recycling solid wastes, materials recovery facilities	CO4

Approval
Head
Department of Chemical Engg.
Hindustan College of Science & Technology
Farah, Mathura

Director
Director
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**HINDUSTAN COLLEGE OF SCIENCE & TECHNOLOGY,
FARAH -MATHURA**



DEPARTMENT OF CHEMICAL ENGINEERING

Value Added Course

VAC-1702 - Solid Waste Management

18th July '2020 – 28th Nov 2020 - Every Saturday: 3:10 PM – 4:50 PM

Course Outcomes

- CO1 Plan logistics for waste collection and disposal
Formulate strategies for segregation of waste and waste reduction.
- CO2 Plan appropriate recycles facility for heterogeneous wastes.
- CO3 Plan and design waste collection systems.

CO-PO Mappings

COS	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	3											2		
CO2	2	3											2		
CO3	2			3						2	2	2	2		
CO4			2	3						2	2	2		3	
Average	2	3	2	3						2	2	2	2	3	

Evaluation Criteria: 1. Evaluation of Practical assignments, Group project, Viva/Quiz

Sharma
Head,
Department of Chemical Engg.
Hindustan College of Science & Technology
Farah, Mathura

[Signature]
Director
Hindustan College of
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DEPARTMENT OF CHEMICAL ENGINEERING

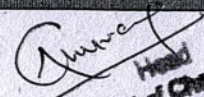
Value Added Course VAC-1702 - Solid Waste Management

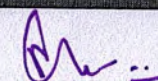


Program Schedule

18th July '2020 – 28th Nov 2020 - Every Saturday: 3:10 PM – 4:50 PM

Session	Date	Time	No of Lectures	Session Topic	Resource Person
1	25-07-2020	3:10 PM – 4:50 PM	2	Topic 1:Logistics, importance, methods of logistics	Dr. Sandeep Kumar Verma
2	01-08-2020	3:10 PM – 4:50 PM	2	Topic 2:human components, technological components	Dr. Sandeep Kumar Verma
3	08-08-2020	3:10 PM – 4:50 PM	2	Topic 3:waste handling equipment and technology	Dr. Sandeep Kumar Verma
4	22-08-2020	3:10 PM – 4:50 PM	2	Topic 4:managerial goals, steps in waste management logistics	Dr. Sandeep Kumar Verma
5	29-08-2020	3:10 PM – 4:50 PM	2	Topic 5:Environmental aspects of waste collection	Dr. Sandeep Kumar Verma
6	05-09-2020	3:10 PM – 4:50 PM	2	Topic 6:role of public authority and private sector in waste collection	Dr. Sandeep Kumar Verma
7	12-09-2020	3:10 PM – 4:50 PM	2	Topic 7:organizing collection of residential waste	Dr. Sandeep Kumar Verma
8	19-09-2020	3:10 PM – 4:50 PM	2	Topic 8: fee schemes, public awareness programs	Dr. Sandeep Kumar Verma
9	26-09-2020	3:10 PM – 4:50 PM	2	Topic 9:source-segregated waste	Dr. Sandeep Kumar Verma
10	03-10-2020	3:10 PM – 4:50 PM	2	Topic 10:Purpose of source segregation	Dr. Sandeep Kumar Verma
11	10-10-2020	3:10 PM – 4:50 PM	2	Topic 11:segregation criteria and guidance	Dr. Sandeep Kumar Verma
12	17-10-2020	3:10 PM – 4:50 PM	2	Topic 12:segregation potential and efficiencies	Dr. Sandeep Kumar Verma
13	24-10-2020	3:10 PM – 4:50 PM	2	Topic 13:systems for collecting segregated fraction	Dr. Sandeep Kumar Verma
14	31-10-2020	3:10 PM – 4:50 PM	2	Topic 14:Waste delivery, waste transfer	Dr. Sandeep Kumar Verma
15	07-11-2020	3:10 PM – 4:50 PM	2	Topic 15: transportation of the reloaded waste	Dr. Sandeep Kumar Verma
16	14-11-2020	3:10 PM – 4:50 PM	2	Topic 16:siting and Design of waste transfer station	Dr. Sandeep Kumar Verma
17	21-11-2020	3:10 PM – 4:50 PM	2	Topic 17:economical considerations, recycling solid wastes	Dr. Sandeep Kumar Verma
18	28-11-2020	3:10 PM – 4:50 PM	2	Topic 18: materials recovery facilities	Dr. Sandeep Kumar Verma
Total Number of Hours covered			36 (30 Hours)		


 Head
 Department of Chemical Engg.
 Hindustan College of Science & Technology
 Farah, Mathura


 Director
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Value Added Course-2

Solid Waste Management (VAC-1702)

1. Introduction to waste management:

Logistics, importance, methods of logistics, human components, technological components- waste handling equipment and technology, and managerial goals, steps in waste management logistics.

2. Waste collection system and organization:

Environmental aspects of waste collection, role of public authority and private sector in waste collection, organizing collection of residential waste, fee schemes, public awareness programs.

3. Source segregation and collection:

source-segregated waste, Purpose of source segregation, segregation criteria and guidance, segregation potential and efficiencies, systems for collecting segregated fraction

4. Waste transfer stations:

Waste delivery, waste transfer, transportation of the reloaded waste, siting and Design of waste transfer station, economical considerations, recycling solid wastes, materials recovery facilities.

Course Outcomes: At the end of the course, the student will be able to:

1. Plan logistics for waste collection and disposal .
2. Formulate strategies for segregation of waste and waste reduction.
3. Plan appropriate recycles facility for heterogeneous wastes.
- 4 Plan and design waste collection systems.

Signature
Department of Chemical Engrg.
Hindustan College of Science & Technology
Farah, Mathura

Signature
Director
Hindustan College of
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CLASS TIME TABLE FOR ODD SEMESTER 2020-21

SESSION:	2020-21		W.E.F :	8/5/2020		CLASS TEACHER:	Mr. Chandra Pal Singh (CPS)		
YEAR/SEM-SEC:	II Year (III Sem)		ROOM.NO :	501		COUNSELLORS :	Mr. Sandeep Kr. Verma (SKV)		
Time / Day	I	II	III	IV	V	VI	VII	VIII	
	10:10 TO 11:00	11:00 TO 11:50	11:50 TO 12:40	12:40 TO 01:30	01:30 TO 02:20	02:20 TO 03:10	03:10 TO 04:00	04:00 TO 04:50	
MONDAY	MEB	Mat. Sci.	HTO	CEFM	LUNCH	PDP		Python	
	AB	HL	CPS	SKV				PK	
	501	501	501	501				501	
TUESDAY	HV	Mat. Sci.	CEFM	HTO				MEB	Python
	PS	HL	SKV	CPS		AB	PK		
	501	501	501	501		501	501		
WEDNESDAY	HV	PDP		Mat. Sci.		HTO	MEB	CEFM	
	PS			HL		CPS	SKV		
	501			501		501	501		
THURSDAY	Mat. Sci.	Python	CEFM	HV		MEB	CEFM Lab		
	HL	PK	SKV	PS		AB			
	501	501	501	501		501			
FRIDAY	HV	CEFM	Mat. Sci.-Tute	MEB		HTO	HTO Lab		
	PS	SKV	HL	AB		CPS			
	501	501	501	501	501				
SATURDAY			Mini Project or Internship Assessment*		Library	VAC-1702			
Name of the Subject		Subject Code	Name of the Faculty		Total No. of Lect./Tut./Practical				
					Lect.	Tut.	Pract.		
Material and Energy Balance (MEB)		KCH301	Mr. Anurag Bajpai (AB)		4	1	0		
Chemical Engg. Fluid Mechanics(CEFM)		KCH302	Mr. Sandeep Kr. Verma (SKV)		4	1	0		
Heat Transfer Operation (HTO)		KCH303	Mr. Chandra Pal Singh (CPS)		3	1	0		
Material Science (MS)		KOE032	Dr. Hemant Lal (HL)		4	1	0		
Universal Human Values (UHV)		KVE301	Dr. Pramod Senger (PS)		3	1	0		
Python Programming(PP)		KNC302	Mr. Pramod Kumar (PK)		3	0	0		
Chemical Engineering Fluid Mechanics Lab		KCH351	Mr. Sandeep Kr. Verma/Mr. Asim Shukla		0	0	2		
Heat Transfer Operations Lab		KCH352	Mr. Chandra Pal Singh/Mr. Venkatesh		0	0	2		
Soft Computing Lab		KCH353	Mr. Chandra Pal Singh/Mr. Asim Shukla		0	0	2		
Mini Project or Internship Assessment*		KCS354	Mr. Chandra Pal Singh/Mr. Asim Shukla		0	0	2		

Mr. Lalit Singh Baghel
Time Table Incharge

Mr. Anurag Bajpai
Head of the Department

Director
Hindustan College of
Science & Technology
FARAH (MATHURA)

Head
Department of Chemical Engg.
Hindustan College of Science & Technology
Farah, Mathura

Hindustan College of Science & Technology

Department of Chemical Engineering

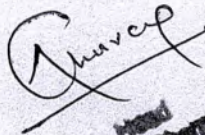
Value Added Course - Registration Form

Solid Waste Management

Session 2020-21

From 18th July, 2020 to 28th Nov, 2020

Sr. No.	Roll No.	Name	Department	Semester	Signature of Student
1	1900640510001	Hardik Kumar	Chemical	III	H. Kumar
2	1900640510002	Ritkrati Agarwal	Chemical	III	Rit
3	2000640519001	Aditya Raghav	Chemical	III	Aditya
4	2000640519002	Shivam Saraswat	Chemical	III	Shivam
5	2000640519003	Sumant Kumar Singh	Chemical	III	Sumant


Head
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Director
Hindustan College of
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Hindustan College of Science & Technology

Department of Chemical Engineering

Value Added Course - Registration Form

Solid waste Management

Session 2020-21 (Odd Sem)

session wise Attendance Sheet

Sl. No.	Roll No.	Name	SEM	Signature of the Student by Session																	
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
				28.07	1.8	08.09	22.08	29.08	05.09	12.09	19.09	26.09	02.10	10.10	17.10	24.10	31.10	07.11	14.11	21.11	28.11
1	1900640510001	Hardik Kumar	III	H.K	H.K	A	H.K	A	H.K	H.K	H.K	A	H.K	A	H.K	H.K	H.K	H.K	H.K	A	H.K
2	1900640510002	Ritkrati Agarwal	III	Rit	A	Rit	Rit	Rit	Rit	A	Rit	A	Rit	Rit	Rit	Rit	A	Rit	Rit	Rit	Rit
3	2000640519001	Aditya Raghav	III	Adity	Adity	Adity	A	Adity	Adity	A	Adity	Adity	A	Adity	Adity	Adity	Adity	A	Adity	Adity	Adity
4	2000640519002	Shivam Saraswat	III	sh	sh	sh	A	sh	sh	sh	sh	sh	sh	sh	sh	sh	sh	sh	A	sh	A
5	2000640519003	Sumant Kumar Singh	III	Sumant	A	Sumant	Sumant	Sumant	Sumant	Sumant	Sumant	A	Sumant	Sumant	Sumant	Sumant	Sumant	A	Sumant	Sumant	Sumant

Sumant
 Department of Chemical Engg.
 Hindustan College of Science & Technology
 Farah, Mathura

[Signature]
 Director
 Hindustan College of
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 FARAH (MATHURA)

**HINDUSTAN COLLEGE OF SCIENCE & TECHNOLOGY
FARAH, MATHURA**



Certificate of Completion

DEPARTMENT OF CHEMICAL ENGINEERING
Academic Session 2020-21

This is to certify that Mr. Aditya Raghav, Roll No: 2000640519001 of Course: B. Tech. Chemical Engineering, III semester has successfully completed 30 hours Value Added Course titled "Solid Waste Management" (Course code: VAC-1702).

S. Verma
Course Coordinator

Anurag
Head of Department

R. B. ...
Director, HCST

Anurag
Head
Department of Chemical Engg.
Hindustan College of Science & Technology
Farah, Mathura

R. B. ...
Director
Hindustan College of
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FARAH (MATHURA)