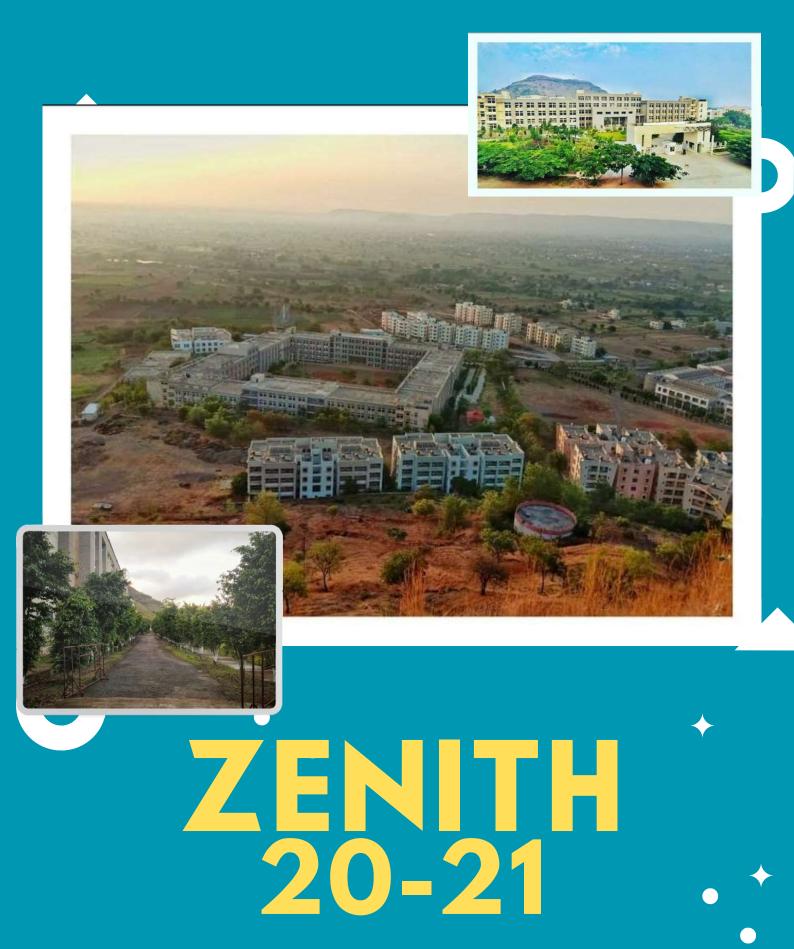
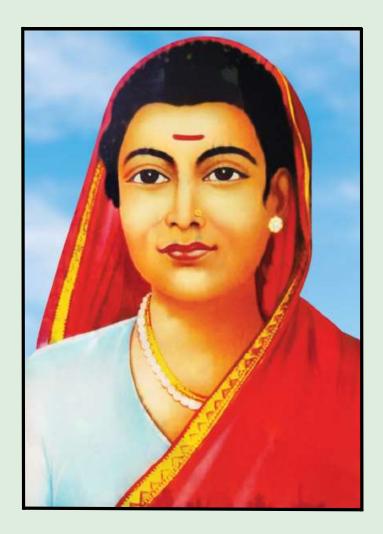


# Government College of Engineering and Research, Avasari (Kh)

Affiliated to Savitribai Phule Pune University, Pune College Code- CEGP014980



## TRIBUTE TO SAVITRIBAI PHULE



## **VISION OF INSTITUTE**

Educational institution for Empowerment through technological excellence towards sustainable development

## MISSION OF INSTITUTE

- Value based and demand driven education using best practices
- Promotion of research, innovation and entrepreneurship
- Commitment to sustainable solutions in service of society
- Capability to face local and global challenges

# FROM THE PRINCIPAL'S DESK

It is an exhilarating feeling to pen down my views in the e-Magazine of GCOEARA, for which I have been waiting for quite some time. It gives me great pleasure to write a message for the annual magazine of year 2020-21. The college has made lot of progress during this year. I am convinced that there can be no better platform to express one's literary adventures, than the college E-Magazine. It's a symbol of literary wealth of an Institute and showcase of the rich literary talent that the Institute ought to nurture. Let me assure everyone that we will take every possible step to encourage literary initiatives in our institute.



The plethora of activities has made our campus truly vibrant and lively. However much more needs to be done. I urge all my students to take up some extra/co-curricular activity, besides academics for one's overall development. For this, I am open to any suggestions any time of the day, from my staff/students, which will make the campus life of my students more enriching and meaningful.

Unlike talking, when we write we look for more sophisticated words and expressions to describe what we have in mind. This helps one to build a structure that will allow one to express oneself better and communicate complex ideas in a much more effective way. Writing also helps to improve one's productivity. It is well known that setting one's goals in writing significantly increases the possibilities of achieving them. Therefore, I congratulate all the contributors and the editorial board for bringing the College Magazine, despite several hurdles, faced by them in coming out with this magazine. Our institution is consistently trying to empower the students with sound knowledge, wisdom, experience, life values and methodical training both at the academic level and in the extracurricular domain. The institution aims at changing the face of rural region by acting as a prime center of knowledge enhancement and career development. I extend my wishes to all the readers. I take this opportunity to give my best wishes to all my student friends for scaling newer heights and achieving bigger success in their professional career and also on personal front.

Dr. D. R. Pangavhane

I

Government College of Engineering and Research, Avasari (kh)

# MESSAGE FROM MAGAZINE FACULTY CO-ORDINATOR

It is with profound pleasure, humility and anticipation that we celebrate the launch of the annual college magazine Zenith, with this issue of 2020-2021. It gives me immense pleasure to write a message for 'Zenith – 2k21'. I congratulate the students of GCOEAR Avasari, who have taken the initiative and have contributed to 'Zenith 2021'. I take this opportunity to thank our authors, editors and team members, all of whom have volunteered to contribute to the success of the magazine.



A college magazine is a mirror of the college life, that reflects the literary, educational and sports activities going on in the college. It projects the important events celebrated in the college during a year. It also contains news about the college. The magazine has provided the students a platform to bring out their talents. It shows that technical minds are no less when it comes to creative writing and expressing their philosophical and technical thoughts.

A lot of effort has gone into the making of this issue. The students have shown their high talents in the field of literature with a large number of articles that we received. There has been a transition to the online mode, due to the pandemic.

It has been a wonderful experience to work with the editorial team under the leadership of the magazine secretary, Rutwik Bagale and to see the creations taking shape. Rutwik and his brilliant team have worked very hard in making the magazine a memorable document. I would like to thank Principal DR. Dilip Pangavhane, who has been an inspiring personality for the students and faculty members.

On behalf of the Zenith Editorial Team, I would like to extend a very warm welcome to the readership of Zenith.

Smt. Suhasini N. Madhekar
 Magazine In-charge

Π

Zenith 20-21

# MESSAGE FROM MAGAZINE FACULTY CO-ORDINATOR





It is my earnest delight to welcome you all into our college magazine-Zenith. Zenith is an online magazine that is an excellent creation by our bright and dedicated students. I congratulate the students of Government college of Engineering and Research, Avasari (Khurd) who have taken the initiative and contributed to this edition of the 'Zenith-2022'.

Magazine of this kind provides an opportunity to the Engineering students to express their hidden talent, ideas and thoughts in the form of articles, poems, views about the life and experiences inside and outside the college campus. I thank to our Principal Dr. D. R. Pangavhane, All Head of departments, Faculty members, staff, all students of magazine committee and students contributed through their huge support for this magazine.

Thank you with best wishes!!!

Prof. Prajakta B. Pimpalkar Magazine In-charge Government College of Engineering and Research, Avasari (kh)

# THE TEAM AND THEIR EXPERIENCE

First of all, I would like to thanks for believing in me and giving this chance to be a part of ZENITH Magazine. It was a good experience overall for me to learn new things. I would like to congratulate and appreciate all my colleagues and friends to contribute their beautiful art forms through this magazine.



As we all know 'Art is unique form of expression where anyone can express their feelings and thoughts through it in a more effective and efficient way'. It was a great opportunity to come across such good contents through different forms. It was not only the new learning but also cherish some old sweet memories again from childhood and get a big smile on our faces. This magazine has given a base for some to express themselves and for some to learn something new. For all this, I specially thank our Principal sir and magazine faculty coordinator for this support and opportunity provided to all of us.

"Art has the power to transform, to illuminate, to educate, inspire and motivate". Last but not least, I would like to give my best wishes to all for their future and hope that a greater number of art forms will be presented in front of all of us next time.

> – Sakshi D. Vartak Article Section head, (SE Computer)

The process of magazine designing plays an important role in making the reader dive into its depths. Apart from designing, the arrangements of various sections played an important role for my analysis of subject matter and designs. I went through the various concepts of design theory and implemented them in this magazine.



Throughout the magazine publishing process, I learnt numerous management learning and for that I would like to extend my gratitude to the faculties and my fellow group members for bringing it to a wonderful level.

> - Rajashri Ghogare Paintings section Head,(SE Computer)

# THE TEAM AND THEIR EXPERIENCE

YOU are the future, YOU are the creator of your own destiny, and YOU are the master of your own will. This is what we believe in.

For student minds, we came up with ZENITH 2021 – A magazine that is truly custom made and crafted for YOU. The content here is a result of months of brain storming,

weeks of writings, days of editing and hours of touch ups that ignites the reader's mind. As one of the fastest growing nations in the world, we are in more need of "Ignited Minds" than ever before.

By the time you reach the last words of this magazine, we assure you that you will have a smile across your face coupled with the search of positivity and newly discovered confidence with necessary inputs that will help you to get motivated and mentor you through your journey.

Going by what Mother Teresa says, "Even if our work is just a drop in the ocean, without it, the ocean will be one drop lesser."

- Alisha S. Dhavale Poem Section Head, (TE Computer)

I am thankful to all the faculty members who guided us throughout the magazine publishing process. Right from the ideas of various fields to be included in the magazine till the publishing process, all the team members worked cooperatively and encouraged each other.



We considered all the aspects like technology enhanced reading experience and Emagazine support to make it as good as it can be. This magazine will definitely be more exciting from the magazines we have seen in the past.

> - Ruturaj Aher Photography Section Head, (SE Computer)



Government College of Engineering and Research, Avasari (kh)

# THE TEAM AND THEIR EXPERIENCE

As a part of magazine editor team, I am very thankful for all the members of the team for supporting me. As this course of working in magazine committee I got to learn lots of things. I learned team work, coordination, patience, perseverance, good communication and developing the technical skill.



It's not just for the work we did, also we enjoyed a lot while doing it, we got to know new things from each other. I was amazed to see the talents and achievements of the students of our college and we published the best of them accordingly. We have contribution in almost every field, done our best in both technical and non-technical. I got experience to work besides the teachers who guided us in the best way possible. I am thankful to each and every one for this experience and for giving me chance to work at my fullest.

It's been an amazing journey for me to working as a magazine coordinator for Zenith 20–21. The journey of ups and downs and in between that journey I personally learnt so many new things which resulted in good team work and communication within us. The difficulties as well as the opportunities were the guiding force to work for this edition which I the platform for many students to show their skills.



- Aditya S. Thombare

Clubs section Head (SE Computer)

A college magazine is one of the best places to work for students in the institute and it's great feeling to showcase the talent on such platform. As an editor as well as magazine coordinator of ZENITH 2021, I came to know more about editing and writing too. This is the best opportunity I got to be the editor of magazine and to come across very incredible things done by our college students as well as faculty member. Special thanks to Principal sir and magazine faculty Coordinator for the support and cooperation for ZENITH 2021.

I hope you all will enjoy reading this magazine. Your contribution matters to us most, so we're always there to showcase your talent.

- Rutwik D. Bagale Department Section Head & Magazine Co-Ordinator (TE Computer)

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# Articles

Students this year had written the articles among variety of topics with deep thinking and experience.

## Randomness of universe caused life

"Not only is the Universe stranger than we think, it is stranger than we can think." -Werner Heisenberg.

Being said that we don't have any proof or a trace of any life or alien life form in the universe, it would be hard to conclude that we are alone in the universe. If there was a life form in the universe, considering that the universe is about 13.8 billion years old, this life form would have been discovered by either detection of some abnormal waves or some of the unfamiliar space debris roaming in our solar system, assuming the alien life form is evolve enough to carry out space probe launch. But till now we haven't made any contact with other life forms and it raises a number of questions about our existence, mainly what caused it?

It seems we have some information that we consider as proof of life on earth. To begin with, the starting of the universe was a controversial subject as some people thought the universe was forever and others as the universe had a beginning, but this was solved by the discovery when the Hubble telescope was put into orbit. It discovered that the other galaxies are moving away from us with a greater speed which concluded that the early universe was dense or was closer to singularity and another proof was that if the universe was forever, the stars in the universe would have heated up the universe to its own temperature and the night sky would be bright as the sun. But this theory has a flaw that, the Einstein's theory of relativity breaks as we move towards singularity. Assuming the physics would work out at singularity, we come to the next stage that is the Big Bang.

Big Bang is considered as a huge explosion, with an unknown origin, which created energy and mass. This mass scattered around the newly formed super Hot universe, as time passed the universe cooled and the formation of simple subatomic particles started and they combined with each other to form complex particles. But still the earth, which was an uneven-shaped mass at that time wasn't a body that could sustain life due to lack of oxygen and lethal nitrogen and sulfur gas. Now considering this situation there are many possibilities of life not happening on earth. Firstly if we consider the course in which our solar system went around the universe, it had a very high probability of crashing in another solar system or just some large group of debris which was scattered during the big bang or crashing into a celestial object in its own solar system or getting sucked in a Blackhole or being close to a supernova explosion. So there are so many possibilities in which there is no life on earth as we see it now. But we still exist, so to view this life form today as we experience it, there must have been a unique way. A unique random path which was followed to achieve this stage of advancement, this unique situation of randomness has the cause of our life. This randomness is significant in our nature too. With a scientific approach, the Werner Heisenberg's uncertainty principle and the Brownian motion are the perfect examples of the randomness in nature. It seems like randomness is a part of nature which contributes to its perfection. This randomness affects us too, even a small decision can have bigger consequences which are unpredictable, which is related to the butterfly effect which says that small changes in initial conditions can lead to large-scale and unpredictable variation in the future state of the system. Randomness has significant use in the field of physics, electronic noise studies, and in computer simulations. Considering all these aspects of randomness, embracement of randomness is a must.

Written by

VIBHANSHU HIRE F.E. Mechanical (2020-21)



2

# दोन दशकांनतंर आठवणी कारगिल च्या.....



कारगिल युद्धाला बावीस वर्ष उलटलं युध्द काही शूरवीर 'योध्यांची' आठवण काढताना आणि आदरांजली वाहताना आजही ऊर भरून येतो. जीव कासावीस होतो, सर्व कसं गलबलायला होतं आणि वाटतं तु जर त्या युध्दवीराची आई, बहीण, पत्नी, मुलगी असतीस तर.....हिच भावना तुला कायम ठेवता आली असती का.....? अभिमान एका जागी असतो आणि स्वतच्या काळजाचा तुकडा गमावणे एका जागी, त्याच्या साथीने घरदार सोडून आली तोच जर नसेल तर सारं जग परक वाटू लागतं, बापाचा हात डोक्यावरून निघून जातो. तेव्हा उन्हाची झळ सोसावी नाही. जग फक्त सहानुभूती द्यायला असतं. मात्र साथ मिळेल याची खात्री नसते. तुला हे सगळं पचवणं आणि तो आता नाही याची जाणीव करून जगाला एकटं तोंड देणं सोपं नसतं. स्वतःच्या हाडामासाचा तुकडा जेव्हा तिरंग्यात लपवन घरी येतो. तेव्हा त्याची आईची अवस्था कोणताही लेखक त्याच्या पुस्तकात मांडू शकत नाही. इतकी काळीज पिळवटून टाकणारी ती भावना असते. सात जन्माची साथ देईल असं वचन देणारा हात सोडून देतो. तेव्हा वीरपत्नीचा सन्मान घेणाऱ्या त्या शहिद पत्नीला पुढच्या वटपौर्णिमेला पांढरी साडी नेसायची भीती नसते. तर तिच्या आयुष्याचा वृक्ष मुळासकट उन्मळून पडलाय याची भीती असते...पप्पा येताना मला काश्मीरची ती भखमली शाल घेऊन या बरं का...! असं हे उदगार हेलवून सांगणाऱ्या मुलीचा बाबा जेव्हा एका तिरंग्यात गुंडाळून घरला परत येतो तेव्हा तिची भावना माझ्यासाठी '........' एवढी मोठी होऊन बसते......

माझं नाव नावात काय आहे....माझं गाव महाराष्ट्रातील सैनिकांचा जिल्हा म्हणून ओळखला जाणारा सातारा येथील प्रत्येक घरातला एक तरी मुलगा भारतीय सैन्यात सेवा देत आहे. इथल्या प्रत्येक मुलाचं जन्माला आल्यानंतर एकच लक्ष असतं ते म्हणजे '**१६०० मीटर**'. एखादा मुलगा सुट्टी संपली तर माघारी पुन्हा सीमेवर परततो तेव्हा एखाद्या कुटुंबाची अवस्था वर्णन करणं खूप अवघड होऊन बसते. मीही या अवस्थेची चांगलीच परिचित आहे माझे वडील सुध्दा भारतीय सैन्यात होते.....ते जेव्हा सुट्टी संपवून सीमेवर माघारी जायचे तेव्हा मला जाणीव व्हायची. अभिमान हा असतोच पण भावनांना अश्रूंची वाट मोकळी असते....त्या उफाळून येतातचं. आणि मग कधी कधी या भावनांना स्वार्थाचा मुलामा चढतो. आणि 'शिवाजी जन्माल पण दुसऱ्याच्या घरात' असे वाटते. सहाजिकच आहे कुठल्याही आईला, पत्नीला, बापाच्या लेकीला ही स्वार्थाची भावना मनात येणं.....पण त्या भावनेचा त्याग करून भावना अश्रूरूपात ढळून न देणं आणि तुला अजून एक आई आहे.... भारतमाता असा विचार करून त्याला घरच्या बंधनातून मुक्त करून देश रक्षणासाठी सज्ज करतात. म्हणूनच त्या लेकी, आई आणि पत्नी वीर असतात.....दिवस दिवसभर टीव्ही समोर काढणं त्याचे सोशल मीडियावर व्हायरल झालेले व्हिडिओ पाहणं, कधी कधी तर आपोआप अश्रूने डोळे तरळून जायचे.....कारण याआधी माझ्या भारतमातेच्या सुपुत्रासोबत पाक सैनिकांचा व्यवहार फारसा ठीक नव्हता. हे एक उदाहरण होतं अशा अनेक हृदयद्रावक घटना भारतात वेळोवेळी घडत आल्या. मग तो उरी मध्ये झालेला हल्ला असो किंवा पुलवामा अटक...आत्ताचं उदाहरण द्यायचं झालं तर तेलंगणा येथे सैनिकांची गाडी पलटली...अनेक व्हिडिओ व्हायरल झालेले पण खरंच सांगते काळीज पिळवटून टाकणारे क्षण होते...... RIPचे स्टेटस टाकून आणि सोबत दोन इमोजी टाकून भावना व्यक्त करता येत नाही ओ......!

दिवसागणिक एक नक्षलवादी हल्ल्याची बातमी येते पण १ दिवस किंवा २४ तासानंतर #Disappear होणारा स्टेटस पुरेसा नसतो......ते शौर्य इंटरनेटवरह न मावणारं असतं .....माझ्या मते जसं नितीन बानगुडे पाटील म्हणतात "आजच्या तरुणाईने या पराक्रमाच्या मूर्ती फक्त डोक्यावर घेऊन नाचवल्या डोक्यात कधी घातल्यावर नाहीत." असो....., सातारा जिल्ह्याचे सुपुत्र कर्नल संतोष महाडिक २०१८ साली दहशतवाद्यांच्या चकमकीत शहीद झाले. पण त्यातून सावरून त्या वीरपत्नी ने भारतीय सैन्यात प्रवेश केला. त्या एका वृत्तपत्रात मुलाखत देताना म्हणाल्या, "ज्यांनी माझ्या संतोषला गोळ्या घातल्या त्यांना गोळ्या घालण्याची इच्छा आहे शेवटची....." तसेच एक वीरपत्नी नवर्ला निरोप देताना...... 'My Hero Left me Behind...!' हे उदगार काढते किंवा मग 'एक बार, सिर्फ एक बार मुझे उसन बात करने दो न '....हे वाक्य असे कानी पडलं की अंगावर आजही शहारे येतात......

एकदा एक आईने स्वतःच्या मुलाच्या अंत्यसंस्कार करायला आलेल्या सैनिकांच्या अधिकाऱ्याला एक साधा प्रश्न केला, 'साहब १ इंच कम होने पर आप लोक रिजेक्ट कर देते हो, तो आज मी मेरे बेटे के इंच इंच तुकडे कैसे स्वीकार करु.....बताईए ना आप सरजी.....?' तो सैन्यदलाचा एवढा मोठा अधिकारी सुध्दा त्या आई समोर निशब्द झाला. एकीकडे गर्वाने छाती फुलून येते आणि एकीकडे आतल्याआत गुदमरायला होतं. चार दिवस या शहिदांच्या बातम्या पेपर मध्ये छापून येतात आणि नंतर मात्र फक्त अमूक तमूक नेत्यांने दुखः व्यक्त केले. फक्त एवढंच चार दिवस दुःख व्यक्त करून आणि ट्विटर / फेसबुक वरून श्रध्दांजली वाहून काही मोठे तीर मारलेले नसतात. एकदा त्या परिवाराला भेट द्यायची त्यांची आपूलकी ने चौकशी करा, ते एकटे नाहीत याची त्यांना जाणीव करून द्या ते महत्त्वाचा असतं. आर्थिक मदत करावीच पण कधी कधी भावनिक मदत केल्यानेही अनेक अडचणी दूर होतात. कित्येक शहीद आज सुध्दा त्या सिनेमाच्या चौकटीत अडकून राहिलेत आणि कितीतरी त्या चौकटीतच नाहीत अशा अनेक घटना राहिल्याने त्यांना वाचा फोडणे आणि त्या जगासमोर आणणे हाच अट्टाहासाच्या मागचा उद्देश आहे.... मनात आलेल्या भावनांना शब्दांची वाट मोकळी करून देणं गरजेचं असतं ..... नाहीतर मनात आलेल्या भावनांचा आतल्याआत गुदमरून मृत्यू होतो असं म्हणतात. कित्येक शहीद परिवाराच्या भावना त्यांच्या मनामध्ये विरून चालल्या आहेत. त्या कुठेतरी समोर यायला हव्यात असं मला वाटतं. असेच काही पडद्याआड राहिलेल्या घटना, शूरवीर आणि एक भावनिक पाश्र्वभूमी असलेले कारगिल जगासमोर आणायचे आहे.

Written by

KALYANI KALE F.E. Civil (2020-21)

घर...



अंगणात आजीच्या मांडीवर पडून गच्च चांदण्यांनी भरलेल्या आकाशाकडे बघत आजीकडून गोष्टी ऐकायला मिळाव्यात.....आजोबांच्या हाताला धरत गावात, शेतात गप्पागोष्टी करत मनसोक्त फिरावं......घरी आला की आईच्या कुशीत पडून आपले संगळे लाड पुरवून घ्यावेत. बाबा....बाबाला तर आयुष्यभरासाठी मित्रच करून टाकावा आणि कोणताही आडपडदा न ठेवता मनातलं सगळं त्याला सांगाव. आपल्या भावातही सोबत प्रेमानं भांडून घ्यावं......आणि त्यांचं आपल्या सोबत नातं इतकं सुंदर व्हावं की आयुष्याच्या ताकातली संगळी सुख-दुःख आनंदाने एकमेकांनी वाठून घ्यावीत......

काका-काकी, मामा-मामी, मावशी, आत्या आणि आपली म्हणता येतील अशी बरीच नाती एकत्र येऊन गप्पा, गोष्टी, गाण्यांची सुरेख मैफिल जमावी.....एकाच्या डोळ्यात आलेलं पाणी दुसऱ्याने टिपून घ्यावं.....चुकलं तर समजेन सांगावं, तुटलं तर जोडून घ्यावा......घराच्या भिंतींसोबत मनाच्या भिंती सुध्दा होत्या खेळत्या रहाव्यात.....

बस एवढंच मिळावं आयुष्यात......मग फक्त कोण्या एका दिवशी प्रेम साजरा करून सादर करण्याची गरज लागणार नाही. नात्यांची ओल इतकी खोल पाहिजे की कोरड्या मनाला पण नात्यांचा गारवा जाणवला पाहिजे. याच ओलीतून तर घरात सुख-समाधान पिकतं.....!!

> आणि घर 'घर' बनतं. बाकी काही नाही.....

> > Written by TEJAS KARPE F.E. Automobile (2020-21)



### Women's Empowerment



We are now in the 21st century but still, we are discussing women's empowerment and their rights regarding education, safety, economics, politics, and many more. women have become the pillars of society by playing various roles with ease in daily life. Sometimes she is a loving daughter or loving mother or sometimes a capable companion. In this way, she is handling all the relationships with outmost skills and tenderness.

Even so, women are still beyond the reach of the average person. Also, women are victims of a great deal of social inequality, economic dependence, and other social oppression. From time immemorial these restrictions on women have hampered their personal and professional development.

If we are talking about youth empowerment for reformation then women's empowerment is the most important part of that because women's empowerment and gender equality in our society will be helpful to ensure sustainable development in our country.

We are celebrating festivals like Navratri, Durga pooja, Kanya Pooja, Laxmi pooja but in reality, women get tamed, harassed, abused, kidnapped, and raped every single day.

According to Hillary Clinton " Human rights are women's rights and women's rights are human rights, once and for all"

But in reality, these are just lines ...

Many times they are sexually and mentally assaulted at their working place or public places like bus stops, markets, malls, and sometimes in their home by their own people.

We are living in a society where the way of thinking of people is like the work of women's is only handling her home and being a parent and if she wants to get rid of that's and get apart from her comfort zone then many times she has to face underestimation and harassment by the society.

'But if she can then she will, and she definitely will'

Empowerment is not just about educational freedom but also about the greet of what she wants to become whether it is economically, socially, educationally, or politically.

Éducation is the basic and most prior right of all people even girls and women but still, in some areas, women are restricted but education is the key part of empowerment because girls who are educated can pursue meaningful work and can contribute to their countries economy later in life. Many women are just unaware of their rights but the right to education on the basics of non-discrimination and equality is a recognized right under human rights law. Provisions relating to gender equality in education can be found in both general and specific international treaties as well as treaties concluded in most regions of the world.





We have knowledge about 'Mahatma Phule' and 'Savitribai Phule ' who fought for girls' education and their rights. 'Savitribai Phule' is the best example of how one woman can fight for their rights and how bold she can become. If she is a loving mother then at a time she can become 'Durga'.

Being financially and economically stable is the need and one of the unspeakable wishes of every woman. Women's started their own businesses and worked tirelessly to prove that they are as adept and successful in the entrepreneurial space as their male counterparts. If we take a look at the dedication and intelligence of women then we understand that they are adorable in their way 'Mission Mangal' is the best example of women's power and their presence of mind in every worst situation they had faced. If we talk about the women who work under 'Google' then we realize what kind of facilities they will provide during maternity leave or any other family situations. Because they respect the work of women and their dedication. In our Indian laws, girls or women have their rights about their properties such as the daughter shall remain a coparcener throughout life, irrespective of whether her father is alive or not. Daughters must be given equal rights as sons, but it doesn't mean that they became economically stable, giving them equal opportunities in all fields will become them economically stable, if we want to know the strength, boldness, dedication, perseverance, and patience then we should think about the time when one woman give the birth to the children because giving birth is the second most painful thing in the world after burning alive. At that time every muscle of the body gets stretched but she faces all that pain.

She plays a vital role in every place of progress whether it is in education, farming, caretaking, being a doctor or being a politician, or surviving as a soldier.

Youth can do much better to empower women. There are almost 1.8 billion young people aged between 10-24 and almost 600 million are adolescent girls and young women. So the impact of youths in empowerment is maximum than any other people.

Franklin D. Roosevelt said that " we cannot always build the future for our youths, but we can build our youths for the future "

Building and empowering youths and women doesn't mean giving them all the rights but actually giving them the freedom to make their own choices what they want to do in their life or what changes they want to make in society. There are many NGO'S and associations in the nation which help teenage girls and women whenever they want any help but empowerment will be done when they really don't need any help from any NGO or associations.

We just need to change the vision of our society and public regarding the women's and their rights. Every women and girl have their own right to education, has the right to pay equally in their workplace, and has rights in their economic and even in politics and in government jobs. Every girl and woman is unique in its own way. We cannot be so judgemental about their thinking or their way of dressing.





Rape is the fourth most common against women in India. According to the 2019 annual report of the National Crime Records Bureau, 32,033 rape cases were registered across the country or an average of 88 cases daily slightly lower than in 2018 when there was 91 cases were registered daily

Some people think that the sexual assault happens due to the dressing style of women or girls and because of their freedom then but then what about the case which was happened in Odisha where the rape victim was just 3 years old and the banda victim was just 8 and the girl who was raped and then set on fire was also 12 yrs old the list can go on and on and all these rape cases happened in 2021.

Written by

SIDDHI JAGDALE F.E. Instrumentation & Control (2020-21)

# त्या कोजागिरीच्या चद्रांला…

'चांदोमामा चांदोमामा भागलास का?' म्हणल्याशिवाय आमचा बालपण कधी पूर्ण झालाच नाही अगदी लिंबोणीच्या झाडापासून चिरेबंदीवाड्या पर्यंत तुझं जग नेहमीच मला नवलाई च वाटायचं. आज सुध्दा आमच्या तारुण्यात......ओह! आमच्या एकांतात तूच सोबती आहेस. अक्ख जग जेव्हा रात्रीच्या कुशीत सामावलेलं असतं तेव्हा दिलेले प्रोजेक्ट्स पूर्ण करताना मला तझीच सोबत मला लाभते. तुझ्याच सानिध्यात किती कवी आणि किती लेखक नावारूपास आले. आज अचानक तुला पत्र लिहावेसे वाटले कारण जो सगळ्यांना साथ देतो त्यालाच जेव्हा सगळे विसरतात तेव्हा थोडं वाईट वाटत. तुझ्याकडून लहानपणापासून अनेक गोष्टी शिकले आहे पाहिल आणि महत्वाचं म्हणजे तुला इंग्रजीत मून म्हणतात. आयुष्यात आई नतंर तुला काय म्हणतात तेच शिकले. आणि दूसरं म्हणजे वेळेला ससा आणि वेळेला वाघोबा कसं बनाव. तू फक्त चांदोमामा नसून अनेकांसाठी प्रगतीच प्रतीक आहेस, जमाना चद्रांवर जाऊन पोहोचला आहे आणि मी मात्र अजून इथेच चाचपडत आहेस. पत्र लिहताना तुझ्या नावापुढे प्रिय किंवा अप्रिय लिहले नाही कारण तुझं महत्व त्या शब्दांच्या तराजूत न समावणारं आहे. तुझ्या नावापुढे फक्त तीन टिम्ब दिले आहेत त्यातला एक म्हणजे बालपणाच्या चांदोमामाला, दुसरा तारुण्याच्या प्रिय 'चांद' ला, आणि तिसरा म्हणजे म्हातारपणाच्या नवचतैन्याला जे मी चद्रं सोबत जगणार आहे कारण माझ्यानतंर चा मी मला जगाला दाखवायचा जो अगदीच तुझ्यासारखा आहे हो!!तू जसा कलेकलेने वाढत जातोस अगदी तसाच हे आयुष्य देखील आहे...कधी आनदांची भरती येते तर कधी आहोटी....

आज कोजागिरी निमित्ताने तुला पत्र लिहावं वाटलं कारण अनेक गोष्टी तुला सांगायच्या राहून गेल्यात. पण त्याआधी माझा तुझ्यावर रागही तितकाच आहे.....'त्या दिवशी तळीये गाव तुझ्याच भरवश्यावर अनेकांनी सोडला होता, तुला एकदाही वाटलं नाही का ती येऊन त्यांना सावध करावंस. आज अनेक जीव गमावले नसते रे! असो......नियतीला कोण थांबवू शकतं नं.' कोजागिरी पौर्णिमेला अनेक जण रात्री जागून आनंद साजरा करतात तू तर फक्त एक निमित्त असतोस रे. पौर्णिमा काय आणि अमावस्या काय दोन्ही सारख्याच फक्त माणसाचा तुझ्याकडे पाहण्याचा दृष्टिकोन बदलतो. आता तर काय नवीनच, तू तुझी जागा बद्दलतोयस म्हणे, पण त्याला सुध्दा कारण म्हणजे मानवाचं राहणीमान बदलणं.

तुझं आणि सूर्याचं काही वैर आहे का रे? जेव्हा तू येतोस तेव्हा तो निघून जातो आणि जेव्हा तो येतो तू निघून जातोस. अनेकांना सूर्य प्रिय असतो कारण तो नवचैतन्याला उधाण आणतो म्हणे! पण सर्व आशेचा किरण जरी घेऊन येत असला तरी त्या काळोखात तू कधी साथ सोडली नाहीस. सूर्याकडे कधी डोळेवर करून पाहण्याची हिम्मत झाली नाही आणि तू मात्र नेहमीच हवा हवासा वाटलास!! म्हणायला गेला तर तुम्ही दोघे जुळे भाऊ आहेत पण अगदीच विसगंत.....तुमच्या दोघांची तुलना होऊच शकत नाही. असेल तुझं अनन्यसाधारण महत्त्व त्या विज्ञानात पण माझ्या आयुष्याच्या अध्यात्माला पूर्णत्वाची आहोटी आणणारा पूर्णविराम आहेस तू!!

Written by

KALYANI KALE F.E. Civil (2020-21)

#### Zenith 20-21

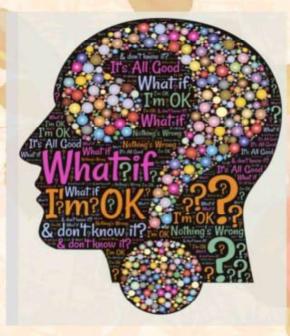


## **Getting Older, Getting Wiser**

Your birthdays are the indication that now it's time for you to grow one year older than you are now. It hurts when you can't find parts of your joyous childhood as age grows, so sometimes it's just that you should fill your messed up life elatedly. No one can stop the time when you are in an unenviable position in your life, you don't want to face this dreadful phase but however in the end you learn to survive through every vexed condition. Life hits you hard on your face when you're not ready to leave the innocent child hidden inside you, this child is said to be the key to tranquility, abundant happiness, and devoid of a bombarding mixture of emotions. You get wiser when you start to realize that it's you who is going to pick yourself up when you fall badly. People come, they watch, they laugh, they criticize and they walk away without hesitation, lastly one thing will have remained mutely deep within you and that will be your broken pieces of impoverished moral waiting to mend and unleash into your true self. The one who learns must suffer against their own will embracing the mistakes and choices they made by seeking the truth by faith. Getting a little bit wiser pushes you towards the utter responsibilities that are requisite to step ahead in real life. Life will mercilessly cry out in immense pain but make sure that you rise in anticipation of tempting desire with new hope of living better. In this miserable tragedy don't be trapped by dogma thinking about people, just let down the world's voice and trust your intuitions. Follow your heart, draw the imagined map of your dreams and get busy contemplating wiser life indeed.

#### Written by

GAURI RATNAPARKHI F.E. Mechanical (2020-21)



# "ANTIMATTEF"

We often think about the existence of aliens in the universe. But wait, would you like to know about your outer space doppelganger? This is possible, as there's a mysterious mirror image of our universe, called antiuniverse, where twins of every ordinary matter exist with some properties flipped. Down at the atomic level, antimatter is made up of regular atoms but with opposite charges, like protons with negative charge while electrons with a positive charge. If you want to know in a nutshell, we have to go 13.8 billion years back, at the moment of the big bang!

The big bang is the idea that the universe began as just a single, extremely dense fireball that exploded with unimaginable force, creating an equal amount of matter and antimatter, then expanded and stretched to grow as large as it is right now and it is still stretching! Now in part of the universe that we are observing no significant accumulation of antimatter found. Then, where is antiuniverse? What will happen if we manage to go there? Some physicists with Neil Turok propose that the big bang is also starting point of the antiuniverse. The antiuniverse would stretch back in time from the Big Bang and it follows CPT symmetry. CPT symmetry says that if you reversed the charge (C), parity(P) [parity is the symmetry of space], and time(T) of a given particle, the laws of physics will remain the same.

In 1928 Nobel laureate, Paul Dirac came with an elegant equation by unifying the theory of relativity and quantum mechanics to describe how particles like electrons behave when they travel close to the speed of light, surprisingly Dirac found that his equation always has two solutions.

**Big Bang** 

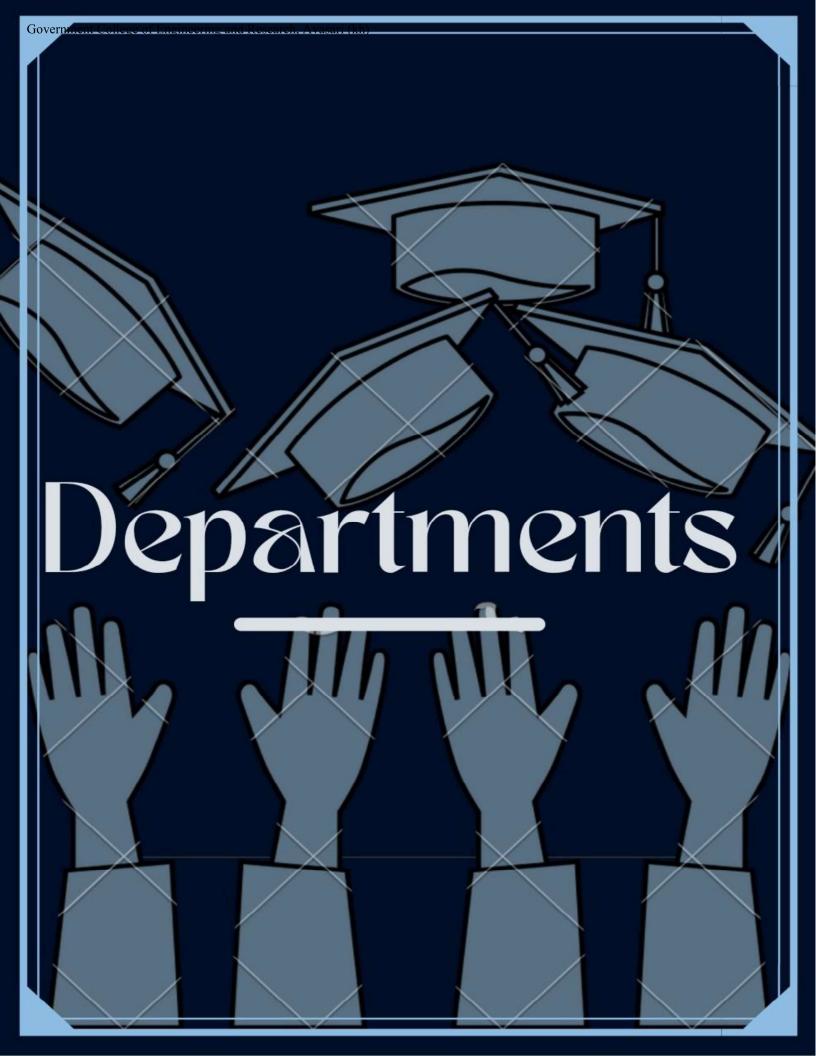
Neil Turok model of piverse and up

One solution describes an electron with a negative charge and the other describes an electron with a positive charge called antielectron also known as the positron. From this equation, he predicts the whole antiworld. After a few years, in 1932 Carl Anderson discovers the first antiparticle while examining cosmic rays.

At CERN (European Council for Nuclear Research) numerous experiments are underway to produce antiparticles. They are successfully producing 10 million antiprotons per minute but this is not enough as at this rate it would take CERN 100 billion years to produce 1gram of antiparticles. But the main challenge is to store them because when matter and antimatter come in contact with one another, they annihilate means they mutually converted into electromagnetic radiations. It is said that just 1 gram of antimatter can destroy the whole New York City. Somehow if we manage to go in antiuniverse, as our body is made of regular matter, we will explode with the release of energy nearly 70,000 times more than the Fatman bomb, which was detonated over Nagasaki. So, the most efficient nuclear weapons could be made with antimatter. Matter-Antimatter reactions have practical applications in the medical field. It also has the potential to cure certain types of cancers. Antimatter could also be used as fuel for interstellar travel so that we can manage to go in outer space easily. who knows, we could manage to do time travel also ;)

Written by

Lawand Asmita Pradip FE MECHANICAL 2020-21





## **APPLIED SCIENCE**

Cenith 20-21

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### DEPARTMENT

Applied Sciences Department bridges a gap between basic sciences and engineering technology. This department takes care of First year as well as second year engineering subjects like Engineering Mathematics I, II and III, Engineering Physics, Engineering chemistry and Soft Skills/Employability Skills Development.

The department has total 06 full time teaching faculties:

**Dr. U.S.Kakade**, Associate Professor in Physics, as well as s of Department and First Year Coordinator. He also works as a Member of College Development Committee as per Maharashtra University Act, 2016, In-charge of ARC and In Charge Change of Branch Committee after First Year, Facilitation centreCenter (FC) Coordinator for FE/DSE at Government College of Engineering and Research Avasari Khurd, Mentor for FE E&TC E3 batch students, Coordinator for Criterion-8 for the NBA.

**Smt. H.H.Rakshe**, Assistant Professor in Mathematics. She also heads Women Grievances Redressal Committee, First year coordinator, FE Internal Examiner Officer,

ICC (Internal Grievances Committee) Member, NBA Coordinator for the subjects Engineering Mathematics- I, II & III

#### Training-

1) ''Life Skill-Management 2020-21''- Dr. <u>balasaheb</u>B<u>abasaheb</u> Vikhe P<del>p</del>atil (Padma

Bhushan Awardee) Pravara Rural Education Society's Sir Visvesvaraya Institute of Technology, Nashik. 05-07-21 to 09-07-21

2) "Engineering Optimization Techniques and its Applications (ENOTAA-2021)" Government College of Engineering Aurangabad. By AICTE Training and Learning (ATAL) Academy 14-06-21 to 18-06-21

3) National Workshop on 'NET/SET in Mathematical Sciences' Rayat Shikshan Sanstha's Kkarmaveer Bhaurao Patil College, Vashi (Autonomous) 1-st March and amp; 2-nd March 2021

- ✤ Life Time Member of Indian mathematical society
- ✤ ISTE Member

**Smt. P.V.Damre**, Assistant Professor in Chemistry. She is working as NBA coordinator for Engineering Chemistry, additional charge as Program Officer of National Service Scheme unit in the college, working as a class teacher for FE Electronics and telecommunication engineering students, working as a Chemistry Laboratory In – Charge, Successfulsuccessfully completed responsibility of Scrutiny member for FE admission 2021-22.

Training- 1) One week FDP O Accelerating innovations in material science – surface characterization- Department of CHEMISTRY, BMS Institute of Technology and Management, Bengaluru, India, duration- 18-5-2021 to 22-5-2021



rnment College of Engineering and Research, Avasari (kh)

2) One week FDP on Insight in to Analytical techniques and its applications (IATA-2021), Acharya Institute of Graduate Studies, Bengaluru-560107, duration- 21-6-2021 to 25-6-2021 LIFE MEMBERSHIP-

1) Society for Polymer Science life membership

2) Life member of Pharma Research Library

3) ISTE Life member

**Smt.Y.N.Chaudhari**, Assistant Professor in Physics. She is working as co- coordinator for the TATA Samarth Scholarship and CSR activity at institute level, as a member of the Publicity committee for our institute, Also handle the charge of coordinator for Spoken Tutorial activity conducted by IIT, Mumbai for FE students., With this active member of the Student Counselling Committee at institute level, Working as a class teacher for FE Instrumentation and Control as well as Automobile Engineering students, Working as a Physics Laboratory In – Charge, Equipment and furniture purchase committee member for the First Year department at institute level, Actively working as NBA coordinator for Engineering Physics subject.

#### **Conference attended:-**

1) Presented paper on "Influence of mixed solvent system and reaction temperature on insituinstitute, surfactant free synthesis of P3HT:SnS Nano composite" at International Conference on "Sustainable Material and Technologies for Bio and Energy Applications (SMTBEA-2021) held at SSN college of Engineering, Kalavakkam, Chennai during 19-21 May 2021.

#### Awards:-

1) Awarded by "Best Paper Presentation Award" at an <u>International International</u> conference on "Sustainable Material and Technologies for Bio and Energy Applications (SMTBEA-2021) held at SSN college of Engineering, Kalavakkam, Chennai during 19-21 May 2021.

**Shri.M.D.Panchal**, Assistant Professor in English. In this academic year, he has successfully completed One week FDP on Enhancing Soft Skills and Personality jointly conducted by NPTEL and AICTE. At the college level, he has additional charge as Programmed Officer of National Service Scheme unit in the college. He is a member of Covid-19 vaccination Committee of this college under 'Mission Yuva Swastha'. In the early half of this academic year, he has also worked as Boys' Hostel Rector and In-charge Coordinator of Covid-19 Care Centre functioning at college hostels. He is a Member of Gender Equality Cell, Students' Development Committee and Anti-Ragging Committee of this college. He has received Corona Warriors Appreciation Certificate from National Service Scheme Department of Savitribai Phule Pune University, Pune for his dedicated service towards Covid-19 awareness programmes and for conducting various activities during Pandemic for welfare of the masses. He is a Life Member of The Indian Society for Technical Education (ISTE).

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**Shri.V.P.Jadhav**, Assistant Professor in Chemistry. He is working as a First year Engineering cocoordinator, working as a member of the water supply & maintenance committee for our institute, Also handle the charge of coordinator for the First year students induction program, charge of First year Time table in charge, class teacher for FE Civil Engineering students, Working as a Departmental library In-charge (Applied Sciences), Working as First year remedial Class Coordinator, Counsellor for first year students, Actively working as NBA coordinator for Environmental Studies I & II subject.

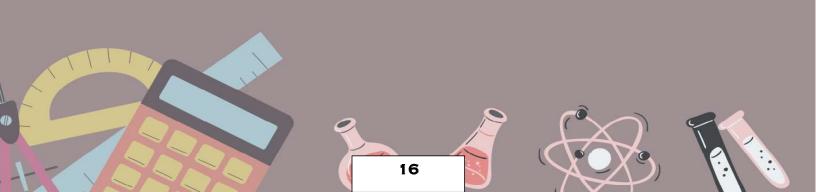
Lenith 20-21

In current academic year 2020-2021 the department organized following programs for First Year students.

- 1) Welcome program for newly admitted first year students.
- 2) Induction program for newly admitted first year students
- 3) Physical Education Scheme of Savitribai Phule Pune University.
- 4) Spoken Tutorial courses like LATEX for all desired first year students.

Apart from regular teaching learning activities, Applied Sciences Department faculty and staff is associated with activities like 1) ARC for Engineering, Pharmacy, MBA/MCA etc. 2) First year and Direct Second year admissions 3)Internal as well as University Examinations etc.

Faculty of this department always encourages First year students to participate in various co-curricular & extra-curricular activities like SUPRA, ROBOCON, GO KARTING, ABINITIO, BAJA, IAPT, NSS, Unnat Bharat Abhiyan and all sports & cultural events.



## AUTOMOBILE ENGINEERING DEPARTMENT



The department of Automobile Engineering was started in the academic year 2009-10. Since from Nine year we are striving for continuous development of our department and with that effort now department is having full equipped Laboratories with almost all Teaching resources, also higher qualified Teaching and non-Teaching staff. The department is committed for overall development of students which will help them to achieve top position of their career.

#### **Department Vision**

"To develop proficient automobile engineers for sustainable development."

#### **Department Mission**

M 1 To impart application-oriented education with creative thinking and human values.

M 2 To develop Automotive Technological skills of the students for enhancing the employability and entrepreneurship.

**M 3** To prepare the students for higher studies, research and innovation.

M 4 Develop the graduate engineers for continual learning to serve the society.

#### **Program Educational Objectives (PEOs)**

**PEO 1** Be successful in career with a sound knowledge of basic fundamentals of mathematics, engineering sciences and engineering.

**PEO 2** Develop the ability to solve real time engineering problems using core knowledge of automobile engineering.

**PEO 3** Developing the inter-disciplinary skills and professional ethics to analyze and solve the engineering issues towards sustainable development.

**PEO 4** Buildup interpersonal skills, leadership, and team spirit and entrepreneurship qualities for successful profession along with life-long learning.

TAXABLE PARTY AND DESCRIPTION.

#### Infrastructure Status

- Total Laboratories = 08 + 01(CAD Lab),
- Total Classrooms = 03 + 01(Drawing Hall),
- Total Staff-rooms = 04+01 (HOD Cabin)
- Seminar Hall = 01,
- Girls Common Room = 01
- Boys Common Room = 01

#### **Staff Position**

- FE Intake= 60,
- Total Intake = 240,
- Total Teaching Faculties=10 (1 Prof. + 1 Asso. Prof. + 08 Asst. Prof.)
- Total Tech. Lab Assistants = 04
- Total Auto Technician = 03
- Total Supporting Staff (Class IV) = 02

#### **Higher Education and Placement**

Many students from previous batches were preferred to go for higher studies. Magar Sameer Ashok from the class of 2016, Chakka Venkat Siva Kanna and Bhiram Suresh Kumar from the class of 2016 has secured admission for **M.S.** (Mechanical Engineering) at Rochester Institute of Technology, New York, also Kunal Laxmangiri Gosavi from the class of 2018 has secured admission for Mechanical Engg. Tech-Industrial at Centennial College, Toronto, Canada. As like Lalit Deepak Shendage and Sumit Rajaram Yelpale from the same class has secured admission for M. Tech. at MIT Pune & NIT Raipur. Students were also placed in reputed companies, details of Student placement for 2020-21 are tabulated as follows.

Sr.	Name Of the Student Placed	Enrollment No.	Name Of the Employer
No	1-	Contraction of the local division of the loc	
1	Pardhi Vivek Yeshwantlal	18211018	TCS Ltd
2	Jadhav Nilesh Dipak	18211020	Infosys Ltd
3	Rokade Sachin Goraksha	17111024	Infosys Ltd
4	Vishal Prakash Gadkar	18211011	Byjus
5	Waykar Shilpa Babasaheb	17211020	TATA Motor
6	Chavan Tukaram Balu	17111045	TATA Motor
7	Chavan Sanket Sunil	18211008	TATA Motor
8	More Akshay Ravindra	17111003	TATA Motor



#### Industry sponsored projects (Academic Year 2020-21)

For final year project, students have got sponsorship from various Industries. Tabulated details are follows:

Sr. No.	Name of Company	No. of students	Title of Project
	Superb Technology Pvt. Ltd. Pune	04	Design and Manufacturing Tandem Master Cylinder with Proportioning Valve
-	J. B. Industries Nasik	04	Design and Development of Plastic Mold

#### **Departmental Organized Programs**

This Department is always trying to organized socially beneficial and technically advantageous programs which could percolate social awareness and technical competency among benefited individuals. With this perception, for this academic year department has organized one week faculty development program on "Scope of IOT and its applications in Automotive and Agricultural Industry" in three phases in association with GCOEARA-ISTE chapter. Phase I was organized during 22 February to 27 February 2021, Phase II was organized during 22 March to 27 March 2021 and Phase III was

organized during 3 May to 8 May 2021. This IOT enables applications ranging from the micro to the critical problems. Technology developments related to the IOT offer entrepreneurs, service sector huge opportunities to leverage these capabilities to redefine industries and services that we know today and to innovate and offer new services and solutions to existing problems. The purpose of Automotive and agricultural security awareness is to develop essential competencies, new techniques and methods that are so essential in facing possible security issues.

Department is also taking effort to ensure the social and digital safety of woman in society. With that vision Department has organized one day webinar on "opportunity and challenges in cybercrime: Women "Empowerment through Precautions and strategies" on date 15/12/2020. Department has also organized "Road Safety Week 2021" under SAE Collegiate Club & ISTE Student Chapter.

Collaborations with Industries and Corporate Sectors, Premiere institutes etc.-

	Name of the	Date of	Collaboration Scope of Activities	Academic
	Industry/Company	MoU	&benefits accruing to DEI	Year
1	Terminal Technology Pvt. Ltd, Pune	28 <sup>th</sup> July 2021	1. To impart industrial exposure/Training as per available industrial facilities to both students and Faculties.	2020-21

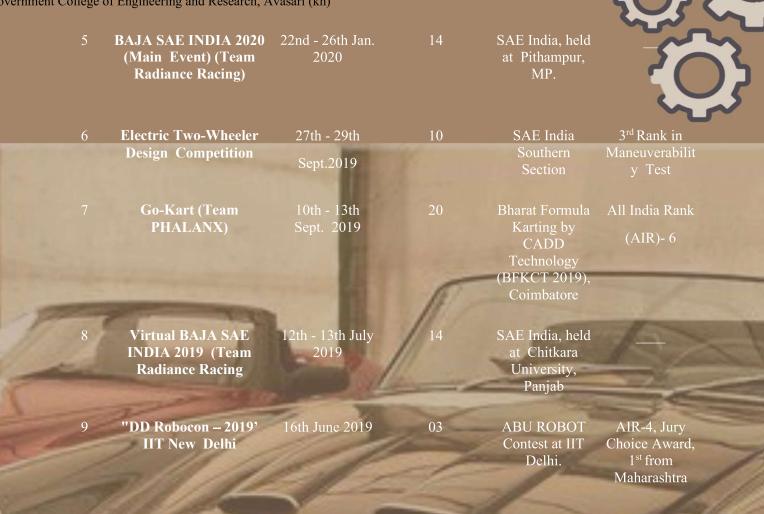
2	Cyberlytics Pvt. Ltd, Pune	1 <sup>st</sup> July 2021	1. To impart industrial exposure/Training as per available industrial facilities to both students and Faculties.	2020-2
3	MCED, Pune	11 <sup>th</sup> Oct. 2019	<ol> <li>To inculcate entrepreneurship amongst the students.</li> <li>To help students to set up Enterprise/Business 3. To train the students in entrepreneurship programs.</li> </ol>	2019-20
4	E-Cell, IIT Bombay	29 <sup>th</sup> June 2017	<ol> <li>To motivate entrepreneurship among the students</li> <li>To help students to set up Enterprise/Businesses</li> <li>To help students to generate business ideas etc.</li> <li>To motivate students to participate in Techfest conducted by IIT Mumbai</li> </ol>	2017-18

#### Extra- curricular activities

Students of department are not only having the Academic Excellence but also participated in National level technical events like BAJA, GO KART, Electric Two-Wheeler Design Competition and ROBOCON. Details of students participation in various events for Academic Year 2020-21 & 2019-20 are tabulated as follows.

Sr. No.	Title of Activity	Date of conduct	No. of Students participated	Organized by	Rank
	BAJA SAE INDIA 2021 (Main Event) (Team Radiance Racing)	22 <sup>nd</sup> to 25 <sup>th</sup> April 2021	13	SAE India, held Online	alle
2	Virtual BAJA SAE INDIA (Team Radiance Racing)	12 <sup>th</sup> -13 <sup>th</sup> December 2020	13	SAE India, held Online	AIR 126
3	Go-Kart (Team PHALANX)	6th – 9th Feb2020	09	Auto India Racing Championship- 4 (AIRC-4)	AIR-23
		6th – 9th March 2020	07	Indian Karting Championship (IKC) Kolhapur	AIR-16th

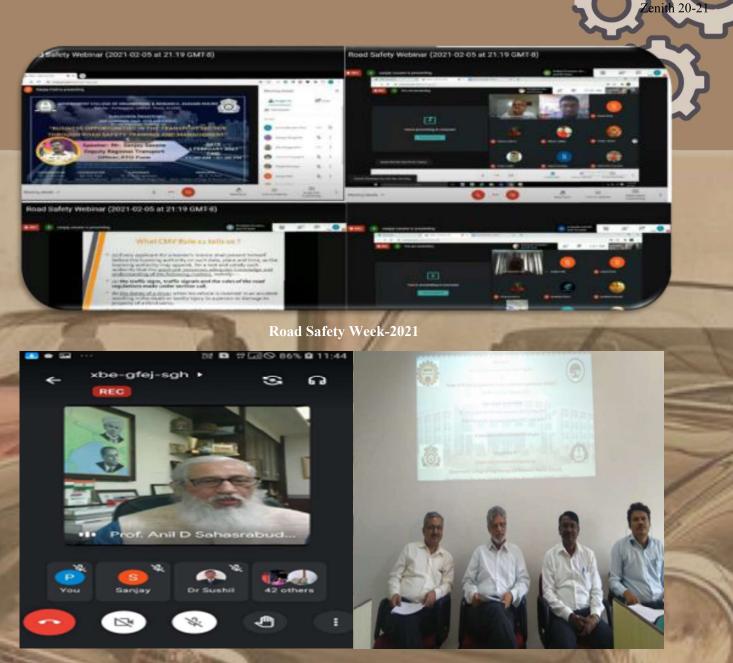
Government College of Engineering and Research, Avasari (kh)



**Photo Gallery :** 



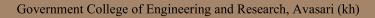
Opportunities and Challenges in Cyber Crime: Women Empowerment through Precautions and Strategies (Online Mode- Google Meet)

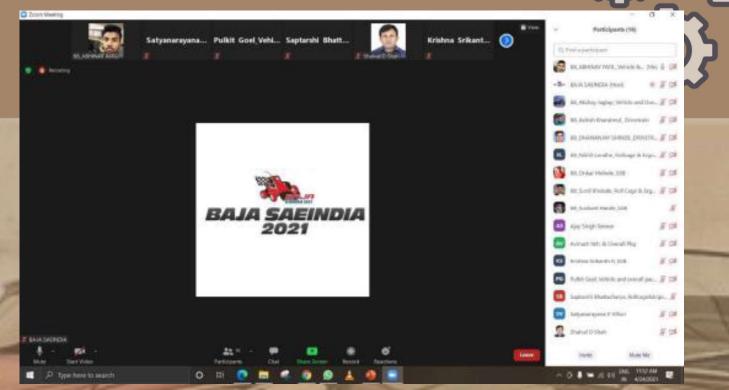


Phase I AICTE-ISTE orientation Program on "Scope of IOT and its applications in Automotive and Agricultural Industry" (Inaugural function in which the chief guest is guiding the audience and institute committee.)



MoU with Cyberlytics Pvt. Ltd, Pune





Virtual BAJA SAE INDIA (Team Radiance Racing)

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NAMES AND ADDRESS OF TAXABLE PARTY.

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## **CIVIL ENGINEERING DEPARTMENT**

The department of Civil Engineering is established in AY 2009-10 with intake of 60. At present around 275 students from FE to BE Civil are taking the education in department. Department has 08 laboratories to cater the need of academics as per SPPU, Pune. Department arranges the site visits, expert talk, Worksop/webinars/training, soft skill development programme, etc, to meet requirement of student to make them a complete civil engineer by education and to take care of the society. Department motivate the students to take part in curricular/co-curricular and extracurricular activities. These activities are like learning /certification of NPTL courses by Swayam, Spoken tutorial by HTB, ABINITIO a technical event in the institute. Students are asked to participate in activities arranged by the institute and other colleges in SPPU/State.

Faculties /staff are motivated to attend the workshops/seminars/FDP/STTP to upgrade their knowledge to share among the students. Faculty works for the SPPU Pune for conduct of various examinations, Committees, attend the paper checking at CAP organised by the GCOEARA/SPPU, Pune.

Department looks after the correspondence of annual maintenance of Sewage Treatment Plant (STP) in the campus. Department does the corresponding with Grampanchyat, PWD, RØ, DTE for day-to-day needs.

Department has conducted the cleanliness drive in the campus / department, during COVID-19 situation to keep the area hygiene. Department aims in future to go for NBA accreditation after meeting the criteria of faculty and infrastructure.

#### List of Major Equipment's:

- Universal Testing Machine-100
  tone
- Compression testing machine -200 Tone
- Accelerated curing tank
- Rebound hammer NDT Testing
- UV visible spectrophotometer
- Direct shear test
- Unconfined compression Test
- Filtration assembly with vacuum
   pump
- Flame photo meter

- Total station
- Auto levels
- Digital Planimeter
- GPS system
- Nautical sextant
- Turbulent Flow apparatus
- Hydraulic Tilting Flume
- Ductility of tar test apparatus
- Film stripping
- Equipment's Impact of jet on Vane, Tar

#### List of Faculties:

1

2

Sr	Name of faculty	Designation
No.		

- Dr. A. S. Pant **Professor and Principal** Dr. W. N. Deulkar Associate Professor and Head
- 3 Dr. M. G. Shaikh Associate Professor Dr. S. B. Kharmale Associate Professor 4
- 5 Prof. R. P. Assistant Professor Thanedar

#### Qualification

PhD in Civil Engg PhD in Civil Engg PhD in Civil Engg PhD in Civil Engg ME in Civil Engg

#### List of Instructors (Technical Lab Assistant):

Sr No.	Name of faculty	Designation	Qualification
1	Mr. S. S. Gurav	Technical Lab Assistant	Diploma in Cor
2	Mrs. A. D. Bhat	Technical Lab Assistant	Diploma in Civ
3	Mrs. K. P. Ubale	Technical Lab Assistant	- ARALLEV
4	Mr. S. V Bharambe (wef 28.12.2020)	Technical Lab Assistant	BSc (Physics)

## loma in Computer Engg oma in Civil Engg

#### List of Laboratory Attendant:

- 1. Mr. P. R. Sonavane
- 2. Mr. P. K. Tak

#### Workshop/FDP/STTP/Seminar/expert talk etc, organized in the department:

- One day workshop on "Best concrete practices and new building materials in construction" was organised in association with Ultratech cement and company ltd, Pune on 21.01.20.
- One day workshop on "Higher studies and opportunity in Civil Engineering" was organised for webinar on "Retrofitting of the structure" was organised jointly with BVB college of engineering and Technology Hubli for Civil engineering fraternity on 26-5-2021
- Expert talk on topic "Use of Bamboo" was organised by Mr. Prashant Lingam on 15-8-2020.
- Students by the civil engineering department on 20-9-2020

- Dr W N Deulkar organized motivational and counselling speeches for students online via YouTube in a semester to release the stress.
- Dr W N Deulkar has delivered the speech during two-day conference on "Damage Detection" Strategy using smart material" at KBIECT, Baramati on 5th and 6th March 2020.

#### Site Visit Arranged for the students:

- Dr W N Deulkar organized the site visits for the students via YouTube at RMC plants to study the details of Concrete.
- Dr W N Deulkar organized the site visits for the students via YouTube at sewage treatment Plants to study the environmental aspect of sewage
- Dr W N Deulkar organized the site visits for the students via YouTube for SD/II/ RCC to study. the RCC details of structures

#### **Details of Testing and Consultancy**

Department runs the Testing and Consultancy cell to meet the need of Civil Industry, in which civil engineering materials are tested and infrastructure is consulted. Revenue generated is used by Maharashtra Government for various laboratory developments. Approximately 5 to 6 lac revenue is generated by the department.

#### Major works undertaken by departments are-

- 1. Checking and Third-party audit of Water supply and pipe line distribution under Gramin Pani Purwatha yojana, Nagar parishad, Junnar
- 2. Checking and Third-party audit of high mask pole installed by for Z P Pune under Manchar/Ambehgogn, district Pune Third party audit of CBSC school at Manchar and Koregaon Bhima, Shikrapur
- 3. Checking and Third-party audit of RCC drawing for construction of ESR, GSR, Concrete Road, retaining walls, etc for Nagar parishad, Junnar, Rajgurunagar, Ambegaon, Dist. Pune
- 4. Checking and Third-party audit of RCC drawing for construction of Hospital for Animals by Nagar parishad, Junnar

#### Major customers of the consultancy by the department are,

- Pooja electrical, Ahmednagar
- M/s V S Patel, Pune
- Mangal murti Construction, Khed, Pune
- Trimurtee RMC plant. Khed
- Gosavi Baba Construction, Chakan, Pune
- Sahyadri earthmovers, Rajuri Junnar

- Nagar parishad, Junnar,
- Nagar parishad, Chakan,
- Nagar parishad, Rajgurunagar
- Zilla Parishad, Pune
- Maharashtra Jeevan Pradhikaran
- Kendriya Vidyalaya,

#### **Faculty Achievements:**

#### 1. Books Published:

- A book on "Structural Mechanics" with Nirali Prakashan by Dr W N Deulkar
- A book on "Concrete Technology" with Nirali Prakashan by Dr W N Deulkar

#### 2. Paper Publication by Faculties:

- Jagadale U. T., <u>Asmita Mankar</u>., Thakare S B., Nayak C. B., Deulkar W. N., (2020), "An experimental-based python programming for structural health monitoring of non-engineered RC frame", Springer Journal-Innovative Infrastructure Solutions, 5(1), pp 4-10, April 2020.
- Deulkar W. N. and S B Kharamale, (2020), "Plastic Formwork", National Conference on Advances in Construction Management (ACM 2020) organized by Department of Civil Engg College of Engineering, Pune on 6-7 March 2020.

#### 3. NPTL Course attended by Faculty and students;

- a. Dr. W. N. Deulkar had registered and successfully completed the NPTEL course on Theory of Elasticity and Advanced Concrete Structures during July to Nov 2020 and examination in Dec 2020 conducted by IITB
- b. Dr. S. B. Kharmale had registered and successfully completed the NPTEL course on Theory of Elasticity and Advanced Concrete Structures during July to Nov 2020 and examination in Dec 2020 conducted by IITB
- c. About 30 students of TE and BE had registered and successfully completed the NPTEL course on Advanced Concrete Structures, Geotechnical Engg, Structural Analysis, etc during AY 20-21.

#### 4. STTP/FDPs Attended by Faculty:

Sr No.	Faculty name	Type of FDP /STTP	Tile of FDP /STTP Organizin	g Institute	Duration with dates
1	Dr W N Deulkar and Dr S B Khramale	One Week TEQIP-III sponsored FDP		ering, ollege of g, Karad &	27.04 to 01.05.2020

5. Workshop/conference/seminar/webinar attended by Faculty: 02

Sr. No.	Name of Faculty	Details	Date
1.	Dr. W. N. Deulkar	attended TE Civil syllabus drafting SPPU Pune at AISSPMS, Pune Jan 2021.	AA
2.	Dr. W. N. Deulkar and Dr S B Kharmale	Attended a National Conference on Advances in Construction Management (ACM 2020) organized Department of Civil Engineering, College of Engineering, Pune	1 by March 2020
3.	Dr. W. N. Deulkar	Attended a Quality improvement programme on "Damage detection strategy using smart material" COE Baramati	at March 2020
4.	Mrs. A. D. Bhat	Online Webinar on capacity enhancement training program for supporting staff (CETPSS)	6-8 Øct 2020.

#### 6. R and D activities:

Sr No.	Name of faculty	Details
1.	Dr. W. N. Deulkar	Guiding 04 candidates for their PHD under SPPU.
2.	Dr. S. B. Kharmale	Guiding 03 candidates for their PHD under SPPU.
3.	Dr. M. G. Shaikh	Submitted FDP proposal on "Need of Bamboo" to AICTE under ATAL scheme NPTEL courses with 30 students in the department.

#### **Students Activities:** List of Class Representatives: BE Class SE TE Akshay Kale Vikas Shinde Omkar Zunjakar/ Rajesh More CR1 Pratiksha Sakhare/ Renuka Vaishnavi Todkari/ Prajakta Kajal Sarade CR2 Garud Bhapkar Annual Result by SPPU: SE BE Class TE All clear (%) 93 100 100 ATKT (%) 07 00 28

### Student Activities and Achievements and students' participation for:

Stude	it retitles u	iu memeremen	is and students participation for:	
S.N.	Date	Name Of Candidate	Achievements	Class
1	13.05.20	Prajakta Garud	E-Quiz on Is456:2000 Guidelines	TE/
2	12-26.05.2020	Prajakta Garud	Digital Skill: social media.	TE
3	12-26.05.2020	Prajakta Garud	Digital Skill: Digital Marketing	TE
4	15-16.02.2020	Shailesh Shinde	Sport Event of Kho Kho @ Ait Pune	TE
5	25.05.2020	Prajakta Garud	Quiz On Electrical Safety	TE
6	10-28.04.2020	Neha Patekar	Career Edge Knockdown the Lockdown	TE
8	28-05-2020	Vikas Shinde	Webinar On "Applications of Fuzzy Logic in Civil/ Engineering"	TE
9	29-06-2020	Vikas Shinde	Webinar On "Implementation of Vaastu shastra In Construction Planning"	TE
10	6-7-2020 to 8-7- 2020	Vikas Shinde	National Level Faculty Development Program On "Concrete Technology on Field"	TE
11	26-07-2020	Vikas Shinde	Ultratech Cement Workshop On "Concrete Mix Proportioning"	TE
12	26-07-2020	Vikas Shinde	E-Quiz On "Concrete Technology"	TE
13	02-04.06.2020	Yashodhan Chavan	Completed Online Workshop on Corrosion &It's Control Organised by Dypimemr &B S Abdul Rehman Crescent Institute	BE
14	13-05-2020	Yashodhan Chavan	Online Webinar on Strategies for Extension as Social Responsibility By SPPU, Pune	BE
15	23.06.2020	Yashodhan Chavan	Attending Webinar On 'How to Become Successful Civil Engineering'	BE
16	11-26.5.2020	Vikas Shinde	Online Civil Internship	TE
17	12-26.05.2020	Neha Patekar	Digital Skill: Digital Marketing	TE
18	23-05-2020	Abhishek Mote	Online Course Offered by TCS Ion 'Career Edge - Knockdown the Lockdown'	BE
19	28-05-2020	Abhishek Mote	Online Webinar On 'How to Become Successful Civil Engineer' By Mr. Prakash Medhekar, Rtd. Civil Engineer	BE
20	29-05-2020	Abhishek Mote	Online Course On 'Artificial Intelligence for Civil Engineers: Part I'	BE
21	12-26.05.2020	Neha Patekar	Digital Skill: social media.	TE
22	15-05-2020	Shivani Ingole	Quiz On Concrete Technology	TE

				- Martin
23	18-06-2020	Abhishek Mote	Quiz On 'Steel Structure'	BE
24	19-06-2020	Abhishek Mote	Webinar On 'An Overview of Geopolymer Concrete & Its Application'	BE
25	20-06-2020	Abhishek Mote	Quiz On 'Geotechnical Engineering - I (Foundation Engineering)'	BE
26	16-04-2020	Shivani Ingole	Online Internship of Civil Engineering and Project Management.	TE
27	13-05-2020	Shivani Ingole	Online Digital Marketing Internship by Intershala.	TE
28	23-07-2020	Shivani Ingole	Energy Literacy Program.	TE
29	24-07-2020	Shivani Ingole	Online Course of AutoCAD and 3d Drawing.	TE
30	13-05-2020	Shivani Ingole	"Test Your Knowledge in Civil Engineering" Quiz Competition Organized by Phcet.	FE
31	27-05-2020	Shivani Ingole	Civil Engg. MPSC Quiz by MITCOE Pune.	TE
32	04-06-2020	Khurange Shashikant	Online Workshop on Corrosion and Its Control	TE
33	15-07-2020	Khurange Shashikant	Zero Mile Event	TE
34	04-02-2020	Utkarsh More, Akash Vansale, Krushna Maharanwar	Zero Mile Event	TE
35	06-07-2020	Khurange Shashikant	Jantar Mantar Observatories	TE
36	18-08-2020	Khurange Shashikant	Communication Skills by TCS Ion Digital	TE
37	13-05-2020	Khurange Shashikant	Quiz On Is 456:2000 Guidelines	TE
38	20-05-2020	Khurange Shashikant	Quiz On Concrete Technology	TE
39	13-05-2020	Khurange Shashikant	Quiz On "Fundamentals of Fluid Mechanics	TE
40	06-07.07.2020	Neha Patekar	Webinar On 'Hydraulic Modelling of Water Supply and Sewerage Network Using Bentley Water gems & Sawergems Connect Edition'	BE
41	13-05-2020	Shivani Ingole	Quiz On Is 456-2000 Guidelines	
42	06-07.07.2020	Rohit Waghmare	Webinar On 'Hydraulic Modelling of Water Supply and Sewerage Network Using Bentley Water gems & Sawergems Connect Edition'	BE
43	12-05-2020	Shivani Ingole	Quiz On Fundamentals of Fluid Mechanics.	TE
44	4-5-2-2020	Akash Vansale	Zero Mile Event by JSPMS COE, Wagholi, Pune	TE
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45	6- 7-7-2020	Akash Vansale	Webinar On 'Hydraulic Modelling of Water Supply and Sewerage Network Using Bentley Water gems & Sawergems Connect Edition'	TE
46	17.06.20	Prajakta Garud	Attending Webinar On 'Branding Through Digital Marketing'	TE
47	23.06.2020	Prajakta Garud	Attending Webinar On 'How to Become Successful Civil Engineering'	TE
48	24.06.2020	Prajakta Garud	Attending Intershala Classroom-Online Internship Talk	TE
49	25.06.2020- 04.07.2020	Prajakta Garud	Mastering Bitumen for Better Roads and Innovative Application	BE
50	01-15.07.2020	Prajakta Garud	Volunteering In YouTube Marketing	BE
51	06-07.07.2020	Prajakta Garud	Webinar On 'Hydraulic Modelling of Water Supply and Sewerage Network Using Bentley Water gems & Sawergems Connect Edition'	BE
52	16.07.2020	Prajakta Garud	Webinar On 'An Overview of Civil Engineering in Scel a Coal Mining Industry in Telangana State	BE
53	11-20.07.2020	Prajakta Garud	Introduction To Faecal Sludge Management	BE
54	21.07.2020	Prajakta Garud	Webinar On 'Typical Construction Practices	BE
55	20-23.07.2020	Prajakta Garud	Renewable Energy and Green Building Entrepreneurship	BE
56	26.07.2020	Prajakta Garud	Webinar On 'Mix Design'	BE
57	24-28.07.2020	Prajakta Garud	Wood Science Beyond Building	BE
58	27-30.07.2020	Prajakta Garud	Quiz On Basic Civil Engineering	BE
59	24.07-04.08.2020	Prajakta Garud	Fundamentals Of Fluid Solid Interaction	BE
60	11-07-2020	Yashodhan Chavan	Participated In Online International Conference 'Advanced Materials Smart Future by Iqac	BE
61		Abhishek Mote	Quiz On 'Mechanics of Structures'	BE
62	13-05-2020	Akash Vansale	Strategies For Extension as A Social Responsibility Perspective of Higher Education by Sppu	TE
63	07-08-2019	Aniruddha Khude	National Service Scheme	TE
64	02-09-2019	Aniruddha Khude	Unnat Bharat Lamp Solar Lamp Ambassador	TE
65	10.08.2020	Vishwajeet Bochare	Indo Australian Workshop On "Construction Project Management with Innovation Tools and Techniques	BE



## COMPUTER ENGINEERING DEPARTENT

The Computer Engineering department was established in year 2009 with the aim of providing quality education and excelling in all the endeavors it undertook.

The Department has state-of-the-art infrastructure and computing equipment supported by high-speed internet connection. Student organizations (COMPSA and Gati-Tech) are dynamic and organize a number of academic well as extracurricular activities .The Department has a pool of experienced, dedicated and committed faculty members who aim at delivering top class education to students. Highly skilled technical laboratory assistant helps us to keep all laboratories updated with latest software. Department organizes industry visits and expert session on latest technologies to expose the students to the rapid change in computer engineering domain. Student of our department have won prizes in various national and international level paper presentation and project exhibition.

#### List of Major Equipment's:

- Desktop computers Total 140 Nos
- <u>Lenovo Think center All in one 22 Nos</u> Configuration CPU- Core i3 3.07GHz, RAM-2GB HDD - 300 GB
- Wipro 20 No Configuration CPU- Core 2 Duo 3.07GHz , RAM- 2GB HDD 300 GB
- <u>DELL OptiPlex 780 60 Nos</u> CPU- Core 2 Duo 2.93GHz , RAM- 1.9GB HDD 300 GB
- Lenovo Think center (with CPU): 20 No Core i5 2.8 Ghz RAM 4GB HDD 500GB

#### **List of Faculties:**

Sr. No.		Designation	Qualification
1	Dr. S. U Ghumbre	Professor and Head of Department	PhD
2	Dr. V. A. Inamdar	Asso. Professor	PhD
3	Prof. Danny Pereira	Assist Professor	M Tech(Comp), Pursuing PhD
4	Prof. P.V. Kulkarni	Assist Professor	ME(CSE)
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Qualification

#### of Instructors (Technical Lab Assistant):

Sr.	Namo
No.	

e of faculty

Mr. Chetan 1 Chaudhari 2 Mr. P. V. Darandale

3 Mr. D. J. Gupta

4 Mr. C. P. Borse

1. STTP/FDPs Attended by Faculty:

(T.L.A.) Instructor (T.L.A.)

Instructor

Designation

Instructor (T.L.A.)

Instructor (T.L.A.)

#### Diploma in Computer Engg. **BSc BIS**

**B.E in Computer Engg** 

**Diploma in Computer Engg** 

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**Diploma in Industrial Electronics Engg.** 

#### **List of Laboratory Attendant:**

1. Mr. Arun Jadhav B.A.

### **Faculty Achievements:**

P	. V. KULI	KARNI -		
S N	Type of FDP /STTP	Title of FDP /STTP	Organizing Institute	Duration with dates
1	STTP	Two weeks online Industrial Training Program on IIOT	The National Small Industries Corporation Ltd Technical Services Center	16/3/2021 to 30/3/2021
2	FDP	One Day Syllabus Revision Online FDP on "Data Structures and Algorithms Laboratory" (SE 2019 Course)	MES College of Engineering Pune	27 Jan 2021
3	FDP	"Project Based Learning II (SE Course 2019)"	SINHGAD TECHNICAL EDUCATION SOCIETY'S Sinhgad Institute of Technology	22 Jan 2021
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### **Students Activities:**

### ist of Class Representatives:

Class	SE	TE	BE	

CR Rutwik Bagale Pushkar Marathe Abhishek Wadmare

### Annual Result by SPPU:

Class	SE	TE	BE
All clear (%)	97.43	100	100
ATKT(%)	2.56	Nil	Nil

### List of Class Toppers with CGP:

Sr. No.	SE	ТЕ	BE
1	KISHORI RAVINDRA JATHAR (19121007 - CGP - 9.70)	SURYAWANSHI YOGESH GOVIND (19221084 - CGP - 10)	JADHAV MADHURI SANJAY (18221005 - CGP - 10)
2	ROHIT SUNIL KHARAT (19121002 - CGP - 9.68)	RAJPUT VISHAL SUNIL (18121021 - CGP - 10)	PACHPUTE SONAL PANDURANG (18221001 - CGP - 10)
3	DIVYA TUKARAM SALE (19121009 - CGP - 9.64)	AJAGE ONKAR SURESH (18121048 - CGP - 10)	KURKUTE ASHWINI RAJENDRA (17121026 - CGP - 10)
4	BHAVANA MADHUSUDAN NARAYAN (19121027 - CGP - 9.57)	PATWARDHAN VEDAVRAT PRABHANJAN (18121032 - CGP - 10)	WABLE SHIVANI JAISING (17121005 - CGP - 10) (17121005 - CGP - 10)
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RISHIKESH DNYANDEV SHINDE (19121012 - CGP - 9.57)

ANJANI SUNIL DHOBALE (20221081 - CGP - 9.57)

ANIKET PRAKASH RANDHAVAN

(19121048 - CGP - 9.57)

8 VAISHNAVI RAMCHANDRA CHINTANVAR (19121034 - CGP - 9.55)

> PRAGATI SHENDRE (19121057 -CGP - 9.50)

10 VISHAKHA RAMCHANDRA LONDHE (20221079 - CGP - 9.50) DARADE AKSHAY BALU (18121057 - CGP - 10)

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MARKALI VAISHALI RAJENDRA

(18121014 - CGP - 10)

KHILE PRATIKSHA MALHARI

(18121019 - CGP - 10)

SHINDE DNYANESHWAR BALASAHEB (18121017 - CGP - 10)

DARSHANE SAKSHI SANDIP (18121030 - CGP - 10)

MASKE MAHESH VITTHAL

(19221079 - CGP - 10)

KHATALE SWARALI BALASAHEB (17121029 - CGP - 10)

SHAIKH SAMIRA PARVIJ (17121069 - CGP - 10)

IKHAR SHREYAS GUNWANT (17121072 - CGP - 10)

WAGH NILESH PRASANNAKUMAR

(17121042 - CGP - 10)

WADMARE ABHISHEK VIJAYKUMAR (17121075 - CGP - 10)

MAHAJAN SAHIL ASHOK (17121011 - CGP - 10)

### Student Activities and Achievements and students' participation for:

Name	Class	Course/ workshop/session/certification	Date
Akanksha Baykar	FE	Basic of web development	02-03-2021
Akanksha S.Pingale	TE	Azadi ka Amrit Mahotsav Quiz	02-10-2021
Pratiksha Gophhane	FE	Code-o-fista	2021
Rajashri Ghogare	FE	Fundamentals of digital marketing by google	04-09-2020 08



Zenith 20-21

Satish Shinde	TE	Microsoft Al classroom webinar	01-02-2021
Anjani Dhobale	SE	The Guinness World Record Event- Most users to take an online computer programming lessons in 24 hours	25-04-2021
Rutwik Bagale	SE	Internshala Campus Ambassador	20-04-2021
Shubham Singh	SE	DD Robocon 2020 (Robo Rugby 7s)	27-10-2020
Shubhra Nakod	FE	Intershala_workshop	03-05-2021

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### Placement Statistics of students 2021:

Sr. No	Roll No	Name	Name of the Employer	Post	Package (LPA)
1	17121054	Aatif Momin	Amdocs	Associate Software Engineer	4
2	17121075	Abhishek Wadmare	Mphasis	Trainee Associate Software Engineer	3.25
3	17121075	Abhishek Wadmare	TCS Ninja	Asst System Engr Trainee	3.36
4	17121012	Aishwarya Pawar	Infosys Ltd	System Engineer Trainee	3.6
5	17121030	Amruta Hindurao Mane	Accenture	Application Development Associate	4.5
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01	110	0001	36	and and a section stoller	Tare (0. col), (bran ), 0).e

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51 Mainter	17121030	Amruta Hindurao Mane	Infosys Ltd	Systems Engineer Trainee	4.5
7	17121016	Ashvini Kurkute	Vodafone	GET	3
8	18221003	Bhairavi Khairnar	Mindtree Ltd	Engineer	4
9	17121056	Dnyaneshwar Kedar	TCS Ninja	Asst System Engr Trainee	3.36
10	17121074	Gaurav Surana	<b>Reliance Jio</b>	Asst Manager GTE	3.6
11	17121038	Govinda Daga	Infosys Ltd	System Engineer Trainee	3.6
12	17121003	Harshada Pawar	RIL	Junior TAC Engineer	3.5
13	17121037	Ishwar Kavhale	<b>Relianced Jio</b>	Asst Manager GTE	3.6
14	17121028	Ketan Dhumal	TrueCopy	AI ML Engineer	6.5
15	17121018	Krushna Dhavale	FIS Global	InP - IT Trainee	5.22
16	18221005	Madhuri Jadhav	Agiliad Technologies	Software Engineer	4.25
17	17121002	Mayuri Sanap	Agiliad Technologies	Software Engineer	4.25 4.25 4.25 FRANSFILL
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18 <sup>1101</sup>	17121027	Mrunal Kanade	Infosys Ltd	System Engineer Trainee	3.6
19	17121042	Nilesh Wagh	Infosys Ltd	System Engineer Trainee	3.6
20	17121059	Priyanka Pathade	Accenture	Application Development Associate	4.5
21	17121059	Priyanka Pathade	TCS Ninja	Asst System Engr Trainee	3.36
22	16121001	Rakshanda Meshram	Agiliad Technologies	Software Engineer	4.25
23	16121001	Rakshanda Meshram	Mount Blue	Trainee	4.3
24	16121001	Rakshanda Meshram	Relianced Jio	Asst Manager GTE	3.6
25	17121043	Rupali Zanzad	Accenture	Application Development Associate	4.5
26	17121043	Rupali Zanzad	TCS Ninja	Asst System Engr Trainee	3.36
27	17121020	Rutwik Sayankar	РТС	Associate Software Analyst	7.5
28	17121020	Rutwik Sayankar	Trianz	Software Engineer Trainee Grade A	3.8
29	17121011	Sahil Mahajan	Agiliad Technologies	Software Engineer	4.25 4.25
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301100	17121069	Samaira Shaikh	TCS Ninja	Asst System Engr Trainee	3.36
31	17121069	Samira Shekh	Accenture	Application Development Associate	4.5
32	17121069	Shaikh Samira	Vodafone	GET	3
33	17121072	Shreyas Ikhar	rtCamp	WordPress Engineer Trainee	12
34	17121013	Shubhangi Mhaske	Accenture	Application Development Associate	4.5
35	18221001	Sonal Pachpute	MKCL	Project Trainee Tech Dev	2.52
36	18221001	Sonal Pachpute	Mount Blue	Trainee	4.3
37	18221001	Sonal Pachpute	TCS Ninja	Asst System Engr Trainee	3.36
38	18221010	Utkarsha Ganesh Gove	Birla soft		3.6
39	18221010	Utkarsha Ganesh Gove	HCL		3.65
40	18221010	Utkarsha Ganesh Gove	Infosys Ltd	System Engineer Trainee	3.6
41	17121004	Vaishnavi Khaire	TCS Ninja	Asst System Engr Trainee	3.36 3.36 3.36 3.36 3.36 3.36 3.36 3.36
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eadel	42	17121016	Vaishnavi Shinde	Accenture	Application Development Associate	4.5
28 1 . 02	43	17121016	Vaishnavi Shinde	Agiliad Technologies	Software Engineer	4.25
	44	17121055	Vishal Saptal.	TCS Ninja	Asst System Engr Trainee	3.36
1	45	17121048	Vrushali Akolkar	TCS Ninja	Asst System Engr Trainee	3.36
	46	1812004	Jyoti Sanap	Mphasis	Trainee associate Software Engineer	2.5

Government College of Engineering and Research, Avasari (kn)

### ELECTRONICS AND TELECOMMUNICATION ENGINEERING DEPARTMENT

### **Department Vision**

Excel in the field of Electronics and Telecommunication Engineering for value-based education and social development

### **Department Mission**

- To improve quality of knowledge imparted with effective teaching- learning process.
- To prepare students to tackle emerging challenges of industry.
- To ignite young minds with the aptitude for research, innovation and entrepreneurship.

The department of Electronics and Telecommunication was established in 2009-10 with 60 Intake. Since its commencement, the primary level of the department has been to value-based quality education, training and research at the undergraduate in various areas of Electronics and Telecommunication Engineering with broad emphasis on design aspects of electronic systems.

The Department has always been on a high growth path and has experienced and dedicated faculty with a strong commitment to Engineering education. To keep pace with the current technological trends, all the undergraduate curricula have been upgraded by Savitribai Phule Pune University.

Laboratory facilities are utilized by students for the extensive project work. The department focuses on preparing its students to meet new industry challenges and making them aware of the recent advances in the technological field by emphasizing on

- A strong technical training in modern electronics technology
- Skills in analysing and design of microelectronic circuits and system
- Latest trends in simulation
- Practical skills in, Image processing, VLSI Design, Fibre Optic Communication and Advance Communication

### **Strengths:**

- Experienced and Qualified Faculty Members (MPSC selected), O3 Doctorate faculty members
  - Ample and Adequate Infrastructure
  - Well Equipped Laboratories with latest Equipment's
  - All Labs fulfils Practical requirement as per Curriculum of SPPU.



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Sr.	of Faculties an Name of Staff	nd detai Qualif icatio		Experience (Years)	Paper Publicatio	Books	Patent		
INU	Stall	n		(Tears)	ns				
1	Dr. M.S. Nagmode	Ph.D.	Professor & HOD	23 Years	42	03	03 publish -ed		
2	Dr. N. P. Futane	Ph.D.	Associate Professor (CAS)	31 Years	17 17	28	01		
3	Dr. K.V. Thakur	Ph.D.	Assistant Professor	18 Years	13	-	-		
4	Prof. G. R. Phulay	M.E.	Assistant Professor	14 years	07	01	-		
5	Prof. A.P. Gargade	M. Tech.	Assistant Professor	11 Years	01	_	_		2
6	Prof. D.B. Maheshwari	M.E.	Assistant Professor	08 Years	03				
List	of Faculties: <b>B</b>	Electrica	l 🔪						
Sr. No	Name of Staff	f Qı	alification	Designatio	n	Exper (Year			
1	Prof. T. T. Waghmare	M. Pu	E. rsuing Ph.D.	Associate I (CAS)	Professor	17 yea	1120	suing Ph.I 7 2019	D. from
L				42					

### **Paper Publication by Faculty**

### Dr Manoj S Nagmode

- "Modified Atom Search Optimization-based Deep Recurrent Neural Network for epileptic seizure prediction using electroencephalogram signals" in Biocybernetics and Biomedical Engineering, Vol.48, Issue 4, pages 1638-1653, October–December 2020. Publisher: Elsevier, Publication Type: Journal, ISSN: 0208-5216, H Index: 22, Quartile: Q2, Impact Factor: 2.537, SJR: 0.597, Cite score: 5.10, Indexing: SCIE.
- "Comparative Study of Motion Amplification Techniques for Video Sequences", International Journal of Future Generation Communication and Networking, Vol. 13, No. 3, July 2020, pp. 1203–1211.
- "Facilitating the Detection of ASD in Ultrasound Video using RHOOF and SVM" ESCI, Web of Science, Scopus Indexed International Journal of Advanced Computer Science and Applications (IJACSA), Vol. 11, No. 8, pages. 207-217, 2020, ESCI, Scopus Indexed.

### **Departmental Faculty Coordinators**

- Academic Coordinator: Dr M. S Nagmode
- E-Yantra, Robotics Lab, Project coordinator: Dr. N. P. Futane
- ISTE students Forum: Prof. A. P. Gargade
- Spoken Tutorial : Dr. N. P. Futane
- NPTEL/ETeSA, Exam: Mrs. D. B. Maheshwari
- SPPU Exam: Prof G. R. Phulay
- Girls Hostel, Mini project, visiting faculty in charge: Dr. Mrs. K. V. Thakur

### **Institute Activity Faculty Coordinators**

- AQAC In charge: Dr M. S Nagmode
- Student Welfare Technical: Dr. N. P. Futane
- EPABX In charge, AQAC Co coordinator: Prof. A. P. Gargade
- Internet & Networking Committee Member, Parents & Alumni Meet Member: Mrs. Maheshwari
- Publicity In charge, Electrical Maintenance In charge : Prof Phulay
- Girls Hostel Rector: Dr. Mrs. K.V. Thakur

### **Details of Testing and Consultancy:**

Testing of high Mast LED Lamp, 120Watts has been done in the department



### Patent Published by Faculty (AY 2020\_21)

Sr. No.	Applicatio n No	Date of Filing	Date of Publication	Journal No. Page Number	Title and Description
1	202021010 474 A, 2021	11/03/2020	06/11/2020	The Patent Office Journal No. 45/2020 dated 06/11/2020. Pg. no 56290	<ul> <li>TITLE OF INVENTION:</li> <li>"A System and Method Comprising ECC-Based HETNET Node Authentication Protocol"</li> <li>Inventors-</li> <li>1. P G Chilveri</li> <li>2. Dr.M S Nagmode</li> </ul>

### **Research Activity/Domain and Faculty Expertise**

### Dr Manoj S. Nagmode: Video and Signal Processing

- AICTE Sponsored program Expert talks :02
- SPPU: 02
- ISTE: 02
- PhD Guide: 06 students, 03 pass out

#### Dr N P Futane: VLSI and Signal Processing

- AICTE Sponsored program Expert talks :01
- TEQUIP :03
- SPPU: 03
- ISTE: 01
- College level :03
- PhD Guide: 04 students, 02 pass out

### Prof. G.R. Phulay: Advanced communication

- Expert Talk College level :01
- FDP coordinator:01

#### Dr. K.V. Thakur: Biomedical & Signal Processing

• Expert Talk College level :02

#### Prof Gargade: Digital Systems

• Expert Talk SPPU University:01

#### Prof. D. B. Maheshwari: Age Processing

• Expert Talk SPPU University:01

### Interaction with outside world

- Most of the faculty members in E&TC department are invited as resource person in different educational institute such as PVG, GCOE Karad, KIT Kolhapur etc,
- Dr. M.S. Nagmode, Dr Futane, Prof Phulay was invited for Academic Audit Committee of Government Engineering College, Jalgaon and Karad.
- Judges for various International Conferences such as IEEE,ISTE

### **Social Activity**

- Officers on special duty for COVID 19
- Developed and worked for COVID CARE CENTER in Boys and girls Hostel



## **STTP/FDPs Attended by Faculty :**

Dr. N	I S Nagmode							4
Sr. No	Workshop/set	minar	Institute		Duration	Y	ear/month	
1	FDP AI and Data	Science	JSPM'S Raj Shahu Colleg Engineering,	ge of	One Week, 2 26 July 2020		)20 July	
2	Online Cours Remote Sensi Technology a for		IIRS, Dehrad	dun G /	13 June to 01 July 2020	20	020 June to July	
3	SRM FDP			2010	21 TO 25 AUGUST 20		020 AUGUST	
Prof.	Phulay G.R			ST				
S. N.	Type of FDP /STTP	Tile of FDP /STTI	P	Organizin	g Institute	Duratio	on with dates	
1	Two Week	Outcome Based E Step Towards Exc		Engineeri	ent College of ng karad under arg darshan	11-05-2	020 to 15-0 <mark>5-2</mark> 020	
2	Two Week	Research Method and Techniques	ology Tools	IILM Coll Engineerin Technolog	ng and	18-05-2	020 to 22-05-2020	
3	Two Week	Signal Image and Processing	Video	Governme Engineeri	ent College of ng karad	26-05-2	020 to 30-05-2020	
4	Two Week	Problem Based Lo	earning		njshri Shahu Engineering e, Pune	01-06-2	020-05-06-2020	
5	Two weeks	Advancement in F	Renuable		ent College of ng Nagpur	17-03-2	021 to 23-03-2021	

### Dr. K. V. Thakur -

S. N.	Type of FDP /STTP	Tile of FDP /STTP	Organizing Institute	Duration with dates
1	WEBINAR	MATLAB for Engineering Applications	D Y Patil School of Engineering ,Pune	10/9/2020
2	STTP	RECENT TREND IN DEEP LEARNING 2020	GOVT. COLLEGE OF ENGG. AURANGABAD	ONE WEEK 4/9/2020 TO 8/9/2020
3	WORKSHOP	UNIVERSAL HUMAN VALUES	AICTE	ONE WEEK 28/7 TO 1/8/2020
4	FDP	ALGORITHM & TECHNIQUES FOR SIGNAL PROCESSING	COLLEGE OF ENGG. PUNE &MANIPUR UNIVERSITY	ONE WEEK 14/7 TO 18/7/2020
5	FDP	RECENT TRENDS IN MECHTRONICS AND AUTOMATION	NBN SINHGAD SCHOOL OF ENGINEERING& IEE PUNE SECTION	ONE WEEK 30/6 TO 4/7/2020
6	FOP	ELECTRONICS CIRCUTS	SPPU PUNE	22/6/2020 TO 26/6/2020
7	WEBINAR	DEEP LEARNING FOR AUTOMATIC SPEECH RECOGNITION	AISSM, PUNE	26/6/2020
8	WEBINAR	THE TAKING CHARGE OF YOURSELF	IET WOMEN IN SMART ENGINEERING PUNE LOCAL CHAPTER	6/6/2020
9	FDP	SIGNAL IMAGE&VIDEO PROCESSING:A PRACTICAL APPROCH	GOVT. COLLEGE OF ENGG. KARAD	26/5/2020 TO 30/5/2020
10	FDP	OUTCOME BASED EDUCATION:A STEP TOWARDS EXCELLENCE	GOVT. COLLEGE OF ENGG. KARAD	11/5/2020 TO 15/5/2020

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Dr. I	N.P. Futane			
<mark>S. N.</mark>	Type of FDP /STTP	Tile of FDP /STTP	Organizing Institute	Duration with dates
1	FDP	Python3.4.3	РССОЕ	20/4/20 to 25/4/20
2	FDP	MATLAB apply in Engg and science	GCE Karad	27/4/20 to 01/05/21
3	FDP	Scilab	AISSSM	4/5/20 to 9/5/20
4	FDP	Signal Image and Video Processing appln and Approach	GCEKarad	26/5/20 to 30/5/20
5	FDP	Universal Human Values	AICTE	23/7/20 to 27/7/20
6	FOP	Microcontrollers	SPPU	22-7-21 to 24-7-21

### Shri A P Gargade-

Sr. No	Workshop/seminar	Institute	Duration	Year/month
1.	Image Processing and Data Science with MATLAB (IP & DSWM 2020) Online STTP	GCOE Aurangabad	1 Week	7 <sup>th</sup> July 2020 -11 <sup>th</sup> July 2020

### R and D activities :

S N	Name of faculty	Details
1.	Dr. M S Nagmode	Guiding 03 candidates for their Ph.D. under SPPU, 03 research candidates completed Ph.D.
2.	Dr. N. Futane	Guiding 02 candidate for Ph.D. under SPPU, 02 research candidates completed Ph.D.



#### List of Non-Teaching staff:

Name	Qualification	Designation
Smt. A.V. Danure	D.E.E.	Technical Lab Asst.
Smt. K G Kamble	D.E.E.	Technical Lab Asst.
Shri. K.S. Waghmare	B.S.C	Technical Lab Asst.
Shri. M.V. Hande	B.S.C	Technical Lab Asst.
Smt. S.B.Morde	B.E IT	Technical Lab Asst.
Smt. Ravi Hembaade	B.Com	Laboratory Attendant

### NPTEL Course attended by Faculty and students

• Smt D B Maheshwari completed the NPTEL course

### Student Activities and Achievements and students' participation for:

#### 1. E-Yantra Lab achievement

GCOEARA inaugurated e-yantra lab through video conferencing with IIT-Bombay on 28<sup>th</sup> February 2018. Principal Dr. A. S. Pant in his inaugural speech expresses his view for the current demand of robotics.

The e-yantra Lab is supported by IIT Bombay and Sponsored by MHRD under the National Mission on Education through ICT program, Government of India. Four teachers from GCOEARA completed a three-month training conducted by IIT Bombay in order to set up the Lab in the Institute, and they received a cash award of Rs. 4,000 for showing excellence in training.

The College purchased materials worth of Rs. two lakhs for this lab. As this lab is under the control of IIT Bombay, the students will be benefited with the guidance of IIT Professors. This lab has been started in Electronics and Telecommunication Department. IIT Bombay gifted three robots in the FIREBIRD-5 category to the Institute. 50 students of the institute are working in this laboratory at present and more students will be accommodated in the future.



#### E Yantra winners -



#### Abhikalp 2020 winners-

PROJECT "Smart & Efficient Techniques for Automated Guided Vehicle" secured 3rd RANK. Competition Name:- ABHIKALP 2020 (Innovative Project Competition). Theme (C) Robotics & Drones, Smart Vehicle, Security & Surveillance, Smart Communication, Renewable Energy. Conducted By:- SPPU Research Park Foundation & Design Innovation Centre, SPPU, Pun Held on:-13th & 14th March 2020



	S.N.	Name Of Candidate	-	Achievements
	1	Ingale Shreyash Tushar	Member	ABU Robocon 2021 Team AIR6 and 2nd in Maharashtra
0	2	Jaydip Nalawade		Completed Ethical Hacking
	3	Rahul Sanjay Dahale		Video Making competition Participation Unnat Bharat
	15	Walke Chaitanya		IOT hardware software internship
<u>e</u>	5	Londhe Shradha		IOT hardware software internship
1000	6	Mendke Sanket Madhav		TCS ion Edge Young Professional
70 694	7	Kolekar Shailesh		eYantra eYRC competition participation
i sta	8	Thite Prerana		eYantra eYRC competition participation
		Ghadge Sanika		eYantra eYRC competition participation
		"Mahadik Vaibhav		eYantra eYRC competition participation
		50		

			No. of Concession, Name
11	Kumbhar Mahadeo	eYantra eYRC competition participation	
12	Chavan Purva	Cyber security boot camp	
13	Dhobale Tejal	IOT hardware software internship	
14	Gourshete Aniket	eYantra eYRC competition participation	
15	Sonavane Rajdeep	eYantra eYRC competition participation	
16	Jadhav Sohan	eYantra eYRC competition	

### **Industry Institute Interaction**

In every semester, Institute organizes expert lectures on different topics by industry persons & senior faculty members of reputed Institute. Industrial Training is organized for TE/BE E&Tc students is organized: Mr. S. Natesan, from OPPILA Microsystems, Pvt. Ltd. Bangalore

### INSTRUMENTATION & CONTROL ENGINEERING DEPARTMENT

The department of Instrumentation and Control Engineering is established in academic year 2010-11 with intake of 60. At present around 250 students from FE to BE Instrumentation and Control are taking the education in department. Department has six laboratories to cater the need of academics as per SPPU, Pune. Department arranges the industrial visits, expert talk, training, soft skill development programs, etc., to meet requirement of student to make them a complete Instrumentation and Control Engineer by education and to take care of the society. Department motivate the students to take part in curricular/co-curricular and extracurricular activities. These activities are like online certification of NPTL courses by Swayam, Spoken tutorial by IIT Bombay, ABINITIO a technical event in the institute, Project Competitions through Innovation club, ROBOCON club. Students are encouraged to take part in activities arranged by the institute and other colleges in SPPU or at State and National level too.

Faculties /staff are motivated to attend the workshops/seminars/FDP/STTP to upgrade their knowledge to share among the students. Faculty works for the SPPU Pune for conduct of various examinations, designing of syllabus, Committees, attend the paper evaluation at CAP organized by the GCOEARA/SPPU, Pune.

Department took participation in cleanliness drive in the campus / department, during COVID-19 situation to keep the area hygiene. Department aims in future to go for NBA accreditation after meeting the criteria of faculty and infrastructure.

### List of Major Equipment's:

- DCS Trainer Kit
- PLC trainer kit
- Flow Measurement Setup using various sensors
- Open loop and close loop system with PID controller
- Hydraulic and Pneumatic Trainer kit
- Digital Flame Photometer

- Load Cell Trainer
- LVDT Setup for displacement measurement
- Dead Weight Pressure gauge Tester
- Liquid Level Measurement setup
- Temperature measurement setup
- Photoelectric Colorimeter
- 8051/AVR Microcontroller Kits

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## Application Software's

- Virtual instrumentation interface
- LabVIEW Make NI software
- Automation Studio Software

### List of Faculties:

	L LA LOAT		10.923 Contraction of the local sector of the	
A North	Sr. No.	Name of the Faculty	Designation	Qualification
	1	Dr. N. S. Nehe	Professor and Head of Department	BE, ME, PhD
	2	Dr. M. R. Bongulwar	Asso. Professor	BE, ME, PhD
	3	Prof. K. H. Kowdiki	Asso. Professor (CAS)	BE, ME, PhD (Pursuing)
	4	Prof. S. R. Patil	Asso. Professor (CAS)	BE, ME, PhD (Pursuing)
	5	Prof. N. M. Karajanagi	Asst. Professor	BE, ME
	6	Prof (Smt) N. P. Wagh	Asst. Professor	BE, ME, PhD
			(On Deputation for PhD)	(Pursuing)
	7	Prof. (Smt) D. B. Trimukhe	Asst. Professor	BE
	8	Prof. (Smt) A. V. Kulkarni	Asst. Professor	BE, ME

### List of Laboratory Attendant:

1. Shri. M.G. Kadam

# Workshop/FDP/STTP/Seminar/expert talk etc, organized in the department:

- 1) 'Embedded Systems for IoT' by Smt. Kirti Raje, Sr. Software Engineer, Leap and Scale Growth Partners Pvt. Ltd, Pune on 6/11/2020
- 2) 'Resource Management and Security in IoT' by Tanmay Kamthekar, Senior Development Manager Lumedex Healthcare Tech., Pune on 6/11/2020
- 3) 'Industry 4.0 and Opportunities for Graduating students' by Dr. Ajay Deshmukh, Director, Centre for Industrial Mathematics, Bhaskaracharya Pratisthan, Pune on 6th July 2021

### **NPTEL Course attended by Faculty and students :**

Sr.No.	Dates	Name of Student	Course	Agency	Mode
1	12 WEEKS	ABHISHEK KENE	DIGITAL IMAGE PROCESSING	NPTEL	Online
2	4 WEEKS	GITE ABHIJEET SATISH	MANAGEMENT OF FIELD SALES	NPTEL	Online
3	12 WEEKS	DEEPALI ASHOK BAMRATKAR	DIGITAL IMAGE PROCESSING	NPTEL	Online
4	8 WEEKS	SANKET PRASHANT THAKARE	ANALOG CIRCUITS	NPTEL	Online
5	12 WEEKS	ROHIT PRASHANT BANGAL	DIGITAL CIRCUITS	NPTEL	Online
6	12 WEEKS	SNEHA PRABHAKAR MOKAL	SENSORS AND ACTUATORS	NPTEL	Online
7-/	12 Ø WEEKS	SPRATE SAAKSHI BIBHISHAN	CONTROL ENGG.	NPTEL	Online

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8	12 WEEKS	SAGAR SANJAY DEVKAR	CONTROL ENGG.	NPTEL	Online
9	12 WEEKS	ROHIT PRASHANT BANGAL	DIGITAL CIRCUITS	NPTEL	Online
10	12 WEEKS	MAYANK JHA	BASIC ELECTRIC CIRCUITS	NPTEL	Online
11	12 WEEKS	PAWAR KUNAL YASHWANT	DIGITAL CIRCUITS	NPTEL	Online
12	12 WEEKS	KAMBLE ASHUTOSH VIJAY	DIGITAL CIRCUITS	NPTEL	Online
13	12 WEEKS	ZEPALE HRISHIKESH DATTATRAY	DIGITAL CIRCUITS	NPTEL	Online
14	8 WEEKS	JADHAV DOJAKUMARI KASHINATH	REMOTE SENSING AND DIGITAL IMAGE PROCESSING OF SAELLITE DATA	NPTEL	Online
15	12 WEEKS	DUDHALMAL DEVYANI DILIP	SENSORS AND ACTUATORS	NPTEL	Online
16	12 WEEKS	ANURADHA SANJAY AMALE	SENSORS AND ACTUATORS	NPTEL	Online
Sr. No.	Dates	Name of Staff	Course	Agency	Mode
	8 WEEKS	Prof. SANJAY RAVINDRA PATIL	CHEMICAL PROCESS CONTROL	NPTEL	Online
2	12 WEEKS	Prof. ASHWINI VINAYAKRAO KULKARNI	MULTIRATE DSP	NPTEL	Online

**STTP/FDPs Attended by Faculty:** 

Sr. No	Faculty name	Type of FDP /STTP	Tile of FDP /STTP	Organizing Institute	Duration wit dates
1	Dr. N. S. Nehe	One week FDP	Algorithms and Techniques for Signal Processing	Government College of Engineering, Pune under TEQIP-III in association with Manipur Tech. University, Imphal	14/7/2020 to 18/7/2020
2	Dr.M. Bongulwar	One-week STTP	Internet of things and its application in industry	RamraoAdik Institute New Mumbai and B&R Automation	8/6/2020 to 12/6/2020
3	Shri S. R. Patil	One week FDP	Machine Learning & Deep Learning and its Applications	Government College of Engineering, Karad	16/05/2020 to 20/05/2020
4	Smt.D.B. Trimukhe	One week FDP	LaTeX	SVPKM, Dhule& IIT, Bombay	01/06/2020 - 07/06/2020
5	Smt.D.B. Trimukhe	One-week STTP	Intellectual property rights and effective patent drafting	KUMARAGURU College of technology, Chennai	27/07/2020- 31/07/2020
6	Smt.D.B. Trimukhe	Two-week FDP	ICT tools for teaching learning process and institute,	MeitY Government of India, Electronics & ICT Academics, NIT, Patna, MNIT, Jaipur, PDPM IITDM Jabalpur, IIT Guwahati & IIT, Roorkee	10/08/2020 - 21/08/2020
7	Smt.D.B. Trimukhe	One-week STTP	An Introduction to the Internet of Things and Its Applications for a Smart, Transparent and Immutable Ecosystem.	AICTE	05/10/2020- 10/10/2020
8	Smt. A. V. Kulkarni	One Week FDP	Days Online Faculty Development Program on SCILAB"	AICTE	04/005/2020- 08/05/2020
9	Smt. A. V. Kulkarni	IIT Bombay	FrivArduino training	Jawaharlal Nehru Engineering College, Aurangabad	Jan-20
10	Smt. A. V. Kulkarni	Marathwada Institute of Technology, Aurangabad, (M. S)	Medical Image processing using Machine learning	Marathwada Institute of Technology, Aurangabad, (M. S)	May-20



12

13

Smt. A. V. Kulkarni

Smt. A. V.

Kulkarni

Smt. A. V.

Kulkarni

**One Week FDP** 

FDP

STTP

**Problem based** learning

The Effective **Techniques** of **Teaching and E-**Commerce"

A Practical **Approach Towards Engineering for Technical Persons -** JSPM's Rajarshi Shahu College of **Engineering**, Pune

**SIOT Mumbai** 

**Pimpri-Chinchwad** 

**College of Engineering** 

05/06/2020

01/06/2020 -

01/06/2020 -

05/06/2020

07/07/2020-13/07/2020

Smt. A. V. 14 Kulkarni

**NITTR Chandigarh** 

Waste Management

NITTR Chandigarh

08/06/2020 to 12/06/2020

### Workshop/conference/seminar/webinar attended by Faculty:

Sr. No.	Name of Faculty	Details	Title
1.	Smt.D.B. Trimukhe	AICTE sponsored one week workshop held between 13th May,2020 to 17th May,2020	"Universal Human Values"
2.	Smt.D.B. Trimukhe	A.J. College of Engineering, Chennai one day webinar held on 31st May, 2020	"Enhance the quality of life with psychological well- being."
3.	Smt.D.B. Trimukhe	Universal College of Engineering association with IQAC, Kaman Vasai, Maharashtra sponsored webinar held on 1st June,2020	"Creating Interactive e Learning content."

### **Students Activities and Achievements:**

#### Internship-

Sr.No. Name of the student **Intern duration** Organisation Javinishka - The 2-11-2020 to 23-11-1. Madhur Umesh Rakhe 2020 Scarf Store **Rashtriya** Chemicals 2. Sorate Saakshi Bibhishan 18-12-2019 to 15-01and Fertilizers LTD 2020

### List of Class Representatives:

Class	SE		BE
CR1	Manoj Desale	Satyajeet Nalawade	Sanket Thakre

### Annual Result by SPPU:

Class	SE	TE	BE
All clear (%)	100	100	97
ATKT (%)	00	00	03

### **Final Year Result**

Total Students Appeared	Distinction	First Class	Higher Second Class
75	26	40	07

### List of Class Toppers with CGPA:

Sr.	SE	14. 5 8	TE		BE	
No.	Name of Student	CGPA	Name of Student	CGPA	Name of Student	CGPA
1	Ghorpade Pranjali	9.14	Pranita Swami	9.83	Sayali Panvelkar	9.03
2	HandeDeshmukh Madhura	<mark>8.86</mark>	Mahesh Morde	9.74	Pratik Adik	<mark>8.93</mark>
3	Mandhare Yash and Warle Vaishnavi	8.73	Aishwarya Madhavi	<mark>9.65</mark>	Sanket Thakare	<mark>8.61</mark>
4	Kotwal Samruddhi	8.68	Namrata Bhoir	9.63	Priya Patil	8.46
5	Kapre Yogesh	8.59	Sudarshan Bhise	9.63	Vrunda Thakur	8.55

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### **Placement:**

il.	Sr. No.	Name of the Student	Placed in
-	100	Pratik Adik	Wipro
100	2	Aditya Deshmukh	ATS Conveyor India
	3	Hrushikesh Bhalerao	L & T
3	4	Dipali Sahoo	Tata Motors
14	5	Atharva Nandanwar	Evosys
J.	6	Priya Bhujbal	Forbes Marshal
	7	Rajesh Diwate	Forbes Marshal
	8	Prashant Falke	Forbes Marshal
	9	Vaibhav Zade	Skoda Volkswagen
	10	Khemraj Chandrakant Bagal	Mindtree Ltd
	11	Kohinoor Kotkar	Infosys Ltd
	12	Mhaske Shubhangi	Vodafone
	13	Namdev Kale	KPIT
Č.	14	Priya Patil	Accenture
	15	Sadaphule Nikhil Mukesh	Tech Mahindra Cerium
	16	Sanket Landge	Infosys Ltd
	17	Shubhangi Borde	Accenture
	18	Sourabh Kulkarni	Accenture

### **Students Publication:**

Kundan Gaikwad, Parasram Falake, Sanket Thakare, Abhishake Kene, Abhishake Bhalke, Ishwar Chaturkar, 'Recognition and Evaluation of Pesticide using advanced Electronic and Optical System',5<sup>th</sup> IEEE Inter. Conf. On Trends in Electronics and Informatics (ICOEI), 3-5 June 2021, Tirunelveli, India.

### MECHANICAL ENGINEERING

## DEPARTMENT

The department was established in 2009 and has very good infrastructural facilities including fairly well-equipped laboratories and a Seminar Hall. The department has 01 Professor, 6 Associate Professors and 4 Assistant Professors at present. All faculty members are qualified, well experienced and dedicated. In addition, there are 5 Technical Laboratory Assistants and 1 Laboratory Attendants, all of whom are also well qualified. Emphasis is given to structured curriculum coverage, by arranging industrial visits, expert talks, guest lectures, guidance sessions and trying to have industry sponsored projects as far as possible. Students are constantly encouraged to participate in sports, cultural and technical activities so as to have all round development.

### List of Major Equipment's:

- Ice plant trainer kit
- Design and fabrication of vapor Absorption Refrigeration test rig
- Catia V5 R21latest version- 20 user
- Automation Studio softwareversion 5.7 – 5 users
- Nx Nastron academic perpetual License- 10 user
- Camlab CNC software Make CADEM
- Temperature distribution in composite wall
- Heat transfer in force Convection
- Parallel flow and counter flow heat exchanger
- Flow transducer trainer kit
- XY Position Control System
- Strain gauge trainer Strain /force measurement
- Study of Linear Conveyor control systems

- Mechatronics lab set up
- Binocular upright metallurgical microscope co-axial body
- Brinell cum Rockwell hardness tester
- Horizontal Muffle furnace
- Fine Polishing machine Single disc
- Jominy end Quench test quenching fixture
- Charpy Izod Test (Impact Test Equipment)
- Profile Projector equipment
- Floating carriage micrometer ( with standard accessories and accuracy 0.2 micron)
- Monochromatic light unit
- Cam analysis apparatus
- Prony brake dynamometer apparatus
- Static and dynamic balancing of machine
- Balancing of reciprocating masses
- Vibration meter 2050

### List of Faculties:

Sr. No.	Name of faculty	Designation	Qualification
1	Prof. S. V. Joshi	Professor and Head	ME Mech- Thermal Engg
2	Dr. S. A. Sonawane	Associate Professor	PhD in Mechanical Engg
3	Dr. S. V. Kshirsagar	Associate Professor	PhD in Mechanical Engg
4	Dr. S. S. Deshpande	Associate Professor	PhD in Mechanical Engg
5	Dr. R. M. Warkhedkar	Associate Professor	Ph. D. (Mechanical)
6	Dr. C. M. Sewatkar	Associate Professor (CAS)	Ph.D.(Mechanical Engineering)
7	Dr. S. V. Karmare	Associate Professor (CAS)	Ph.D.(Mechanical Engineering)
8	Mr. B. A. Patil	Assistant Professor	M.E. (CAD/CAM)
9	Mr. J. M. Arackal	Assistant Professor	M.E.(Mech. Designs)
10	Mr. A. S. Kousal	Assistant Professor	M.E. Mechanical (HPE)
11	Mr. N. D. Padawale	Assistant Professor	M. Tech (Machine Design)

### List of Instructors (Technical Lab Assistant):

Sr. No.	Name of faculty	Designation	Qualification
1	Shri. B. M. Bolkavthekar	Instructor (T.L.A.)	NCTVT ,ITI
2	Smt. P. D. Borade	Instructor (T.L.A.)	Dip. in Prod. Engg.
3	Shri. P. R. Korde	Instructor (T.L.A.)	Diploma in Mech. Engg.
4	Smt. A. S. Jaware	Instructor (T.L.A.)	Diploma in Metallurgy Engg.
5	Smt. K.P. Bhagwat	Instructor (T.L.A.)	Diploma in Computer Technology

Government College of Engineering and Research, Avasari (kh)

#### List of Laboratory Attendant:

1. Smt. S. J. Dalvi - M. A. (Economics)

# Workshop/FDP/STTP/Seminar/expert talk etc., organized in the department:

- ATAL FDP titled 'IoT ready Fluid Power Devices' was Coordinated by Dr. S.S. Deshpande and Dr. S.V. Karmare during 5-9 October 2020. About 120 participants from different parts of the country participated.
- ATAL-AICTE sponsored FDP on 'Computational Fluid Dynamics for Beginners', was coordinated by Dr. C. M. Sewatkar and Dr. S. V. Kshirsagar during 28<sup>th</sup> Sep to 2nd Oct 2020.

#### Site Visit Arranged for the students:

 Online Industrial Visit to Datta Krupa JVB Repair workshop near Pokharkar's City hospital, Manchar, for Hydraulics and Pneumatics Subject on 5.11.2020

#### **Faculty Achievements:**

- \* Paper Publication by Faculties:
- Chaudhari V. D., Kulkarni G. N., Sewatkar C. M. 'Computational fluid dynamics analysis of cabinet type solar dryer' Journal of food process engineering, (2021). <u>https://doi.org/10.1111/jfpe.13756</u>
- Birajdar M. R. and Sewatkar C. M., 'Experimental investigation of the loop thermosyphon with different adiabatic lengths charged with different working fluid' Heat Transfer. 2021; 2688-4534
- Chaudhari V. D., Kulkarni G. N., Sewatkar C. M. Mathematical modeling and computational fluid dynamics simulation of cabinet type solar dryer: Optimal temperature control. Journal of food process engineering, (2021). https://doi.org/10.1111/jfpe.13643
- Birajdar M. R, Sewatkar C. M. Effect of adiabatic length on the performance of closed loop thermosyphon systems. Heat Transfer. 2020; Vol 49, Issue 8, 1-27
- Birajdar and Sewatkar, "Experimental Analysis of Pump Driven Closed Loop Thermosyphon System for the Cooling of Electronics Devices Proceedings of 8<sup>th</sup> International and 47<sup>th</sup> National Conference on Fluid Mechanics and Fluid Power, 9<sup>th</sup>-11<sup>th</sup> December 2020 Indian Institute Of Technology Guwahati, India

- Ravibala Patil and C. M. Sewatkar, "Thermal Lattice Boltzmann Method based Forced Convection Heat Transfer from Six Inline Heated Square Cylinders for Various Spacing Ratios." Proceedings of 8<sup>th</sup> International and 47<sup>th</sup> National Conference on Fluid Mechanics and Fluid Power, 9<sup>th</sup>-11<sup>th</sup> December 2020 Indian Institute Of Technology Guwahati, India
- Chaware and Sewatkar, "Laminar to Chaotic Transitions for Flow Through a Pipe with Twisted Tape Insert", Proceedings of 8<sup>th</sup> International and 47<sup>th</sup> National Conference on Fluid Mechanics and Fluid Power, 9<sup>th</sup>-11<sup>th</sup> December 2020 Indian Institute Of Technology Guwahati, India

### \* SWAYAM /NPTEL Course attended by Faculty:

- Dr. S. S Deshpande completed an internal assessment of NPTEL course on 'Industrial Automation and control' (12 Weeks) on the SWAYAM platform Jan-Apr 2020 semester with internal assessment score 78%.
- Mr. N. D. Padawale completed the FDP Course on SWAYAM as per National Teachers Training Policy of AICTE named "Module- 1 Orientation Towards Technical Education and Curriculum Aspects' ' during Feb-April 2020 (8 WEEK).
- Mr. N. D. Padawale completed the FDP Course on SWAYAM as per National Teachers Training Policy of AICTE named "Module- 2 Professional Ethics and Sustainability" during Feb-April 2020 (8 WEEK).
- Mr. N. D. Padawale completed the FDP Course on SWAYAM as per National Teachers Training Policy of AICTE named "Module- 3 Communication Skills, Modes and Knowledge Dissemination" during Feb-April 2020 (8 WEEK).
- Mr. N. D. Padawale completed the FDP Course on SWAYAM as per National Teachers Training Policy of AICTE named "Module- 4 Instructional Planning and Delivery" during Feb-April 2020 (8 WEEK).
- Mr. A.S. Kousal completed FDP Course on SWAYAM as per National Teachers Training Policy of AICTE named "Module- 1 Orientation Towards Technical Education and Curriculum Aspects" during Feb-April 2020 (8 WEEK).
- Mr. A.S. Kousal completed FDP Course on SWAYAM as per National Teachers Training Policy of AICTE named "Module- 2 Professional Ethics and Sustainability" during Feb-April 2020 (8 WEEK).
- Mr. A.S. Kousal completed FDP Course on SWAYAM as per National Teachers Training Policy of AICTE named "Module- 3 Communication Skills, Modes and Knowledge Dissemination" during Feb-April 2020 (8 WEEK).
- Mr. A.S. Kousal completed FDP Course on SWAYAM as per National Teachers Training Policy of AICTE named "Module- 4 Instructional Planning and Delivery" during Feb-April 2020 (8 WEEK).
- Mr. J. M Arackal completed FDP Course on SWAYAM as per National Teachers Training Policy of AICTE named "Module- 1 Orientation Towards Technical Education and Curriculum Aspects" during Feb-April 2020 (8 WEEK).

- Mr. J. M Arackal completed FDP Course on SWAYAM as per National Teachers Training Policy of AICTE named "Module- 2 Professional Ethics and Sustainability" during Feb-April 2020 (8 WEEK).
- Mr. J. M Arackal completed FDP Course on SWAYAM as per National Teachers Training Policy of AICTE named "Module- 3 Communication Skills, Modes and Knowledge Dissemination" during Feb-April 2020 (8 WEEK).
- Mr. J. M Arackal completed FDP Course on SWAYAM as per National Teachers Training Policy of AICTE named "Module- 4 Instructional Planning and Delivery" during Feb-April 2020 (8 WEEK).

SR. NO.	Faculty name	Type of FDP /STTP	Tile of FDP /STTP	Organizing Institute
1	Dr. S.S. Deshpande	FDP Online- ATAL	Sensors Technology	Tripura University.
2	Dr. S.S. Deshpande	FDP- online	Digital Twin Technology for Industrial Automation process) Phase II-	AICTE Sponsored Online- Sathyabama university
3	Dr. S.S. Deshpande	FDP - Online	TEACHING LEARNING USING MATLAB By	GURU GHASIDAS VISHWAVIDYALAYA- ATAL- Online
4	Dr. S.S. Deshpande	FDP - Online	Digital Twin Technology for Industrial Automation process) Phase III	AICTE Sponsored Online- Sathyabama university
5	Dr. S.S. Deshpande	FDP Online	MOODLE Learning Management System	NIT Warangal
б	Dr. S. A. Sonawane	FDP	Product Development & Industrial Research - 2020	Government College of Engineering, Aurangabad (M.S.)
7	Dr. S. A. Sonawane	Online Course	Intro to Digital Manufacturing with Autodesk Fusion 360	Autodesk [Coursera Platform]
8	Dr. S. A. Sonawane	Online Course	Autodesk Fusion 360 Integrated CAD/CAM/CAE	Autodesk [Coursera Platform]
9	Mr. A.S Kousal	FDP	Remote Sensing & GIS Technology and Applications for University Teachers & Government Officials	Government of India, Indian Institute of Remote Sensing,

### STTP/FDPs Attended by Faculty:

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10	Mr. A.S Kousal	Online Course	Machine Design Part I	Georgia Institute of Technology, Atlanta, USA [Coursera Platform]
11	Mr. A.S Kousal	Online Course	CAM and Design, Manufacturing for Mechanical Engineers with Autodesk Fusion 360	Autodesk [Coursera Platform]
12	Mr. A.S Kousal	Online Course	Modelling and Design for Mechanical Engineers with Autodesk Fusion 360	Autodesk [Coursera Platform]
13	Mr. A.S Kousal	Online Course	Introduction to Mechanical Engineering Design and Manufacturing with Fusion 360	Autodesk [Coursera Platform]
14	Mr. A.S Kousal	Online Course	Engineering Systems in Motion: Dynamics of Particles and Bodies in 2D Motion	Georgia Institute of Technology Atlanta, USA [Coursera Platform]
15	Mr. A.S Kousal	Online Course	Introduction to Thermodynamics: Transferring Energy from Here to There	<u>University of Michigan,</u> <u>USA [Coursera Platform]</u>
16	Mr. A.S Kousal	Online Course	Advanced Engineering Systems in Motion: Dynamics of Three- Dimensional (3D) Motion	Georgia Institute of Technology Atlanta, USA [Coursera Platform]
17	Mr. A.S Kousal	Online Course	Mechanics of Materials III: Beam Bending	Georgia Institute of Technology Atlanta, USA [Coursera Plat
18	Mr. A.S Kousal	Online Course	Solar Energy Basics	The State Universit of New York
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19	Mr. A.S Kousal	Online Course	Simulation Analysis for Mechanical Engineers with Autodesk Fusion 360	Autodesk [Coursera Platform]
20	Mr. A.S Kousal	FDP	Moodle Learning	Government Polytechnic, Mumbai in collaboration with Spoken Tutorial Project, IIT Bombay.
21	Mr. A.S Kousal	FDP	Incubating Universal Human Values in Technical Education	All India Council for Technical Education (AICTE), New Delhi.
22	Mr. A.S Kousal	FDP	Computational Fluid Dynamics	AICTE Training and Learning (ATAL) Academy, at Govt College of Engineering and Research Avasari.
23	Mr. N. D. Padawale	Online- Course	Python for Everybody	Michigan University USA
24	Mr. N. D. Padawale	Online- Course	Introduction to Engineering Mechanics	Georgia Institute of Technology, USA
25	Mr. N. D. Padawale	AICTE Sponsored FDP	Application of FEA & CFD using ANSYS	Govt. College of Engineering, Karad
26	Mr. N. D. Padawale	AICTE Sponsored FDP	Accreditation and NBA Processes	NIT Agartala
27	Mr. N. D. Padawale	AICTE Sponsored FDP	Research and Publication Ethics	PRMITR, Amravati
28	Mr. N. D. Padawale	AICTE Sponsored FDP	Software Tools used in FEA	Kalasalingam University, Tamilnadu.



# Workshop/conference/seminar/webinar attended by Faculty:

Sr. No.	Name of Faculty	Details	Date
1	Mr. N. D. Padawale	Regional Orientation Workshop for Participating Institute of Unnat Bharat Abhiyan	13-03-2021
2	Mr. N. D. Padawale	Enabling Self-Reliant Economy through Techno-social Innovation In A Perspective of Post-COVID-19 Rural India	25-06-2020 to 27-06-2020 (3 Days)
3	Mr. J. M. Arackal	Regional Orientation Workshop For Participating Institute of Unnat Bharat Abhiyan	13-03-2021
4	Mr. J. M. Arackal	Enabling Self-Reliant Economy through Techno-social Innovation In A Perspective of Post-COVID-19 Rural India	25-06-2020 to 27-06-2020 (3 Days )
5	Dr. S. S. Deshpande	Geometric dimensioning and tolerancing by Elearnera in association with UV Knowledge Link Pvt. Ltd.	20.6.2020 to 27.6.2020
6	Dr. S. S. Deshpande	College to Corporate by Apli.ai	26.9.2020
7	Dr. S. S. Deshpande	Digital Marketing Program for Training and Placement Officers by MaTPO and IIDE	7.5.2021

### R and D activities:

SN	Name of faculty	Details
1.	Dr. S. A. Sonawane	Guiding 02 candidates for their PHD under SPPU
2.	Dr. S. V. Karmare	Guiding 03 candidates for their PHD under SPPU

# **Students Activities:**

### List of Class Representatives:

Class	SE	TE	BE	
CR1	Mr. Chetan Sandip Varpe	Mr. Suraj Devkar	Mr. Vaibhav Chavan	
CR2	Miss. Sampada Chhabu Gunjal	Miss. Prema Hanumant Jadhav	Miss. Pranali Shende	0

# Annual Result by SPPU:

Class	SE	TE	BE
All clear (%)	99.95	100	100
ATKT(%)	0.5	0	0

# List of Class Toppers with CGP:

Sr. No.	SE	TE	BE
1	Varpe Chetan Sandip	Zagade Shivam Suresh	Paradeshi Devrath Milind
	(9.05)	(10)	(10)
2	Gunjal Sampada Chhabu (9.02)	Wadekar Aniruddha H (9.98)	Kale Pratik Shivaji (9.98)
3	Yeole Dhanashree	Dumbare Sanket Sharad	Neha Ramesh Chakkar
	Rajendra (8.95)	(9.96)	(9.98)
4	Patane Anant Shivling (8.93)	Ghadage Omkar Sambhaji (9.96)	Ghawate Manoj Anil (9.91)
5	Mungle Satish Balaji	Desai Somesh Ramdas	Kulkarni Rohini
	(8.89)	(9.93)	Dnyanendra (9.91)

# Student Activities and Achievements and students' participation for:

S.N.	Date	Name Of Candidate	Achievements	Class
1	30-06-2021	Sham Maid	Internshala Campus Ambassador at Internshala	SE(Mech)
2 3	4/6/2021 1/5/2021	Sham Maid Sham Maid	Auto CAD Internshala National Level Quiz on	SE(Mech) SE(Mech)
			Automobile College of Technology, Tamilnadu	
4	6/9/2020	Chavan Mrunal	Aero-Design online Workshop MIT, Pune	SE(Mech)

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5	30-04-2020	Sampada Gunjal	COVID-19 Awareness Program Government Poly, Miraj	SE(Mech)
6	11/5/2021	Pallavi Unhale	National Technology DayDIPEX	SE(Mech)
7	28-07-2020	Kharat Shrilekha Baban	Future of Robotics in Surveillance SAINT GITS COE, Kerala	TE(Mech)
8	31-10-2020	Pundipalle Rohan Subhash	Ethical Hacking Internshala	BE(Mech)
9	24-06-2020	Jawale Shreekant	Awareness about Core and Advanced Python PVPIT, Pune	SE(Mech)
10	30-05-2020	Jawale Shreekant	Career Prospects in Mech. Engg after Covid- 19GCOEARA	SE(Mech)
11	3/7/2020	Suraj Devkar	Why you must be an entrepreneur	SE(Mech)
12	3/7/2020	Varsha Vilas Hanbar	Entrepreneurship Cell to convert Feasible Ideas to Product AVCOE Sangamner	TE(Mech)
13	1/7/2020	Varsha Vilas Hanbar	Quiz Createch Research Center	TE(Mech)
14	2/7/2020	Varsha Vilas Hanbar	Basic Knowledge about NSS Mohamed Sathak College of Arts and Sci. Chennai	TE(Mech)
15	2/7/2020	Varsha Vilas Hanbar	Basic Knowledge about CCC Mohamed Sathak College of Arts and Sci. Chennai	TE(Mech)
16	2/7/2020	Varsha Vilas Hanbar	Basic Knowledge about RRC Mohamed Sathak College of Arts and Sci. Chennai	TE(Mech)
17	2/7/2020	Varsha Vilas Hanbar	Basic Knowledge about YRC Mohamed Sathak College of Arts and Sci. Chennai	TE(Meet)

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18	3/7/2020	Sampada Gunjal	Why to be an Entrepreneur Inspire Training and Consultancy	SE(Mech)
19	9/7/2020	Aakash Sunil Shinde	Machine Learning for All Coursera	SE(Mech)
20	1/7/2020	Aakash Sunil Shinde	Autodesk Coursera	SE(Mech)
21	9/7/2020	Aakash Sunil Shinde	AI for Everyone Coursera	SE(Mech)
22	3/7/2020	Aakash Sunil Shinde	Introduction to Thermodynamics transferring Energy from Here to There Coursera	SE(Mech)
23	9/7/2020	Aakash Sunil Shinde	Preparing to Manage Human Resource Coursera	SE(Mech)
24	9/7/2020	Aakash Sunil Shinde	Introduction to Mechanical Engineering Design and Manufacturing with Fusion 360Coursera	SE(Mech)
25	16-07-20	Aakash Sunil Shinde	Digital Manufacturing and Design Coursera	SE(Mech)
26	16-07-20	Aakash Sunil Shinde	Material Processing Coursera	SE(Mech)
27	9/7/2020	Aakash Sunil Shinde	Fundamentals of Waves and Vibration Coursera	SE(Mech)
28	4/7/2020	Aakash Sunil Shinde	Material Science-10 Things that Every Engineer should Concourse	SE(Mech)
29	8/7/2020	Aakash Sunil Shinde	Drug Discovery Coursera	SE(Mech)

# Placement Statistics of students 2021:

	Programs Na	me and Asse	ssment Year-Mechanical Engineering 2020-21
	Name of the student placed	Enrolment no.	Name of the Employer
1	Manoj Ghawate	17141049	Siemens Ltd, Aurangabad
2	Sakshi Surana	17141024	Siemens Ltd, Aurangabad
3	Pranali Shende	17141034	Infosys, Bangalore
4	Rohini Dnyanendra Kulkarni	17141005	Tata Motors, Pune
5	Kunal Samadhan Shelar	18241011	Tata Motors, Pune
6	Sayali Ashok Gadekar	17141004	Tata Motors, Pune
7	Varad Dixit	17141056	Infosys, Bangalore
8	Nikhil Jadhav	17141009	Siemens Ltd, Thane
9	Rohan Subhash Pundipalle	17141038	Cognizant Technology Solutions India Pvt. Ltd, Pune
10	Paradeshi Devrath Milind	17141068	Infosys, Bangalore
11	Bhangale Pranali Ganesh	17141026	Cognizant Technology Solutions India Pvt. Ltd.
12	Pradnya Venkat Jadhav	17141011	TATA Consultancy Services



# TRAINING AND PLACEMENT CELL

#### • Rubicon Training (12 to 22 October 2020)

A training program was arranged for Final and Prefinal year students by Rubicon. The title of the program was "Connect with Work". The program was supported by Barclays CSR. The program aimed at improving the employability skills of the youth. Under this program, students were trained by Corporate Trainers to enhance their Life skills which would help them significantly to increase their chance of succeeding in a job interview. In total 60 students registered and successfully completed 18hrs (9 days daily 2 hrs.) online sessions from 12 to 22 October 2020. The students learned: Organizational Structure, Public Speaking, Presentation Skills, E-mail Etiquette, Grooming, Group Discussion, Personal Interview. Ms. Tanuja Ghonekar, Team Lead-Institutional Business, Rubicon Skill Development Pvt Ltd.,Pune coordinated the program with Dr. Sadanand S. Deshpande

### • go IT initiative by TCS (13 to 21 March 2021)

In Government College of Engineering and Research Avasari, online training program by A giant in software and consultancy domain- the TCS CSR has launched new 'goIT' initiative. The aim is to empower students to become Digital Social Innovators using Design Thinking and Technology to identify and solve social problems. This program is to train the students in 21st Century skills such as Innovative and Creative Thinking, Design thinking, Problem Solving and Presentation Skills. Students studying SE were appealed to join the program.

Online sessions were conducted for the students in two phases: on 13<sup>th</sup> -14<sup>th</sup> March 2021 and 20<sup>th</sup>-21<sup>st</sup> March. About 48 students were trained from all six SE divisions. On the basis of inputs, students were asked to form teams, select a social problem and prepare presentations to address the problems.

The sessions conducted by Experts from TCS and other organizations. Students who completed the 3 modules and gave their presentations received a Completion Certificate from TCS. Students themselves identified social problems as Water Crisis & Rainwater Harvesting, Rural Health Issues in India, Food Wastage, E waste management, Smart ID Card, Invest Waste & Create Best.

Ms. Preeti Shinde Corporate Social Responsibility, of Tata Consultancy Services imparted training and coordinated the presentations. Mr. Vikas Dhimole and Mr. Sunil Mehandiratta were judges for the presentation session. The judges shared important tips with students on how to avoid errors during presentations and how to improve.

### CST of TCS (Tata Affirmative Action Program) TAAP (Youth Employment Program) YEP program for BE2022 (TE2021) batch (25.12.2020 to 30.4.2021)

In all @14 sessions of 2 hrs. were conducted off college hours (online) on various topics such as - Quantitative Aptitude session, Business Communication, Basics of Programming, Basics of C Programming, Quantitative Aptitude session -Time and Work , , Email Etiquettes, Data Interpretation session , Quantitative Aptitude session -Percentage, Ratio & Proportion, Programming in Java

The facilitators were Abhishek Srivastava— HR Head- TCS Lucknow, Preeti Shinde, Anupama Chandrachood, this was coordinated by Aayushi Jauhari, Regional Lead, Corporate Social Responsibility-Tata Consultancy Services, Deval Gaur, Ilu Jain, Rahul Pathak and many from TCS.

 विद्यार्थ्यांच्या इंटर्नशिप करीत शासकीय अभियांत्रिकी व संशोधन महाविद्यालय व महाराष्ट्र चेंबर्स ऑफ कॉमर्स इंडस्ट्रीज ॲग्री कल्चर (एमएसीसीआयए) व सायंटिफिक जुगाडफंडा यांच्यामध्ये सामंजस्य करार (1.4.2021)

अवसरी खुर्द : शासकीय अभियांत्रिकी व संशोधन महाविद्यालय अवसरी (खुर्द) व महाराष्ट्र चेंबर्स ऑफ कॉमर्स इंडस्ट्रीज ऑग्री कल्चर (एमएसीसीआयए) व सायंटिफिक जुगाडफंडा यांच्यामध्ये सामंजस्य करार दि १.४.२०२१ रोजी करण्यात आला. सदरील करारा नुसार नव्याने सुरू झालेल्या ३०००० पेक्षा अधिक इंटर्नशिप संधी या नाविन्य पूर्ण चाचणी प्रकल्पात संस्था सहभागी होईल . इच्छुक विद्यार्थ्यांची बुद्धिमत्ता चाचणी दि १० मे २०२१ पासून घेतली जाईल. ५० विद्यार्थ्यांना दि ७ जून पासून इंटर्नशिप ची संधी देण्यात आली .

• ग्लोबल टॅलेंट ट्रॅक चार दिवसीय बुद्धिमत्ता चाचणी ( एप्टिट्युड ) कशी उत्तीर्ण करावी याचे

### ऑनलाइन प्रशिक्षण (20,21,27,28 Feb 2021)

शासकीय अभियांत्रिकी व संशोधन महाविद्यालय अवसरी (खुर्द) व ग्लोबल टॅलेंट ट्रॅक पुणे यांच्यामध्ये सामंजस्य करारा झालेला आहे .सदरील करारा नुसार व बारक्लेज यांच्या सी.एस. आर. तथा उद्योगाची सामाजिक दायित्वे अंतर्गत चार दिवसीय बुद्धिमत्ता चाचणी ( एप्टिट्यूड ) कशी उत्तीर्ण करावी याचे ऑनलाइन प्रशिक्षण विद्यार्थ्यांना देण्यात आले. दि. २०,२१,२७ व २८ फेब्रुवारी २०२१ रोजी दररोज चार तास ऑनलाइन प्रशिक्षण पार पडले. संस्थेचे प्राचार्य डॉ. ए. एस. पंत या प्रसंगी म्हणाले की "बुद्धिमत्ता चाचणी (एप्टिट्यूड ) उत्तीर्ण होणे ही नोकरी मिळवताना ची पहिली महत्त्वपूर्ण पायरी आहे त्यामुळे विद्यार्थ्यांनी सखोल अभ्यास करणे आवश्यक आहे." डॉ. सदानंद देशपांडे, (प्रशिक्षण व आस्थापना अधिकारी ) यांनी सदरील प्रशिक्षण आयोजनामुळे "विद्यार्थ्यांचा आत्मविश्वास वाढेल व प्लेसमेंट वाढेल असे सांगितले". ग्लोबल टॅलेंट ट्रॅक च्या तज्ञ प्रशिक्षकांकडून अंतिम व उपांत्य वर्षाच्या एकूण ६६ विद्यार्थ्यांनी प्रशिक्षण घेतले. प्रशिक्षण पूर्ण केलेल्या सर्व विद्यार्थ्यांना ग्लोबल टॅलेंट ट्रॅक पुणे यांच्या मार्फत प्रमाणपत्रे वितरित करण्यात आली . श्री. राहुल राय (की अकाऊंट मॅनेजर, ग्लोबल टॅलेंट ट्रॅक पुणे) व महाविद्यालया तर्फे डॉ. सदानंद देशपांडे, प्रशिक्षण व आस्थापना अधिकारी (TPO) यांनी समन्वयक म्हणून म्हणून काम पहिल.



TPO WITH GLOBAL TALENT TRACK OFFICIALS

#### • Visit to Araymond, Chakan (2.12.2020)

Meeting with Mr. Rahul mali and Dr. S.S. Deshpande TPO GCOEAR Avasari was arranged in Araymond plant Chakan

- 1. To decide reduce attrition rate of selected students.
- 2. How to retain them after selection and joining.
- 3. How to convince students and upcoming batches.
- 4. What rules are to be framed by institute for barring other campus drives after acceptance of any placement.

It was decided to have next meeting at institute with Principal and HoDs,

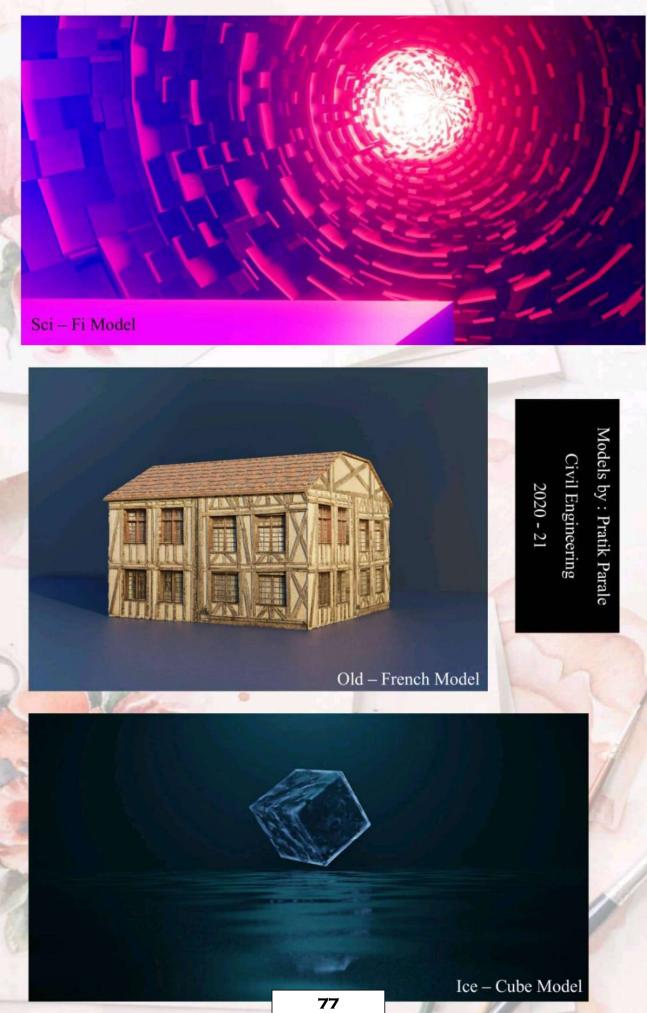
# LIST OF SELECTED STUDENTS IN COMPANIES IN 2020-21

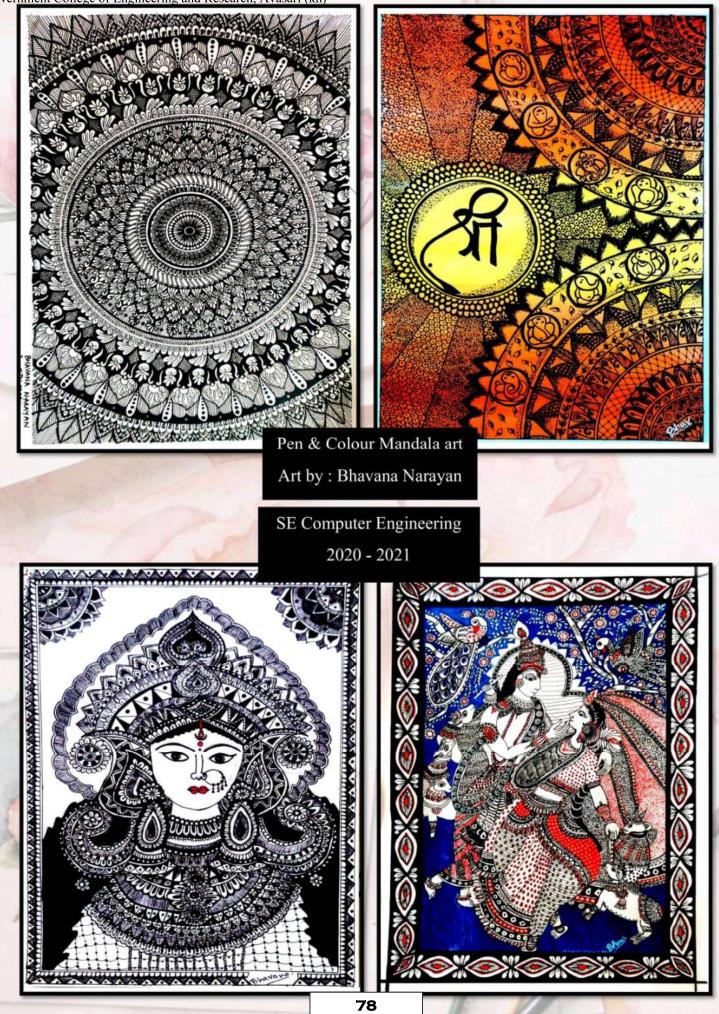
	Intake->	60	60	60	60	60	60	360	
Sr No	Name of the Firm	ME	СОМР	CIVIL	AUTO	EXTC	INSTRU	Total	CTC in Rs. Lakh per annum
1	Accenture		6			3	3	12	4.5
1		1	5			3	3	5	4.5
2 3	Agiliad Amdocs	-	1					1	4.25
3			4.				1		
	ATS						1	1	3
4	Conveyor	1	-						2.6
5	Birla Soft		1					1	3.6
6	Byjus				1	3		1	10
7	Capgemini	1.000			1	1		2	3.8
8	Cognizant	2				1		3	4.5
	DXC					1		1	3.6
9	Technologies								
10	FIS Global		1					1	5.22
11	HCL		1			1		2	3.65
12	Infosys Ltd.	3	6		2	6	2	19	3.6
13	KPIT						1	1	3.6
	L & T						1	1	3.52
14	infotech								
15	Mindtree		1				1	2	4
16	MKCL		1				-	1	2.52
17	MountBlue	1	2				-	2	4.33
18	Mphasis	1	1		-	1		2	3.25
19	PTC		1	-		1		1	7.5
19	Reliance		3		-			3	3.6
20	Jio		3					3	5.0
20		1		-		2		2	2.5
21	RIL		1		-	2		3	3.5
22	rtCamp		1					1	12
23	Siemens	3						3	5
	TATA					1		1	3.5
24	elexi								
	TATA	3						3	2.28
25	Motors								
26	TCS		9		3	6	1	19	3.36
	Tech					1	1	2	3.1
27	Mahindra								
28	Trianz		1					1	3.8
29	TrueCopy		1					1	6.5
30	Vodafone		2				1	3	3
31	WIPRO	1				3		3	3.5
	Wipro					25/1/	1	1	2.5
32 PARI									
_	Total	11-	45	0	7	27	13	103	-
	. ottai	1	10					105	4.32
Average CTC per company - Average CTC per candidate -						3.91			
				Average	cit pe	i canuluat	<b>C</b> -		3.91
				Max Cl	C				12

# Section : Models, Paintings, Sketches

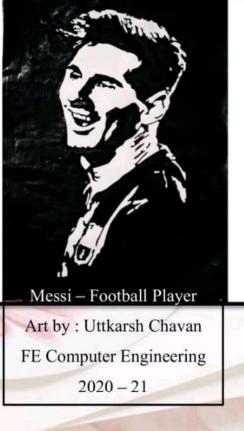


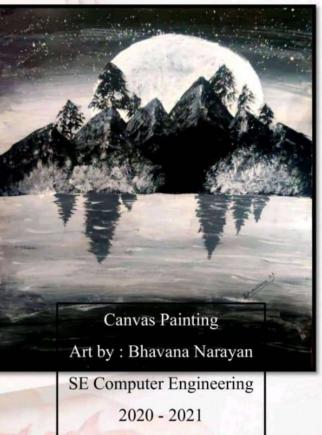
"Art has something to do with the achievement of stillness in the midst of chaos "





Zenith 20-21





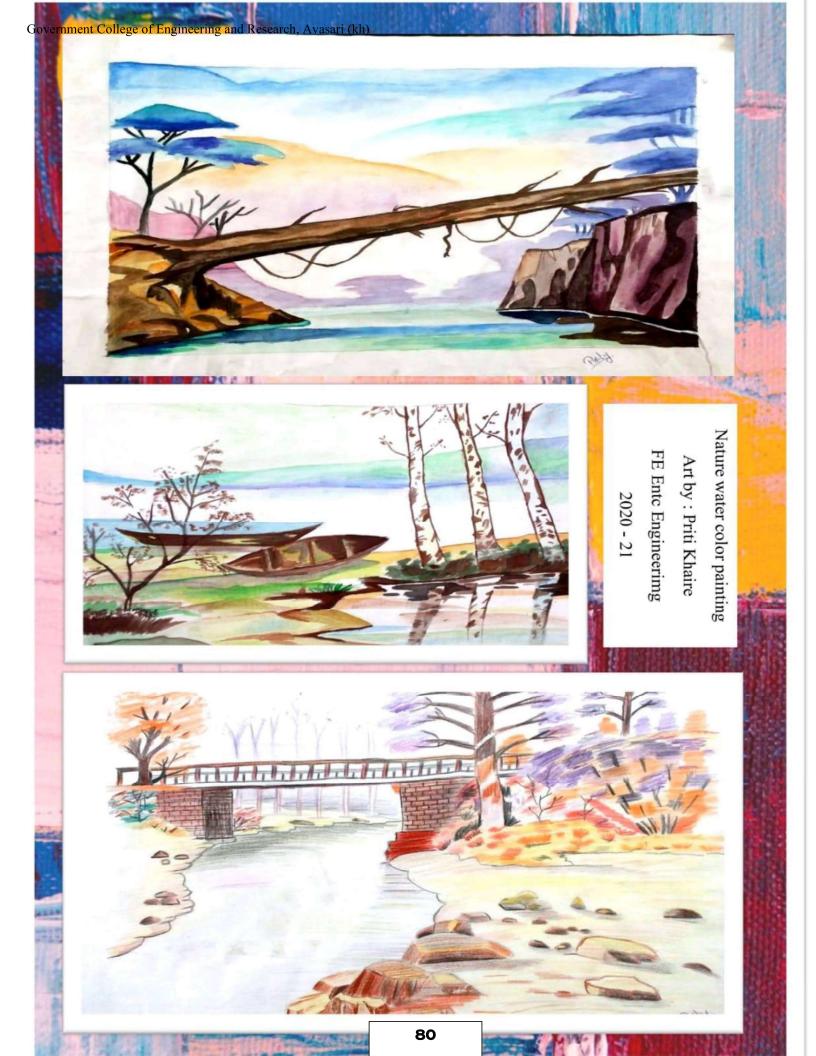


#### Classical Dancer

Art by : Rajashri Ghogare FE Computer Engineering 2020 - 21



Pen artwork - Eagle Art by : Asmita P. Lawand FE Mechanical Engineering 2020 - 2021

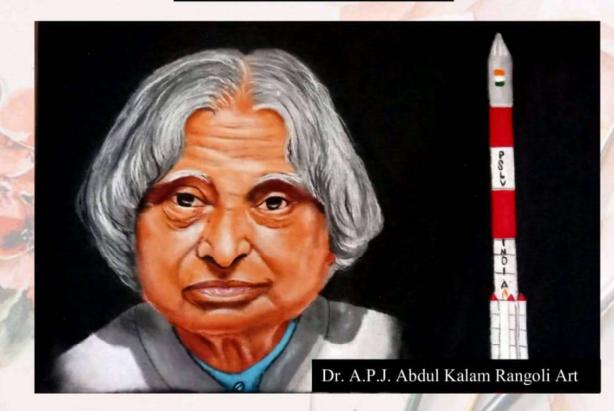


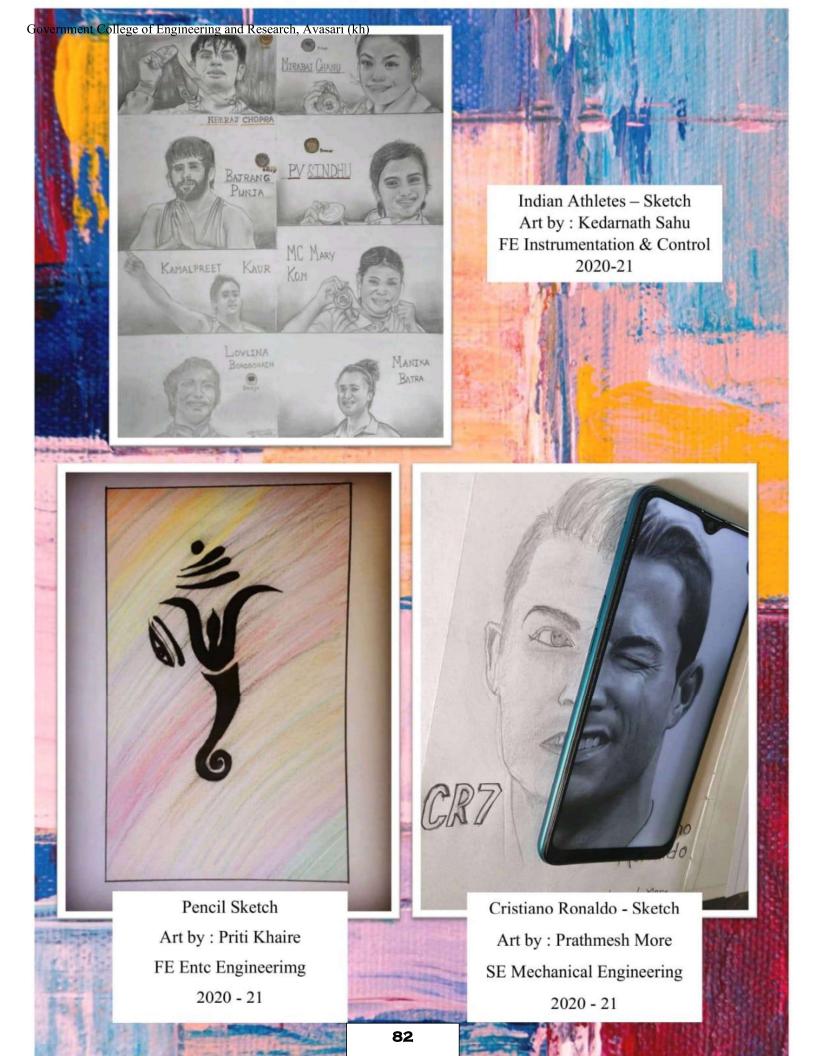
# श्यतेचा राजा

all

Chatrapati Shivaji Maharaj Rangoli Art

Rangoli Art Art by : Pratik Patil FE Computer Engineering 2020 - 21





# **IS IT POSSIBLE?**

It is observed through different national surveys that employability of engineering graduates in India is quite low. The industrial employers say that fresh graduates lack in not only technical subject knowledge and associated skills, but also in soft skills related to their engineering profession. In a way, they point out that students' overall development does not take place even though they are taught for four years in the college. May be partly this is due to the inadequacies associated with the current college timings, the prescribed time-tables followed, and the way students are taught in the colleges. It may be mentioned here, for example, in a typical institute, the college starts at 10.30 am and closes by 5.30 pm, wasting early hours of say 8.30 to 10.30 am of the day which are precious hours for learning. During this 10.30 am to 5.30 pm time, typically four teachers teach the students of a given class daily different four subjects in four lectures of one hour each. During these lectures, naturally students find it difficult to be attentive fully for all four by sixty minutes during those lectures; and then students are advised to do practical for remaining two hours in the day. Since these four teachers on a day are given individually one hour each for teaching, they cannot interact with each and every student in a class of say 70-75 students; they cannot solve individual students' difficulty in the class due to lack of time. This type of teaching becomes one-way communication resulting in very little learning by the students. After lectures, teachers expect that students should go home and read/write on their own for the sake of learning their subjects. However, it is quite clear nowadays that students have so many distractions that they hardly study seriously at home; maybe there are a few exceptions to this. Another important point is that hardly any college gives any slot in its time table for extracurricular activities which are very much essential for students' overall socio-technical development including soft skills and cultural/sports/health requirements. As a result of this, it is found that the fresh graduating students possess little subject knowledge, technical skills, and soft skills. Under these circumstances, our students cannot be expected to evolve themselves into charming happy skillful energetic professionals. The education system is entrusted with noble work of developing society of cultured and happy skillful citizens. Teaching community needs to join hands to work together for increasing happiness index of all students in the college campuses. Therefore, it is high time for educational institutes to provide students a diligent effective and caring system for grooming individual students' personality as a whole. In this context, a typical new system for time table in two parts (Part A & Part B) has been proposed here. In the proposed new system, the students are expected to be sincere, disciplined and enthusiastic in their daily routine. They may resolve to follow a certain typical daily routine proposed as follows, for their own proper development as a good citizen, good human being, always thinking positive for development of the society. There is a lot of scope for teachers and students to make our country proud while serving the global humanity, happily.

## Part A Proposed Typical Time Table for Teaching-Learning Sessions in Professional Institutes in India

Proposed	Suggested Activities	Expected	Remarks
Time Slots		Outcome	
8.30-10.30 am;11.00 – 1.00 pm; 2.00-4.00 pm (Tea Break:10.30- 11.00 am; Lunch Break: 1.00 to 2.00 pm)	Interactive sessions for teachers in a way suggested in the Part B	Every individual student would be able to get required technical knowledge and skills at his/her own pace utilizing early fresh time of the day	Students would be attending sincerely lectures/practical/tutorials/workshops/assignment /seminars/projects wondering for new knowledge every day with a caring active support from the faculty as explained in Part B
4.00 – 6.00 pm	Time for students & faculty advisors to plan and execute cocurricular, extracurricular students' club activities including various institute programmes; This time could be utilized for lectures/workshops by external experts available from society in the field of science & technology/academia/medical/ law/management/social sciences/government/defense/ literature/art/culture/sports, etc.	The students would be able to acquire required soft skills while working with their team- mates, along with right attitude and aptitude enabling them to develop themselves as happy talented professionals, with time-to- time support from caring faculty advisors	The students would be able to pursue their personal interests/hobbies under guidance of experts from respective fields through the institute's students' clubs-each one specific for a given extracurricular activity. The students would gat chance to hear success/motivational stories right from the achievers. The students' nationalism will be nurtured through interactive sessions with renowned personalities in different walks of life.

### Part B

A Proposed New Effective Teaching-Learning Process in Institutes (In 'One Day-One Subject' mode: Introductory Lecture followed by Self Study which includes Theory, Practical, Tutorial, Workshop, etc.)

Days (Below) Time Slots (Right)	8.30—10.30 am	11 am to 1 pm	2 to 4 pm:	4 to 5.30 pm:
Mon (6 Hrs.): Subject 1 only	In the introductory lecture (not more than 1 hr.), teacher opens the topic of learning, introduces definitions, principles, derivation of equations/proofs, etc. in the respective subject in the first 1 hr.; Students read from text book/laptop/ mobile and write their short notes on the topic introduced by their teacher in their notebooks in the next 1 hr.; Teacher also reads from his/her book/laptop/mobile in this 1 hr. paying attention to students' queries, if any; by the end of second hour students get their notes signed by teacher in the class itself(Teacher & students take a tea break for half an hour 10.30 to 11 am)	Students' & teachers continue self-study from books/e-sources, etc. in the class itself (Teachers & students take lunch break 1 to 2 pm)	Students perform related experiments, make models, write tutorials, write computer programs, discuss in groups, etc. group activities resulting in peer learning	Students and teachers go for extracurricular activities (departmental/ institutional) as per their interests, without bunking any academic activity
Tue (6 Hrs.): Subject 2 only	Same as above	Same as above	Same as above	Same as above

Wed(6 Hrs.): Subject 3 only	Same as above	Same as above	Same as above	Same as above
Thu (6 Hrs.): Subject 4 only	Same as above	Same as above	Same as above	Same as above
Fri (6Hrs): Subject 5 only	Same as above	Same as above	Same as above	Same as above
Sat (6 Hrs.): Seminar/ Project only	Students decide topics for Seminar, Project, Workshop, Expert Lecture, etc. in consultation with teacher	Students find literature for Seminar, Project, etc. from resources from Central Library/Computer Center and read it in classroom	Students write Seminar/Project Reports in class using their laptops/ PCs in computer labs; Students get their reports printed and get it signed by teacher subsequently. Saturday activities could be allowed in flexible manner as per requirement like students' visits to local nearby industry, etc.	

### A Typical Daily Routine for Students of Professional Institutes

All students in professional institutes are naturally interested in their overall development. They wish to become skillful, talented, sensitive, happy professionals for serving the society, while leading their happy life peacefully. For actual realization of such development, as long as they are in the institute, they need to follow certain well-planned activities in their daily routine. A typical daily routine for them could be as follows:

Sr. No.	Time slot	Suggested activity	Expected Outcome	Remarks
1	6 am - 8.30 am	Morning ablutions, physical exercise on ground, court, roof, etc.	The students would be able to keep sound physical and mental health	Walking/jogging/running/cycling/gymn asium/yoga/khokho/volleyball/ basketball/cricket/kabaddi/badminton/ swimming/etc.
2	8.30 - 10.30 am	Study time in college	The students would be able to get required subject knowledge	Interactive lectures/practical need to be attended sincerely wondering for new knowledge everyday
3	10.30 - 11 am	Tea Break	Teacher and students would be able to relax for a while in the short break	Tea/Coffee/Milk/Fruit Juice, etc. healthy drinks could be taken in this break
4	11am to 1 pm	Study time in college	The students would be able to get required subject knowledge	Interactive lectures/practical need to be attended sincerely wondering for new knowledge everyday
5	1 to 2 pm	Lunch Time	The students would be able to get require food energy	Proteins, Carbohydrates, Fats, Vitamins, Water are required in the diet which could be obtained through a variety of cereals, grains, vegetables, dairy products, etc. as per availability and choice
6	2 to 4 pm	Study time in college	The students would be able to get required subject knowledge, professional and soft skills	Interactive practical/project work need to be undertaken sincerely wondering for new knowledge every day to enhance professional and soft skills
7	4 to 5.30 pm	Extracurric ular activities in college	The students would be able to conduct cocurricular and extracurricular activities	Planning & execution of various cocurricular and extracurricular activities for persuasion of hobbies/talents as per personal interests under the guidance of experts from respective fields could be possible through students' club system

8	5.30- 6.30 pm	Entertainm ent time	The students would be able to relax after a busy day	Students may listen music, watch movies, read fiction/nonfiction books, blogs, etc.
9	6.30- 7.30 pm	Family/ Friends time	The students would be able to get emotionally bonded with their family and friends	Parents, siblings, friends would be happy to be together in person or through call/chatting on mobile phones
10	7.30- 8.30 pm	Dinner time	The students would be able to get require food energy	Proteins, Carbohydrates, Fats, Vitamins, Water are required in the diet which could be obtained through a variety of cereals, grains, vegetables, dairy products, etc. as per availability and choice
11	8.30- 10 pm	Non- academic reading, reflection time	The students would be able to keep updated with time	Watching TV, reading newspapers, periodicals will help them to update on current affairs
12	10 pm to 6 am	Sleep time	The students would be able to get sound sleep as per natural requirement	Peaceful sleep is required for healthy life

#### - Prof. M. G. Shaikh,

Civil Engineering Department & Library In-charge

# Poetry is nearer to vita truth than history

D

Charles FOR

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मी स्वातंत्र्य चोरायला निघालोय..



हातात दंडुका घेऊन, डोळ्यात आग घेऊन, मनात राग घेऊन, गुलामीचा द्वेष घेऊन, राती,क्रांती,राग,लोभ,धिक्कार, स्वीकार,आशा,निराशा, स्वार्थ, परमार्थ या सगळ्या भावनांची थैली काखेला लटकवून मी स्वातंत्र्याची चोरी करायला निघालोय...... तांडात कॉबलेला अभिव्यक्ती स्वातंत्र्याचा गेळा आता मला गप्प बसू देत नाहीये.... त्या गोळ्यात स्वातंत्र्याची बारूद भरून पारतंत्र्याला बेचिराख करायला मी निघालोय......

तथाकथित स्वातंत्र्याच्या पंच्याहत्तरीनंतर चौकाचौकात लागलेल्या बॅनर्सच्या मागून डोकावत असलेला पारतंत्र्याचा भूत पांढरपेशा इसमाजाला दिसत नाहीये.....

पण माझ्या गचांडीवर मात्र तो थयाथया नाचतोय, 🏹 🔬

स्वातंत्र्याचे 75 झॅंडे फडकल्यावर सुद्धा..... या पारतंत्र्यात चिरडून निघताहेत दलित,शोषित,स्त्रीया अन बालकेही.... शेतकरी,कष्टकरी,कामगार अन मजूरवर्गही... धर्म,पंथ,जात, अन माणुसकीही.... त्यात भरडले जात आहेत गीता,कुराण, बायबल,अन बुद्धांचा धम्मही...... निर्लज्जपणाने चौकात मिरवणारे हे बॅनर्स मला चोरायचेत.....

चोर चोर म्हणून मला समाज हिनवेलही... पण या चोराच्या बॉबा उलट असणार नाहीत.....

त्या सुतासारख्या सरळ अन पाण्यासारख्या निर्मळच असतील......

चोराचा ठपका बसल्यावर हा पांढरपेशा समाज हातात बांबू घेऊन मला फटके दयायला एकत्र होईल......

पण उलटून त्यांच्यावर थुंकत मी एकच सांगेन.....

ढुंगणावर खोटं स्वातंत्र्य मिरवण्यापेक्षा, छाताडावर पारतंत्र्य घेऊन खरं स्वातंत्र्य चोरायला मी असाच निघेन,

उन्हात.... पावसात.... अन कुडकुडणाऱ्या ेथंडीतही..... !

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SE Automobile 2020-21

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Zenith 20-21

# लेक वाचवा

मुलगी नको मला, असे म्हणतात सारेजण, याचे कारण मात्र, विचारा स्वतःलापण. मुलगी येते जन्माला तेव्हा, त्रास वाटतो सगळ्यांना, वंशाच्या दिव्यासाठी मात्र, दूर लोटलात पणतीला, वारस म्हणून सर्वांना, मुलगा हवासा वाटतो, पणती म्हणून सर्वांना, मुलगी का नको? ती येते जन्माला, तेव्हा सुखाचे वारे वाहू लागतात, इतरांच्या सुखासाठी मात्र, तीला दूर लोटतात. बापाचे बोट धरून मुलगी, पहिले पाऊल टाकते, "बाबा" या शब्दासाठी अगोदर, ती जन्माला यावी लागते. जन्मापासून बाप तीला, फोडाप्रमाणे जपतो, लग्न झाल्यावर मात तीला, त्रांस सहन करावा लागतो. साथीदारावर विश्वास ठेवून, मुलगी उंबरठा ओलंडते, त्याच्या एका शब्दावर ती, संपूर्ण आयुष्य पणाला लावते. तिच्या अत्याचाराचा कोणीच, विचार करत नाही, तिच्या आयुष्याचं मात्र, कोडं सोडवत नाही. मुलगी एक बहीण, एक कन्या असते, रक्षाबंधनासाठी भावाला, ती हवीशी असते. मुलीचे दुसरे रूप, ही आईच असते, तिच्यामुळे सारे घर हसत असते. मुलगी नको मला, असे म्हणू नका कधी, म्हातारपणी मात्र पाठीशी, तीच असते उभी. कधीतरी मुलींना, मानाचे स्थान द्या... त्यांचे आयुष्य घडविण्यात, त्यांना थोडीशी साथ द्या..

> - Chavhan Purva Shankar (SE E&TC 2020-21)

# मरणाची वाट...

हृदयातुनी साद वेड्या हृदयाला घालतो.. अन मरणाची वाट माणसा उगाच का चालतो ..।

उरला ना उंबरा येथे अन संसार असा एकही माय गेली बाप गेला तर कधी दोघा आधी लेकही..|

वेदनेचा आक्रोश सारा काना मंदी सजतो अन मरणाची वाट मानसा उगाच कसा चालतो...।।

मरण्याच्या नशिबी आता सरण येथे उरले नाही. आहे का एक तरी काळीज जे आता हूर हूरले नाही..।

मृत्यूचा तांडव जणू साक्षात येथे घडतो. अन मरणाची वाट माणसा उगाच का चालतो... क्षणाक्षणाला माणसं इथं काळाआड गेली किती कुणी करावा हिशोब सारा माणस आजवर मेली किती...

पापण्यांच्या ओठ ही आता दुःखाने गहिवरतो.. अन मरणाची वाट माणसा उगाच का चालतो.. अन मरणाची वाट माणसा उगाच का चालतो...।।

शोधु नको उगाच गड्या मरणाची वाट तु.. मांडला हा कोणता वेडा खुळा घाट तु.....||

> - कातकडे सुरज मारुती (SE Civil 2020-21)

# पतझड़ पन्ना

पतझड़ का मौसम था। युही रास्तोंसे में गुजर रही थीं धिरेसें कोई मुझे पुकार रहा था। शायद वो एक पतझड पन्ना था।।

रास्तों में यूही हो जाती हैं मुलाकाते... पर कोई उनमें से खास सा लगने लगता है। बातें मुलाकातें जब बढ़ सी जाती है। हाँ शायद उसे ही प्यार की शुरुवात कहते है।

जैसे बसंत में फूल खिलने लगते हे.... इरने भी तेजी से बहनें लगते है। मानों संगम, ये समा बना रहा हो.... पर कुछ बातें दिल में संजोए रखते है।।

जुदाई के समय आंखों में शिकस्त न दिखाई पर यूंही कुछ हसी यादें दिलमें संजोट रखे है.... और होगी मुलाकात फिर उस रास्ते पे कभी। इस उम्मीद में रोज उन गलियों से गुज़रा करते है।।

पर अब तक उस रास्ते पे कभी देखा नहीं। शायद परछाई और इंसान का कोई मेल नहीं। पर तेरी याद में आज भी कुछ लिखती रेहती हूँ.... शायद तुम ही हो वो,

जिसे में मेरी डायरी का आखरी पतझड़ पन्ना केहती हूँ।।

- Twinkal Meshram SE Computer 2020-21

# BE YOU...!

It's not about changing ourself cause of others ... It's about learning new things ... Finding new ways of madness to enjoy the life ... It's about changing mindset of us towards particular thing which we know it is wrong but we accept cause of society... And finally doing things that makes us happy n finding new ways to love zindagi ...

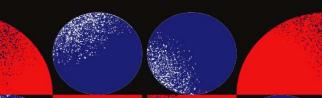
> - Prachí Devram (SE E&TC 2020-21)











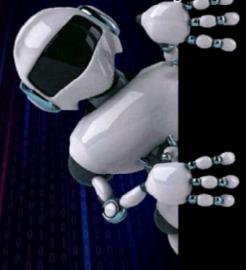
# ROBOTICS RESEARCH LAB



The Robotics Research Laboratory was established in 2013. It is the place where students perform hands-on work and gain pre-industrial knowledge. Here, students design, manufacture, control and automate a variety of mechanisms and various robotic drives using advanced software. It is a platform that enables a person to work on their innovative ideas and improve their soft skills. Our laboratory focuses on the interdisciplinary perspective that integrates the knowledge and competencies associated with other disciplines. RRL competes in the competition named ABU Robocon since 2013. Certain avenues cannot be explored without going astray. So, the team started to participate in numerous experimental procedures.

# VISIS- (VISITOR'S SAFETY AND INSPECTION SYSTEM)

This robot senses the person standing in front and detects if he is wearing the mask or not. If not, it provides the mask. Before this it gives sanitizer without any physical contact by sensing the hand. It also captures the temperature of the person. This robot can be used at the office entrance, to monitor hospital visitors, schools, colleges and other public places.







# **ROBO SOCCER**

We participated in Robo soccer. In which maximum of two manually controlled robots will compete each other in an arena that resembles an actual soccer field. We have to show our abilities and skills in robot controlling to bring our team to victory. Dynamical and fast game, in which accuracy and time play their role.

# MITSUBISHI ELECTRIC CUP

The team was honored with Mitsubishi Electric Cup, the National level competition for factory automation skill for engineering students.

Other projects like Quadcopter and Solar chargers are also developed in lab.

Eventually, the team was awarded "Best Robot developed by Rural Institute" in the competition ABU Robocon in 2016 and received AIR 6.

The following year, RRL ranked 7th in India, with the game's theme being "APPARE."

In 2018, the team was involved in several robotic activities that gave students a better understanding of the relevance and dynamic interaction between robotics and technology. As a result, RRL received the Smart and Simple Robot Award and was placed runner-up in India, which was a huge accomplishment.







In the year 2019, the team implemented numerous technologies in the Lab, students learned and performed activities in a way that maximized productivity while minimizing loss of time. The RRL participated in ABU ROBOCON 2019, which was held at IIT Delhi, and the game theme was "GREAT URTUU," which led to the development of a quadruped named "ARVAN". This quadruped was equipped with eight BLDC motors, to which nationally no one makes an effort to control and was recognized with the Judges' Special Award and also made us achieve the All-India Rank 4 position.



In 2020, Despite the Covid pandemic, we were physically present in the college. The pandemics couldn't break our willpower and perseverance. We still worked on the event and achieved AIR 14. For the theme of the year 2021, students developed a Swerve Drive kinematic model which is very efficient and has excellent controllability. This drive operated each of the four swerve modules independently which provided greater agility and less steering hysteresis than a typical holonomic drive.

Robotics Research Lab is the only team in India that operates four-wheeled independent swerving modules. Each swerving module was controlled by a gear train and driven by BLDC motors through a belt drive. The team received a perfect score in the first and second rounds of the 2021 JIMO ABU ROBOCON Competition and received an AIR 6, which was a huge achievement for us.





The Robotics Research Laboratory is the only team in our college possessing a 3-D printer. 3D printing, also known as additive manufacturing is the process of generating a 3D item from a CAD or digital model. Rapid prototyping is now possible, all thanks to the 3D printer! We have designed and printed several parts of our latest Robots.

The Robotics Research Lab has made microcontroller advancements by upgrading from the Arduino to the STM microcontroller and further integrating the components necessary for the competition.

The team members use numerous expensive components for various tasks and are able to publish their research papers. Till now, we have our research document based on the vector equations of Tri Omni drive, Swerve Drive kinematic model, and Arvan- the Quadruped.



Government College of Engineering and Research, Avasari (kh)

# SAHYADRI FORMULA RACERS

#### About team:

Team Sahyadri Formula Racers is the official Formula Student team of Government College of Engineering and Research, Awasari (Kh.). We are a group of students who love to get our hands dirty and design, manufacture and test formula student style prototype race cars. We are participating and represent GCOEARA for first time in formula student competition SAEINDIA SUPRA. Our engine has started roaring since we were founded in 2021, and we won't be putting on the brakes any time soon!

#### About competition:

- SUPRA (Super Racing) is a national-level engineering student competition where teams design and fabricate a Formula- style vehicle as per the design standards.
- Student Formula Competition, which presents the challenge to various teams of undergraduate and graduate students to design, fabricate, develop and compete with small formula style vehicles.
- It facilitates the students with an opportunity to deal with a practical problem using their innovative and creative ideas, aiming to construct a formula-style racing car with most economic model.



### **OUR JOURNEY**

Its foundation was laid in 2021. It was an outcome effort of a few enthusiastic founding members and faculty advisers. The team took solid form with the support of Asst. Prof. Kiran Bansode (Automobile Dept.) and Prof. M. J. Pable (HOD of Automobile Dept.) also the great support of Dr. D. R. Panghvane (Present principal, GCOEARA). Jitendra Prajapati became the first Team leader and stirred the team through the difficult initial stages where the team faced shortage of technical knowledge. Since then, it has grown to become the GCOEARA's official Formula Student team encompassing around 30 students from 6 departments. For first time we are participating in SAEINDIA SUPRA 2022 Virtual Event.

The journey of new car begins with its design. This involves application of all the classroom knowledge in actual engineering problems to achieve the set goals for car and its different systems, through modelling, simulation and experimentation. Supporting the car through its journey are the aspects of project management, cost planning, sponsorship and public relations. As a part of one of the events in the competition, the team also develops a complete business plan to launch the car as a product in market. The activities of the group provide an all-round experience for its members to build a great skill set for themselves, and be a part of a team representing the institute at national level.





# Government College of Engineering and Research, Avasa RADIANCE RACING









#### **ABOUT COMPETITION**

BAJA SAEINDIA design competition is organised by SAE India for enthusiastic budding engineers in India. Competition ask student to design, analyse, develop, built, test and present their off-road vehicle in event.

#### ABOUT TEAM

RADIANCE RACING has been representing our institute in SAEINDIA'S BAJA at National level competition since it was founded in 2017. Despite being relatively new in the field, the club has a glorious past in the various competitions like BAJA SAEINDIA, ESI (Enduro Student India) & the list goes on. The team comprising of 30 budding engineers focuses on the design, analysis, optimization, manufacturing, testing and marketing of "BAJA BUGGY", an All – Terrain Vehicle.

#### PREVIOUS YEAR JOURNEY

The most awaited flagship ATV competition of the INDIA, BAJA SAE INDIA 2021 commenced on Wednesday 21st April 2021 to 25th April 2021 the whole competition was taken in two stages, initially a virtual design round was carried out to evaluate the designing capability of the participating teams and colleges across the India. Teams from all over India participated in Virtual BAJA 2021 and only some teams were selected based on their design. Our team Radiance Racing stood 5th in JOURNEY CHALLENGE 2021 OF BAJA SAEINDIA. It was a glorious event and we did a lot of mistakes being a rookie. We corrected them and still we are doing the study on flaws and we get a suitable remedy and also implementing it in our motorsports club.

All this endeavor wouldn't had been possible without our faculty advisor's support. Special thanks and huge applause for Hon. Principal Dr. D.R. Pangavhane, Mr. A.J. Bhosale (Faculty Advisor) and all of the team members of the team Radiance Racing. With their collective efforts this ATV building dream came true in history of GCOEARA.



#### ACHIEVEMENTS

- We Secured AIR 7th in virtual BAJA 2017.
- Participated in ESI competition in 2018 and ranked 32nd.
- AIR 53 in BAJA event 2020.
- Secured AIR 5 in "JOURNEY CHALLENGE 2021"
- Selected for the dynamic with flying colours in BAJA SAEINDIA 2022.





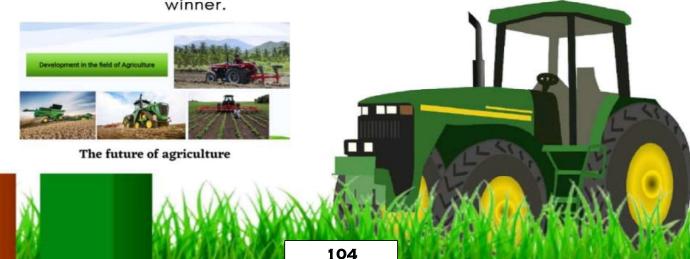




TEAM AAYUDH 2.0 was established in the year 2017. It is Team of students participating in the event called "SAE TIFAN". It is an Automotive Society of the engineers and the expertise related to the automobile sector. This event's main purpose is to solve agricultural challenges using modern engineering solutions. Team provides a great platform for students to show their innovative ideas and help them in their accomplishment. Through this students perform hand on operations on Welding, CNC, Lathe Machine, etc. and gain industrial knowledge.

#### **About Event:**

For this event teams have to register themselves once the registration is opened. Then teams have to prepare CAD model of vehicle according to the theme and specification which given by organizing committee. Theme of this year is to design and fabricate a "Self-Propelled Onion Harvester". For appearing in final round teams have to qualify virtual round. In virtual round teams have to represent a CAD model and its analysis of the designed machine. After qualifying virtual round; teams have to demonstrate the fabricated prototype of the machine at "Mahatma Phule Krishi Vidyapeeth Rahuri". Best economical and efficient machine will be declared as winner.





We are part of these event since last 3 years. In 2017 due to the transmission failure in the event we are unable to complete the final round. We didn't give up on this and bounce back in 2019 by securing 19th rank across the India. We feel glad to share this with you that, this year also i.e. for TIFAN 2022 we have qualified the virtual round and entered into the final round.

#### Uniqueness of our team:

- 1) We have clear goals and plans.
- 2) Each Members fulfill their own tasks and also help one another.
- 3) Members communicate openly with team.
- 4) Members feel they directly contribute to team's success.

## Soft skills developed in students are :

- 1) Communication Skills .
- 2) Confidence level .
- 3) Technical Knowledge .
- 4) Fieldwork Experience
- 5) Teamwork Experience .





# **TEAM PHALANX**

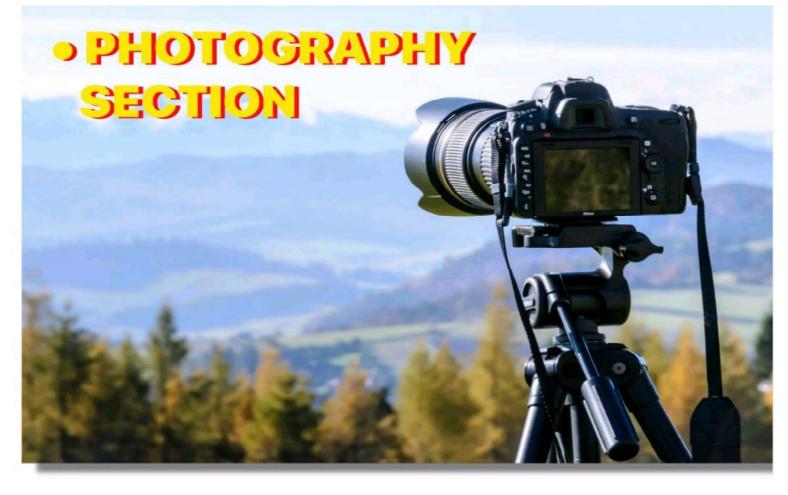
Team Phalanx has been one of the oldest establishments in the college. The students have always tended to get involved in competitions. This student club has always made up problems and made students break a sweat until they find the solution. The students put everything on the line for competitions. Team phalanx always made self learning possible and had always put automobile knowledge to the test. But over the years the industry has transformed, so do we. Henceforth, the team has decided to go for things the industry really demands. The industry has transformed and has made its paths towards automation with the use of developed electronics. Therefore, to make it happen, we structured a new team to achieve the goals we wish to achieve, also making sure that we work on our Automobile Strength.



The team will be hereby participating in two more competitions namely the hackathon, involving a coding, and automation and other being Electric Bike where the team will be moving towards the electrification of bikes as you might have assumed as per the industry demands. The question arises is, what is the response of the college? By far, the team had received 100 plus applications for getting enrolled into the team. But unfortunately, the team capacity could not be exceeded. The team has welcomed them with open arms, and now they have become the face of the team. What is our secret mantra of victory? The mantra is simple as it sounds, make it happen in testing and then in reality. With the advancement in technology, this has become a fairly easy process where we make models and then run it over the computers to make sure it's feasible. The systems and the knowledge now been to test, and assured of the results. Why would anyone want to join a team all together? Let's consider that a student is not involved in extracurricular activities. The student might turn into the brightest minds in his selected field. But the industry is expecting a person who can collaborate with a team to achieve the vision of the company. The company on the other hand is looking for all-rounders, and the master in one field is rookie. When you have an experience under your belt for being a good communicator, then you get aware of how to make things happen. When you do things by hook or crook, each day you develop to be the true engineer. Team Phalanx, with open arms, welcomes each one to be a part of the journey to share your true potential and knowledge with the team, moreover to get an experience which makes you Industry ready.



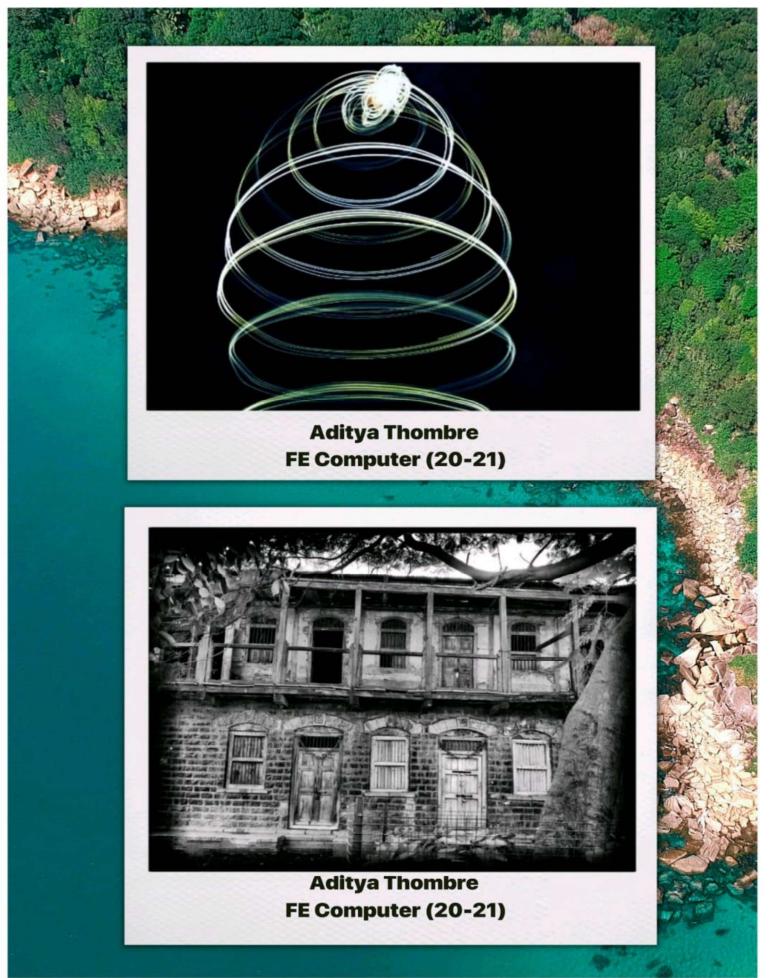
#### TEAM PHALANX



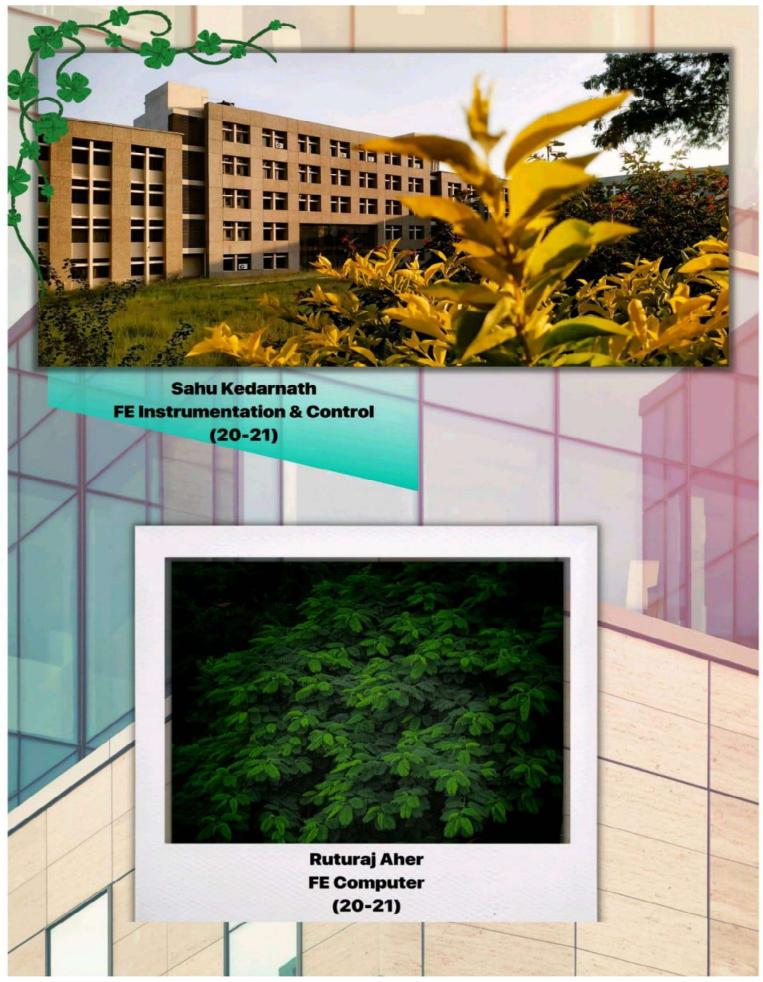
# Mobile Photography.

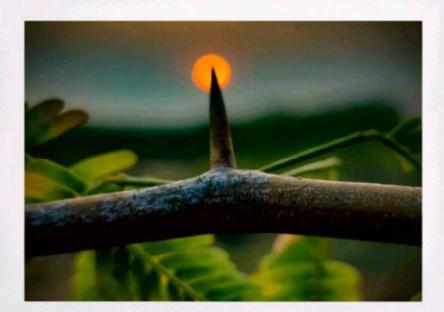


Zenith 20-21



Government College of Engineering and Research, Avasari (kh)





# Aditya Thombre FE Computer (20-21)



## Aditya Thombre FE Computer (20-21)



# All Department HODs with the Principal



The Staff of GCOEARA



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