



**SRK INSTITUTE OF TECHNOLOGY**  
**ENIKEPADU, VIJAYAWADA-521108**

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**ELECTRONICS &  
COMMUNICATION  
ENGINEERING**

**DIGITRONIX**



## **CHAIRMAN'S MESSAGE**



**SRI.B.S.APPA RAO**  
**CHAIRMAN**

SRKIT is unwavering in its commitment to provide quality education of global standards to the students who are about to step into the professional realm full of challenges and opportunities. While giving them room to spread their wings, SRKIT realized that we need to set up an education system that fosters the highest degree of values and encourages students to aspire for greater goals

## **SECRETARY'S MESSAGE**

As time is changing, education needs to be seen with new eyes, free from baggage of yesterday's characterization. It is very much apparent that we live today in a world that is so very different from the one we grew up in, the one we were educated in. Change in today's world is riding an accelerated pace and we need to pause and reflect it on the entire education system. I firmly believe that students must be taught how to think, not what to think. That reminds me of the great words of wisdom by Aristotle



**SRI B.SRI KRISHNA**  
**SECRETARY**

## PRINCIPAL'S MESSAGE



**DR.M.EKAMBARAM NAIDU**  
**PRINCIPAL**

Education is not merely acquirement of facts but also of values which help us improve the different facets of mankind. It ensures that we leave the world a far better place than we found it. A pivotal role of education lies in shaping the personality of a student into a healthy mind and happy soul, who is not only equipped with 21st century skills and aptitude required for academic excellence but also face the challenges of life

## HOD'S MESSAGE

Ever since the department of ECE started its journey over years, the department has been simultaneously and successfully performing the multiple roles of creating new knowledge, acquiring new capabilities and producing an intelligent human resource pool contributing in various domains of the society. The Department has always been on a high growth path and has experienced and dedicated faculty with strong commitment to engineering education who work with zeal and enthusiasm to provide a vibrant and optimum learning environment.



**DR.S.SRI GOWRI**  
**HOD ECE**

# Program Specific Outcomes (PSOs)

**PSO1:** Ability to apply the acquired knowledge of core subjects in design and development of Communications /Signal and Image processing.

**PSO2:** Analyze and solve complex Electronics and Communication engineering problems using hardware and software tools.

**PSO3:** Identify and apply domain specific tools for Design, Analysis and Synthesis in the areas of VLSI and Embedded systems.

# Program Educational Objectives (PEOS)

**PEO1:** To identify, analyze and apply engineering concepts for design of Electronics and Communication Engineering systems and demonstrate multidisciplinary expertise to handle societal needs and meet contemporary requirements.

**PEO2:** To attain technical competence with an aptitude to foster in higher education with an inclination towards continuous learning.

**PEO3:** To develop effective communication and interpersonal skills to demonstrate leadership qualities, and exhibit professional ethics.

# Program Outcomes (POs)

**PO1:** Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

**PO2:** Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO3:** Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO4:** Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

**PO5:** Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

**PO6:** The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

**PO7:** Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

**PO8:** Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

**PO9:** Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

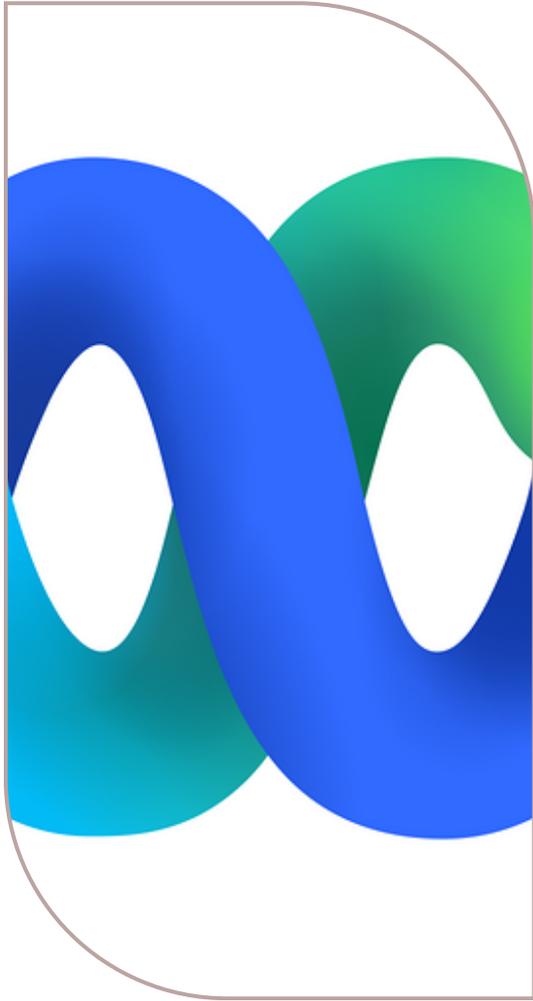
**PO10:** Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

**PO11:** Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

**PO12:** Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

**Locked-down by covid**

*unlocked by online*



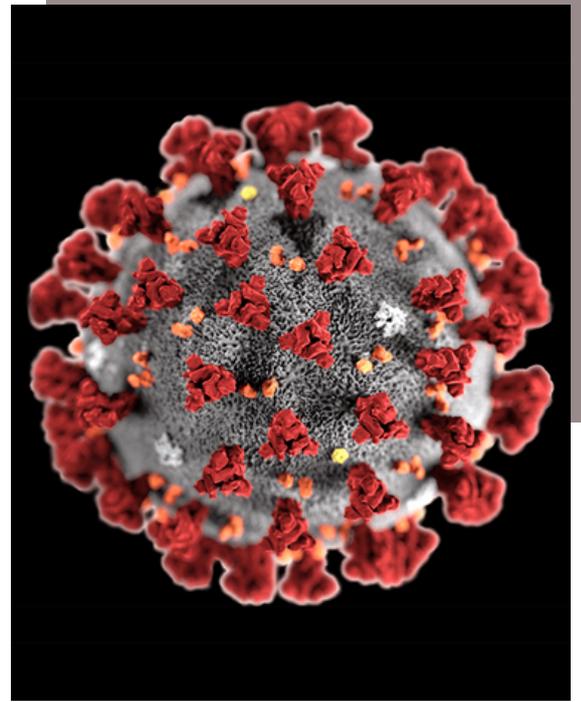
Lock-down is to stop the spread of COVID-not spread of knowledge!!! For that to happen the institute has taken the initiatives of using the digital teaching platforms like ZOOM Meetings , MS Teams , WEBEX , Google Classrooms.

- used ZOOM Meetings for conducting project discussions , Experimental learnings , VIVA-VOCE etc.
- used MS Teams for theory class work as it uses lesser bandwidth .



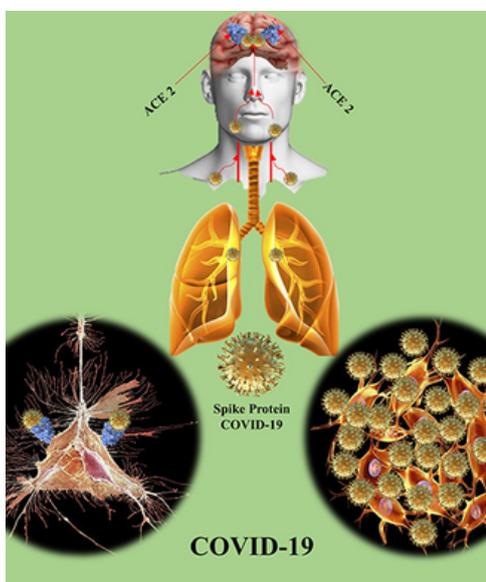
# The Pandemic Bells

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The COVID-19 pandemic in India is a part of the worldwide pandemic of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). As of 18 July 2020, according to Indian government figures, India has number of confirmed cases.(after the United States of America) with 348941 reported cases of COVID-19 infection and the third-highest number of COVID-19 deaths (after the United States and Brazil) at 531,913 deaths. In May 2021, the World Health Organization estimated 2.7 million excess deaths, both directly and indirectly related to COVID-19 to have taken place in India

The first cases of COVID-19 in India were reported on 30 January 2020 in three towns of Kerala, among three Indian medical students who had returned from Wuhan, the epicenter of the pandemic. Lockdowns were announced in Kerala on 23 March, and in the rest of the country on 25 March. Infection rates started to drop in September. Daily cases peaked mid-September with over 90,000 cases reported per-day, dropping to below 15,000 in January 2021. A second wave beginning in March 2021 was much more devastating than the first, with shortages of vaccines, hospital beds, oxygen cylinders and other medical supplies in parts of the country. By late April, India led the world in new and active cases. On 30 April 2021, it became the first country to report over 400,000 new cases in a 24-hour period. Experts stated that the virus may reach an endemic stage in India rather than completely disappear; in late August 2021, Soumya Swaminathan said India may be in some stage of endemicity where the country learns to live with the virus.

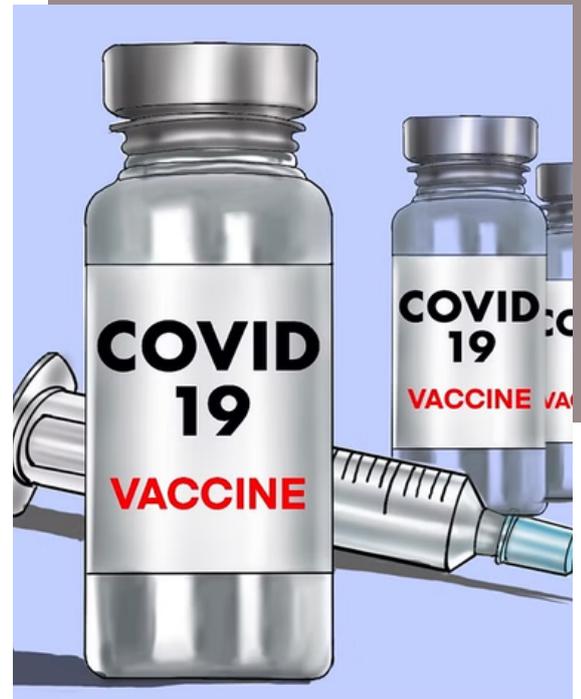


The following symptoms are considered severe:

- breathlessness at rest and/or you're unable to speak in sentences
- being unconscious, fainting or drowsy
- skin turning blue or pale
- cold and clammy, or pale and mottled, skin
- pain or pressure in the chest lasting more than 10 minutes
- confusion
- passing no urine ('wee') or a lot less urine than usual
- coughing up blood

IT'S UP TO YOU  
COVID-19 VACCINATION

# Surviving the situation



There's a lot of misinformation about vaccines online, so it's important to always get your information from trustworthy sources like UNICEF and WHO. If you have any questions about whether you should receive a COVID-19 vaccine, speak to your doctor. At present, people with the following health conditions should not receive a COVID-19 vaccine to avoid any possible adverse effects:

- If you have a history of severe allergic reactions to any ingredients of a COVID-19 vaccine.
- If you are currently sick or experiencing symptoms of COVID-19 (although you can get vaccinated once you have recovered and your doctor has approved).

**Stay safe.** Make sure to follow safety precautions at the vaccination facility such as physical distancing while waiting and wearing a mask.

**Communicate.** Let the health care professional know if you have any medical conditions that could be considered precautions, such as pregnancy or a compromised immune system.

**Keep your records.** You should receive a vaccination card that tells you which COVID-19 vaccine you received, when you received it and where you received it. Make sure to hold on to this card in the event that you need it in the future.

Stay for monitoring. The health care provider should observe you for about 15 minutes after the vaccine is administered to make sure you don't have any immediate reactions. However, it is extremely rare for severe health reactions.

Be prepared for some side effects. Vaccines are designed to give you immunity without the dangers of getting the disease. While it's normal to build immunity without side effects, it's also common to experience some mild-to-moderate side effects that go away within a few days on their own.

Some of the mild-to-moderate side effects you may experience after vaccination include:

- Arm soreness at the injection site
- Mild fever
- Fatigue
- Headaches
- Muscle or joint aches
- Chills
- Diarrhoea



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# is there 'PLAN'et B?

Nature has provided us numerous gifts such as air, water, land, sunlight, minerals, plants, and animals. All these gifts of nature make our earth a place worth living. Existence on Earth would not be possible without any of these. Now, while these natural resources are present on Earth in plenty. When we speak about conserving nature, we are really talking about taking care of our future, because nature provides essential resources for our survival and enjoyment. We asked an international group of scientists working on different environmental issues worldwide to identify important practical actions that we can all do to help conserve nature. We obtained nearly 100 responses and grouped them into three main categories: (1) Actions to reduce our ecological footprint; (2) Actions to conserve nature; and (3) Actions that help us connect with nature. We briefly explain actions that can be performed daily to reduce our impact on nature

Right from the multibillion funded governmental space organization to recent great heights reached private organisations started to explore and try to get to the roots of the traces of life in mars. The new technical era has brought the power of achieving wondrous and mind-boggling findings with very compact equipment, not every great achievement is by luck or coincidence but most of the achievements are because of years and years of hard work, determination towards the end goal, passion for choosing such profession and the interest that they put every time while working.

There is not much needed to conserve nature. We don't have to give in our everything or leave other things to achieve this one goal, no. All we have to do is take small steps, every day. Small steps like trying to save even one ounce of water each day, or trying to plant at least one plant from your side, or trying to lessen air pollution from your side. Nature doesn't ask much from us.

To achieve this goal, we also need to know to have knowledge about a few other things such as our natural resources. Natural resources are classified into two groups, named, Renewable and Non-Renewable. Non-Renewable resources.

To achieve this goal, we also need to know to have knowledge about a few other things such as our natural resources. Natural resources are classified into two groups, named, Renewable and Non-Renewable resources. Conserving nature is just similar to adding or keeping cash in the pocket. Nature is the best friend of a human. Have you ever heard of naturotherapy techniques to cure the patient? Patients are advised to take or spend some time in the native place of animals. There they can keep themselves calm and comfortable so that they feel relaxed at the time of surgeries.

Conserving nature is one way of storing something fruitful for our future self, or the future generation. It is like investing money in a bank, which in turn lets you have more than what you invested eventually.



To conserve nature would be equal to conversing with the human race. We need to start thinking about it. It might seem like a small or negligent topic to talk about but honestly, nature is getting worse with every passing day and we have to start preserving it today.

The other thing is being aware of the 3Rs technique, i.e., Reduce, Recycle, Reuse. If we pledge to follow these small rules and live by them, we can achieve a lot more than just nature's conservation.



Ms.A.V.P.SARVARI  
Asst Professor

# glance of cryptocurrency



Cryptocurrency is digital money. This means that there is no physical coin or physical paper used as a currency, the entire currency is on the internet. To transfer the cryptocurrencies there is no need for any intermediaries like banks, we don't even require third parties. New Cryptocurrencies are being created regularly. Cryptocurrencies work in a decentralized way, which implies that there is no central authority to control the cryptographic forms of money.

Cryptocurrencies don't collect transaction fees. Cryptocurrencies can be bought using a credit card, lots of investors are spending a lot of money investing in cryptocurrencies, expecting that cryptocurrencies would hit the market with high demand.

- With the increase in demand for cryptocurrencies, scams would also increase, so don't fall into the trap
- Be aware of cryptojacking as this could lead to horrible circumstances
- Though the cryptocurrency transactions are anonymous, the wallet address and transaction amount could be used to identify the account holder
- If a refund is initiated in form of cryptocurrency, the market value of crypto must be checked as the value of cryptocurrency changes constantly



**CARDANO**

# BODY'S LANGUAGE



**Body language is the non-verbal form of communication which is transmitted by gestures and postures. It is controlled by the sub-conscious mind, so the viewers can understand what you are saying and what you actually intend to convey. It is the most essential part of your emotional intelligence. We had body language before we had speech, and apparently 80% of what you understand in a conversation is read through the body, not the words.**

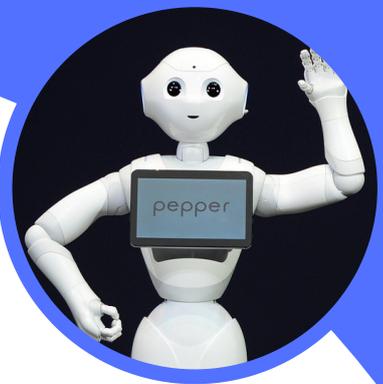
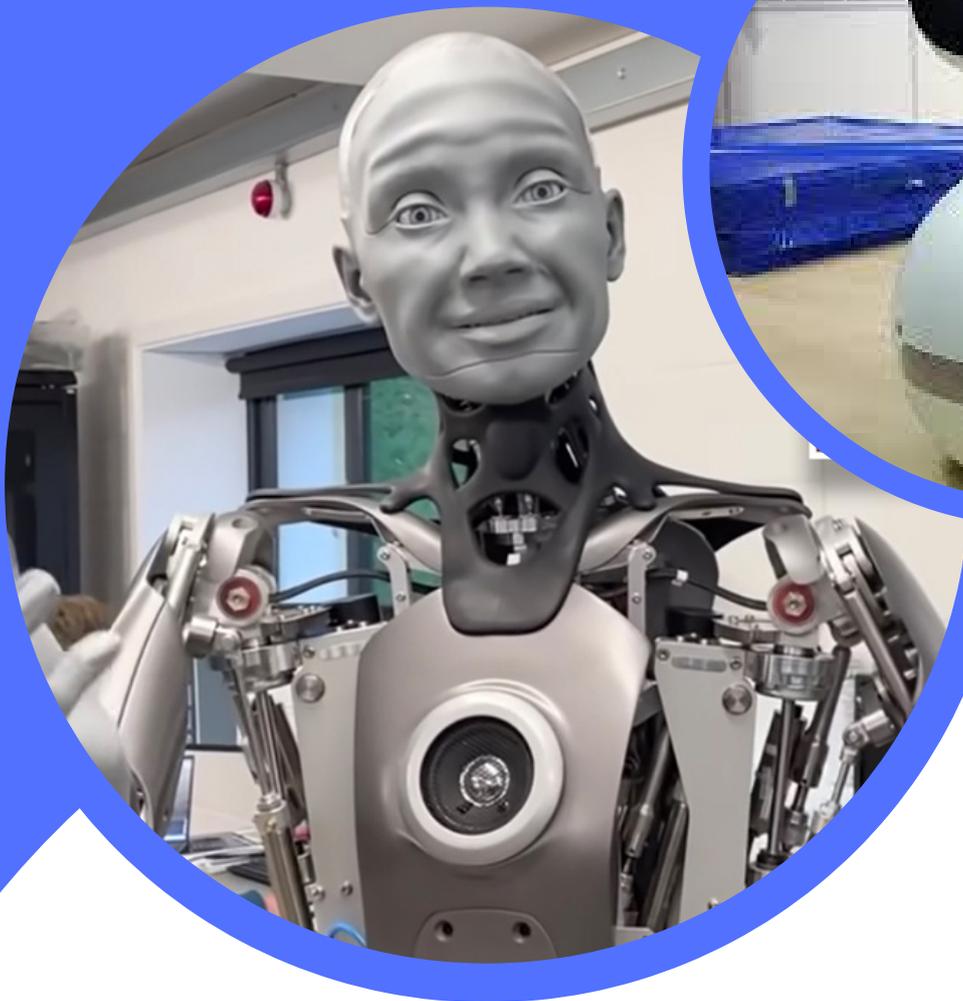
**FACIAL EXPRESSION:** HUMAN FACE CAN EXPRESS COUNTLESS EXPRESSIONS. SADNESS, ANGER, FEAR, HAPPINESS AND DISGUST ARE SOME OF THE UNIVERSAL EXPRESSIONS WHICH ARE COMMON TO MOST OF THE INDIVIDUALS. VISUAL SENSE IS DOMINANT, THE WAY YOU LOOK AT SOMEONE CAN COMMUNICATE MANY THINGS AFFECTION, HOSTILITY OR ATTRACTION. TO MAKE YOUR AUDIENCE COMFORTABLE, SIMPLY SMILE AT THEM.

**POSTURE:** A PERSON'S POSTURE CAN REVEAL MANY THINGS. POSTURE IS THE WAY YOU POSITION YOUR BODY. A PERSON'S SELF-ASSURANCE, FRAME OF MIND, APPROACH, AND ATTENTIVENESS CAN BE DETERMINED BY LOOKING AT THE POSTURE. BASED ON THE INDIVIDUAL'S DEGREE OF CONFIDENCE, STATUS OR RECEPTIVITY TO ANOTHER PERSON TWO FORMS OF POSTURE HAVE BEEN IDENTIFIED, 'OPEN' AND 'CLOSED'. FOR INSTANCE, IF SOMEONE SEATED IN A CLOSED POSITION MIGHT HAVE HIS/HER ARMS FOLDED, LEGS CROSSED OR BE POSITIONED AT A SLIGHT ANGLE FROM THE PERSON WITH WHOM THEY ARE INTERACTING

**GESTURES:** IT REFERS TO A MOVEMENT OF PART OF THE BODY, ESPECIALLY HAND OR HEAD, TO EXPRESS AN IDEA OR MEANING. TO BOOST CONFIDENCE DURING YOUR PRESENTATION BE WITH OPEN CHEST AND ARMS, AND KEEP YOUR BACK STRAIGHT. THIS POSITION WILL MAKE YOU BREATHE AND YOU'LL FEEL MORE RELAXED. GESTURES WITH YOUR ARMS AND HANDS IN A NATURAL WAY BY LOOKING AT YOUR AUDIENCE IN THE EYE IS A GOOD MOVE TO ENGAGE PEOPLE.

**P.Bala Sai Sudheer**

(17X41A0437)



ACCELERATED HANDS  
MAKING LIFE EASY

# BUILD YOUR FUTURE

## LATEST ROBOTS

- 1. Google's worker robots
- 2. Multi-tasking bots
- 3. UR3 arm
- 4. Saul Robot
- 5. Asus Zenbo
- 6. Paro
- 7. Pepper Robot

## LOOKING FOR A DEGREE IN ROBOTICS?

If you are passionate about science and would like to work with robots, you'll need the right educational background to do so. ECPI University offers hands-on learning environments to help prepare for a Bachelor of Science degree in Electronics Engineering Technology with a concentration in Mechanics. Talk to a knowledgeable and friendly admissions counselor today to see if ECPI University is the right fit for you.

by A.Tejo Vinny (18X41A0463)

# ALUMNI TALK

SRKIT is not just a college; it is the epitome of learning where students fulfill their dreams, overcome fears and weaknesses to step into the world as smart and confident professionals. It is just not a place to earn the qualification or a degree but to be groomed holistically. SRKIT nurtures talent. Being away from Home, SRKIT was always a second home to us. I feel proud to be a part of such esteemed family. Thank you T&P Cell, teachers and friends for making this journey so beautiful. Placed in TCS.

A.Tejaswini  
17X41A0404

Initially when I joined SRKIT, I was afraid about how I would cope with academic curriculum and culture, especially because I was required to use English frequently. Although I knew English was an easy language, I feared that I may not be as good as the experienced English speakers. I tried not to lose hope, and made use of every available opportunity to get better at the language. The Academic as well as T&P Cell has continuously encouraged me and helped me in many ways to defeat the fear of language. My utmost recommendation for SRKIT. Placed in Accenture

K.Neelima  
17X41A0424

The four years at SRKIT replete with learning and fun. From being a hostel student to travelling to various cities for placement, SRKIT has helped me at all levels to holistically groom myself. ECE in Competitive Marketing Strategic Management is a very Unique Course and has helped me to understand the world of business with a different perspective. Kudos to SRK Institute of Technology.

V.Bindu Madhavi  
17X41A0429

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