

**E-newsletter of Mechanical Engineering Department** 

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Your

attitude

is like a

price tag,

it shows how

valuable

you are.

Education is
the most POWERFUL
WEAPON
which you can use
to change
the WIRLD





### **TECHORIZON 2020**



New Horizon College of Engineering organized National Level Project exhibition TecHorizon 2020 from 22<sup>nd</sup> to 29<sup>th</sup> June 2020. Mr. Rajendra Y D, from UniABROAD, Overseas Education Consultants was Guest of Honour. Around 200+ final year engineering projects were participated in ONLINE project exhibition. Good number of institutes from state as well as outside Karnataka were part of this mega event. Jury members were from the reputed organizations and NHCE alumni association.

### **Online Alumni Talk**

on

"Past, Present and Forecast of Job Opportunities at the effect of COVID - 19"

The Webinar on "Past, Present and Forecast of Job Opportunities at the effect of COVID - 19" was conducted by Department of Mechanical Engineering, NHCE dated on O6th June 2020. The webinar started at 11:00 AM. Dr. M. S. Ganesha Prasad. Dean, Professor & HoD - ME welcomed the Alumni and participants. All the alumnus introduced to themselves and shared their experience of getting a job and the way they groomed in getting into their respective position. Explained the current scenario regarding job market and as giant companies are planning to shift their manufacturing units from China to India there is a great opportunities for Mechanical Engineering aspirants. Suggested students what to and how to prepare themselves as per the requirement of job market.

Students were very much involved and there was a healthy discussion between alumni and the students regarding the opportunities for higher studies here after and many more.

At last alumni's expressed that they were happy for being apart of this event and the webinar was finally concluded by Prof. Manjesh B C, Sr. Asst. Professor & Alumni Officer.











## **Guest Articles**

# How to customize online learning for different kinds of students?

Dr M S Ganesha Prasad, Dean, Professor & Head of Dept. of Mechanical Engineering, New Horizon College of Engineering says there is considerable difference between learning styles of students in offline mode and online mode. He delves deep into how can teachers customize their classes to improve learning curve.

By D Tejaswi

eachers have a great mission to ignite the minds of the young said Dr A P J Abdul Kalam, Former President, Govt. of India. Inspiring young minds may be possible if one can synchronise with the learning frequency/ understanding frequency of Young minds. Younger generations can be inspired either through online or offline teaching / engaging them with reasonable time. One of the studies says that to build strong knowledgeable society students are to be engaged either through online or offline at least thirty three percent per week time.

Learning management system (LMS) is a system which allows teachers and students to connect either asynchronously or synchronously with interaction between teacher and students occurring intermittently with a time. An online classroom is an environment created through use of any LMS system either in real time or with offline chat/messaging services.



During this pandemic period, across India all the higher education institutions engage students only through online mode of teaching. With this method of getting connected to student's community, faculty members must know how best they can transfer their knowledge to student's community. Learning efficiency of a student will increase only if faculty member synchronise with his / her teaching style with students frequency.

If we take any course particularly for engineering programs, normally the course will be completed around 55 Hrs. This may be applicable during offline teaching. But during online teaching, either experienced or inexperienced faculty may complete the same course with little more time. This is mainly to understand the learning progress of the students. As faculty members need to take good number of quizzes or need to collect good number of online assignments for understanding students learning ability. Depending on the surprize quizzes faculty can take a call, whether they can slowdown or maintain standard teaching time in LMS.

There is good number of surveys conducted by reputed agencies in understanding different types of students. These categories are done on the basis of their learning styles. There is considerable difference between learning styles of students in offline mode and online mode.

During offline mode, the learning can happen from Faculty - to - student, student - to - student (peer learning that is either through peer support groups, peer teaching, peer tutoring, or peer-assisted learning).

For an average student learning through Faculty will happen at least 80 percent and learning from student – to – student will be of 20 percent.

### Planning & Execution of Project Work for Under Graduate Studies An Overview: Dr....

Articles The Education Paper - July 29, 2020

For under graduate programs each and every student during their final year needs to do a project work. The final year project is the final phase of the degree program - it gives students a chance to demonstrate all they have learned until final year. To evaluate their project students submit final reports of their progress and final results to the respective authorities, and give in- person presentations and demonstrations of their work. The project report is an important document for the students for next few years (at least 5 to 6 years), because most of the best higher education institutions / Research organizations in India and abroad will definitely look into the contents before allotting the competent projects during their higher studies / research work. Also during recruitment good number of "product based companies" in India and abroad definitely tries to understand the value addition of a student in doing the final year project. Students can also use this document to submit to the funding agency if they wanted to start their own start-up initiatives. So by considering these futuristic opportunities students must and should give maximum commitment in executing the project.

A project is complete only when it starts working for the owner, rather than owner working for the same. In starting any project of their program the leader of the team has to involve the team members as much as possible and being the team leader he / she needs to respect the ideas and views of the other members of the team. As mentioned by Amy Poehler "As you navigate through the rest of your life, be open to collaboration. Other people and other people's ideas are often better than your own."

Amy Poehler might be better known as a comedian and actress, but what she has to say about teamwork applies to project management. Project of any type or any scale is a collaborative art. When we believe an actor or laugh at a comedian, it's not just a good script and fine direction that elicits a response. It's that the people who bring the words to life are doing so as a team. There are no stars. There is only the whole experience made successful through ego-less teamwork.

# Webinar

M Brainfood Higher Education Plus Buly 2020

# Prof. Gangadhar Immadi Ant. Professor Department of ISE, NHCE Prof. Vinayak Balahittal Ant. Professor Department of ME, NHCE Department of ME, NHCE Prof. Vinayak Balahittal Ant. Professor Department of ME, NHCE Dr. R. J. Anandhi Professor & Head Department of ME, NHCE Department of ME, NHCE Department of ME, NHCE Dr. R. J. Anandhi Professor & Head Department of ME, NHCE Department of M





### INTRODUCTION TO DATA SCIENCE & MACHINE LEARNING

TOPIC	DETAILS	DURATION
INTRODUCTION	Need for Data Science, Applications, companies specialized in the domain, Machine Learning and its Classification	9.30-9.45
PYTHON FOR DATA SCIENCE	Basics of Python, NumPy, Pandas,matplotlib.[Hands - on]	9.45-10.30
PROBABILITY	Probability theory, Normal Distribution, Z-Distribution. [Hands on]	10.30 - 11.0
	Central tendency and Dispersion.[Hands on]	11.15 - 11.45
SIMPLE LINEAR REGRESSION	Model Building, Estimation of parameters using Ordinary Least Squares Method, Interpretation of Regression Coefficients, Validation of Model, R - Square and Residual Analysis. [Hands - on]	11.45 - 1.00
MULTI LINEAR REGRESSION	Model Development, [Hands - on]	1.45 - 2.15
DECISION TREE	CART and C4.5 Introduction, Entropy and Gini Gain Computation, Decision Tree Control arguments, Loss, Miss-Classification Error and Response Rate, Confusion Matrix and AUC. [Hands - on]	2.15 - 3.00
NAIIVE BAYES CLASSIFIER	Model Development.[Hands - on]	3.15 - 4.00
CLUSTERING	Hierarchical Clustering, Distance Computation, Euclidean Distance, Agglomerative Clustering, Non – Hierarchical Clustering, K-Means algorithm, Optimal No. of Clusters, [Hands – on]	4.00 - 4.4



# **BoS Meeting**

Date: 2-07-2020

Time: 10:30 AM To 2:00 PM

BoS meeting for the Mechanical Engineering Department was conducted at IIoT lab at ME-dept, NHCE. The VTU nominee was *Dr. H K Rangavittala*, *Professor*, *BMS College of Engineering* and the college of nominee was **Dr. Shanamukh Nagara**, *Professor and Dean-Academics*, *RV College of Engineering*. The nominees attended the BoS meeting though online mode. The meeting was successfully held with all the attendees.



Department of Mechanical Engineering, NHCE planned to setup Centre of Excellence for Non-conventional Energy Resoruce. In this regard, The windmill power generating unit of 1kW capacity is successfully installed on the Department building (Sardar Vallabhbhai Patel block). It is used to power the sodium vapour lamps at the S V P block.

# Windmill Installation



# **Forthcoming Events**







Editorial board: Dr. M. S. Ganesha Prasad, Dr. Srinath M K, Prof. Shiva Prakash S, Prof. Puneeth H V, Prof. Manjesh B C, Prof. Santhosh A N, Mr. Harish (5<sup>th</sup> Sem), & Mr. Sonic Somanna (7<sup>th</sup> Sem)

Advisory Committee: Dr. C P S Prakash (Principal, Dayananda Sagar College of Engineering)

Mr. Deepak Kamath (Technical Head of Continental India Ltd. Bangalore)

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