

Electrical & Electronics Engineering Department e-Magazine



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Harmless

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Editorial Board



Faculty Coordinator: Dr. Aditya Tiwary/ Mr. Hemant Mehar
Editor- in-Chief: Ms. Dristy Raj
Co-Editors : Ms. Aditi Katole

Principal Message



Technical Education is the most potential instrument for socio-economic change. Presently, the engineer is seen as a high-tech player in the global market. Distinct separation is visible in our education between concepts and applications. Most areas of technology now change so rapidly that there is a need for professional institutes to update the knowledge and competence.

Institute of Engineering and Science, IPS Academy is a leading, premium institution devoted to imparting quality engineering education since 1999. The sustained growth with constant academic brilliance achieved by IES is due to a greater commitment from management, dynamic leadership of the president, academically distinctive and experienced faculty,

Disciplined students and service oriented supporting staff. The Institute is playing a key role in creating and ambiance for the creation of novel ideas, knowledge, and graduates who will be the leaders of tomorrow. The Institute is convinced that in order to achieve this objective, we will need to pursue a strategy that fosters creativity, supports interdisciplinary research and education. This will also provide the students with an understanding and appreciation not only of the process of knowledge creation, but also of the process by which technology and knowledge may be used to create wealth as well as achieve social economic goals.

I am delighted to note that the engineering graduates of this institute have been able to demonstrate their capable identities in different spheres of life and occupied prestigious position within the country and abroad. The excellence of any institute is a measure of achievements made by the students and faculty.

Dr. Archana Keerti Chowdhary Principal

HOD'S Message



Our Country is passing through a critical phase of growth. If you take an over view of this growth, we find that we are developing new energy dimension and electrical energy plays the most vital part in total energy context. In fact, electricity is taking the role of indispensible energy form of our daily life. Ours is the sixth largest country in terms of global energy consumption. The last decades of economic growth of our country has brought an unprecedented demand for energy. The installed electrical generating capacity of our country stands at 162366 Megawatts in 2010, and is projected to be 950000 MW by 2030. This large scale use of electrical energy will definitely demand a large team of electrical engineers to manage its use. All the same there is continuous pressure of balancing our ecology especially in context to global warming. This is forcing to ensure efficient use of electrical energy. Electronic power control is offering new tools in management of electrical energy.

Electrical and Electronics engineering together is a dedicated branch of engineering to fulfill all challenges of electrical energy futures.

Prof. Manish Sahajwani HOD

DRONE (UNMANNED AERIAL VEHICLE)"

Drones, also called unmanned aerial vehicles (UAVs), have no human pilot onboard, and instead are either controlled by a person on the ground or autonomously via a computer program. A typical unmanned aircraft is made of light composite materials to reduce weight and increase maneuverability. This composite material strength allows military drones to cruise at extremely high altitudes. Drones are equipped with different state of the art technology such as infra-red cameras (military UAV), GPS and laser (military UAV). Drones are controlled by remote control system also sometimes referred to as a ground cockpit. An unmanned aerial vehicle system has two parts, the drone itself and the control system. These stealth craft are becoming increasingly popular, not just for war and military purposes, but also for everything from wildlife and atmospheric research to disaster relief and sports photography. Drones are becoming the eyes and ears of scientists by surveying the ground for archaeological sites, signs of illegal hunting and crop damage, and even zipping inside hurricanes to study the wild storms. You can even rent a personal drone to soar above the horizon and snap a photo or video. This is not even the start we can use it for many other purposes like home delivery, WIFI etc. Recently we have found a new application of a Drone which is firefighting. It was a very interesting project. The main components which we used were as follows: • Thermal cameras to identify fire sources and hot spots.

INVIGORATE YOUR DREAMS

"You have to dream before your dreams can come true", aptly said by the 'People's President', Dr. APJ Abdul Kalam. Dreams serve as our goals, as long as we believe in them and constantly follow them. Life without dreams is like the night sky without stars; no sparkle, no shine, no vigour and all darkness everywhere. The essence of life is in doing and enjoying things that makes you happy. If we let go of our dreams, then life serves no purpose. The dream to be 'healthier', comes along with the commitment to lead life in the so called 'healthier' way. It further paves the way to actions. First, set the goal that finally helps in achieving the dream and then perform to attain the goals. Initially the gap between the goal and the dream would be enormously large. As we set higher and higher goals, this gap diminishes. Of course, as the intensity of goals increases, the efforts needed to achieve these goals would also increase. But the ultimate dream of attaining success would truly be a motivation to put in more and more efforts at each stage of the goal achievement process. All of us are unique and capable enough to do meaningful things in life. But being 'unique' makes the difference. Dreams enlighten the so called 'uniqueness' of an individual. We need dreams to cope up with the stresses we have in our everyday lives. But, if we give up, we end up nowhere. The path of fulfilling dream is not always smooth. Setting the right goals and choosing the right way of achieving the goals is equally important. Here comes the need of invigorating our dreams. Dreams pave the way to success. No matter how we need to succeed in life, our dreams can always get us there. It being cracking a job interview, or starting own business or learning something challenging, dreams will help us succeed in all ways. Just believe and follow them. They would definitely lead to a state of positivity. The dream of one's life is not essentially the pictures he sees in his sleep. The dreams in our sleep would no longer be a part of us, once we are awake from the sleep. But the dreams of life comes true only when we are awaken. So the right dream can lead one to the most peaceful state of mind. The satisfaction of achieving such a dream is again the motivator to dream and dream.

> Sourabh Singh Thakur EX III Year

HARMLESS

September 20, 2008: The dream of every first -yearite, it seems, is to get a branch change, except perhaps for those fortunate few with triple digit ranks who made it to the cool shade of the E&C Tower (Though why they still ghiss more than st anyone else is one of the greatest mysteries of the 21 century.) No wonder then that I too spent the most of my first year in IIT attempting to make up for the fact that I'd ended up with a rank five times that of the others in the elite group I hoped to join. The going was tough and the tough got going. Sadly, I wasn't one of them. Not quite. After an exhausting year, my fate seemed to be hanging on a razor's edge. A tense holiday later I was saddened to see that my name was not on the list. Consoling myself with the age-old, 'Meta rocks', I set off with life as usual. To my pleasant surprise, there was a twist in the tale yet to come. Two days later I received my grade-sheet. Inspecting it casually, I was stunned by the C I'd received in a subject other than Maths. 2 weeks and 10 meetings later I was reminded that 'Piyush' wasn't the most unique first name in the world. Realizing that my end-sem marks had been mixed up with those of another Piyush, I set off to lodge a 'formal' complaint only to find the entire office in various states of stupor. When I finally managed to wake themup, Iwas informed that it would take at least a week because the application would have to be sent by 'post' to the concerned people. Another week later, the prospects of my making it to the coveted 'list' dawned upon me. The case was unprecedented and so was the procedure. Shunted from one dept. to the other, I ultimately landed at the doors of the highest authorities in Roorkee. "What? An application for branch change now! But the mid-sem is two days away." With the usual ado, I wasleft with my fingers crossed. A surprisingly brilliant exam later I was greeted with news, "Your branch has been changed. Kindly join your batch immediately. You will have to take the tests again next week. "Hmph! September 15, 2008: Two hours and six chapters to go for my Solid Mech T.S, I was totally freaked. The Prof's frequent threats ("Even if you miss this one small arrow mark on the diagram... 0! That's what being an engineer is all about. If you are given complete freedom on the job, you'll have to be more responsible, and that's why, you'll have to be PERFECT in everything that you do.") didn't do my self-confience a world of good either. An hour passed and I was still as morose as ever, completely unprepared and convinced that the only perfect figure I could manage was a perfect zero. Anyhow, I went through the local Geek God's tute diagrams on the long walk to NEH, with my fingers crossed. I came out an hour later with the threats of failing to register a score looming large. Two days later, I got my paper back. More to my own disbelief than anyone else's I had managed a 'perfect' 20/20. Never had I beamed so much after looking at an answer sheet, at least not after coming here! I guess th moral of the story is to expect nothing from your actions. That way, even with a measly score, you would have gotmuch more than what you had expected originally! August 20, 2008: Classrooms are the place where the best of our ideas surface! As the mind wanders through the hitherto unexplored realms, new ways of keeping oneself awake strike in a quick succession of brain-wayes. Sheets are heartlessly torn out of the notebooks (brought to some use finally!) and soon airplanes of various kinds invade the skies (the ceiling of the class, to be more precise!). Some of us take the expression 'Let your imaginations fly high' a bit too seriously, I guess! After the implementation comes improvisation as the various groups compete amongst themselves to make better and flashier planes- aerodynamics at its very best. The whole class can be found gasping in unison as the planes fly tantalizingly close to the non – flying zones. Soon the budding physicists can be found verifying the laws of gravitation. A day-old, halfeaten apple, wrapped in paper, served as the object of ourstudy. The target was located and the ballistics came into play. The unfortunate victim was caught unawares as the inconspicuous projectile hit the mark hard (and he thought it was just a harmless ball of paper), spraying the juices all over his face. It is not long before the prof realizes that he entire class is awake and decides that something is definitely amiss. Needless to say, the next guy he catches in a compromising position is unceremoniously thrown out of the classroom. The attendance follows and I survive yet another class without dozing-off. All's well that ends well...for most of us, at least.

> Aditi Katole EX III Year

A THING OF BEAUTY IS A JOY FOREVER

A beautiful object fills the heart with joy and delight. The soul gets stirred by the external view of beauty. Man has developed an eye for beauty right from the Stone Age. The earliest cave-paintings depicting animals and trees prove the caveman's love for beauty. Artistic creations are man's attempts to depict the joy created by beauty. *A person may see a beautiful thing for a short duration but its memory lasts for a long time. Man cherishes the beautiful moments in life. The imagination helps to revive and relive the happy moments spent in the company of beautiful things. A colorful butterfly seen for five minutes gives instant delight for the same time, but if that scene is recaptured twenty, the joy becomes twenty fold. *Beauty abounds in nature. The sunrise, the sunset, the moon, the stars, the rainbow and the seasons delight the senses. Beautiful sight and sounds of nature provide pleasure to man. The rivers, the forests, the green mountains, the snow-capped peaks and the flowers are beautiful objects of nature. They leave an impression on the mind of man. Recollection of this impression becomes a constant source of joy. *Beautiful objects are a source of inspiration for poets to compose poetry. Poets are more moved by beautiful sights than people of ordinary imagination. Keats was a great lover of beauty in all its varied forms. In most of his poems, Keats appreciate different forms of beauty. The dancing daffodils seen by Wordsworth during his travel left a mark in his memory. He composed a poem on daffodils after four years of that visit but he felt the same delight, which reflected in the poem. This proves that any aspect of beauty leaves and ever-lasting impact on human heart and soul. The great Sanskrit poet Kalidas has also graphically described in his poem Kumar Sambhav, the beauty of the forest blooming all round with the touch of spring. *Beautiful sights influence the painter to draw the same. His paintings are a poetry of colors which depicts nature as it is on the canvas. A painter always remains in search of a place where he could find any form of beauty whether of nature or human to adorn his canvas with everlasting charm of beauty. A human face painted by a master painter will not only show the physical structure in its exact form but also reveal the emotion of the subject. The paintings of Leonardo da Vinci, Raphael, Hogarth, Rabindra Nath Tagore, Nand Lal Bose, M.F Hussain and others are a feast for the eyes and the mind.

> Shubham Sharma EX III Year



Students Achievements:

List of Students placed (On Campus) in Session 2018-19

(Batch 2015-19)

S.No.	Enrollment No.	Name of Student	Company Name	Package in Lacs
1	0808EX151027	Himanshu Kumar Jha	Jaro Education	5.64
2	0808EX151061	Saket Suhane	Karl Storz	3.70
3	0808EX151058	Romil Chhabaria	Karl Storz	3.70
4	0808EX151001	Aayushi Mehta	TCS	3.36
5	0808EX151081	Vikram Dhakad	TCS	3.36
6	0808EX151003	Abhinandan Rathore	TCS	3.36
7	0808EX151038	Mayank Sharma	TCS	3.36
8	0808EX151019	Ayushi Shrivastava	Hexaware Technology	3.00
9	0808EX151074	Srishti Jha	Hexaware Technology/ TCS	3.00/ 3.36
10	0808EX151068	Shivani Rajput	Hexaware Technology	3.00
11	0808EX151070	Shubhanshu Sahu	Cyber Infrastructure	2.50
12	0808EX141064	Shanu Kumrawat	Mayur Uniquoters Ltd.	2.4
13	0808EX151087	Yogendra Singh Raghuwanshi	Xoriant Solutions	2.40
14	0808EX151072	Sourabh Pal	Xoriant Solutions	2.40
15	0808EX151066	Shikhar Nigam	Karl Storz/Xoriant Solutions	Waiting/2.40
16	0808EX151024	Gaurav Kumar Patel	Karl Storz	Waiting
17	0808EX151018	Ashutosh Joshi	RelyTek Technologies indore	1.56
18	0808EX151052	Prajal Singh Kushwaha	RelyTek Technologies indore	1.56
19	0808EX151067	Shivam Sharma	RelyTek Technologies indore	1.56
20	0808EX151008	Amit Ranjan	Bridgestone Pvt. Ltd (GET)	1.96