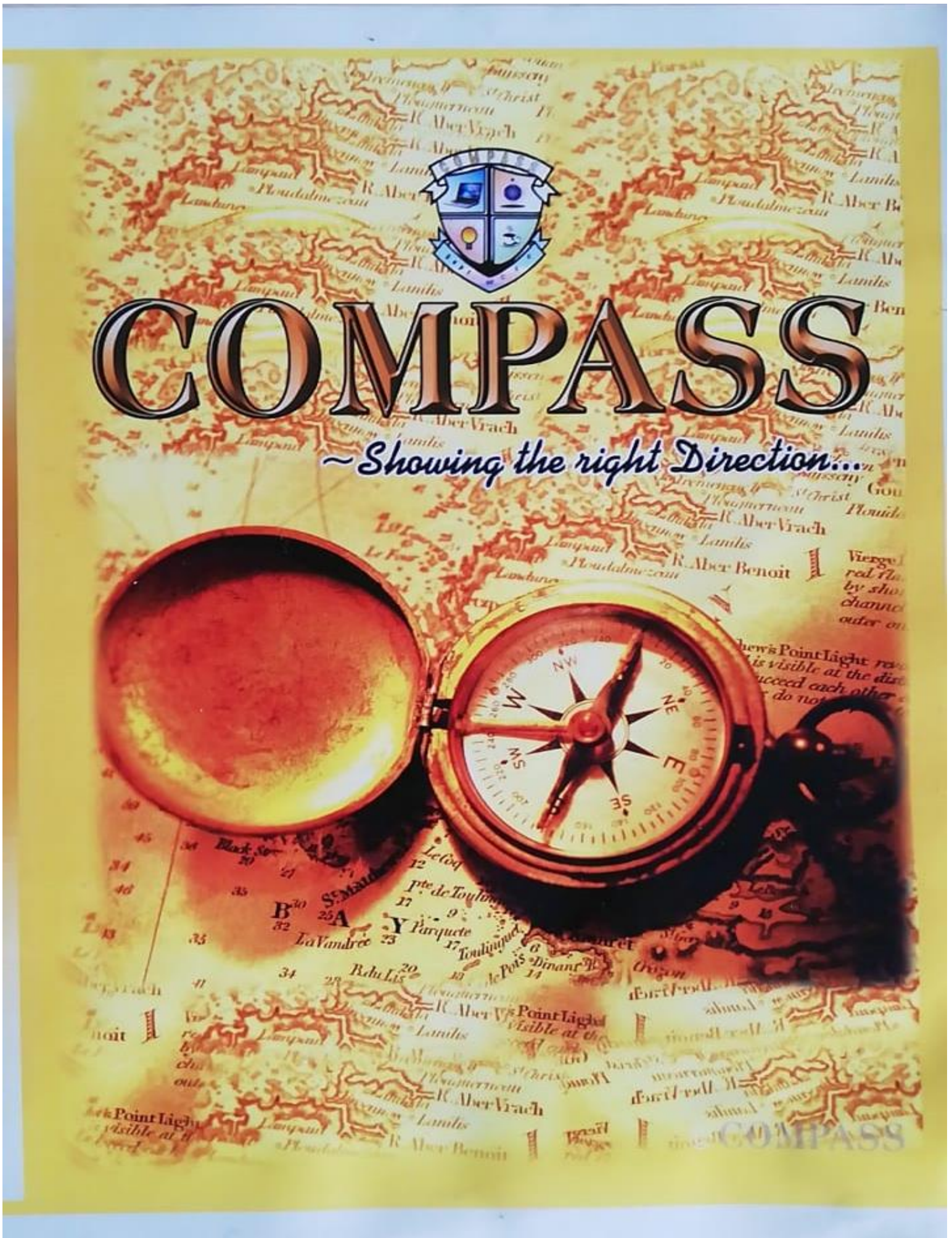
COMPASS
~Showing the right Direction...

RAJEEV GANDHI MEMORIAL COLLEGE OF ENGINEERING AND TECHNOLOGY

(AUTONOMOUS)

NANDYAL

(ESTD-1995)

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About RGMCET

Rajeev Gandhi Memorial College of Engineering and Technology was founded in the year 1995. It is located in a 32.04 acre sprawling campus on NH-40 (old NH-18) at Nandyal, Kurnool (Dist), Andhra Pradesh.

It is the dedicated commitment and efforts of our Chairman, the man with vision "Vidyarathna" Dr. M. Santhiramudu, who started the institution with a motto "**EDUCATION FOR PEACE**". RGMCET is a road of elegant educational journey, yet path breaking in different dimensions.

Rajeev Gandhi Memorial College of Engineering & Technology (Autonomous) is Ranked in the band of 251-300 in Engineering category as per National Institutional Ranking Framework (NIRF) - 2020, Ministry of Human Resource Development (MHRD), Govt. of India.

RGMCET Vision

- To develop this rural based engineering college into an institute of technical education with global standards.
- To become an institute of excellence which contributes to the needs of society.
- To inculcate value based education with noble goal of " Education for peace and progress".

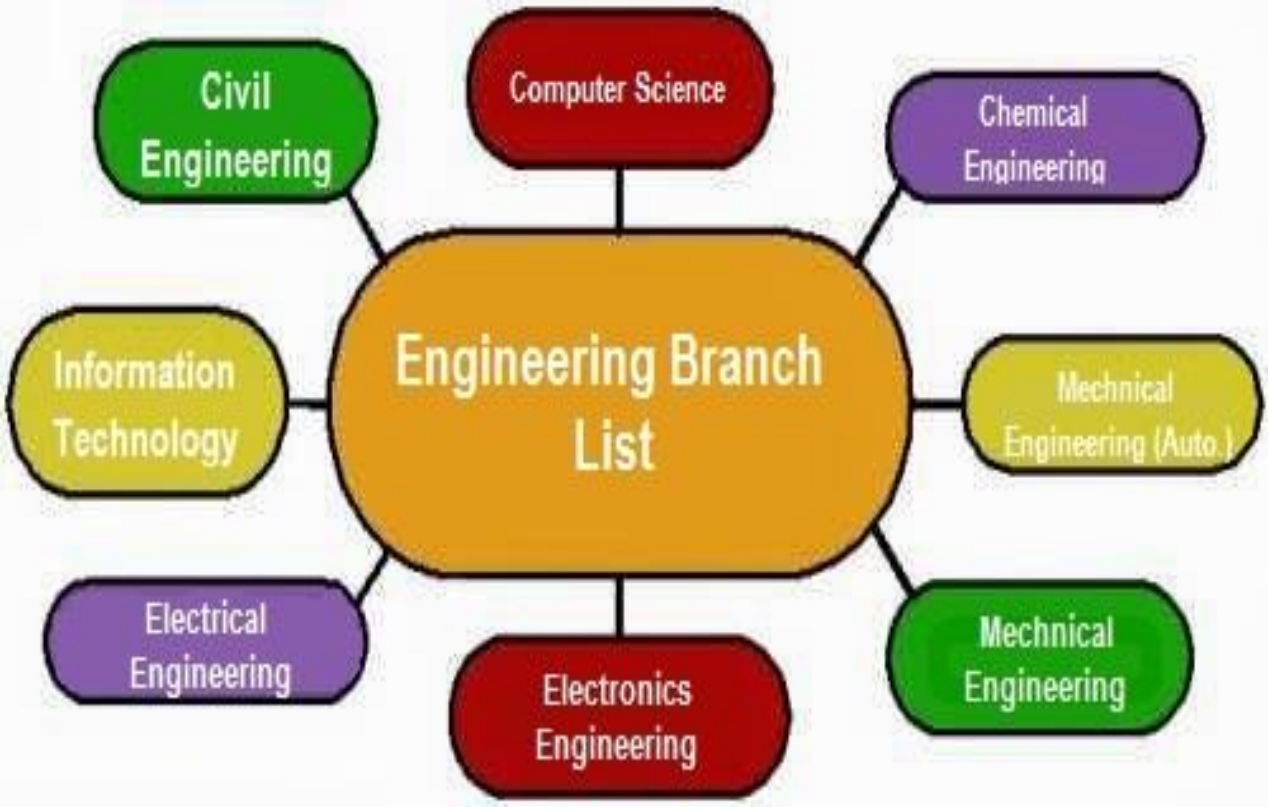
RGMCET Mission

- To build a world class undergraduate program with all required infrastructure that provides strong theoretical knowledge supplemented by the state of art skills.
- To establish postgraduate programs in basic and cutting edge technologies.
- To create conductive ambiance to induce and nurture research.
- To turn young graduates to success oriented entrepreneurs.
- To develop linkage with industries to have strong industry institute interaction.
- To offer demand driven courses to meet the needs of the industry and society.

- To inculcate human values and ethos into the education system for an all-round development of students.

RGMCET Quality Policy

- To improve the teaching and learning.
- To evaluate the performance of students at regular intervals and take necessary steps for betterment.
- To establish and develop centers of excellence for research and consultancy.
- To prepare students to face the competition in the market globally and realize the responsibilities as true citizen to serve the nation and uplift the country's pride.



About COMPUTER SCIENCE AND ENGINEERING

CSE Department Vision

- To empower students with cutting edge technologies in computer science and engineering.
- To train the students as entrepreneurs in computer science and engineering to address the needs of the society.
- To develop smart applications to disseminate information to rural people.

CSE Department Mission

- To become the best computer science and engineering department in the region offering undergraduate, post graduate and research programs in collaboration with industry.
- To incubate, apply and spread innovative ideas by collaborating with relevant industries and R & D labs through focused research groups.
- To provide exposure to the students in the latest tools and technologies to develop smart applications for the society.

Program Specific Outcomes (PSO's)

1. Students will have the ability to understand the principles and working of computer systems to assess the hardware and software aspects of computer systems.

2. Students will have the ability to understand the structure and development methodologies of software system, that possess professional skills and knowledge of software design process.
3. Students will have the ability to use knowledge in various domains to identify research gaps and hence to provide solution to new ideas and innovations.

Program Educational Outcomes (PEO's):

1. To Pursue a successful career in the field of Computer Science & Engineering or a related field utilizing his/her education and contribute to the profession as an excellent employee, or as an entrepreneur.
2. To be aware of the developments in the field of Computer Science & Engineering; continuously enhance their knowledge informally or by pursuing graduate studies.
3. To Engage in research and inquiry leading to new innovations and products.
4. To be able to work effectively in multidisciplinary and multicultural environments.
5. To be responsible members and leaders of their communities, understand the human, social and environmental context of their profession and contribute positively to the needs of individuals and society at large.

Program Outcomes (PO's) - Engineering Graduates will be able to:

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 modelling 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 life-long learning in the broadest context of technological change.

Incipience:

A short note for readers... We want to thank all of those who supported us in Compass Magazine. We will always be gratified to the faculty who supported us through this journey.

The essential purpose of Compass Magazine is to inform, engage, inspire and entertain a diverse readership including faculty, staff, students and other friends of RGMCET.

Our magazine glides you through a series of queries you get during the phase of B.Tech and we tried to possibly find answers and solutions for your queries and problems.

You will get to know how the scope of Computer Science and Engineering has in present society and what are the important guidelines you need to follow in order to embellish your success in stream of your choice. So we wish you a happy experience and good luck with your future.

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CHOOSE YOUR CAREER

Here we take the review of questions like

i. How to organise time to get a job?
ii. The Challenges that are being faced in achieving a job?
iii. The sense of fulfilment in our jobs?

Firstly, we come from the question of "***How to organise time to get a job?"***

For this, we have to **"Work smarter, not harder"**.

There are number of tricks to manage your time effectively.

1. **Complete most important task first**

   This is the golden rule of time management. Each day, identify the two or three tasks that are the most crucial to complete and do those first. Once you're done, the day has already been a success. You can move on to other things, or you can let them wait until tomorrow. You has finished the essential.

2. **Learn to say "No"**

   Making a lot of time commitments can teach us how to juggle various engagements and manage our time. This can be a great thing. At some point, you need to learn to decline opportunities. Your objective should be to take on only those commitments that you know you have time for and you truly care about.

3. **Sleep at least 7-8 hours**

   Some people think sacrificing sleep is a good way to hack productivity and wring a couple extra hours out of the day. This is not the case. Most people need 7-8 hours of sleep for their bodies and minds to function optimally. Listen to your body, and underestimate the value of sleep.

4. **Be conscientious of amount of TV/Internet/gaming time**

   Time spent browsing on apps like Instagram, and Face book or watching TV and movies can be one of the biggest drains on productivity. Becoming more aware of how much time you spend on these activities. Simply by noticing how they're sucking up your time. You'll begin to do them less.

5. Delineate a time limit in which to complete task

Instead of just sitting down to work on a task and thinking, "I'm going to be here until this is done", try thinking, "I'm going to work on this for three hours". The time constraint will push you to focus and be more efficient, even if you end up having to go back and add a bit more lately.

6. Leave a buffer time between tasks

When we rush from task to task, "it's difficult to appreciate what we're doing and to stay focused and motivated. Allowing ourselves to take breaks between tasks can be a breath of fresh air for our brains.

7. Don't think of the totality of your to-do list

One of the fastest ways to drown yourself is to think about your massive to-do list. Realize that no amount of thought will make it shorter. At this point, all you can do is focus on the one task before you. Feel relaxed, and take one step at a time so that you can concentrate.

8. Do less

Slow down, notice what needs to be done, and concentrate on those things. Do fewer things that create more values, rather than more things that are mostly empty.

9. Commit to your plan to do something

"Don't flake on your own plan to do something!"

Be resolute. Be committed. Be professional about it, and follow through. A firm will to accomplish what you decide to accomplish will take you anywhere.

10.Find time for stillness

Discovering time in your life for silence and non-motion reduces anxiety and shows you that there is no need to constantly rush. It also makes it easier to find your work pleasurable.

"Enjoyment should always be the goal. Work can be play."

- Coming down to the second one of the queries is "***The complications that are being faced in achieving a job and How to overcome them?"***

Some of the disputes that are being at the time of securing the jobs are:

1. Irrelevant education.
2. A lack of experience.
3. Lack of skills.
4. No contacts.
5. Twisted mind of youngsters who are searching for the job.

Success is possible to achieve in overcoming the disputes. To overcome these disputes we have to follow:

1. Practice your skills online.
2. Participate in career guidance programs.
3. Visit career fairs.
4. Sign up for MOOCs.
5. Share experience with others.
6. Win new friends.

To overcome all above –mentioned problems, we need to make efforts. Obviously, it is hard to find a good job position, but rolling up your sleeves is the best way not to suffer from unemployment in the future.

Coming to the third question of the queries is, ***"How can we satisfy your job thirst?"***

Satisfying our job is most essential after acquiring a job.

Some of the essential keys to find fulfilment at job are:

Define a personal mission and live it each day

Create a personal mission statement, something that defines how you are going to act independent of any external circumstances. Then apply it each day in tour work, no matter what you are doing, or where you are. This will lead to inner-congruence and will make you feel like you live with integrity. This will make more fulfilled in your job.

Constantly set and re-set goals

Growth is where fulfillment exists, and there is no growth without goals. Set long-term, short-term and most importantly daily goals. Even if you aren't working in your "dream career" you can still benefit consistent goal setting behavior, if you find more fulfillment than you'll feel without setting goals.

Make a specific goal to improve yourself, every single day

Improvement feels great, even it is small improvement. Don't set the standard for yourself what other people are doing. Your personal satisfaction in a career is something that you alone must determine. Find ways to improve yourself.

Be grateful-it could be a lot worse

This is the truth. If you are ever feeling sorry for yourself, take a moment and find someone else who is in a worse situation than you. A lack of gratitude in life is a sure way to get discouraged and depressed, but the reverse is also true. A person who feels abundance of gratitude, no matter what his or her life looks like, will also feel abundance of fulfillment.

Don't be passive –take initiative

Your enjoyment in an activity is in direct correlation to the amount of emotional energy you invest in it. So don't sit on the sidelines. You won't feel fulfillment that way. Find ways to be proactive. Even if you're current job isn't your ideal job, if you invest emotional energy in it, and be proactive, you'll feel more fulfillment.

Find ways to learn something new

Education is fulfillment. Learning new things feels great. You may need to put yourself out of your comfort zone a little for the growth to happen, but again if you do it you will feel more fulfilled.

Build positive relationships

It feels good to have positive people in your life. The more positive relationship you build in your current work setting the more fulfilment you feel. Take time to listen to people; show genuine care and interest. Show interest in people they will show interest in you. Be a good person and you will build positive relationships.

WHY COMPASS?

Sharing our insights and experiences

What is compass?

Generally getting and staying involved while in college be one of the best choices you make as a student. Being involved encourages and advances your development on all levels of intellectual, cultural, spiritual and social. Compass guides and shows you an ideal path for your bright future.

History of Compass:

According to the American Society for Engineering Education's Prism Magazine, "**ECMA (Engineering College Magazines Associated)** was created in the 1920s to be a single interface for companies wanting to recruit engineering graduates through ads in the magazines published by engineering colleges". There are records of ECMA member publications meeting for conferences as early as 1923.

Over the years, ECMA has evolved into more of a professional society, granting acclaim to student engineering publications and allowing student's access to many top workers in the publication industry, as well as the knowledge they possess. Every year, one college receives the honor of hosting the ECMA conference. The hosting university then has a chance to showcase their magazine, their university, and their way of life.

Mission of compass:

To welcome students of all faiths, presenting college challenges learners towards academic excellence which helps for the development of whole person.

How Compass helps students?

Compass will help us to know the variable resources and utilities provided by the college. How we have to utilize those resources and face the challenges to become a successful person.

How Compass is useful for CSE?

So many students go through their entire high school career without being exposed to computer science. Rapidly growth in field of studies that is an important key to opening doors to job at technical jobs like: Google, Apple and Face book.

Through our own research we have isolated three resources at why students are not interested in CSE:

- Lack of Exposure
- Support is Key
- Social Factors

Based on above reasons the students are not showing much interest in CSE. By this Compass we can direct or guide the students to get better job by providing some instructions encourage them based upon the challenges what we have faced earlier.

SWOT ANALYSIS

The performance evaluation is a formal review of an individual employee's job performance over a specific time period. Performance evaluation measures such things as efficiency, increasing in productivity, and progress toward departmental and individual goals. A SWOT analysis analyses the strength, weaknesses, Opportunities and threats associated with a given topic.

STRENGTHS:

Performance evaluation can provide meaningful feedback to employees to help better themselves professionally and personally. Managers and employees who use the evaluation process to set performance goals can steadily increase job performance and human resources productivity over time. Making personal development priority in your human resources department can help garner deeper loyalty in our work force, as well. Evaluating individual and group performance can also help ensure that pay raises and other incentives are disturbed equitably to high performers, rather than being based on politics, nepotism or simply length of service.

WEAKNESSES:

Performance evaluations must be performed by people which always leaves room for human error. Using people to judge and assess other people brings a range of challenges to the table, such as political influence, emotional influence and interpersonal issues. Even when managers truly wish to act and unbiased in evaluations, human emphasizes on recent events that events further in the past can dampen the equity of a review. Companies can counteract the human element of the process by requiring managers to keep records and attach them to reviews to back up their resources. Soliciting feedback from more than one person in evaluations can also help keep evaluations fair by reducing personal influences and final results.

OPPORTUNITIES:

Records-based performance evaluations can help companies identify rising starts in their ranks allowing them to choose the hardest working most dedicated and skilled employees to place on advancement tracks or even groom for executive leadership. Evaluations also grant companies the opportunity to continually reduce costs by improving efficiency in operations.

THREATS:

Performance evaluation weaknesses can introduce threats to the process. If employees feel they are being treated unfairly in an evaluation, especially when pay raises and incentives are on the line, they can become extremely dissatisfied. An inaccurate performance review system can cause high performers to leave the organization, or it is a spread discontent throughout the informal communication network of the company.

SKILLS TO DEVELOP

1. Technical Skills.
2. Soft Skills

TECHNICAL SKILLS

What is meant by technical skills?

Technical skills are practical abilities and specialized knowledge needed to perform tasks in technical roles in IT, mechanics, science, engineering, finance, sales etc.

Technical Skills in CSE:

In CSE technical skills are practical and often relate to mechanical, IT, mathematical or Scientific tasks. Some examples include Knowledge of programming languages, mechanical equipment, or tools.

Technical skills are often most important for jobs related to IT and other fields in the sciences. Required skills will based upon the job for which you are applying, so be sure to be specific when listing hardware, software, programs, applications etc.

Importance of Technical Skills:

Technical skills are important because nearly every job relies on different tools, programs and processes, if you have sought after technical Knowledge and skills common in your industry, the person will more competitive candidate.

Examples of Technical Skills:

The type of technical skills that you may be required to know or learn will depend on what you are seeking. However, there are several technical skills that are common across different industries:

1. Programming
2. Productivity software Applications
3. Industry-specific skills

How to improve our Technical Skills?

We can improve our technical skills by:

1. Enrolling in courses.
2. Use a self-study training program.
3. Learn from a professional.
4. Learn the job.

How to balance your technical skills?

Unlike soft skills, technical skills change with time. Once successfully landed a job it can be helpful to keep your technical skills active In many cases, the tools or programs you commonly used will change over time, so the technical skills you possess now may need to be enhanced with new knowledge. It is better to be get ahead of changes in your field instead of waiting until your skill is outdated.

SOFT SKILLS

Soft Skills:

A soft skill is a personal attitude that supports situational awareness and enhances an individuals and ability to get a job done. The term soft skills are often used as a synonym for people skills or emotional intelligence.

Examples of soft skills:

Soft Skills comprise of personal attributes, communication skills and abilities and personality traits which differentiate people with similar hard-skills set from each other.

- Communication skills

- Leadership
- Work Ethic
- Creative Problem Solving
- Time Management
- Conflict Resolution
- Team Player

Importance of Soft Skills:

Soft Skills are increasingly becoming the hard skills of today's work force. Team work, Leadership and Communication are underpinned by soft skills development. Since each is an essential element for organizational and personal success developing these skills is very important,

Soft Skills in Engineering:

Engineering soft skills are just as critical as technical acumen when carrying out the day to day duties of engineering roles.

Top Engineering Soft Skills:

A few of the most important soft skills for engineers include:

- Communication
- Creativity
- Adaptability
- Collaboration
- Leadership

Ways to develop and enhance our soft skills:

- Communication
- Problem Solving
- Data Analysis
- Productivity
- Digital Proficiency
- Creativity
- Agility
- Confidence
- Self and Social Awareness


HARD AND SOFT SKILLS
EMPLOYER
HARD
SOFT

BOOMING TECHNOLOGIES

What are Booming technologies to be aware of?

According to the present job scenario and stack overflow popularity, the below technologies have good growing opportunities:

1. Artificial Intelligence:

It covers technologies that are used for prediction purpose. The technology stack of AI constitutes

- Machine Learning
- Deep Learning
- Human Computer Interaction
- Robotics
- Computer Vision

2. Data Science:

Data Science is all about cleaning, analyzing, organizing, preparing and visualizing the data. It requires the following things to be included

- Statistics
- Machine Learning
- Data Mining

3. Big Data and Cloud Computing:

These are another boom area to be considered as the trending technology in the present sector. It is because of importance of data in life of every individual and consistent improvement in social networks and e-commerce traffic.

4. Android Development:

As the internet users are more comfortable with using android apps than websites, the demand of android development becomes very high. The two popular ways of building android apps are through java and kotlin language.

5. Data Analytics:

Data analytics is the process of examining data sets in order to draw conclusion about the information. Data analytics technologies and techniques are widely used in commercial industries to enable organizations to make more informed business decisions and by scientist and resources to verify scientific models, theories and hypotheses.

- Business Intelligence
- Online Analytics Processing

6. Block Chain:

Block chain technology is the decentralized computing environment, where distributed computing plays an important role.

Crypto currency is the major element that profounces the importance of block chain.

7. Internet of Things:

The internet of things or IOT is a system of interrelated computing devices, mechanical and digital machines, object, people that are provided with unique identifiers (VIDS) and the ability to transfer data over a network without requiring human to human or human to computer interaction.

- Micro Services
- Operational Technology
- Information Technology

8. Programming Languages:

1. Python
2. R-Programming Language
3. Java
4. C#

5. .Net
6. C

9. Websites for Programming Languages:

1. Code Chef
2. Hacker Rank
3. Hacker Earth

LONELINESS IS A MONSTER

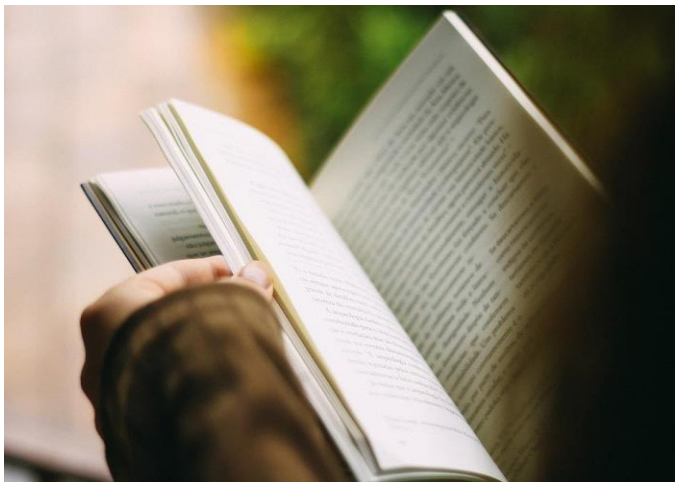
Saying goodbye to everyone was hard. Watching my friends move on to new jobs in new states was harder, especially considering I'm stranded in the desert that is Arizona—where my parents moved to late during my junior year at college—without a single friend and without a job I so hoped to have by now. I see things just lying around the house that fill me with the memories of what was rather than the prospects of the future. As my memories absorb me, I can't help but feel alone. The kind of loneliness that follows me and lingers in the shadows of my room.

I SIT AND DIP MY FEET OVER THE EDGE OF THE POOL AND FEEL LONELINESS HEAVY ON MY SHOULDER.

I walk my dog in the morning with loneliness trailing just a few paces behind. No matter how far or how fast I run at the gym, I know that loneliness waits for me in the passenger seat of my car when I leave. Maybe I've been reading too much Stephen King and **making a monster out of loneliness** is just figment of my imagination, but when I turn the lights off before bed and the shadows of my room envelop me alongside my comforter, I can't help but feel completely and oppressively lonely.

By now, I'd imagined I'd be starting anew in some city with a good job and a cute studio apartment. I'd be getting drinks and dinner with friends at night after a long day at the office then retire home and read until I fell asleep. Then I'd do it all over the next day. I had high hopes, to say the least. Moving home was a likely possibility, and I didn't mind the idea of it. I had just forgotten that **the only company waiting for me in Arizona** was my parents and dog. I hadn't considered the possibility of boredom and household chores and endless applications to fill out.

I HADN'T CONSIDERED THE POSSIBILITY OF BEING LONELY.



I'm afraid of feeling lonely, of being alone. I have been surrounded by friends for 22 years. From elementary school to the day I left college I always had a friend down the street, a holler downstairs, or a phone call away. I'm not accustomed to loneliness. However, it's my fear that pushes me toward optimism. **I find ways to refuse loneliness**' coos and coaxes. Running at the gym is a refusal. My mind and body are focused on something other. The music blasting in my ears propels me to my best. I leave elated. For some time, in the gym and after, loneliness doesn't phase me as if I've defeated the monster lurking in my mind once and for all. I use that feeling to sustain me. If I don't find it in running, I find it in books. I read every day at least for a few minutes although it really ends up being a few hours. I escape into the world that the author creates, into the minds of the characters. As they deal with their monsters, I forget about mine.

I ALSO HAVE TO REMIND MYSELF THAT I'M NOT REALLY PHYSICALLY ALONE.

There are people all around me going about their days, running next to me in the gym, swimming in the pool next door. I try to go out every day to live among them to show myself **I**'**m not the only person in the world** even if I may feel like it at times. Even when I'm beside myself going crazy with cabin fever at home, I remind myself that I'm not alone there either. I'm living with my parents after all. While they have their own lives and work to carry on with they're always there for me if I need them; whether it be from down the hall or miles across the country. They call themselves "my team" and we have meetings about my job search and what I can do to better it. They don't want to see me discouraged or depressed and neither do I.

Between reading, running, trips around town and convening with my parents, **loneliness cowers**. Some days, I allow loneliness to wrap its arms around me in a burdensome bear hug and my mind reminisces on heart-wrenching memories of what used to be. But I crave the days in which I deny it the opportunity.

- **K. Shyam Sundar Reddy**

WORKSHOPS ORGANIZED

Department of Computer Science & Engineering organized Six Days Training Program **on Exploring Yourself with C** , by BYTES training solutions, Chennai on **08th to 12th March 2021** for first year students of CSE branch, has the objective of triggering fresh ideas on implementation of innovative ideas in C-Language.

The resource person may concentrates on basics of C-Programming knowledge from the fundamentals to advanced concepts in c-language. Even this workshop helps to understand the syllabus of Problem Solving and Programming in their first semester.

OBJECTIVES OF COMPASS

- INVOLVE STUDENTS IN DIFFERENT FORMS OF PEER-LEARNING
- ENCOURAGE STUDENT PARTICIPATION IN ACTIVITIES THAT REQUIRE THEM TO ACQUIRE AND DEMONSTRATE RATIONAL THINKING, COMMUNICATION SKILLS AND LOGICAL ABILITY.
- BRING OUT THE LEADERSHIP SKILLS AMONG INDIVIDUALS BY PROVIDING THEM SUFFICIENT EXPOSURE TO UTILIZE THE SKILLS ACQUIRED.
- HELP STUDENTS RECOGNIZE THE IMPORTANCE OF SMART-WORK & THINKING OUTSIDE THE BOX, THUS INCULCATE CREATIVE THINKING.
- CONTRIBUTE TO ALL ROUND DEVELOPMENT OF INDIVIDUALS THROUGH LEARNING OUTSIDE THE CLASSROOM.