

### Toc H Institue of Science and Technology Arakkunam A NAAC ACCRIDITED ISO 9001:2015 INSTITUTION









Department Newsletter 2019 Civil Engineering department

### B. Tech Toppers 2015-2019 batch





Aishwarva S CGPA - 8.58

Chithra A Saikrishna CGPA - 8,41



Kavya M Shenoy CGPA - 8.32

Congratulations to Aiswarya Manikandan (S3,2018 admission) for securing a SGPA of 10 in B.Tech II Semster examination conducted during May 2019



Aiswarya Manikandan SGPA - 10 in S2

#### DOWN THE MEMORY LANE

Sanskriti, the Civil Engineering Newsletter marked its birth on 12th, August 2008 by the blessed hands of Dr.Baaba at Ramanujan Hall in Aryabhatta Block. Its successful voyage continued to the next year with Mr.Muralee Thummarakkudy releasing Sanskriti 2009. Mr. Cyriac Davis did the honours by releasing the 3rd volume of Sanskriti 2010. 2011 witnessed the release of Sanskriti by Mr. L. Gopakumar. Sanskriti 2012 was brought to life by eminent structural engineer E.Sudhakar. Er.Kesava Chandran DMRC Chief Engineer, released Sanskriti in the year 2013. The seventh volume of Sanskriti was launched by Dr.N Ganesan Professor and HOD, CE department NIT Calicut in the year 2014. The eighth volume of Sanskriti was launched by Arch.BR.Ajit, Chairman, IGBC Cochin Chapter on 17th July 2015. The 9th edition of Sanskriti was released on August 8th, 2016 by Dr.P.K.Aravindan, Chief Consultant Sreegiri Consultants. The 10 edition released by Mr. Chandrakumaran Nair was Executive Director CIAL on 11th August 2017. The 11th edition was released by Dr. R Ravindran Nair, Dean TIST on September 15th 2018

To transform into a centre creating change agents in civil engineering with professional competency, integrity and ethical values for serving the society with the highest level of proficiency through their chosen domain MISSION

1. Provide ambience to create civil engineers of global standards to serve the society collaboratively, competently and ethically. 2. To provide an academic environment for lifelong learning nurturing the skills in research and development for the benefit of all stakeholders. professionalism in students through 3. To inculcate team effective work. communication and leadership skills. 4. To encourage and empower the faculty in the field of engineering education and mentoring for enhancing the teaching-learning process. 5. To impart hands on experience to aspiring undergraduates through interdisciplinary research projects, industrial training and consultancy work.

### **PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)**

The graduates of Civil Engineering will 1. Apply technical expertise to identify and resolve any complex civil engineering problems with the help of modern engineering tools and lifelong learning to meet the specified needs of their chosen domain viz. employment, higher studies or research and development. 2. Develop cost-effective solutions for a sustainable environment with deep insight in societal and ecological issues by adhering to professionalism. professional ethics, management and leadership 3. Exhibit qualities with good communication skills facilitating to work in a multidisciplinary team for evolving as an entrepreneur.

#### **PROGRAMME SPECIFIC OUTCOMES (PSOs)**

Students of Civil Engineering Program will demonstrate: 1. Innovative Design in Civil Engineering: The ability to create innovative designs with new materials of minimum embodied energy through research and development focusing on global quality of life by observing professional ethics. 2. Civil Engineer and Sustainability: The ability to recognize the need of the hour like housing, sanitation, waste management. irrigation, use of renewable energy etc. for a sustainable environment. 3. Civil Engineering Analysis and Design tools: The ability to analyze the effects of natural calamities like earthquakes, landslides etc. including disaster management and to design stable structures for relevant stress resultants.

### VISION

### **PROGRAMME OUTCOMES (POs)**

Engineering Graduates will be able to:

- 1. **Engineering knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2.**Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3.**Design/development of solutions**: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- 4.**Conduct investigations of complex problems**: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- 5. **Modern tool usage**: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- 6. **The engineer and society**: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- 7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- 8. **Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10.**Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- 11. **Project management and finance**: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- 12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

### **Editor's note**

"Follow your dreams, they know the way!!"

We as a editorial team have immense pleasure to introduce the new edition of "Sanskriti" the newsletter of civil engineering department. The contribution and dedication of faculty members, students and non-teaching staff has been continuously helping the magazine in stepwise manner for achieving new milestone. Sanskriti provides a perfect platform to highlight the talent and capability of civil department. The only purpose of Sanskriti is to unlock the hidden potential within the students and help the students for self-motivation.We welcome the comments and suggestions to improve the quality of magazine.

On behalf of the team we would like to thank all the members of the civil family for their cooperation. We also thank our seniors for successfully completing their course and making the department proud.

- Editorial Team

## Sanskriti Crew

### Principal's Message



### **Student Editors**

Fathima Nourin Youssef Sarin Xavier Ebin Saji Niyan CA Roshan George

### **Editor in charge**

Asst. Prof Vidya Jose Asst. Prof Elba Helen George Asst. Prof Annie Sonia Xavier

Razeen Raihas Hussain deserves special mention for designing the layout of this Newsletter

I am happy that the department of Civil Engineering of TIST is releasing its 12th volume of newsletter "SANSKRITI". I feel proud that the department with its determination, dedication and hard work could evolve itself as the first department in Civil engineering in Kerala to achieve cent percent in S8 results under KTU. The department of Civil engineering is actively involved in many research and consultancy works which includes development of pavement tiles from plastic wastes for Apolo tyres in collaboration with PLANET EARTH, preparing detailed project report for Piravom municipality for developing a hawking zone for street vendors etc. I wish that the department will initiate new research projects in collaboration with premier in the of water manageinstitutes area resource ment, effective disaster crisis management, soil piping, solid waste management and flood mitigation which is the need of the hour

Prof. Dr. Preethi Thekkath Principal

### HOD's Message

## **Editor in Charge**





Congratulations and we once again demonstrate our passion and commitment by releasing the latest volume of 'Sanskriti'. The field of education is going through a lot of changes and modifications. The rules and regulations of the university are changing drastically requiring the individual institutions to be NAAC accredited and the individual departments to be NBA accredited. We can be proud that our institution is NAAC accredited and our civil engineering UG program is NBA accredited. We could accomplish this academic excellence with the support of our students, staff, parents, alumni and the management. And we all can be proud that we are part of this great institution. Our results are also getting better and better with the first KTU batch in civil engineering, TIST getting 100% pass in 8th semester for the second time in a row. The civil engineering department, TIST stood first in the university for the 8th semester university results. Ms. Aiswarya Manikandan of 2018 admission got a perfect 10 for the second semester university examination. Mr. Naveen Giri of 2016 admission came to second position in chess championship in the National Level Techno-Cultural Fest 2019. Congratulations to all. We should also be aware of the natural calamities and disaster happening to our state and also the world at large. It's high time that we closely watch, explore, review and take initiatives to correct the .cause for all these climate changes - be it the floods in Kerala or the amazon rainforest fires

As I always keep reminding you all, the adaptation to automation and IT in the civil engineering field is fast catching up. We should be aware of these changes and constantly realign ourselves to upgrade and update with the latest technologies and best construction practices. Let us be united for building up a glorious future for our department which will bring us happiness, better placement opportunities and an overall sense of well-being. Congratulations again, to all contributors and editorial board of 'Sanskriti', the civil engineering newsletter for successfully bringing out its 12th volume. We are thankful to the management and the staff of this institution for all the support extended to us in all our endeavors

With best wishes and warm regards Lathi Karthi HOD Civil Department

We feel really first B.Tech proud and happy as the students of KTU batch (2015 - 2019)secured 100% results in eighth semester examination. Their success is a testament to their hard work and commitment. Also our department stands first among 125 engineering colleges under KTU having civil branch. Our M. Tech students continue to excel with 100% result in university examination.

Very few have fully realized the wealth of sympathy, kindness and generosity hidden in the soul of an individual. The effort of every educator should be to unlock that treasure and TIST is an excellent example where everyone strives towards this. When our state witnessed the recent unprecedented floods, our student volunteers took the responsibility upon themselves, participated in survey related work and other flood rehabilitation programs and activities. We sincerely appreciate all efforts and services taken by our students.

On behalf of Sanskriti team, I would like to place on record our gratitude and heartfelt thanks to themanagement, teaching & non-teaching staff and students, for their kind & continued support in making this possible.

May God Almighty shower His choicest blessings upon all

Asst. Prof. Vidya Jose Editor In-charge

#### Welcome to a new academic year!!!

It gives me immense pleasure to bring out the 12th edition of department newsletter Sanskriti. This serves as a platform to highlight the literary and artistic segment of the TIST Civil family. This also helps to unlock the hidden potential within the students. The Newsletter continues to expand its reach to achieve its vision of being a truly representative department publication.

The department of Civil Engineering has a dedicated group of students and faculty members who really work hard for a sustainable future.

### **Our Strength**

### WELCOME TO CE FAMILY



Asst. Prof.Jesna N. M.

M.Tech in Traffic and Transportation Planning

Teaching Staff



Non teaching staff

### **BUNDLES OF JOY**

Asst.Prof. Annie Sonia Xavier gave birth to a baby girl on 8th October 2018
Asst.Prof. SahimolEldhose gave birth to a baby boy on 7th December 2018



#### Asst. Prof. Anue Marry Mathew

M.Tech in Structural Engineering and Construction Management

### **BID FAREWELL TO**

Asst.Prof. Life John
Asst.Prof. Sherin K Rahman
Asst.Prof. Annie Joy
Ms. Usha Rani Balan
Ms. Mini Thomas

### **Department Achievements**

• Seminar hall of Department of Civil Engineering, Amrutham Hall (in memory of Ms.Amrutha who passed away in the year 2007) had been inaugurated by Dr. K Varghese, Founder Director and Manager of Toc H Public School Society on 15/03/2019 and the speaker system worth Rs.1.2 lakh is sponsored by the Alumni of Civil Department.



The department along with GeeksLab Technologies, an Intern of IIT Delhi organized a 3-day training programme on "Construction Project Management" from 23<sup>rd</sup> to 25<sup>th</sup> May 2019.





## **Faculty Achievements**

Two sessions of Invited talk were delivered by Assoc.Prof.(Dr.) Vasudev R on 'Forensic in Civil Engineering' and 'Eco-friendly Construction using Concrete' at National Workshop organized by MBC, Peerumedu in association with ICI and KSCSTE on 14/9/2018.



Prof. Lathi Karthi, Assoc. Prof.Dr.Smitha.K.K and Asst.Prof. Sahimol Eldhose visited metro casting yard of Cherian Varkey Construction Company Pvt. Ltd on 10.06.2019, where all the precasting works of metro constructions were carried out. The visit was arranged by the Builders Association of India (BAI). The site mainly consisted of pre casting of concrete prestressed 'I' girders and the pre cast pier caps for the metro stations.



### **Students Achievements**

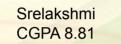
B.Tech 2015 admission batch achieved 100% result in 8th Semster University examination conducted by KTU in May 2019. Department secured first position out of the 125 civil engineering departments in S8 examination

M. Tech Toppers 2017 – 2019 Batch



Abitha Varghese CGPA 9.06







Anisha Mariya Paul CGPA 8.79



Naveen Giri of S7 CE (2016 Admission) secured FIRST position in KTU Inter Zone Individual Chess Championship held at College of Engineering, Trivandrum.



M.Tech. Students of CE department participated in Survey work at Velloor Grama Panchayath, conducted as a part of flood relief activities



Irene Mary Jomy, an alumna of the department (B. Tech 2008 Admission) won Emerging Engineers Award 2019, MiddleEast constituted by Institution of Civil Engineers.





Ajay Sooraj P.S of Second year M.Tech (2017-2019 batch) secured third prize in a photography competition organized by HarithaKeralam, Government of Kerala. The programme was conducted as part of World Earth Day Celebration 2018 and Ajay received a cash prize of Rs.5000





Aneesha A of S5 CE (2017 Admission) was awarded Elite+ Gold NPTEL Online Certificate for the course "Electronic Waste Management – issues and Challenges" conducted by IIT



Naveen Giri and Vijay Nair of S7 CE (2016 Admission) were D Zone CHESS

Runners up, and qualified for the Inter Zone Tournament organised by KTU.



Naveen Giri secured second position in GAMBIT 2.0 held as part of national level Techno cultural fest conducted at TKM, Kollam

### CEA ACTIVITIES (2018-19)

Conducted QIP on 'Innovations in sustainable waste management' on 19th 20th 21st july 2018

Two sessions of invited talk was delivered by Dr. Vasudev R on forensics in civil enginnering in a national workshop organized by NBC Peerumedu

Celebrated 51st Engineers day in the college on 15/9/2018. Enginner's day message delivered by Dr. Ravindran Nair

As a part of Life Bhavana Padhadhi, 6 houses and site of Udayamperoor Panchayat were visited by Asso.Prof.(Dr.) Vasudev R, Asst.Prof.Vidya Jose and Asst.Prof.Life John and submitted the report to panchayat secretary regarding the prioritization of allocating fund for reconstruction on 12/12/2018

As part of Energy Conservation Day a Technical talk on 'Energizing Energy' was taken by Mr. .Mohanlal Menon, BPCL 17/12/2018

S4 B.Tech and M.Tech students visited bridge site at Chambakara organized by ICI student chapter of TIST and Mary Mata Construction company on 6/2/2019

To give more awareness for school students on 'Disposal of Plastic & water conservation', Asso.Prof.(Dr.)Vasudev R and Asst.Prof.Sherin K Rahman had visited Chinmaya School, Tripunithura .on 6/2/2019

S6 students had an industrial visit to Coorg, Chickmanglur, from 7/2/19 to 10/2/19

To give more awareness for school students on 'Disposal of Plastic & water conservation', Asso.Prof.(Dr.)Vasudev R and Asst.Prof.Sherin K Rahman had visited Assissi Vidyaniketan School, .Kakkanad on 12/2/2019

Department of Civil Engineering in association with Mulanthuruthy Block Panchayath celebrated Women's day on 8 th march 2019 at Farmers hall, Edakkattuvayal. B.Tech. final year students (2015 Admission) conducted various cultural programs which focused on equality of women in the .society

Amurtham Seminar Hall inauguration and alumni meet was conducted on 15/3/19

Conducted 2 days National workshop on 'Building Construction' and on 'Software training hands on RIVET, Primavera and Building Information Modelling (BIM)' by IIT, Kharakhpur on 15/3/2019 and .16/3/2019

Conducted poster and photography competition based on theme 'Leaving No One Behind' for • .school and college students as a part of World Water Day on 22/3/2019 Engineering, TIST on 4/2/2019

The workshop on the theme 'leaving no one behind' was organized by the department as a part of World Water day celebration and Civil Engineering Techfest TECHSHILA,2019 was listed in the program list of United Nations World Water Celebration Conducted 2 days National Inter Collegiate Technical Fest 'TECHSHILA' on 22/3/2019 and 23/3/2019

Technical talk on 'NDT Testing' for M.Tech(1st & 2nd year) and B.Tech students(S8) was taken by Mr. Renjumon, Managing Director, Techshore Inspection Services organized by Department of Civil

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Technical talk on 'NDT Testing' for M.Tech(1st & 2nd year) and B.Tech students(S8) was taken by Mr. Renjumon, Managing Director, Techshore Inspection Services organized by Department of Civil Engineering, TIST on 4/2/2019

Final year B.Tech and M.Tech students presented a paper in 3re national Conference SECON'19 held at FISAT

A 3 day training programme on construction project management was organized in the department by IIT Delhi

Faculty members visited Cherian Varkey Construction yard, Kochi metro on 10/6/19

Faculty members attended 5 day KTU sponsored FDP at Rajagiri School Of Engineering And Technology from 8/7/19 to 12/7/19

Faculty members attended 5 day FDP on 'Emerging trends in utilization and conservation of energy for sustainable development' at TIST organized by EEE department from 15/7/19 to 20/7/19

Faculty members attended 5 day FDP on 'Emerging trends in utilization and conservation of energy for sustainable development' at TIST organized by EEE department from 15/7/19 to 20/7/19

B.Tech Students of Civil Engineering Department participated in flood relief activities at Ernakulam Collectorate, August 2019

M.Tech Students of CE department work at participated in Survey Velloor Grama Panchayath, as part of flood relief activities

For Unnat Bharat Abhiyan Prof.Lathi Karthi, Head of Department of Civil Engineering, had visited Vadavucode Panchayat and Chottankikkara Panchayat on 17th and 18th Jan 2019

For Unnat Bharat Abhiyan Asso.Prof.(Dr.) Vasudev R had visited Ramamangalam Panchayat on 25/1/2019

SANSKRITI Department Newsletter

### **Social Outreach Programme**

Department of Civil Engineering, TIST as a part of its social commitment has initiated a social outreach programme in association with various senior and higher secondary schools in and around Kochi. The programme is closely aligned with the Unnat Bharat Abhiyan (UBA) scheme and empowers young minds through technology transfer. The programme was conducted at ChinmayaVidyalaya, Tripunithura on 6th February, 2019 and AssissiVidyaniketan on 12th February, 2019. The outreach programme consisted of brief introduction on how to choose a bright career and was followed by lecture sessions on Waste Management to the senior secondary students and staff. Associate Professor Dr. Vasudev R, TIST enlightened the students on plastic pollution and the need of proper waste management. This was followed by a talk on Water Conservation by Asst. Prof. Sherin K Rahman, TIST ... in which students were motivated to conserve water by various simple methods





A technical visit was conducted to six houses in Udayamperoor Grama Panchavat for providing Third Party Technical Assistance (TPTA) on 12th December 2018 by Assoc. Prof. Dr. Vasudev R. Asst. Prof. Life John and Asst. Prof. Vidva Jose





### **Workshops and Seminars**

**"TWO DAY NATIONAL WORKSHOP ON "LEAVING NO ONE BEHIND** 

Department of Civil Engineering celebrated world water day and conducted a two days workshop on the theme "leaving no one behind" as part of Techfest, Techshila 2K19 on 22nd and 23rd .March 2019. The workshop was enlisted in the event list of UN world water day celebration website





National level workshop on Building Construction Department of Civil Engineering, TIST has organized a two day National level workshop on Building Construction on 15th and 16th of March 2019 in association with E Cell fest IIT Kharagpur





"Quality Improvement Programme On "Innovations In Sustainable Waste Management

Department of Civil Engineering, TIST is organizing a three day QIP on "Innovations in Sustainable Waste Management" on 19th, 20th and 21st of July 2018. This programme aims to impart the knowledge of state of Waste Management in India. Sustainable waste management is a goal that all societies must strive to maintain. Currently nearly 80% of global wastes are sent to landfill, with a significant amount lacking proper design or containment.















### Water Day Celebration 2K19

Department of Civil Engineering celebrated World Water Day on 22nd and 23rd March 2019. A two days workshop was conducted on the theme "leaving no one behind" as part of Techfest, Techshila 2K19. The workshop was enlisted in the event list of UN world water day celebration website.Poster Making and Photography competitions were conducted





### **Sports Achievements**

Muhammed Remees, Akhil S, Athul S, Ebin Martin of 2016 admission secured first position in AHAS 2K19 ,Cricket Tournament held at KMEA Engineering College



Muhammed Fayis(S3), Muhammed Nihal, Ashique Kunjumon (S3), Aslam MU, Faris Muhammed, Alphin Babu, Razeen Raihas Hussain (S5) C Sidharth (S5), Ashwin (S7), Jaison (S7) secured first position for the second consecutive year in the Inter-Department Football Tournament conducted in June 2019 participated







### **Industrial Visits**

#### B.Tech



#### M.Tech

### ATTITUDE IS EVERYTHING

The most important step we can take towards achieving our greatest potential in life is to learn to monitor our attitude and its im-.pact on our performance, relationship and everyone around us We all have a choice. We can choose self - encouragement and self motivation, or we can choose one of self - defeat and self - pity. That's a power we all have. Everyone has a hard time. The key to realize that it's notwhat happens to us that matters, it's how we choose to respond The loudest and the most influencial voice we hear is our own inner voice. It can work for or against us, depending on the message we allow. It can wear us down or cheer us on, but only if we consciously take responsibility and control our inner conversation. It takes serious work to examine the roots of a harmful attitude, but the rewards of getting rid of ourselves of this can last a lifetime

#### AS WINSTON CHURCHIL ONCE SAID ATTITUDE IS A LITTILE THING THAT MAKES A BIG DIFFERENCE



Fathima Nourin Yousef S5

### SEND A DROP OF KINDNESS

Send a drop of kindness And see a happy face A drop of kindness goes real far It may even reach outer space Send a drop of love And feel a loving embrace It feels so good to feel like You are in the right place Send a drop of hope But be that shinning star Hope is wonderful to have But sometimes you can't sit away so far Send a drop of faith With a single prayer And God will show the way As faith is always there



Hasna P.H S1

### !!!'It's Not Just a 'Hai

Life can be thought as a series of choice made I hope to look back and smile as my memories replayed Those once in a life time friendships are always quick to show But once they materialize Then somehow we will know That's how I found my Friend It has been said that real friends are hard find 'But I found mine with just a 'Hai A friend I thought would never be I became that in just a day Life can be thought as a series of choice made And that hai was my choice that led to frien ship when memories replayed

Aiswarya K.M S5

### LOVE YOURSELF

I'm shaking and afraid but I keep going foward I'm meeting the real me, hidden in the storm Why did I want to hide my precious self like this What was I so afraid of Why did I hide my true self I maybe a bit blunt, I may lack some things I may not have that shy glow around me But this is me My arms, my legs, my heart, my soul I'm the one I should love in this world Shining me, precious soul of mine I finally realized, so I love me Not so perfect, but so beautiful I'm the one I should love

Nazreen Rasheed S1

### **BE AN ACHIEVER**

es	A goal has been set for you To dream,chase and fulfill
	To follow it with determination
	A strong and steadfast will
	To never give up mid-way
n't	No matter how difficult it be
	To thrive on your inner strength
to	On the face of adversity
	A goal has been set for you
	By your future ridling strong
	By the unknown supreme power
	That shall not let anything go wrong
	For when he gives you a dream
	He knows you deserve it best
	He knows you have the ability
es	To withstand every test
00	It's you who has to take the message
.d	And follow the instincts always
nd-	Victory then shall be yours
	In all the coming days you

Arya Asok S5

#### REMEMBRANCE

Tried of opening my eye Painful it was But although, managed to open My aching head left me restless Somehow wiped my tears Though I couldn't wipe my pain Focusing back on the page I couldn't read her words literally But I could sense The cold breeze in her words Messing with its warmth Each words knitted her dreams And was beautifully expressed

Ever since I know her She was not a habitual diary writer ,But she started to pen down her words .....Just after her first chemo Though her outer body pretended to be strong Her inner heart had no scope of survival She herself did her countdown

Mere words cannot express The depth of loss I feel But it's the only way to heal my heart Death took away my beloved friend Still memories of those best moments lies within me it's the only asset for my pain which death could not take away

Death is always the winner in the play and when time comes for us to pass reunions will happen all those that have gone before us We will meet in heavens hall Life goes on with unwanted change To adapt and to move on The pain in my heart Will surely go off with time But your name carved in my heart Will surely stay forever my dear friend

Aiyleen Elsa Ravi S5

#### "World is cruel, Motivation is your fuel"

When you realise that the world is cruel Is the day when motivation acts as a fuel When everything you worked on goes wrong Is the day when you work harder and stay strong When you realise that its a bad day Is the day when you pray to slay When you think that you should give up Is the day when you must rise up When you think that hard work isn't working out Is the day when you shouldn't let yourself doubt When more and more problems are introduced Is the day you make sure that enough motivation is produced

When the world you made seems to crumble Is the day when you motivate yourself to hustle World is cruel, Motivation is your fuel

Abhijith J Kumar S5

### മാനത്തെ നക്ഷത്രങ്ങൾ

എങ്ങും നിശബ്ബത, കോരിച്ചൊരിയുന്ന മഴ, ഇടിവെട്ടും മിന്നലും മഴയെ തണുപ്പിക്കുന്നു. കരിപിടിച്ച ചിമ്മിനി വിളക്കിനു മുന്നിൽ രണ്ടു രൂപങ്ങൾ തണുത്തു വിറച്ചിരിക്കുന്നു. ഇടയ്ക്കിടയ്ക്ക് അവർ തലപൊക്കി പറയും. " അമ്മേ...വിശക്കുന്നു". മഴവെള്ളം മുഖത്ത് വീണതിനാൽ അമ്മ കരയുകയാണ് എന്ന് അവരാരും അറിഞ്ഞില്ല. അവൾ ആത്മഗതമെന്നോണം പറഞ്ഞു. " എന്നാണ് ഈ കഷ്ടപ്പാടൊക്കെ തീരുക... " നാളെയെങ്കിലും ഫീസ് അടച്ചില്ലെങ്കിൽ അവരെ സ്കൂളിൽ നിന്നും പുറത്താക്കും. ആകെ നിരാശയോടെ അവൾ മക്കൾക്ക് കഞ്ഞി വിളമ്പി. ഉറങ്ങാൻ നേരം, രാജു അമ്മയോട് സന്തോഷത്തോടെ ഒരു കാര്യം പറഞ്ഞു. " നാളെ...പാട്ട് മത്സരത്തിന് ഫലം പ്രഖ്യാപിക്കും എനിക്ക് തന്നെയായിരിക്കും സമ്മാനം കിട്ടുക എന്ന് മീന ടീച്ചർ പറഞ്ഞു". മനസ്സിൽ വിങ്ങലോടെ പുറമേ പുഞ്ചിരിയോടെ അവൾ അവനോട് പറഞ്ഞു. " നിനക്ക് തന്നെയായിരിക്കും സമ്മാനം...... " അവരെ ഉറക്കിയ ശേഷം അവൾ വീടിൻറെ ഉമ്മറത്ത് വന്നിരുന്നു. .മാനത്തെ നക്ഷത്രത്തെ നോക്കി തൻറെ വിഷമങ്ങൾ പറഞ്ഞുകൊണ്ടേയിരുന്നു

നേരം വെളുത്തു. രാജുവും, അമ്മാളുവും വളരെ ധൃതിയോടെ സ്കൂളിൽ പോകാൻ തയാറായി. വിഷമത്തോടെയാണെങ്കിലും അവൾ അവരെ സ്കൂളില്ലേക്ക് അയച്ചു. ഫീസ് ഇല്ലാത്തതിനാൽ അവർ ഉടനെ തിരിച്ചു വരും എന്ന് പ്രതീക്ഷിച്ച അവൾക്ക് തെറ്റി. സ്കൂൾ വിട്ടശേഷം രാജു ഓടിവന്റ് അമ്മയെ് വാരിപ്പുണർന്നു കൊണ്ട് പറഞ്ഞു. " ഒന്നാം സമ്മാനം എനിക്ക് കിട്ടി അമ്മേ... " അവൾക്ക് സന്തോഷമായി. പക്ഷേ ,അവൾ അപ്പോഴും ആലോചിക്കുന്നത് ഫീസിനെക്കുറിച്ച് ആയിരുന്നു. പിറ്റേ ദിവസം അവൾ മക്കൾ അറിയാതെ സ്കൂളിലെത്തി കാര്യം തിരക്കി. അപ്പോഴാണ് ആ സത്യം അവൾ മനസ്സിലാക്കുന്നത്. അവരുടെ അച്ഛൻ സ്കൂളിൽ വന്ന് ഫീസടച്ചു എന്ന്. അവൾ അത്ഭുത്പ്പെട്ടു. സന്ധ്യാസമയം വിടിൻറെ ഉമ്മ്റത്ത് ഒരാൾ വന്ന് . അ്ടഞ്ഞ ശബ്ബത്തോടെ പിളിച്ചു്." സു<mark>ജാ്തേ.... " ഇത് കേട്ടതോടെ അവൾ</mark> അടുക്കളയിൽ നിന്നും ഓടി ഉമ്മറത്ത് എത്തി. വ്ളരെ അത്ഭുതത്തോടെ അവൾ അയാളെ നോക്കി നിന്നു. അപ്പോൾ രാജു ചോദിച്ചു. "ആരാ അമ്മേ ഇത്...? " അടഞ്ഞ സ്വരത്തോടു കൂടി അവ്ൾ പറഞ്ഞു. " നീ ഏറ്റവും കൂടുതൽ കാണാൻ ആഗ്രഹിക്കുന്ന ആൾ ആണിത്." " അച്ചാ..... " എന്നും വിളിച്ച<mark>ുകൊണ്ട് രാജു അയാളുടെ</mark> അ്ടുക്കലേക്ക് ചെന്നു. മനസ്സീൽ സന്തോഷം്നിറഞ്ഞു പ്രോണ്ട് അവൾ അയാളെ് വീട്ടിലേക്ക് കയറ്റി. മനസ്സ് " !..തുറന്ന് അവൾ അയാളോട് ചോദിച്ചു. "എവിടെയായിരുന്നു.....?ഇത്രയും നാൾ ....പെടെന്ന്

നോക്കിയേ അമ്മേ..എഴുന്നേൽക്ക് ,നേരം എത്രയായി എന് എനിക്ക് " രാജു വിളിക്കുന്നു. കണ്ണുകൾ പതിയെ സ്കൂളിൽ പോകണം.. തിരുമ്മിക്കൊണ്ട് അവൾ സ്വപ്നത്തിൽ നിന്നും ഉണർന്നു. കണ്ടത് താൻ എ<mark>ന്നറിയ്</mark>ാതെ ് അവൾ സ്വപ്നമാണോ യാഥാർത്ഥ്യമാണോ കുറച്ചുനേരം സ്തംഭിച്ചുനിന്നു. മരിച്ചുപോ്യവർ നക്ഷത്രങ്ങൾ ആയി വരും എന്ന് വിശ്വസിച്ച .അവൾ, ആ നക്ഷത്രം ഒന്ന് ഭൂമിയിൽ വന്നിരുന്നെങ്കിൽ എന്ന് ആശിച്ചു

അജ്മൽ വി. ഐ S7

# Maker vs. designer vs. engineer what's the difference

Product development is in the midst of a profound shift as the advent of low-cost development hardware and open-source software along with crowdfunding meets rising opportunity in robotics, the Internet of Things, and smart consumer device markets. A maker, as the name implies, is someone who makes things — usually something novel. This rather broad term encompasses product developers as well as artists, craftspeopl e, and others who produce a tangible object. There are no other restrictions. Age, education ,level, materials used, and the like are all open-ended. A maker makes period

Designers take a different approach. They plan out their creation, often to a high degree of detail, before starting to make it. This approach gives them a roadmap to follow toward a clearly defined goal. There may be changes made to the design as implementation progresses (in fact, it's almost inevitable), but by and large, their implementation efforts follow the pre-defined plan. The end result is usually more refined, more robust, and better-suited to its purpose than something that is simply "made." And often, the whole process yields its final results faster than the maker .approach despite the seemingly "unproductive" time spent in planning Engineers are also designers, but with one added wrinkle: analysis. Like a designer, an engineer will plan out their creation before beginning implementation. But engineers also plan beyond the implementation to consider mass production and maintenance needs, stress, environmental effects and wear-and-tear, cost to produce and to maintain, and a host of other factors that may not affect form or function but do affect practicality. Evaluating the design against these factors takes both technical knowledge and mathematical analysis. Engineering is an analytic discipline that requires both substantial training and experience and is essential to ensuring that a design plan will yield a .product that is durable, reliable, safe, manufacturable, and cost-effective

മലയാളം ഒരാൾ ജനിക്കുന്നത് മുതൽ അയാളിൽ ഒരു ഭാഷ രൂപപ്പെടുന്നുണ്ട് എന്ന് ശാസ്ത്രം നമ്മെ പഠിപ്പിക്കുന്നു. ഭൂമിയിൽ എത്തുന്നതിനു മുമ്പ് തന്നെ അമ്മയുടെ ഉദരത്തിൽ വെച്ച് മാതാവിന്റെ നിത്യ ഭാഷ കുട്ടിയിൽ ചല-നങ്ങൾ ഉണ്ടാക്കുന്നു. അതാണ് അവന്റെ മാത്യഭാഷ. ഈറ്റില്ലത്തിൽ നിന്ന് കുഞ്ഞിനെ ഉള്ളിൽ മാത്യഭാഷയുടെ പ്രതിസന്ധി ഉണ്ടാകുന്നു എന്നതിന് തെളിവാണ് വളരെ പിഞ്ച് പ്രോയത്തിൽ തന്നെ നാം കുഞ്ഞിന്റെ അടുത്തിരുന്ന് സംസാരിക്കുമ്പോൾ അത് ശ്രദ്ധിക്കു-ന്നത്. അതുകൊണ്ട് ഒരാൾക്ക് ഏറ്റവും ഹൃദയമാകുന്ന അത് അവന്റെ ഭാഷ തന്നെ-<mark>?യാണ്. മലയാളികൾക്ക്</mark> മലയാളമാണ് മാതൃഭാഷ എന്ന് പ്രത്യേകം പറയേണ്ടതില്ലല്ലോ ഒരു ജനതയുടെ സംസ്കാ-രത്തിന്റെ പ്രതീകമാണ് ഭാഷ. ഭാഷാ പഠനം എന്നത് ഒരു സാംസ്കാരിക പഠനം കൂടിയാണ്. ഒരു സർക്കസ് കാരനാണ് നടക്കുമ്പോൾ ഒരു ദണ്ഡ് സഹായമാകുന്നത് .പോലെ തന്നെ നമ്മെ സഹായിക്കുന്നത് ഭാഷയാണ്. മലയാളിക്ക് അത് മലയാളം തന്നെ ലോകത്ത് സംസാരിക്കുന്നവരുടെ എണ്ണം കൊണ്ട് മുപ്പതാമത്തെ സ്ഥാനമാണ് "മലയാളത്തിനുള്ളത്. ആയിരക്കണക്കിനു ഭാഷകളും 700 കോടിയോളം ജനസംഖ്യയുള്ള ഈ ഭൂമിയിൽ ചെറിയ സ്ഥാനമല്ല ഇത്. എത്രയെ-.ത്ര മഹാരഥന്മാരാണ് മലയാള ഭാഷയിൽ നിന്ന് വിശ്വത്തോളം ഉയർത്തപ്പെട്ട ഉള്ളത്. ശാരീരിക പൈതലിനെ കൊണ്ട് പാട്ടുപാടിച്ച പുതുമലയാ-ണ്മതൻ മഹേശ്വരൻ ആയ എഴുത്തച്ഛനും ഭാഷയെ ചിലങ്കകെട്ടി തുള്ളിച്ച കുഞ്ചനും ചേർത്ത് വളർത്തിയ മലയാളത്തിന് സ്നേഹഗായകൻ ആയ ആശാനും "എന്നുടെ ഭാഷ്ട്രതാനൻ തറവാ-ട്ടമ്മ" എന്ന് ഉറക്കെ പ്രഖ്യാപിച്ച വള്ളത്തോളും ആശയ ഗാംഭീര്യം നൽകി സമ്പന്നയാക്കി. ഭാഷക്കു സൗന്ദര്യം നൽകിയ വൈലോപ്പിള്ളി ഇടശ്ശേരിയും മാത്യഭാവം പകർന്നുനൽകിയ ബാലാമണിയമ്മയും ഭാഷയെ കനകച്ചില്പങ്ക ചങ്ങമ്പുഴയും ജ്ഞാനപീഠ ത്തെ ആനയിച്ചുകൊ-ണ്ടുവന്ന ജി ശങ്കരകുറുപ്പും ഓ എൻ വി യും ലോക സഞ്ചാരിയായ എസ് കെ പൊറ്റ്ക്കാടും ഭാഷയെ ലോകമെമ്പാടുംഎത്തിച്ച ബേപ്പൂർ സുൽത്താനും നീർമാതളത്തിന്റെ കൂട്ടുകാരി-.യായ മാധവികുട്ടിയും അങ്ങനെയങ്ങനെ മലയാളത്തെ സമ്പന്നമാക്കിയ എത്രയേത്ര പ്രതിഭകൾ എന്നിട്ടും ഓക്സീജൻ അന്വേഷിക്കുന്ന ഭാഷയായി മലയാളം മാ-റു്കയാണോ എന്ന് നാം ഭയപ്പെടേണ്ടിയിരിക്കുന്നു. ലോകത്തൊട്ടാകെ 500 ലധികം ഭാഷകൾ മരണ അവസ്ഥ്യിലാണ് . ആ്അവസ്ഥ മലയാളത്തിൽ ഉണ്ടാ്കരുത്. ഭാഷയുടെ മരണം ഭാഷയിൽ നിക്ഷേപിക്കപ്പെട്ട സർവ്വ വിജ്ഞാനങ്ങളും മരണമാണ് .ഭാഷ് നശിച്ചാൽ സംസ്കാ-രവും നശിക്കും. മലയാളം ഇല്ലെങ്കിൽ മലയാളിയും ഇല്ലല്ലോ? മണി നാദം പോലെ മാധു-ര്യമുള്ള മറുനാട്ടിൽ മൊഴിയായ് മലയാളത്തിലെ മഹത്വം നാം തിരിച്ചറ്റിയേണ്ടിയിരിക്കുന്നു. തലമുറ്റകളെ് പ്രകാശത്തിലേക്ക് നയിക്കാൻ ശക്തിയുള്ള ഭാഷയും സംസ്കാരവും കൈ വിട്ടു പോക<mark>ാൻ നാം അനുവദിക്കരുത്. നിരവധി വെല്ലുവീളികൾ നേരിടുകയാ</mark>ണ് എങ്കിലും മാത്യ്-.ഭാഷയെ അഭിമാനത്തോടെ സംരക്ഷിക്കുവാനും വളർത്തിയെടുക്കുവാനും നമുക്ക് കഴിയണം

മറ്റുള്ള <mark>ഭാഷക</mark>ൾ കേവലം ധാത്രിമാർ " " മർത്ത്യനു പെറ്റമ്മ തൻ ഭാഷ താൻ .എന്ന് മഹാകവി വള്ളത്തോൾ വരികൾ

Dhanya Ms S5

Megha Sajeev S3





നമുക്ക്

ണഞ്ചോടു

ചേർക്കാം

### THE AMAZON IS NOT BURNING IT'S BEING BURNED

The lungs of the Earth are burning, and it is a man-made disaster. They are supported by an extremist Brazilian government, whose president and top ministers either facilitate or allow the destruction of the forest and the suppression of indigenous peoples protesting the destruction of their homes. In fact, locals have been murdered in an attempt to silence their voices. If the horror inflicted on local populations in the Amazon was not enough, the current destruction of the rainforest has direct global consequences for all our survival. The Amazon region has often been called the Green Ocean because evapotranspiration from vegetation provides water vapor to the global atmosphere. It is the home to a massive array of bio-diversity. Many scientists believe that the Amazon is an untapped region of potential medical cures. According to WWF, "less than half of 1% of flowering plant species have been studied in detail for their medicinal potential

Sarin Xavier S5

### THE SECRET OF SUCCESS

The biggest secret of success is that there is no shortcut. Simple secret of success is not in doing what one likes ,but like what one has to do. Be brave, be focused, and be strong. Remember that you are the monster of your success, captain of your soul, charioteer of your destiny Life is a game with fabolous lives. It is a give and take, build and break, ultimately the one wins who honestly tries and plays it fair. Our greatest glory is not in winning but rising every time we fall There will always be abattle to be fought before the convected success. Littile minds are tammed and subdued by seaming setback and dificulties. But the greatest mind rise above all of them Always remember kites rise against but not with the wind

Vishakh B S5

### YOGA

Yoga is a system of exercise for physical and mental well being. It combines stylized poses with deep breathing and meditation. The term yoga is derived from a sanskrit word 'YUJ' which means to join together '. The .ultimate aim of yoga is to unite the human soul with the universal Spirit Yoga was developed five thousand years ago. The first written description was found in yoga sutras attributed to patanjali. According to patanjali, within the human body, there are channels called nadi and centres called chakara. If these channels and centres are tapped, energy .hidden in the body can be released. This energy is called Kundalini Patanjali starts with eight stages of yoga, the yama (universal moral commandments),Niyama (self purification through discipline),Asana (posture), pranayama (breathe control), pratyahara (withdrawal of mind from external objects),Dharana (concentration), dhyana (meditation) and samadhi (state of super consciousness



### **BENEFITS OF YOGA**

Yoga provides both physical and mental therapy by keeping the body parts clean and well lubricated, cell deterioration can be greatly reduced. Improved flexibility is one of the first and most obvious benefits of yoga. Yoga encourages you to relax, slow your breath, and focus on the present, shifting the balance from the sympathetic nervous system (or the fight-or-flight response) to the parasympathetic nervous system. An important component of yoga is focusing on the present. Studies have found that regular yoga practice improves coordination, reaction time, memory, and even IQ scores

Ashwaty Manoharan S5



Ardra Shine S5



Roshna George S5



Aishwarya Manikandan S3



Ann Mary Mathew S5



Sreelakshmi S Shajan S3



Tom Joseph S5



Proud Moment of the Department!! 100% result in VIII Semester university examination for	the second consecutive year.	Congratulations, Students of B.Tech Civil Engineering 2015-2019 batch (first batch of XTU)	Department of Civil Engineering 😹
Proud Moment of 100% result in VIII Semeste	the second con	Congratulations, Students 2015-2019 batch (	TOC H (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)



Award winning photo by Ajay Sooraj M.Tech 2017 admission



Asst Prof Anu V.V



C Sidharth S5



Razeen Raihas Hussain S5



Ashique K Kunjumon S3



Sarang Vidyadharan S5