

#### St. Johns college of Engineering & Technology

Approved By AICTE, New Delhi, Recognized by UGC under 2(f) & 12(B), An ISO 9001:2015 Certified Institution and Affiliated to JNTUA, Antapuramu.

Yerrakota, Yemmiganur-518360, Kurnool Dt., AP

## DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING



### **TECHNICAL MAGAZINE**

**Education with Innovation** 

Volume-2

2021-2022

**ELECTRONIKA MAGAZINE: VOLUME-2** 

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**Student Members** 

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Mr D Ahmed Aswaq – III Year ECE

Ms L Lavanya – II Year ECE

Mr K Sai Balaji – II Year ECE

#### ABOUT THE COLLEGE

St. Johns College of Engineering Technology, the pride of Yemmiganur town, was established in the year 2001. Seven kilometers away from the Yemmiganur town, the college campus nestles amidst lush and luxuriant greenery in a sprawling 27 acres land. The College has specious, well ventilated, well equipped, and well furnished Laboratories, Workshops, Class Rooms, Drawing Halls, Hostels and a well stocked Central Library in addition to departmental libraries.

The college is affiliated to JNTUA, Anantapur and it is approved by AICTE, New Delhi and the Government of Andhra Pradesh. Beginning with a modest intake of 180 students in 4 branches in 2001, the college has grown in size and infrastructure to admit 540 students in 6 branches of B.Tech. Responding to the demand for Post Graduate courses in engineering, Management and Computer Applications, the college has started M.Tech Courses in 9 Specializations, and offer MBA course.

#### VISION OF THE COLLEGE

- 1. To be a preferred technical institution by the first generation learners from rural background.
- 2. The institute in turn will holistically elevate the students into technically strong and ethically sound individuals thereby moulding characters and career.
- 3. Partnering with them to contribute towards the advancement of community, region and nation as a whole.

#### MISSION OF THE COLLEGE

Engage all the stake holders and utilize the infrastructure to develop technically sound employable human resources to translate our vision into a reality.

#### ABOUT THE DEPARTMENT

ECE is the engineering course to learn about electronics and communications. Its implementation is wide spread, and it is almost found in all streams. Sporty presents this course backed up with stellar teaching performance and high end labs.

The beauty of electronics is it is used everywhere. From electronic goods manufacturer to hospitals, it is implemented in many devices. So, the future for this stream is highly positive.

The microprocessors, mother boards, picture tubes, LED, LCD, etc. are various electronic items, and you know about the impact they have created on billions of people and world's economy. You can be a part of this huge niche by getting into ECE at the engineering level.

Apart from the electronics, you also have communications in this engineering. It is important in industries like telecommunications, posts & telegraph, defense, etc. The communications department is very crucial for important aspects, like country protection, etc.

The Department of ECE was established in 2001 with an intake of 60 students in the UG program.

The ECE department offers Undergraduate programs. Electronics & Communication Engineering is one of the rapidly advancing fields in technological development arena with emerging ideas. The department aims at training students advanced cutting edge technologies and imparts values so that they are equipped to deal successfully any challenges in life, by exploring and creating new avenues. Students are taught to recognize their potential & use it for their best advantage. Our students are performing well in academics and they are encouraged in R&D activities and publishing papers in journals. They are participating in symposiums and seminars in various colleges and universities. They won the prizes in these events.

#### VISION OF THE DEPARTMENT

To impart Technical education to the rural students and making them employable in the respective domain

#### MISSION OF THE DEPARTMENT

- 1. Up gradation of laboratories with state of the art equipment as the right tools of pedagogy for better lesson delivery
- 2. Providing bridge classes for average and slow learners.
- 3. Arranging interactive sessions with industries and thereby enhance the practical knowledge and technical skills of the student.

#### PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- 1. Graduates will be able to stimulate continuing education with their existing knowledge in the field of Electronics and Communication Engineering.
- 2. Prepare graduates to practice their profession with ethics, integrity, and social responsibility in a global context.
- 3. Participate in lifelong learning activities to continue their professional development.

#### **PROGRAM OUTCOMES (POs)**

- 1. **Engineering knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. **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.
- 3. **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
- 4. **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.
- 5. **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.
- 6. **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.
- 7. **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.
- 8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. **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.
- 11. **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.
- 12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

#### **PROGRAM SPECIFIC OBJECTIVES (PSOs)**

- 1. Should be able to understand the concepts of Electronics & Communication engineering and their applications in the field of semiconductor technology, consumer electronics, embedded system, communication/ networking and other relevant areas.
- 2. Should have an ability to apply technical knowledge and usage of modern hardware and software tools related to Electronics & Communication engineering for solving real world problems.

#### WORD'S FROM THE PRINCIPAL



It is a great pleasure to see the creative ex-pressions of students who had contributed to Magazine. ECE has grown abundantly in the recent past. It continues to sustain its growth. People reading this magazine will realize the tremendous changes that are happen-ing in the BIET campus. The magazine is presenting a glimpse of the growth of the institution on many fronts. The college has been simply unstoppable in its progress as it has been actively in-volved in various activities that have brought to light the hidden talents of the college students and staff.

Dr V Veeranna

#### **WORD'S FROM THE HOD**



I take great honour in congratulating the students who have contributed for the current year's magazine. Acknowledging the fact that the magazine is completely created and designed by the students I really hope this would kindle a spark in the minds of the students who are yet to contribute towards the progress of the Evolve Initiative in the upcoming years.

Dr K Sudhakaru

#### FROM THE EDITOR'S DESK

Dear Students,

We heartly welcome you to the newly launched ECE Department's first issue of the Magazine for the academic year 2021-22.

The objective of the magazine is to mainly focus on Achievement of the students from the ECE department in the Co-curricular and Extra-Curricular Activities.

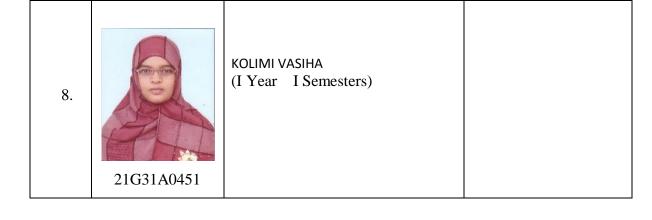
I congratulate all my team members for their constant effort in launching this Magazine. We are also thankful to our Management and Principal for their support and encouragement. Finally we are gratified to our reviewers for their frank opinions and constructive suggestions, namely our colleagues and students.

#### **DEPARTMENT TOPPERS**

#### **ACADEMIC YEAR 2021- 22**

S NO	РНОТО	STUDENT NAME	PERCENTAGE		
IV YEAR					
1.	18G31A0408	BOYA ARCHANADEVI (IV Year II Sem)	87.60		
2.	18G31A0427	KANIKE INDU (IV Year I Sem)	82.75		
III YEAR					
3.	19G31A0441	MALEKAR SHIVANI (III Year II Sem)	81.65		

4.	19G31A0413	DOCTOR AHEMED ASWAQ (III Year I Sem)	84.21		
II YEAR					
5.	20G31A0433	KANCHU SAI BALAJI (II Year II & I Semesters)	86.22		
6.	20G31A0444	N ROJA RAMANI (II Year & I Semesters)	86.89		
I YEAR					
7.	21G31A0451	KOLIMI VASIHA (I Year II Semesters)	91.78		



# Students Achievements (2021-22)

'I can accfept failure, everyone fails at something.But I can't accept not trying.'

- Micheal Jordan

EDIGA AJITH (19631A0415) – Sports:

Represented St. Johns College
of Engineering and Technology
in javelin tHROW and secured
1st place in Bheema Institute of
Technology & Science KurnoolA Two Day National Level –
Sports Fest





SREERAM VEERENDRA

(21G31A04A5) – Sports:

Represented St. Johns College
of Engineering and Technology
in Carrp, and secured 1<sup>st</sup> place
in Guntur Engineering College,
Guntur

#### Fear Offers Two Choices

#### Adiki Tejasri –II ECE A

First, let us evaluate your self-desire of how you want to represent yourselves to this world. Remember, this is a game and the individual with the highest score wins! So, here goes the question – Is the figure below concave or convex?

Examine the figure carefully... Be patient, pause your reading and come up with the most appropriate answer that you are satisfied with. So, now let us see how you want to represent yourselves to this world. Please, allot a mark of 1 to your score card if you have diagnosed this figure as either a concave or convex. If you are in a confusion as you have diagnosed the figure as either of them, then, feel free to assign yourselves a highest mark of 2.

Finally, the results have been declared that the individual with the score of zero wins the game. So, the highest appraisals and the prestigious title of "Winner" goes to that person who have showed up suddenly from nowhere. End of competition. From this competition, I have showed you how this world has changed drastically from a truthful vintage to a corrupted young age. As a citizen of this once beautiful economy, we never have tried to face our day to day chances with utmost courage and determination. We know our strength but fail to be confident about it. We dream of a safe future and live for someone else's life. We see an act of arrogance and marvel at ourselves about our escape from them. We have a passion but we hide it with our dull looking resume. Finally, we get a job and lead a mechanical life. Just ask yourselves, "Is this the life which you are destined to live?" If your answer is yes, then, you can surely win with almost nil passion and nil interest. If you say no, then, you surely are a 'LEGEND'! The above game might have come up with two end points. One is acceptance and the other is back talks. Let us first analyze the scene in terms of back talks. Just consider a competition is being held like this and you are one of the competitors. If you have entered this competition with the main motto of winning, then, you would have started to doubt your skills after the announcement of the results. Fear would have enveloped your mind and you would be subjected to constant disappointment. This might lead you to hide your identity in that competition and would also have made you have back talks about the conspiracy that happened during the finals. Now, what might have been the state of your mind if you had accepted the result of the competition? Just one thing, your inner voice would never have got down, no matter what happens. The factor that made your mind to accept or deny the result was the belief which you had on yourselves. In turn, this whole thought would have been from the source so-called FEAR. Fear was the outcome of that competition but your belief has changed the state of your mind. It is all again your choice.

If you face constant failures in your life, just learn the mistakes from them and wait for the even more beautiful future you are destined to live in. A person who wants to be a winner, learns less and wins his/ her life in the first attempt. But a person who is LEGENDARY tries with many attempts to succeed while learning many valuable things and finally wins in his last attempt. A winner is just a HISTORY who wins his life; while a LEGEND is beyond history who wins the world.

FEAR has two meanings. The choice is yours...

Choice 1 – Forget Everything And Runforward to be a winner.

Choice 2 – Face Everything And Rise, accepting all your defeats, to be a legend.

#### **Sharpen Your Axe**

#### KARNATI SUSHMA IV ECE

John, a woodcutter, worked for a company for five years but never got a raise. The company hired Bill and within a year he got a raise. Then John resented Bill's getting a raise after only one year and went to his boss to talk about it. The boss said, "You still cut the same number of trees you were cutting five years ago. We are a result-oriented company and would be happy to give you a raise if your productivity goes up". John went back and started hitting harder and putting in longer hours but he still wasn't able to cut more trees! He went back to his boss and told him his dilemma. The boss told John to go talk to Bill."Maybe there is something Bill knows that you and I don't." John asked Bill how he managed to cut more trees. Bill answered, "After every tree I cut, I take a break for two minutes and sharpen my axe. When was the last time you sharpened your axe?"

When was the last time you sharpened your axe? Past glory and education don't count much. We have to continuously sharpen the brain.

#### The Science of Happiness

#### B K YASMEEN III ECE

As far as possible without surrender, be on good terms with all persons. Speak the truth quietly and clearly and listen to others, even the dull and ignorant; they too have their story. Avoid loud and aggressive persons, they are vexations to the spirit. If you compare yourself to others you may become vain and bitter, for always there will be greater and lesser persons than yourself. Enjoy your achievements as well as your plans. Keep interested in your career however humble; it is a real possession in the changing fortune of time. Exercise caution in your business affairs, for the world is full of trickery. But let this not blind you from what virtue there is. Many persons strive for high ideals and everywhere life is full of heroism. Be yourself, especially do not feign affection. Neither be cynical about love; for in the face of all arid-ity and disenchantment, it is as perennial as the grass. Take kindly the counsel of the years, gracefully surrendering the things of youth. Nurture the strength of spirit of shield in sudden misfortune. But do not distress yourself with imagination. Many fears are born of fatigue and loneliness.

Beyond a wholesome discipline, be gentle with yourself. You're a child of the Universe, no less than the trees and the stars; you have right to be here. And whether or not it is clear to you, no doubt the Universe is unfolding as it should be. Therefore be at peace with God, whatever you conceive him to be and whatever labours and aspirations, in the noisy confusion of life, keep peace with your soul. With all it shams, drudgery and broken dreams, it is still A BEAUTIFUL WORLD.

BE CHEERFUL. STRIVE TO BE HAPPY.