

Gujarat Technological University

Induction Program for Diploma Engineering

Preamble:

As suggested in Model Curriculum of Diploma by AICTE, all students will have to undergo a mandatory induction program as part of their Diploma Programme Curriculum right at the start of the first year. The duration of the induction program will be of two weeks (12 Working Days) wherein students will undergo a wide variety of activities without actually starting with their usual classes. Normal classes will start only after the induction program is over.

This will help build confidence among the new students, instill a sense of connect and appreciation towards their institution, provide them with the comfortable environment to adjust and pick up friendship with other students, facilitate them to get to know important functionaries and faculty members of the institution, equip them with human and social values.

The Induction Program will help the new students in building social character, leadership qualities, self-confidence, creativity and appreciation for mankind and nature at large. In nutshell, the induction program is envisaged to give the new students the broader foundational experience for the life- long success.

The new students, in the process, will get to learn about various processes and procedures in place in the institution, facilities and best practices, student activities, and the culture & values prevailing in the institution. The Program is also expected to be used for rectifying some critical lacunas, for example, Communication Skills in English for those students who have deficiency in it. Such students can be identified by conducting diagnostic tests and special Proficiency Modules can be conducted for them.

The mentor-mentee groups of the students are formed with each group comprising small number of students and being associated with a faculty mentor. Then the different activities start with a healthy daily routine.

Scheme:

Sr. No	Phase and Activities Heads	Weightage	Hours
1.	Initial Phase	1 day (6 Hrs)	6
2.	Regular Phase	9 Days	54
a)	Physical activity	12 Hours	12
b)	Creative Arts & Culture	10 Hours	10
c)	Mentoring & Universal Human Values	8 Hours	8
d)	Literary Activity	6 Hours	6
e)	Proficiency Modules	6 Hours	6
f)	Lectures & Workshop by Eminent People	3 Hours: 3 Expert Lectures, One per Week	3
g)	Visits to local Areas or Industry	1 Day	6
h)	Co & Extra-curricular Activities in the institute	3 Hours	3
3.	Closing Phase (Feedback & Report)	1 Day (6 Hrs)	6
Total		66 Hours/ 11 Days	66

Phases, Modules, Activities and Guidelines:

The activity during Induction Program would have an Initial Phase, a Regular Phase and a Closing Phase. The initial and closing phases would be one day each. The following is the guidelines indicating the possible activities under each phase of the Induction Program.

Initial Phase (First Day)-6 Hrs.

Following are the activities to be carried on the first day:

- Orientation Programme
- Know your Department/Institute
- Know your university
- Know hostel and other amenities
- Information about Student Diary and Induction Program

Regular Phase (9 Days)-54 Hrs.

The Regular Phase consists of 8 days; each day is of 6 hours. It may cover any/ all the 8 different activity modules. For each module, the objectives, suggested activities and guidelines are provided herewith. Institute can form their time table according to local situation and priorities or use additional relevant activities in addition in suggested activities for each of the phases.

Module Name	Objectives	Suggested Activities
1. Physical Activity	<ol style="list-style-type: none"> 1. Improve bone health 2. Improve cardio respiratory and muscular fitness 3. Understand the anatomy, basic biomechanical principles and terminology. 4. Examine the effect of nutrition, rest and other lifestyle factors that contribute to the better health. 	<ol style="list-style-type: none"> 1. Running/Jogging 2. Brisk Walk 3. Cycling 4. Heavy yard work 5. Swimming 6. Yoga/Pranayama 7. Aerobics 8. Outdoor Sports/Indoor Games(In addition to cricket, Volleyball, Badminton, Chess, Carom, Table Tennis, Other games like Critical Thinking, Math skill developing Games, Memory Games can be included.) 9. Calculate Body mass index of each students and explain their fitness level from it. 10. Tree Plantation 11. Gardening

Guidelines:

- Half an hour Yoga/Pranayama followed by physical activities including various games.
- Refer this link for Yoga/Pranayama
<https://yoga.ayush.gov.in/public/assets/front/pdf/CYPEnglishBooklet.pdf>

Module Name	Objectives	Suggested Activities
2. Creative Arts & Culture	<ol style="list-style-type: none"> 1. Develop creativity and imagination through a range of complex activities. 2. Improve the student's ability to control materials, tools and techniques. 3. Develop increasing confidence in the use of visual and tactile elements and materials. 	<ol style="list-style-type: none"> 1. Make a model of any physical object related to Engineering Design 2. Crafting 3. Painting 4. Sculpture 5. Pottery 6. Music 7. Dance

Guidelines:

- Use any activities leading to creative thing and practice.
- Show the video demonstrating the creative ideas and thinking.
- Show the video demonstrating phenomenon performance using innovation in different areas of humanity and social science.
- Demonstrate the story of leaders with the context of how with their creative vision, with all odds they achieved success.

Module Name	Objectives	Suggested Activities
3. Mentoring & Universal Human Values	<ol style="list-style-type: none"> 1. Impart universal human values in students. 2. Enable students to live in harmony within themselves, with family, with society and the nature 3. Initiate the process of self-exploration and self-investigation within themselves about their understanding of happiness. 	<ol style="list-style-type: none"> 1. Mentoring for creating a learning relationship 2. Showing Motivational Movies. 3. Social Activities like visit of orphanage, old age home, blind people association, Apang Manav Mandal etc. 4. Swachhhata Mission Activities. 5. Awareness regarding environmental issues and remedies. 6. Spread awareness about blood donation, organ donation, precaution to avoid malaria in monsoon etc. 7. Discuss autobiography of legendary persons who practiced universal human values in their life and work. 8. Conduct universal human values group discussions.

Guidelines:

- Use the materials and activities covered in the FDP on Induction Program held at GTU organized by AICTE.
- The faculties trained from institute will take leadership role to rollout it at institute level.

Module Name	Objectives	Suggested Activities
4. Literary Activity	<ol style="list-style-type: none"> 1. Inculcate the habit of active (or interactive) consumption of the best content available in literature. 2. Develop thinking skills. 3. Improve reading abilities and attitude. 	<ol style="list-style-type: none"> 1. Digital literacy and use of Internet 2. Basic Mathematics for Solving Real World Problems 3. Use of Scientific Calculator in Engineering 4. General Knowledge Quiz Competition 5. Vedic Mathematics 6. Reading/writing/speaking/listening 7. Debating/Elocution 8. Enacting a play 9. Book review 10. Digital India Portal 11. Vernacular Literature

Guidelines:

- Use the video lectures to literate students in different skills needed for day-to-day life and need.
- Motivate students to create the nature of inquiry and reading habits.
- Arrange the various competitions like Elocution, Essay writing, Storytelling, Bookreviews etc.
- Writing the review of the well-known books, movies etc. and sharing.

Module Name	Objectives	Suggested Activities
5. Proficiency Modules	<ol style="list-style-type: none"> 1. Determining English proficiency level of students and mentoring accordingly. 2. Learn the mining vocabulary, idioms, and expressions and Understand their meanings in context. 3. Develop ability to write a paragraph about general topics by using the English language correctly. 4. Realize the importance of English language as a global business language. 	<ol style="list-style-type: none"> 1. Activity by Faculty from Communication Skills/ English from Science & Humanities/ General Departments 2. English general diagnostic test to Determine student's English proficiency level. 3. Mentoring students to improve in English proficiency according to his/her proficiency level based on test.

Guidelines:

- An MCQ test of **30 Marks / 30 minutes** should be conducted covering basic grammar and vocabulary.
- Group the students in three groups based on test result in three proficiency levels:
 - Unsatisfactory
 - Satisfactory
 - Good
- Following activities are to be used to uplift proficiency levels of students.
 - Motivational movies, documentary
 - Language games
 - Essay/story writing
 - Ice breaking games.
- Separate set of activities from suggested list should be used for different groups.
- Groups requiring Mentoring may be identified and informed to respective departments for their development in future
- Groups who can lead can also be identified and informed to respective departments for their development in future

Module Name	Objectives	Suggested Activities
6. Lectures & Workshop by Eminent people	<ol style="list-style-type: none"> 1. Motivation through knowing experience of successful person / Alumni. 2. Meet and interact with eminent personalities of different fields. 	<ol style="list-style-type: none"> 1. To conduct lecture by eminent people. 2. Interaction with leaders, experts, entrepreneurs, contributors and successful personalities / alumni.

Guidelines:

- 3 expert lectures each of 1 hour for every discipline. It should be arranged at department level or Common for institute. If multiple disciplines are to be combined in an expert lecture then it may be arranged in both the weeks so as to accommodate all branches.
- External expert should be invited.
- Expert can be from academic, industry, research organization, social organization etc.
- An individual successful person in any of the field can be invited.
- The aspect to be addressed may be social / economical / engineering / entrepreneurship/ spiritual/ humanity science.

Module Name	Objectives	Suggested Activities
7. Visit to Local Area and Industry	1. To familiarize students with the local area. 2. Sensitize with the different aspects of the life including social services and heritage	1. A full day visit covering at least 2 or 3 places. 2. List of possible places A. Centre of excellence B. Elite Academic Institutes C. Research institute D. Hospitals E. Industry visit F. Heritage places

Guideline and References:

- Institute can arrange visit to public, social or specifies places to give insight of the activities and overall socio-economic contribution of such places.
- The uniqueness or impact of such visits should be highlighted.

Module Name	Objectives	Suggested Activities
8. Co & Extra Curricular Activities in the institute	1. Introduce the student about innovation in different fields 2. Make students aware about innovative and modern practices and products in their own branch 3. Create awareness about support available for start-up and innovation	1. Lectures by Convener/ senior members of Gymkhana Committee. 2. Showing videos demonstrating Gymkhana Activity / Talent hunt/ Performances. 3. Introducing NSS Activity 4. Awareness regarding SSIP Scheme of Government of Gujarat 5. Awareness about Government initiatives in areas of innovations and supports for start-up, Incubation, Entrepreneurship etc.

Guideline:

- Video lectures of Gymkhana Activity / Talent hunt/ Performances
- Video lectures from leaders and innovators.
- TeDx Talks.
- Government Policy documents for different schemes.

Closing Phase (Last Day)

The closing phase is the last day of the Induction Program and covering conclusion and summary of the Induction Program.

- **Conclusion and summary:**
- Guiding students for preparation of student report about Induction Program.
- Instruct students regarding submission and examination of the Induction Program.
- Address by HODs/Senior faculties regarding branch/discipline and career option in respective branch.

- Introduce about the engineering and its importance in life and their responsibilities towards the society.

General Regulations:

- a) Every student has to maintain a daily diary. Format of the diary is already given.
- b) After completion of the Induction program student has to prepare a report based on activities performed during the Induction program. Diary will be attached as Appendix in Report.
- c) 75% Attendance is required during Induction Program.
- d) This program will be noncredit subject but it will reflect in 1st Semester Mark sheet as PASS or FAIL.
- e) Institute should appoint a mentor for a group of 20 to 30 students. Mentor can take help of senior students.
- f) If student gets admission transfer in other college during Induction Program the diary will be continued from previous college to new college.
- g) If student gets admission in middle of the Induction Program or student gets admission after Induction Program, it is responsibility of the institute to fulfill the criteria of the Induction Program.
- h) If student fails in the Induction program the student has to clear the same during subsequent Semester

Evaluation Pattern:

1. Induction Program is Mandatory course for each branch of Engineering.
2. It is mandatory for each student to clear Induction Program with PASS grade.
3. Grades for Induction Program are either PASS or FAIL and have no credits. Evaluation for Induction Program is based on the Induction Program Report prepared by a student from Student diary and student will be declared PASS or FAIL.
4. Student has to submit the Induction Program Report at the end of first semester dully approved by Mentor and HOD.
5. Evaluation of Induction Program will be done along with first Semester Term-Work Submission.
6. The evaluation is carried out by Internal Examiner from institute itself. The entry on the GTU portal will be PASS or FAIL, not marks.
7. The students who will FAIL have to reappear again after every 6 months as remedial exam.

Guidelines for Program Report:

- 1) Report should have minimum 15 pages.
- 2) Report must have One Photograph per Activity.
- 3) Report consists of Certificate, Index and Diary as Appendix.
- 4) Report should be dully signed by Mentor and HOD.
- 5) Index will have following sequence:

[A] The Suggestive List of activities is as mentioned below:

- ✓ Physical Activity
- ✓ Creative Arts and Culture
- ✓ Mentoring & Universal Human Values
- ✓ Familiarization with the institution, Dept. /Branch
- ✓ Literary Activity
- ✓ Proficiency Modules
- ✓ Lectures & Workshops by Eminent People
- ✓ Visits in Local Area
- ✓ Extra-Curricular Activities in the institution
- ✓ Feedback and Report on the Program

Induction Program Schedule (Suggestive only)

Note: It is presumed that the first year students are so divided into two major groups that the number of students in each group is almost equal with some branches forming part of Group-I while the rest of the branches being part of Group-II. Grouping can also be done at discipline/ department level.

The detailed suggestive program is as under:

Arrival to Hostel/ Accommodation			
Time	Activity	Students' Group	Venue
Whole day	Students arrive - Hostel allotment	I & II	Respective Hostels / Accommodation
DAY 1- Initial Phase- Reporting at 10.00 am in the respective Departments			
10.30 am – 12.00	Mentor-mentee groups - Introduction with-in group. <ul style="list-style-type: none"> ● Orientation Programme ● Know your Department/Institute ● Know your university ● Know hostel and other amenities 	I	Suitable Venue as per number of mentor-mentee groups
	Screening of Institute Documentary Movie; video clips of various functions and events	II	Conference/Seminar Hall
12.00 – 01.30 pm	Mentor-mentee groups - Introduction with- in group. <ul style="list-style-type: none"> ● Orientation Programme ● Know your Department/Institute ● Know your university ● Know hostel and other amenities 	II	Suitable Venue as per number of mentor-mentee groups
	Screening of Institute Documentary Movie; video clips of various functions and events	I	Conference/Seminar Hall
1.30 pm – 2.00 pm	Lunch	I & II	Respective Departments/ Hostels/ Mess/ canteens
2.00 pm – 5.00 pm	Institute Excursion	I & II	Around the Campus
DAY 2 to 9- Regular Phase -Timings can be changed for Physical / other Activities as per local requirements			
10.30 am – 12.00	Events from [A] are to be scheduled as per guidelines and local convenience i.e. Various activities from Regular Phase like Physical Activity Creative Arts and Culture Mentoring & Universal Human Values Familiarization with the institution, Dept. /Branch Literary Activity Proficiency Modules Lectures & Workshops by Eminent People Visits in Local Area Extra-Curricular Activities in the institution Feedback and Report on the Program	I	Suitable Indoor/ Outdoor Venue in respective Departments as per number of mentor-mentee groups or Conference / Seminar Hall
		II	

12.00 – 01.30 pm	Events from [A] are to be scheduled as per guidelines and local convenience	II	Suitable Indoor/ Outdoor Venue in respective Departments as per number of mentor-mentee groups or Conference / Seminar Hall
		I	
1.30 pm – 2.00 pm	Lunch	I & II	Respective Departments/ Hostels/ Mess/ canteens
2.00 pm – 5.00 pm	Events from [A] are to be scheduled as per guidelines and local convenience	I	Suitable Indoor/ Outdoor Venue in respective Departments as per number of mentor-mentee groups or Conference / Seminar Hall
		II	
DAY 10- Visits to local Areas or Industry/ Any 1 DAY from above			
DAY 11- Closing Phase (Feedback & Report)			
10.30 am – 12.00	<ul style="list-style-type: none"> Guiding students for preparation of student report about Induction Program. Instruct students regarding submission and examination of the Induction Program. 	I	Suitable Indoor/ Outdoor Venue in respective Departments as per number of mentor-mentee groups or Conference / Seminar Hall
	<ul style="list-style-type: none"> Address by HODs/Senior faculties regarding branch/discipline and career option in respective branch. Introduce about the engineering and its importance in life and their responsibilities towards the society. 	II	
12.00 – 01.30 pm	<ul style="list-style-type: none"> Address by HODs/Senior faculties regarding branch/discipline and career option in respective branch. Introduce about the engineering and its importance in life and their responsibilities towards the society. 	II	Suitable Indoor/ Outdoor Venue in respective Departments as per number of mentor-mentee groups or Conference / Seminar Hall
	<ul style="list-style-type: none"> Guiding students for preparation of student report about Induction Program. Instruct students regarding submission and examination of the Induction Program. 	I	
1.30 pm – 2.00 pm	Lunch	I & II	Respective Departments/ Hostels/ Mess/ canteens
2.00 pm – 5.00 pm	Talent Show and Valedictory Function Principal's Address	I & II	Suitable Indoor/ Outdoor Venue in respective Departments as per number of mentor-mentee groups or Conference / Seminar Hall

Note:

- 1) Total duration of the Induction Program is two weeks i.e. 12 working days with Saturdays being working and Sundays off.
- 2) Sundays can be utilized for screening some Patriotic / Socially Significant Movies/ home viewing.
- 3) Faculty mentors would be required to obtain the feedback cum suggestions of the students of their respective groups about the Induction programme on the last day.

- 4) Coordinators can be assigned for various activities during the induction programme.

The suggestive template is as under:

S. No.	Name of the activity	Coordinators
1.	Visits to different departments and around the campus	HoDs
2.	Physical/Sports activities in the Sports Ground (Morning as well as Evening)	In charge of Physical Education / Sports/ Gymkhana Activity
3.	Creative Arts / Technical Workshops. Lecture Sessions or Films on Universal Human Values / Cultural / Talent hunt Activities / Performances by Classical or folk artists. Talent Show and Valedictory Function.	In charge of Technical / Cultural activities/ Gymkhana Activity
4.	Presentation cum Interactive Session with Eminent Alumni / Eminent Speaker	Training & Placement In charge of Department
5.	Universal Human Values	Suitable Faculty members
6.	Proficiency Module (English)	Faculty of English language
7.	Local Visits	Hostel Wardens / Discipline in –charge, 1Sr. & 1 Jr. Faculty
8.	Wake up call/Hostel related activities and Arrangements at Valedictory Function	Chief Wardens (Boys/Girls) Gymkhana Members

- **Schedule of local visits can be tabulated as under:**

Dates	Sections
...	...
...	...
...	...

- **Note:**

- 1) The faculty mentors of the respective mentor-mentee groups / sections will accompany the students on local visits.
- 2) The Institute buses, if there, may be made available for the purpose each day or some other/ local arrangements may be made.
- 3) Attendance of the students' needs to be taken at the time of departure and return.

GTU BoS Resource Persons

Sr. No.	Name and Designation	Institute	Contact No.	Email
1	Shri U. V. Buch- BoS Member and Subject in-charge (EC)	G P Ahmedabad	9825346922	uvbuch@gmail.com

NB: The format of diary to be maintained will be as per Annexure-I

Annexure-I
Induction Program for Diploma Engineering
Format of Diary

Enrolment/Roll No: _____

Name of Student: _____

Dates from : _____ to _____			
Day	Activities Done	Learning Outcomes	Remarks
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
Signature of the Student			
Evaluation: PASS/ FAIL			
Signature with Date of Mentor		Signature of HoD	