



DHISHNA

ABOUT

Dhishna simply kept refers to an "Intellect"; an intellect so pure and undiluted that it marks the shape of things to come. Dhishna is the amalgamation of the talent and resources of the students of seven specialized arms of engineering at the School of Engineering, CUSAT. Here at Dhishna, we strive to flair our X factor. A factor that sets us aside from the plethora of other tech fests in the region. The name is borrowed from Sanskrit and it perfectly conveys the concepts of a better tomorrow and the beauty of the Indian language.

The system of education enforces a learning experience confined to textbooks. We intend to take this experience to a higher level by conducting tech-talks, seminars, video conferences with people in the industry, competitions to challenge one's intellect and also workshops to provide hands on experience. The unifying force at DHISHNA is the passion towards a mastery of technology and it is from this interaction that a structured learning process and a strategic drive are generated to encompass our minds to better understand the different niches of technology. We aim not only to describe the positive impacts and enlighten the society and the future but to also pave the path to achieve this.

Dhishna also intends to pay tribute to those people out there whose thoughts and ideas have transmuted into technological marvels. Sadly, a substantial share of these people have not received

due recognition in contrast to the extolment they truly deserve. As a first step to make up for our disregard and to honour their toil we present to you the core theme “Knowing the tinker next door.”

In toasting these people and their marvels, we aim to ignite in ourselves a tendency to think freely and mould our lives towards an “Inspired Destiny”.

EVENTS :

Committee Events:

Exhibition

Exhibition with 30+ exhibits from students of CUSAT , other schools and colleges.

Inter College Dance Competition

It is planned to organize an Inter College Dance Competition with expected participants from about 10 colleges across Kerala and a huge viewership.

The teams for the event will be decided based on registrations and filtering.

Photography Competition

Online Photography competition with social media as a platform. The best 25 selected photos will be displayed in a Photography Expo at Dhishna.

Virtual Reality

A window to the magical world of virtual reality, we will be using VR headsets and smartphones to create the perfect interface between two dimensions.

1. Virtual Reality Gaming Zone
2. Immersion Videos : Immerse your senses in the VR universe

Quiz

Quizzes at School and College levels are to be conducted, by Quizzat.

Workshops || Presentations || Talks

Various events, proposed by the branches will be conducted in a common schedule.

Magazine

Release of a College Magazine, at the inaugural session of Dhishna.

The Name and cover design for the magazine will be selected from a competition for the same.

Each branch is expected to produce 7 – 10 articles after filtering.

Articles from faculties are also expected.

eWaste Collection Campaign

Product Design From Wastes

School Students are required to build products from waste materials. The preliminary level of the competition is to be held at respective schools.

Clean CUSAT Campaign

TeachTheWeb

School students are taught the basics of web development and basics of coding by Mozilla Volunteers.

Cycle Rally/Marathon

A cycle rally is to be conducted in Ernakulam to spread the message of the need to save nature.

Auto Expo

- Vintage car exhibition
- Pitstop

To exhibit the professionalism of engineers through disassembling the tyres of a car with swiftness.

Branch Proposals for Events : **Civil Engineering :**

LACUS CURTIUS

An event of creativity. Build a bridge which can carry maximum load.

Stack up your sticks and roll out your tricks.

Group event, open to all

CADD ZAKEIA

Show your boundaries of imagination with cadd. Inviting students to draw the plan elevation and section. Be an architect with a golden touch. Open event

SCULPT A WAY

Solve the clues to reach the treasures by your knowledge in surveying.

It's all about your skill and speed in analysing.

Group event - 3 members(max)

Computer Science & Engineering :

Code Relay

Event procedure : 15 minutes time will be allotted to each member from a team of 4. Each member is to code a block of program each. After which the whole program will be compiled and run. The most efficient, least time consuming program wins the deal.

Hardware Assembling

Event Procedure : Assemble a disassembled Desktop system, see that it works and disassemble it perfectly again.

One with least time wins the deal.

Debugging

Event Procedure : A program source code with syntax errors will be given. Team of 2. Team with least time who compiles it successfully wins the deal.

Surf King

Event Procedure:

Preliminary round : which will be conducted online for everyone who wishes to participate.

Final Round : The selected participants will take part in final event conducted during the techfest day.

Mock Press

Event Description : A topic given each of the participants with 5 mins to prepare. They then speak in front of the judges, followed by an interactive session with them. Candidates performing well in both speaking and interactive sessions will be selected as the winners.

Electrical & Electronics Engineering :

CIRCUIT DEBUGGER AND ASSEMBLER

This is a 4 stage event. The main goal of this event is to correct the errors in the circuits and obtain a working circuit. But for this you've to pass the first stage which will be a MCQ on logic design. It is advised that you should know the basics of logic gates.

ELECTRATHON

This is for school students who are below 16 years of age. This is a 3 stage event. Each team should have 2 members. This event is to promote hidden talent and passion for this subject among school students.

DRONE WARS

This is our highlight event. Participants are required to bring their own quadcopters. They will face a series of challenges which test the abilities of their quadcopters. This is a 4 stage event. Each team should have 2 members.

Electronics & Communication :

KARNAUGH'S RUINS

Pan Campus Electronic Treasure Hunt...Solve the Logic Gate Puzzles to Clear each Treasure Gate and the first team to complete the 5 stations wins the prize.

ROBO EVENTS

a)ACCELEROBOT

A robo vehicle controlled by accelerometers attached to the hand is made to negotiate an obstacle course in the shortest time possible

b)MAZERUNNER

Use a Line following robot to navigate through a maze of lines and make it out in the shortest time possible

FANTASTECH Technological Demonstrators

a)Earthscape

Mobile Camera latched onto weather balloon and send to space.

b)Tesla Coil

The Power of Lightning is now harnessed into 6 feet of awesomeness.Experience the Electric Magic of Tesla Coil.

Silicon Expo

Students exhibit their project and ideas for a better world in an exposition of cutting edge science and technology. Best Projects will be selected according to the benefits to society, feasibility of the technology and aesthetic value.

Information Technology :

AlgoHack

The Contestants will be given a competitive problem to solve. The algorithms can be solved in two possible ways :

- 1) In a programming language of their choice
- 2) On a unified platform

*In case different platforms are used a weightage is to be given.

The best executing algorithms are awarded the prizes. In case of ties complexities can be considered.

Moot Court Competition in Information Technology & Privacy Law

Students from law schools throughout the country gather at Dhishna Court, brief and argue challenging and unresolved issues of technology law. Faculty and students participate in the development of each year's problem, and students from Dhishna Moot Court Executive Board serve as bailiffs and assist with coordination of the competition.

The moot court competition is honoured with the participation of prominent personalities in the fields of law, who score and critique each round of the competition.

Contestants : Law students and students with deep knowledge in Information Technology & Privacy Law

Mentors : Persons in the field of law

Judges : Any retired Judges *preferable | Lawyers

Coding || App Development Competitions

A multitude of coding competition on heads like Web Development, Android Application Development or such. In association with any prominent tech community or companies.

Mechanical Engineering:

LATHE MASTER

It's time for some modelling

Prove your skills on lathe by reproducing an exact replica

ENGINE ASSEMBLY

The floor where members of three take on the challenge of complete assembly of an engine

To be organised as a completely sponsored event inclusive of the materials required.

CONTRAPTION

Obtain the required result on given problem using sequential, complicated steps to show off your innovative mind set.

COAL MINE

To showcase the model of a real life coal mine and to explain the working and processes to the visitors.

Safety & Fire Engineering :

First aid and fire training workshop

The registered candidates will be provided practical demonstrations on the usage of fire extinguishers, how to give CPR, How to handle emergency situations etc. There will be a session which include rescue operations of fire brigade and a mock drill. It will be a one day workshop and all the participants will be provided with ASFE (Association of Safety and Fire Engineers) approved certificates.

FIREBOT

It is basically a time based robo race competition in which the registered candidate will be provided with predesigned tracks which include candle flame to extinguish, elevations, depressions, turns, obstructions...Robots which can overcome all these difficulties in minimum time will be the winner. There will be time bonus for successful tackling of various difficulties and time penalty for a failed tackle.

ACCIDENT INVESTIGATION

An accident will be created artificially, the participants will have to investigate, find the cause and submit a report. The report will be evaluated and best two will be provided with prizes

SAFETY IN WORKPLACE GAMES

There will be 8 to 10 safety stations and each will have a specific task in it. The person who will be able to complete maximum tasks in minimum time will be the winner