

## INDUCTION PROGRAMME 2019

Department of Applied Science, Guru Nanak Dev Engineering College,  
Ludhiana- 141006, Punjab (INDIA)  
(22/07/2019 to 06/08/2019)

All the students of 1<sup>st</sup> year B.Tech- 2019 (ME, PE, EE, ECE, CE, IT, CSE) participated in the Induction Program from 22/07/2019 to 06/08/2019 as per the following schedule:

S. No.	Time	Activity	Venue
<b>22/07/2019</b>			
1.	8.00 am - 9.30 am	Path	Gurdwara Sahib
2.	10.00 am - 12.00 noon	Expert Lecture by Prof. Ravinder Kaur (Director, Student welfare from PAU Ludhiana) & Dr. Surinderbir Singh (Ex-Principal, GNDEC Ludhiana)	Auditorium
3.	12.00 noon - 1.00 pm	LUNCH BREAK	
4.	1.00 pm - 3.00 pm	Meeting with mentors	Auditorium
5.	3.00 pm - 4.00 pm	Movie	Auditorium
<b>23/07/2019</b>			
1.	9.00 am - 10.30 am	Bridge courses/ Activity	Class rooms/ Workshop/ Auditorium
2.	10.30 am - 12.00 noon	Bridge courses/ Activity	Class rooms/ Workshop/ Auditorium
3.	12.00 noon - 1.00 pm	LUNCH BREAK	
4.	1.00 pm - 2.30 pm	Expert Lecture by Internal members (Dr. K.S. Gill, Dean Academics)	Auditorium
5.	2.30 pm - 4.00 pm	Expert Lecture by Internal members (MOOC's Mr. Lakhvir Singh Khana)	Auditorium
6.	4.00 - 4.30 pm	Movie	Auditorium
<b>24/07/2019</b>			
1.	9.00 am - 10.30 am	Bridge courses/ Activity	Class rooms/ Workshop/ Auditorium
2.	10.30 am - 12.00 noon	Bridge courses/ Activity	Class rooms/ Workshop/ Auditorium
3.	12.00 noon - 1.00 pm	LUNCH BREAK	
4.	1.00 pm - 2.30 pm	Expert Lecture (NCC & NSS)	Auditorium
5.	2.30 pm - 4.00 pm	Expert Lecture (SELP & Sports)	Auditorium
6.	4.00 - 4.30 pm	Movie	Auditorium
<b>25/07/2019</b>			
1.	9.00 am - 10.30 am	Expert Lecture by Prof. Gursharn	Auditorium

		Singh Randhawa on "How to prepare for competitive examinations"	
2.	10.30 am - 12.00 noon	Expert Lecture by Prof. Gursharn Singh Randhawa	Auditorium
3.	12.00 noon - 1.00 pm	LUNCH BREAK	
4.	1.00 pm - 2.30 pm	Bridge courses/ Activity	Class rooms/ Workshop/ Auditorium
5.	2.30 pm - 4.00 pm	Bridge courses/ Activity	Class rooms/ Workshop/ Auditorium
26/07/2019			
1.	9.00 am - 10.30 am	Bridge courses/ Activity	Class rooms/ Workshop/ Auditorium
2.	10.30 am - 12.00 noon	Bridge courses/ Activity	Class rooms/ Workshop/ Auditorium
3.	12.00 noon - 1.00 pm	LUNCH BREAK	
4.	1.00 pm - 2.30 pm	Expert Lecture by Mr. Sony Goyal on "How to successful in life"	Auditorium
5.	2.30 pm - 4.00 pm	Expert Lecture by Mr. Sony Goyal on "How to prepare for competitive examinations"	Auditorium
29/07/2019			
1.	9.00 am - 10.30 am	Bridge courses/ Activity	Class rooms/ Workshop/ Auditorium
2.	10.30 am - 12.00 noon	Bridge courses/ Activity	Class rooms/ Workshop/ Auditorium
3.	12.00 noon - 1.00 pm	LUNCH BREAK	
4.	1.00 pm - 2.30 pm	Expert Lecture by Dr. Inderjit Singh on "Behaviour Modification"	Auditorium
5.	2.30 pm - 4.00 pm	Expert Lecture by Internal member (Dr. Akshay Girdhar, CEO)	Auditorium
30/07/2019			
1.	9.00 am - 10.30 am	Expert Lecture by Mr. Mohit Sharma on "How to access E-resources"	Auditorium
2.	10.30 am - 12.00 noon	Expert Lecture by Prof. Brahm Jagdish Singh on "Teaching of Guru Nanak Dev ji"	Auditorium
3.	12.00 noon - 1.00 pm	LUNCH BREAK	
4.	1.00 pm - 2.30 pm	Bridge courses/ Activity	Class rooms/ Workshop/ Auditorium
5.	2.30 pm - 4.00 pm	Bridge courses/ Activity	Class rooms/ Workshop/ Auditorium
31/07/2019			
1.	9.00 am - 10.30 am	Motivational Lecture by Prof. Gursharn Singh	Auditorium

2.	10.30 am - 12.00 noon	Expert Lecture by Mr. Sarabjeet Singh	Auditorium
3.	12.00 noon - 1.00 pm	LUNCH BREAK	
4.	1.00 pm - 2.30 pm	Bridge courses/ Activity	Class rooms/ Workshop/ Auditorium
5.	2.30 pm - 4.00 pm	Bridge courses/ Activity	Class rooms/ Workshop/ Auditorium
01/08/2019			
1.	9.00 am - 4.00 pm	Cultural Activity (Mr. Sarabjeet Singh and Mr. Harjit Singh act as Judges)	Auditorium
02/08/2019			
1.	8.00 am - 5.00 pm	One day Trip	Sultanpur Lodhi
05/08/2019			
1.	9.00 am	Valedictory Programme	Auditorium
06/08/2019			
1.	9.00 am	NSS activity	Stadium

Schedule of Induction program, bridge courses with report and list of mentors also attached.

With great regards  
NAAC Departmental Co-ordinator

### **Bridge courses and Activities of B.Tech. 1<sup>st</sup> year**

During the Induction Program, different types of activities and Bridge courses are conducted by Applied Science Department for the 1<sup>st</sup> year students of B.Tech (as per the attached Teacher and branch Schedule).

Bridge courses are taught by subject teachers of Physics, Chemistry, Mathematics, English and PEEM. During these courses, all the students of B.Tech 1<sup>st</sup> year activity attended the classes. Physics taught by Dr. Harpreet Kaur, Dr. Randhir Singh and Ms. Kuldeep Kaur they covered the topics like; Introduction to Del operator, fields and their properties, Curl, Divergence, gradient, Stoke's theorem, *etc.* Teachers of Chemistry (Ms. Mandeep Kaur, Dr. Rajvir Kaur and Mr. Karan Bhalla) covered the topics like; Water Chemistry, Basics of Electrochemistry, Basics of Thermodynamics, transition metals, *etc.* Topics of Mathematics taught by Dr. D. S. Pathania, Dr. Rupinderjit Kaur and Mr. Sukhminder Singh, such as; Set theory, Relation, Function, Infinite series, Basics of multiple integral, Differential equations *etc.* Contents for English (Mr. Amandeep Singh Bal, Ms. Ramanpreet Kaur) are Importance of communication skills, carrier building, speaking, writing *etc.* PEEM taught by Ms. Saloni and topic of PEEM like, Basic introduction to Economics and management, knowledge about various terms used in both the modules.

## Bridge Course Contents

The contents of the Bridge Course are as follows:

- **Introduction**: Details of Pattern of House Test and Final Examination. Attendance rules. Importance of hard work, discipline and punctuality.
- **Career Building**: How to build a successful career?
- **English Language**: History, development and other important facts.
- **Vocabulary**: How can vocabulary be improved? Its importance in personal and professional life.
- **Fluency**: How can fluency be gained in a foreign language?
- **Writing Skills**: How can grammatical mistakes be avoided in writing? Importance of punctuation.




Amandeep Singh Bal  
Asst. Professor of English  
Dept. of Applied Science

18 September 2019

## BRIGDE COURSE CONTENTS

The contents of bridge course are as follows:-

1. Water Chemistry : Introduction, hardness of water, sludge, scale formation, priming, foaming, boiler corrosion, softening of water, lime soda process, zeolite method and ion exchange process, purification of water, desalination method, reverse osmosis and electrodialysis, disinfection and break point chlorination
2. Electrochemistry : Oxidation, reduction, oxidant and reductant, redox reaction, electrochemical cell and electrolytic cell, electrochemical series, Nernst equation and its applications
3. Atomic and Molecular Structure : Introduction to d block elements, semiconductors n type and p type, magnetic properties

  
Karan Bhalla

18/9/19  
18th September 2019

Assistant Professor

Chemistry

Applied Science Department

## CONTENT OF BRIDGE COURSE

1. Introduce the students about the syllabus of Engg. chemistry.
2. Difference b/n Organic, Inorganic and Physical chemistry.
3. Desalination of water.
4. Basics of stereochemistry.
5. Basics of Thermochemistry & chemical Equilibria.

Mandeep kaur.

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## Content of Bridge Course (Mathematics)

- 1) Preliminaries (Set, Complex Number)
- 2) Infinite Series (Basic)
- 3) Basic of Multiple Integral

DP



## Bridge Course contents (Physics)

Introduction to Del operator, fields and their properties, curl, divergence, gradient, Stokes's theorem, Gauss's divergence theorem and numerical problems of Vector calculus.

R. Singh  
18/9/19

## PEEM. - HSMC-103

Content covered in bridge course (Induction)

1. Basic Introduction to Economics, and Management.
2. Knowledge about various terms, used in both the modules.

# Content of classes held during Bridge Course' (English)

1. Parts of Speech
2. Importance of Communication Skills
3. Speaking
4. Writing
5. Presentation Skills

Ramapreet Kaur

## BRIDGE COURSE CONTENTS (PHYSICS)

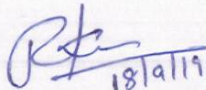
Introduction to  $\Delta$  operator, fields and their properties, curl, divergence, gradient, Stokes' theorem, Gauss's Divergence theorem, and numerical problems of vector calculus.

Dr. HARPREET KAUR GREHAL

## Bridge Course Contents (CHEMISTRY)

The contents of Bridge Course are as follows:

- 1) Introduction: Chemistry in everyday life, Branches of Chemistry and their importance, Engg. Chemistry For B.Tech students.
- 2) Water Chemistry: Types of pollution, Major problems of Water pollution & other environmental issues.  
Treatment methods
- 3) Basics of Periodic Table: (d-block elements, Molecular orbital theory. Electronic configuration
- 4) Basics of Electrochemistry & Thermodynamics

  
18/11/19  
Dr. RAJVIR KAUR  
(Assistant Prof.)  
CHEMISTRY  
Dept. of Applied Science

## # Contents of Bridge Course

- ① Introduction of syllabus of mathematics-1 (BSc-103)
- ② Leibnitz linear differential equation
- ③ Bernoulli's linear differential equation.
- ④ Questions based on Leibnitz linear differential equation.
- ⑤ Questions based on Bernoulli's linear differential equation.

Sukuninder Singh  
AP (Maths)  
(Applied science  
department)  
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## Contents of classes held during Bridge course (Mathematics)

1. Set Theory, Relations and functions
2. Differentiation
3. Integration
4. Differential Equations
5. Matrices and determinants

Rupinderjit Kaur  
18/9/19