

**Department of Chemical Engineering**  
**Sant Longowal Institute of Engineering & Technology, Longowal**  
**Exercise in lieu of In-house Training**  
**B.E. (Chemical Engg.) First Year Students (GCT20)**  
**2 Weeks (80 hrs.) – (1<sup>st</sup> – 14<sup>th</sup> July, 2021)**

**Preamble:** The present situation has forced most of us to study from home. In such a scenario it will not be possible for students to undergo Summer Training in normal fashion as per past practice. So, in view of giving our student to complete course requirement, it is proposed to give suitable exercise to cover the said aspect of course. In this exercise, each student is expected to write a report in given format for the given exercise. The report should be submitted in PDF format to designated email id/ Google classroom in case submission does not fall in the period of institute working. Otherwise a bound report is to be submitted to respective Faculty Coordinator (Summer Training) in google classroom after getting approved from the Faculty Mentor/Supervisor (Summer Training) assigned to the student.

**Duration: 2 Weeks (80 hrs.) – (1<sup>st</sup> – 14<sup>th</sup> July, 2021)**

**Objectives:** The student must be able to

1. To observe the structure and functioning of a chemical industry
2. To understand the role of a chemical engineer in modern world
3. To understand scope and opportunities in chemical engineering
4. To analyze the NBA attributes for an engineering graduate
5. To understand skills required by a chemical engineer – Hard skills and soft skills
6. To understand the curriculum of graduation in chemical engineering
7. To evaluate the hard skills required by a chemical engineer
8. To practice the soft skills required by an engineering graduate
9. To get familiar about various chemical engineering laboratories and practice general laboratory ethics
10. To understand and analyze the situation of COVID-19 and lifestyles and measures after reaching institute (SLIET) w.r.t. campus living like academics, hostel etc.

Distribution of activities to be taken up by students:

Objective	Activity	References	Report Submission	No. of Hrs. considered	Marks allocated	Activity Days	Report Submission day
1	Explore the website of the reputed chemical industries and study their administrative structure and functions	Internet/ websites of specific chemical industries	02 pages Summary report	4 hrs.	5	Day 1 -2	Day 3
2	Explore Websites for Career, Jobs, Employability assessments for Chem. Engineers	Websites of TCSiON; AICTE; any other	1 page summary report	4 hrs.	8	Day 1-2	Day 3
3	#1. Identify the suitable opportunities for Chemical Engineering Graduates i. Employment (Industry/service sector) ii. Self-Employment (Start-up/business opportunity/ setting up of small plant) iii. Higher studies #2. Job advertisements for Freshers Chemical Engineering Graduates posted in the past 5 years (at least 20 nos.)	Google; youtube etc.	04 page summary report for #1 And 20 pages of job advertisements	4 hrs.	7	Day 3-4	Day 5
4	Study of NBA attributes for Engineers	-do-	02 page report	3 hrs.	4	Day 4	Day 5
5	Preparation of powerpoint presentation on hard skills and soft skills required by chemical engineers based on NBA attributes for engineering graduates	-do-	Powerpoint presentation of 10 no. of slides	5 hrs.	4	Day 4-5	Day 6
6	Explore study scheme and syllabi of chemical engg. degree program	Visit <a href="http://www.sliet.ac.in">www.sliet.ac.in</a> and also Google/ youtube	2 page summary	4 hrs.	5	Day 4-5	Day 6
	An overview of the subjects to be studied in Chemical Engg. degree (short tour)	<b>Daily online class by teacher of concerned subject to overview</b>	1-2 Pages report of each lecture	11 hrs.	22		
7	Online designated Talks by Experts	Will be suggested/ arranged online by department	2 pages summary of each talk	6 hrs.	10	-	On the day next to talk
8	Online course on Soft/Life Skills for engineers (To be explored by Department) (about 1-2 Hrs. per day)	To be explored by Department	One page Summary of each day module of the program	20 hrs.	10	Day 1-14	Day 15
9	Study of all chemical engg. laboratories through the laboratory manuals	<b>Video Tour/ Lab Manuals of Labs of Dept. by Technicians.</b>	One page summary report of each lab	12 hrs. (2 Hr. Daily)	10	Day 5-10	Day 11
	Common Activities for Chemical Engineering Laboratories : 1) Safety in Laboratories; 2) Preparation before the Lab.; 3) After Lab; 4) During lab; 5) Lab. ethics; 6) Sample Lab Report writing	Internet sources like Google/ youtube/ any other	One page pointwise summary of all components from 1 - 6	4 hrs.	5	Day 10-13	Day 14
10	Study the guidelines/ protocol issued by WHO/ICMR/ any other agency Your ideas on 'Campus Living after Lockdown Period of COVID-19'	<a href="https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html">https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html</a> WHO/ICMR website	Analyze campus living after COVID-1 lockdown like in academics, hostel etc.- 05 pages report	3 hrs.	10	Day 6-9	Day 10

Other online links and study materials would be shared time to time through Google Classroom. All students would be required to register on the Google Classroom for In-house Summer Training and will submit objective-wise report as per schedule into it after getting approved from concerned Faculty mentor/ supervisor Summer Training) [communication with concerned faculty mentor/ supervisor (Summer Training) may be made through phone/whatsapp/e-mail]. Late submission will not be accepted for evaluation and zero marks will be awarded for that. Faculty mentors/ supervisors (Summer Training) will evaluate the work/ reports in Google Classroom itself and will return to the students after giving marks and necessary comments, and the Final Award Sheet in prescribed Performa would be submitted to Faculty Coordinator (Summer Training) at the end of training program. Following will be distribution of the marks to be awarded:

60% of total marks – To be awarded by concerned Faculty mentor/ supervisor (Summer Training) (continuous assessment)

20% of total marks – To be awarded by Faculty Coordinator (Summer Training) (Continuous assessment)

20% of total marks – To be awarded on the basis of final report submission and Viva-voce exam. (To be conducted by Convener)

#### **GUIDELINES FOR SECTIONWISE REPORTS (Soft copy only)**

**Front page** : Task Name, Student Name, Course, Registration No, Institute Logo, Department Name, Institute Name and address, Dates etc.

Body of text of report

References used

#### **GUIDELINES FOR FINAL REPORT (Soft/ Hard copy)**

**Front page** : Task Name, Student Name, Course, Registration No, Institute Logo, Department Name, Institute Name and address, Dates etc.

**Second Page:** Certificate

**Third Page onwards:**

Dedication/Acknowledgement

Contents

Body of Report (sectionwise), each section to start with New page

References and Appendix (if Required).

**(Format** : Font-12 Pt. Arial, 1.5 line spacing, Both Sides printing, Main Heading 14 Bold, Sub Heading 12 Bold)

**Faculty Coordinator (Summer Training) will circulate necessary formats for report submission by staff/ faculty/ students and for evaluation of students. Any further guidelines will be circulated time to time by the Convener/ Coordinator.**