Foundation Program 2012

Indian Institute of Technology Gandhinagar (IITGN) aims to not only bring excellent engineers and scientists out of its students but also focuses on their personality development so that they can contribute to society, can adapt to their surroundings, and prove themselves to be thinkers and problem solvers of future India. The institute's goal is to go beyond the classic definition of a technology Institute, in line with its motto to create young minds who are fearless to think free and who work towards perfection in the depths of boundless knowledge.

To work towards this goal, the institute introduced a 5-week Foundation Programme in July 2011 for the first year students joining the Institute. The program is designed to introduce a student, who has been committed to IIT-JEE preparation for the past 3-4 years to a wide spectrum of creative activities, workshops, lectures and field trips. Through this program, the incoming students are made aware of a variety of cultural, social and economic challenges our country faces today. They are also given exposure to many different art forms to instigate their creativity which they might have lost during the monotony of arduous JEE preparation years. This year, the program was scheduled to run from 19th July – 23rd August 2012, and was designed keeping in mind the following objectives:

Objectives of the Foundation Program

- □ **Discover Passions**: Help students find areas of passions beyond education and channelize their energies to achieve excellence in both.
- □ Values and Ethics: Inculcate values of both, being a member of IITGN community and a global citizen, into the students.
- □ **Foster Creativity**: Provide a platform to develop students' creativity and help them express inner-self through art, craft, music, singing, media, dramatics, etc.
- □ Self-confidence: Instill a sense of confidence and be fearless in pursuits of justice, equality, and fighting discrimination.
- □ **Physical Activities & Sports**: Engage in sports and physical activity to ensure healthy physical and mental growth.

There were no regular classes for the incoming students for the duration of Foundation Program that overlapped with first three and a half weeks of the regular semester. To account for this, their normal class load and schedules were adjusted and scheduled appropriately.

Organization and Preparation

To achieve the above listed objectives, the major ideas of the program were divided into baskets with well-specified goals. We sent out invitations to the eminent motivational speakers, leading academicians and artists. Each activity was then assigned to one or two faculty members. Their responsibility was to make sure that the speakers were comfortable and the sessions ran smoothly. This ensured efficient division of work among faculty based on their interests and passions. Our baskets were designed as follows,

- 1. Social Awareness
- 2. Emphasis on Values
- 3. Creativity
- 4. Physical Activities and Sports
- 5. Team work and communication

Components of Foundation Program

The program consisted of lectures, field trips and creative activities in each of the five baskets listed above.

- 1. *Lectures:* This included many prominent academicians, scholars, social workers who shared their life experiences to enlighten the students. Even the institute's faculty contributed enthusiastically and delivered lectures on a number of topics. We specifically invited people who are not only the leaders in the field with years of experience but also who could engage the students and ignite their minds for questioning. The lectures were received very enthusiastically by the students with many lectures ending with stimulating discussions and debates.
- 2. *Field Trips:* We arranged many visits for the students to get to know more about their local surroundings for the next four years. The field trips were organized such that there was a mix of knowing the history and heritage of the city, historical sites, and museums.
- 3. *Creative activities:* We also invited artists from in and around Ahmedabad to organize creative activities such as kite making, calligraphy, Warli painting, Phad painting, theatre workshop, mask making and painting, pottery making etc. The objective was to make students explore their creative side of the brain and increase their eye-hand coordination.

A typical day of the students during the course of the program started at 6:30 am when they reported for physical exercise for one hour. After breakfast, the mornings were spent in either field trips or lectures and then interaction with the speakers. Most creative activities and workshops were scheduled for the post-lunch session. This was followed by the evening sports from 5-6 pm.

1. Social Awareness

The segment consisted of lectures, field trips and general knowledge quiz. The lectures introduced the students to many important societal issues which the students many not have given enough attention. These included topics such as Right to information, Teach for India, Social media, Gender socialization, Democracy, Ethics etc.

One of the first field trips in the Foundation Program was a Heritage Walk to the old city of Ahmedabad to introduce the students to its fascinating 600 years old history. The students also visited Shreyas textile museum and tribal museum in Gujarat Vidyapeeth. They also participated in a Charkha workshop that gave students a flavor of the Gandhian philosophy and its way of life. The noted historian, Mr. Michel Danino, took the students to the historical site at Lothal where they visited lothal museum run by Archeological Survey of India. The activities under Social Awareness are tabulated in Table 1.

	Name	Title	Type of Activity
1.	Mr. DebashishNayak	Heritage Walk, Ahmedabad	Field trip
2.	Ms. AvaniVaria	Shreyas Museum	Field trip
3.	Gujarat Vidyapeeth	Gujarat Vidyapeeth and Charkha Workshop	Field trip
4.	Mr. Vijayendra Haryal	Social media	Lecture
5.	Dr. Sandeep Pandey	Right to Information in India	Lecture
6.	Mr. Gunvant Jain	Teach for India	Lecture
7.	Dr. TannishthaS amanta	Gender Socialization	Lecture
8.	Dr. M.D. Srinivasan	The Kerala School of Mathematics	Lecture
9.	Dr. Mona Mehta	Democracy	Lecture
10.	Mr. Jaideep Hardikar	Farm Suicides in Rural India	Lecture
11.	Mr. Michel Danino	Indus Valley Civilization	Lecture Series (3)
12.	Lothal	Indus Valley Civilization Site	Field trip
13.	Dr. Bhaskar Dutta	Biochemical and Spirituality	Lecture
14.	Mr Ravi Handa	General Knowledge quiz	Activity
15.	Dr. Rita Kothari	The Idea of Cinematic India through	Lecture
		Imaging	
16.	Dr. Raghavan Rangarajan	Higgs Boson	Lecture

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Table 1: List of Activities in	the Foundation Program	under Awareness

2. Values and Ethics

The segment consisted of lectures and activities which emphasized on topics such as ethics in both personal and professional lives. We also organized lecture on how technological advances and their applications should be evaluated from an ethical and a moral standpoint. The lectures were also tailored to instill IIT GN's ethos and philosophy. A list of activities in Values and Ethics segment is tabulated in Table 2.

	Name	Title	Type of Activity
1.	Prof. Raj Chhabra	Professional And Personal Ethics	Lecture
2.	Mrs. Ranjana Mehta	How to achieve your goals	Discussion
4.	Underwriters Laboratory	Public Safety and Ethics	Lecture
5.	Prof. R. Sharan	Technology and Ethics	Discussion

 Table 2: List of Activities in the Foundation Program under Values and Ethics

3. <u>Creativity</u>

A variety of workshops were organized under this segment starting from calligraphy, painting to non-traditional art forms such as pottery making, mask making etc. We also organized other workshops such as theatre, grassroot comics. This vast mix of activities was chosen to help students explore their creative side and seek their untapped potentials.

Table 3: List of Activities in the Foundation Program under Creativity

	Name	Title	Type of Activity
1.	Mr. Amit Kharsani	Calligraphy	Workshop
2.	Ahmedabad artists	Kite making	Workshop
3.	Ms.Avni Varia	Pottery making	Workshop
4.	Mr. Suguresh	Mask making and painting	Workshop
5.	Mr. Shanti Lal	Phad painting	Workshop
6.	Ms. Avni Varia	Macreme making	Workshop
7.	Mr. V. H. Varia	Design Colors and Symbols	Lecture
8.	Mr. Shubhadeep	Theatre Workshop	Workshop
9.	Dr. Arup Chakraborty and	Musical evenings	Workshop
	Dr. Srinivas Reddy		
10.	Mr. Arvind Ghosalkar	Warli painting	Workshop
11.	Dr. Jaison Manjaly	Radio Mirchi	Lecture
12.	Prof. Suchitra Mathur	Grassroot comics	Lecture and
			workshop

4. <u>Physical Activity and Sports</u>

This segment had daily morning exercise such as running and yoga. The students also spent their evenings in playing sports of their choice. After 2-3 years of JEE preparation with sedentary life style, this segment was very well received by the students.

	Name	Title	Type of Activity
1.	Morning Exercise		Exercises
2.	Evening Sports and Games		Sports
3.	Meditation		Exercises

Table 4: List of Activities in the Foundation Program under Physical Activities and Sports

5. Team Work & Communication

One of the most desired skills, apart from the technical education is the ability to communicate with peers and work in a team. And several of the students have difficulty in communicating their ideas to an audience, and working in a team towards a common goal. We organized workshops on addressing these issues, where the students participated in several interactive sessions. Workshops on both written and spoken English were also organized.

Table 5: List of Activities in the Foundation Program under Team Work & Communication

	Name	Title	Type of Activity
1.	Ms. Jasbir	Bridging the Gap	Lecture and workshop
2.	Ms. Rashmi Dutt	Interpersonal skills and Personal effectiveness	Workshop
3.	Ms. Jasbir	Team building	Interaction
4.	Dr. Sharmita Lahiri	Story Telling	Workshop

Student Feedback

Throughout the program we were continuously taking feedback from the students. After each week they were given a feeback form to rate the activities on a scale of 0-4, 4 being excellent. This feedback served us a great pointer for mid-course corrections and also a reference for the next year and beyond. Below is the summary of the feedback in each segment.



<u>Result</u>- According to the survey, 70% of the students rated the quiz by Mr. Handa as excellent, followed by Teach for India lecture by Mr. Gunvant Jain and lecture on Higgs Boson by Prof. Raghavan. Other activities had mixed reviews.



<u>Result</u>- According to the survey, 80% of the students rated the Theatre workshop as excellent, followed by Mask making and painting workshops. All other activities were equally favored/disfavored except three: Design Colors and Symbols, Intro to Crafts and Musical lecture and demo, which received low ratings.



<u>Result</u>- All three activities were favored/disfavored almost equally with public safety lecture getting slightly higher reviews.



<u>Result</u>- According to the survey, 40-45% of the students rated evening sports the most favored activity in the physical activity segment.



<u>Result</u>- According to the survey, 65-70% of the students rated the Bridge building activity and Bridging the invisible gap by Ms Jasbir as excellent.

Overall feedback

In general creativity and team work and communication segments were very well received by the students. All the activities in team work and communication had high scores, indicating that the students were receptive to the interactive type format of the activities. Majority of activities in creativity segment were also enjoyed by the students, and had positive feedback. The activities in values and ethics segment had the lowest score, indicating that there is a need to redesign these activities to make them more appealing to the students.

Lessons learnt

The five week program was a major exercise by many involved at the Institute. We have prepared a comprehensive list of Do's and Don'ts of Foundation Program from the experiences of the coordinators, faculty and the students.

List of Do's and Dont's based on feedback from Foundation Program 2011 and 2012

Based on coordinators' (**Supreet Saini and Amit Prashant**) experiences, following comments were obtained for Foundation Program **2011**.

Do's

- Show up at the end of the day, and briefly talk about the visitors the following day. Where is their world-view and perspective coming from, their expertise, and why is it that the work they do is important. This can lay a premise for the upcoming day, and the students actually looked up people in the night/evening before about the visitor the next day.
- The lectures should be limited to people who have been in the field for a long period of time. A broader perspective comes only by putting in the years and decades of experience.

Based on the coordinators' (**Prachi Thareja and Amit Arora**) experiences and the feedback from the faculty, below is a comprehensive list of Do's and Don'ts of Foundation Program **2012**, which can be used as pointers in the future.

Do's

- Contact the speakers two months in advance.
- Some people do not respond to the email, use phone in those cases.
- Get advance approval for every visitor even if undecided.
- Use a staff member to deal with accounts and bills.
- Take approximately 3 lacs of advance for handling the expenses during program.
- Procure 20-30 revenue stamps (required for any payment more than 5k).
- Get the material requirements from the visitors in advance and ask material department to procure them.
- Hire an extra housekeeping staff solely for FP handy jobs.
- Keep the outdoor trips before the semester starts as faculty members are busy with classes during the semester and cannot accompany conveniently.
- Get the rooms allotted in proper format when the time table is prepared so that there is no confusion about room allotment.
- With technical staff make sure the sound and video work in the rooms.
- Take help of a staff member to arrange for travel/transportation of guests.
- Let only one person do the scheduling of the program and give support of one staff member for frequent announcements.
- Talk to every speaker and if possible meet personally before the program
- Organize hands on activities, workshops.
- Organize field trips.
- Organize interactive lectures.
- Form sub committees for each of the five goals of Foundation Program.

- They plan for each of the segments separately and coordinate for the overall program.
- Organize hands on activities on campus, to save time.
- Request speakers for thought provoking intense topics such as ethics to be more interactive.
- Have at least 3-4 volunteers for activities such as heritage walk, which is organized in the city to prevent students from leaving the group.
- Have the Lothal Trip divided in groups, so that all students can fully enjoy Prof Danino's guided tour of Lothal
- Have regular meeting with the participating faculty and staff to increase co ordination.
- Pay the volunteering faculty in advance so that they can pay for tickets for the museums etc.
- Inform the volunteering faculty about the logistics of a session/activity/trip in advance.

Don't

- Organize non-interactive lectures. Students' feedback was that they got bored.
- Keep students beyond 5 pm so that they can have evening snacks before sports session.
- Let students get away with photography while on outdoor tours so that there are no unnecessary delays.

Concluding Remarks

The Foundation Program was a major source of excitement for all – the incoming students, student volunteers, staff and the faculty. The students were extremely excited and for majority, the lectures, creativity workshops, trips were a first time experience. The program served as an excellent platform for the students to bond and forge friendships. We hope that the diverse set of activities which they were involved in during this program is cherished for many years to come. The efficacy and the impact of the program can only be assessed when IIT Gn graduates are able to retain and inculcate the values and ideas this program has imparted and introduced to them.