



Anil Neerukonda Institute of Technology & Sciences

(UG-C Autonomous)

(Permanently affiliated to Andhra University Approved by AICTE, accredited by NBA and NAAC 'A' Grade)

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Department of Information Technology

Induction Programme Summary Report



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Information Technology is no more esoteric and exclusive to a few. Its all-pervasive and we find our day to day lives cutting across various economic strata of the society influenced dramatically and increasing by the day. In the past few decades there has been a revolution in computing and communications, and all indications are that technological progress and use of information technology will continue at a more rapid pace. These advances present many significant opportunities but also pose major challenges.

To keep abreast of these changes in technology(ies), it's pertinent that the students of Department of IT at ANITS are provided with the latest syllabi, laboratories, infrastructure and curriculum relevant to the industry and changing demands.

The Department of IT at ANITS made its humble beginning in the year 2001 and today with 660 students and 26 well qualified faculty is headed by Prof Dr. Poosapati Padmaja who has over 22 years of rich teaching and research with deep Industry experience.

Department of IT values professionalism, communication, integrity and discipline. These principles form the bedrock of every activity at the department.

Facilities and infrastructure

The department of IT today is well equipped with 181 computers with the latest i5 configuration. High speed Wireless LAN, and well supported by UPS with uninterrupted power supplies. Additionally, the department has 276 i5 driven computers connected to an IBM server. The students are encouraged to leverage these facilities, the expertise of the staff and faculty to constantly enrich themselves on learning , innovating and practicing, expanding their horizons of knowledge and contribute in presenting technical papers in various national and international seminars, conferences and workshops. I wish every student a very rewarding and a fulfilling journey of a thorough professional in Information Technology.

The induction program for the fresh batch of students joining the Department of IT was organized in the month of August 2019 with a packed 2-week schedule. The program was designed to take through the fresh students over a typical life at the department, various courses offered at the department, various student activities both academic as well as extra-curricular and how the students are groomed over the next 4 years into a complete holistic professional, equipped with all the necessary skills required by the best of the industry.

WEEK 1:

DAY – 1: Date: 19-08-2019

The Day 1 commenced with the formal welcoming of the freshers with their respective parents/guardians by **Prof. Poosapati Padmaja, HOD Department of IT** and **Mrs. Annapoorna, Asst. Prof. Department of IT**.

With the help of a PowerPoint presentation, the gathering was introduced to the various departments of the institution, their respective HODs, faculty members and general orientation about the college was. The students were also familiarized with Departmental curricular, Co-curricular & extracurricular activities and associations.

During the session the students were explained in detail on the various infrastructure, laboratories, department library, student associations, curricular and extracurricular activities, clubs, their importance in a student's life publications and various achievements. The achievements and the publications of the faculty at national and international levels were the key highlights. The session concluded with explaining the code of conduct and guidelines for maintaining highest the discipline at ANITS and summary of the performance of alumni of the department at various national and state level competitions. Finally, the session ended with a warm wish to all the students' good luck for their journey ahead.



DAY – 2: Date: 20-08-2019

Energized by the proceedings of day 1, day 2 began with **Prof. Ch. Suresh, and Ch. Demudu Naidu, Sr. Asst. Professor, Department of IT** introduced the students to the 4 years Curriculum, the evaluation systems various grading systems, OBE and familiarization of the common amenities of college and first year laboratories. The session commenced with the explanation of the Department Vision and Mission Program Educational Objectives (**PEOs**), Program specific outcomes (**PSOs**) and Program Outcomes (**POs**) were elaborated.

The alignment of various PEOs and Mission was discussed. The session focused on the various learning methods and how the department of IT has adopted some of the most effective and modern methods of effective learning. With the clear definition of various course and their respective outcomes, students were taken through in detail what are the key expectations from them and expected to achieve at the end of every course and subject. The process of framing Course outcomes (each unit is mapped to one course outcome), CO-PO mapping was also described with examples.



The students were informed that B. Tech Four-year course structure was introduced under Autonomous category with various elective streams. The students were explained on the assessment process and different assessment tools were introduced.

Bloom's taxonomy levels were explained in detail and students were informed that these levels are taken into consideration while framing the mid examination.

Minimum required academic requirements for promoting to III and IV year and grading system were discussed.

The students were explained in detail on the autonomous course structure various electives their streams, category of subjects such as HS, BS, ES, MC. Open electives, professional electives were also explained on their importance, why they are introduced along with the various mandatory non-credit courses, project and the credits. The students were also explained on how the syllabi is tuned regularly with the experts from industry and academia reviewing the content, and upgrading it continuously.



DAY – 3: Date: 21.08.2019

With the fresh students equipped with the complete understanding of the academic structure at the department of IT, **Mr. M. V. Kishore, Asst. Prof, IT and Prof. D. Prasada Rao**, Dean of Examinations, ANITS. Provided a detailed orientation about the **NSS activities and Enrolment into different clubs of the college and Evaluation systems with various grading systems.**

In India, the idea of involving students in the task of national service dates to the times of Mahatma Gandhi, the father of the nation. The first duty of the students should be, not to treat their period of study as one of the opportunities for indulgence in intellectual luxury, but for preparing themselves for final dedication in the service of those who provided the sinews of the nation with the national goods & services so essential to society.

Advising them to form a living contact with the community in whose midst their institution is located, he suggested that instead of undertaking academic research about economic and social disability, the students should do "something positive so that the life of the villagers might be raised to a higher material and moral level".



With this background context of NSS, students were appraised of the various NSS initiatives at ANITS such as Lifesaving activities like "Blood Donation" camp on National blood donation day in association with Lions Club blood bank, relief camp for the victims of Srikakulam cyclone (TITLY). Students were introduced to various eco-friendly activities such as Swacchh ANITS, tree plantation and seminar on VANAM-MANAM on Krishna pushkaralu movement on having Eco-Ganesha which includes Bucket Ganesha were also conducted.

DAY – 4: Date: 22.08.2019

Students having been equipped with all the necessary information on academics and related information the gears now shifted to another important topic of Holistic development. **Srinivasa Sarma (T&P)**, ANITS introduced the students the key elements, the philosophy and the implementation of **Personality Development including leadership development at ANITS.**

"Personalities are not born, they are forged". It is a process that requires time and diligent efforts. We are what we do and what we surround ourselves with. In the current era of endless opportunities and ever-increasing competition, it is extremely important to work on one's own personality.

Only good grades will not ensure success. A perfect balance between academic excellence and the right soft skills is quintessential. Everyone at ANITS firmly believe in personality development and no stone is unturned to offer all possible opportunities for the students to build a strong personality. ANITS and department of IT have set up multiple forums, clubs, and associations, conduct multiple curricular and extra-curricular events where the students not only participate but also lead these events by organizing



completely. Participation in these events expose the students to various facets of Personality development and hone their leadership with effective communication skills.

DAY – 5: Date: 24.08.2019

All work and no play make Jack a dull boy. Healthy body leads to healthy mind,

We at Department of IT and ANITS as an institution firmly believe in this maxim. Physical activity improves one physical wellbeing, build team spirit Regular physical activity can help to improve the absorption of nutrients in the body. It also helps to improve cardiovascular health and develop muscular strength.



Mr P. Venu Gopal, Physical Director, ANITS explained the students on various facilities available at the institution where **physical activity and exercise** are encouraged, actively participated to have immediate and long-term health benefits and significantly improves quality of life of the students. He also enlisted some of the key benefits of effective Physical activities like

- **Improvement of academic performance:** -There are studies that show that it can help to improve the academic performance of a student. Many of the regular physical activities that students engage in are associated with higher levels of concentration and well-composed behaviors.
- **Social assimilation:** -The activities that students engage in physical activities like sports, games etc.can help in the improvement of social interaction. From the time learn how to cooperate through various group activities and from a team's positive sense of identity. Students can take leadership roles in sports activities and this helps them to develop leadership skills.
- **Reduces the levels of stress:** -Students do feel theyare under pressure to perform better in all the subjects. Even after spending hours in the classroom, they put in additional efforts to acquire more skills, subject knowledge and strive to stay always updated to face stiff competition on the market. Therefore, physical activity can be an outlet for getting rid of stress and anxiety. It can also facilitate emotional resilience and stability.
- **Health and nutrition:**-Nutrition is one of the elements of physical activities. One of the key benefits is that it helps students to understand the importance of proper nutrition. This is particularly important in high school as this is where eating disorders and obesity prevails. With physical education and health, students understand the importance of eating well and the key nutrition guidelines.
- **Instill positive behaviors:** -The moral development of a student can be impacted by quality physical education. With P.E., students get the opportunity to work as a team, question actions by their peers and accept responsibilities for their own actions.

WEEK 2:

DAY – 1: Date: 26-08-2019

In a world where change is the only constant, there is a perpetual need to build newer skills, acquire knowledge and gain expertise. In a thriving digital economy, the demand for skilled professionals with both technical and analytical skills is every increasing by the day. In such a competitive and time-starved world, continuous learning without boundaries and constraint is the key differentiator for every student.



Dr.K.Sharada and N.Aditya Sundar of the Department of IT highlighted the importance of **continuous learning** and provided the necessary guidance about **Online Courses / e-learning** and top career options for the students. The faculty also explained how the online learning provides the students with the necessary tools to continuously add to their existing current skill sets and broaden their horizons without the constraints of time or place. They also highlighted a few of the benefits of continuous online education additional to what is being offered in the classrooms and laboratories

The benefits of studying online courses:

- **Career advancement and hobbies.**
- **Flexible schedule and environment. ...**
- **Lower costs and debts. ...**
- **Self-discipline and responsibility. ...**
- **More choice of course topics.**

Some sources of the key online courses:

Swayam	Udemy
MIT Open CourseWare	Youtube
edX	Free Code Camp
Coursera	Khan Academy
Udacity	Codecademy

Various career options available for the students after completion of their graduation were also discussed extensively. The students were appraised on various jobs profiles such as a software developer, database administrator, computer hardware engineer, architect and data analyst and what it takes to be a successful professional and alternative options like post-graduation, taking up GATE examination and pursuing higher studies, alternative career paths like being a blogger, content developer, online marketer, web designer etc. and even being a tech-based entrepreneur.

Day – 2: Date: 27-08-2019

Since the dawn of time, humans have developed tools and technology to assist in the pursuit of our goals. Large shifts in technology have resulted in large shifts in social structures, and how individuals both contribute to society and make a living. The Industrial Revolution, for example, brought large-scale changes to our socio-economic structures and the kinds of work people did.

Today, technological advances are rapidly making it possible to automate much of the work currently carried out by humans. This applies to both blue-collar jobs, through robotics and the Internet of Things, and white-collar work, through artificial intelligence. **Dr.M.Rekha Sundari** faculty from the department of IT touched upon the topic on Latest trends in IT and how the students would be exposed to these changes through their academics and various pedagogical initiatives.



The session started with **Internet of Things** with a brief presentation and a video on WHY, WHAT, HOW IoT is used in the present world and what can be done in the future with the help of IoT. Role of AI and its significant influence in our everyday lives with the examples like humanoid SOFIA, SIRI, Google Assistant and many other AI applications was explained through a video. Concepts of the Triad of **Machine Learning, Deep learning, Big Data with Cloud** and how these topics are different from conventional subjects are explained in brief.

The session concluded with a story how a relationship between a mentor and mentee should be in the journey of a student life. Quoted from a Sanskrit sloka to highlight the importance of knowledge and wisdom in upholding an individual's career.

*vidyAdadAtivinayaM,
vinayAdyAtipAtratAM
pAtratvAddhanamApnoti,
dhanAddharmaMtataHsukhaM*

*Knowledge gives discipline, from discipline comes worthiness,
from worthiness one gets wealth, from wealth (one does) good
deeds, from that (comes) joy.*

Day – 3: Date: 28-08-2019

Topic: Group discussion & Stress and Strain Management

With technology pervading every aspect of our lives, expectation rising with every day students are not immune to stress and strain. Effective stress management helps one to break the hold stress has on one's life, so the student can be happier, healthier, and more productive. The goal is a balanced life, with time for work, relationships, relaxation, and fun—and the resilience to hold up under pressure and meet challenges head on.

There's a good chance we can all identify negative stress, but did you know that stress can also be positive? **Sister Madhuri Brahma Kumaris, Visakhapatnam** highlighted the various aspects of stress especially in every student. She also explained the differences between good stress, called eustress, can be beneficial to the student. Unlike bad stress, or distress, good stress can help with motivation, focus, energy, and performance. For some people, it can also feel exciting. On the other hand, bad stress typically causes anxiety, concern, and decreases performance. It also feels uncomfortable, and it can lead to more serious issues if not addressed. It's no secret that the long-term effects of distress can damage our health. The session concluded with about various stress alleviating and strain relaxation methods.

Group discussion (GD), by virtue of the term, means exchange of views by participants on a given subject. The whole idea is to bring together a set of people on a common platform to share their ideas, thereby giving an opportunity to exhibit not only their knowledge, but also to understand and enhance their learning by absorbing the thoughts of other people.

Ms. G. Vijaya Lakshmi, and Ms. D. Sailaja, Asst. Prof, Department of IT introduced the students about Group discussion with some key points like body posture, do and don'ts, aspects on which students have to think about the given topic. The students were divided into groups with each group given a topic like smart work vs. Hard work, social media: curse or a boon, joint family vs. Nuclear family, digital payments-secure or insecure, village vs. City, youth in politics. Based on each group performance they were given feedback.

Advantages of Group Discussions were discussed during the session

- **Better understanding of the subject:** GD offers a great opportunity to the discussants to take a deep dive into the subject and understand it profoundly. It expands the horizon of knowledge and learning. In addition, it extends a chance to the participants to improve their abilities to think critically and develop their analytical skills.



- **Solve problems:** Since GD brings together a group of people holding diverse opinions, it also perceived as one of the sought-after ways to arrive at solutions to problems. GDs help in changing the thought process from a narrow to a wider view, thereby paving the way to solutions.
- **Improve listening skills and confidence:** Since GDs necessitate the contribution of ideas and thoughts, the participants are required to be listen keenly to others' observations. Group discussions are a fantastic way to enhance listening skills and boost the confidence of speakers by engaging them and encouraging them to express their thoughts.
- **Enhance communication and interpersonal skills:** While one aspect of GDs is that it encourages people to share their knowledge, the other important aspect is that it gives an opportunity to people to build their communication skills. The participants, in the process, learn how to express their ideas while also respecting viewpoints of others. This in turn contributes to the development of interpersonal skills among the peer group.
- **Team building exercise:** GDs help in developing teamwork and leadership attributed in people, which are extremely important in the current context. Working in a group helps them increase tolerance and respect towards others, and how to unanimously arrive at conclusions.

Day – 4: Date: 29-08-2019

The day also marked with a detailed interaction of the fresh students with the members of departmental technical societies/clubs/central clubs. The interaction was led by the faculty of **Ms. JSVS Hari Priyanka and M. Navya Sri, Asst. Prof,** Department of IT along with the Student members: **Ms. G. Vineela** (316126511079) and **Ms. Sreya** (316126511084).

The students were introduced about HELIOS -The club for co-curricular and extracurricular activities. During the interactive session various diverse topics were discussed including various events conducted by HELIOS, student chapters of national level institutions like the ISTE, CSI , various student chapter activities, celebrating events of importance for the engineers like the EngineersDay, coding contest, Techquiz, spot events, young mind's innovation, etc. Various ideas given by past students like building barcode code scanners, setting up of student federation ,innovative initiatives around recycling of plastic, introducing innovative bus pass system, GIRL child safety and SOS by dialing 108, various usage of LINUX machines using sensors e.tc were discussed.



Day – 5: Date: 30-08-2019

The intense and comprehensive 2-week orientation program concluded with a very socially relevant session on Swachh Bharat activity inside and outside the ANITS campus. Led by the department faculty member, **Dr. V. Suresh** - NSS coordinator, Asst. Prof, Department of IT assisted by an External expert Mr. P.Venu Gopal, the students were taken through in detail on the various Swachh Bharath initiatives at ANITS and all the various notable activities conducted under its aegis.

NSS activity was also organized college level and department level with first year IT Students for SWACHH ANITS

