

SRISHTI

NEWS LETTER

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DEPARTMENT OF CIVIL ENGINEERING
MANGALAM COLLEGE OF ENGINEERING

DEPARTMENT OF CIVIL ENGINEERING

Civil engineering branch is an ever growing stream of engineering with the huge amount of demand for new constructions with the increasing developments taking place in the world. The academic activities of the Department lays emphasis on deep understanding of fundamental concepts, development of creative ability to handle the challenges of Civil Engineering, and the analytical ability to solve problems which are interdisciplinary in nature. The department is committed to produce Civil Engineers which would usher India into a utopia of development.

VISION

To emerge as a knowledge center in civil engineering education focusing on research and industry outreach services with emphasis on sustainable development.



MISSION

Mould Civil Engineers with high level of professional, moral and ethical values. Attain highest standards in theoretical as well as practical knowledge. Excel in major areas of Civil Engineering to respond to the current and future needs of the industry and higher studies. Employ the principles of continual quality improvement to enhance its programme and faculty.

FROM THE CHIEF EDITOR'S DESK



Prof. Reshma Kassim
Head of the Department

Advances in 3D printing technology is seamlessly linking the digital and physical worlds. As a result, demand is surging across all spheres: from consumer applications in the home, to different sectors such as retail, health care and aviation.

Most construction project costs can be split into three categories: finance, materials and labour. 3D printing could potentially erase significant amounts of money in bringing construction projects to market, through shorter project times and fewer wasted resources.

This technology could replace certain parts of a number of labour intensive trades, including builders, electricians and plumbers. Using 3D printers to create prototypes of early products, and fulfill small manufacturing orders could significantly impact a number of these workers.

Smaller companies with access to 3D printing services will be able to create their own prototype products and bypass parts of the manufacturing process, putting more power into the hands of start-ups.

Professor Behrokh Khoshnevis at the University of California has developed a process of 'contour crafting' using concrete to produce small-scale models of the external and internal walls of houses and is testing a giant transportable 3D printer that could be used to build the walls of a house in twenty four hours. The robotic system requires a flat ground slab with underground services in place. Rails are installed either side of the footprint to take a gantry crane that spans the building. A nozzle, driven by a computer-controlled crafter then delivers layers of concrete. The layers build up to form an inner and outer skin for each wall, leaving them to be filled later with insulation or concrete. As 3D printers become more accessible they will start entering the home, allowing consumers to create their own products. The distribution of 'blueprints' for these products will inevitably become more valuable.

EDITOR'S



Prof. Reshma Kassim
Chief Editor



Asst. Prof. Sruthi Krishnan V.
Editor



Asst. Prof. Alice Johny
Editor

India, one of the oldest civilisations of the world, has stood for certain eternal values — sathya, dharma, prema, shanti and ahimsa. Truth is one, but the wise ones interpret it differently. The eclectic tradition holds that all systems of thought lead to the same truth. Love was the emotional bond that held together the diverse elements, whether it was a group of human beings in a society or family or man and his environment. This love was the logical conclusion and a reflection of the philosophy that all life was essentially one. From this flowed the concept of Vasudhaiva Kutumbakam — the earth is one family. If there is no stranger in the universe, how can there be conflict? As the philosophers have maintained: if I harm someone, I demolish a part of myself. It was these great ideals, again and again propounded by a succession of seers, rishis, saints and kings which led India into its greatness, and made it eclectic and tolerant.

It is not fair to God or man to assume that one people are the chosen of God, that their religion occupies a central place in the religious development of mankind, and that all others should borrow from them or suffer spiritual destitution ... After all, what counts is not creed but conduct ... The truly religious never worry about other people's beliefs." Moses, Christ, Muhammad, Buddha and Sankaracharya, each came bringing some different aspect of spiritual truth.

"The chief among the reasons of man's failure is his imperfect nature dominated by his ego. In religion, the ego incites him to an attitude of superior separatism and he would love to be pledged to a sect or dogma because it is his own creation. In politics, it is symbolised in the State whose absolute power must be worshipped by all. In science, it is glorified when man takes pride in his achievements and refuses to believe in anything that cannot be perceived by his physical senses. It is this ego which persists in every so called triumph of human effort,," says The Life Divine.

While India has been able to maintain the democratic system without any break since Independence, although in a number of developing countries, democracy got distorted or was transformed into various forms of anti-democratic rule, there is conflict all round — among political parties in State legislatures and Parliament and outside, in elections, between the executive and the judiciary, in society as caste and religious conflicts, matrimonial disputes and violence against women. There is dispute on sharing of waters and territorial divisions. A large number of such conflicts or disputes find their way to courts. Violence and terrorism have no place in any civilised society, much less in India, the home of ahimsa. But wisdom lies in refusing to let the speech and acts of a few provoke us into any form of rancour or ill-will between communities or regions.

The most effective way of dealing with differences, with conflict, with disagreement is not through force. It is through negotiation, through compromise, through trying to see the point of view of the other, working together, recognising and respecting the essential, irreducible human spirit which is common to us all. There is need for positive thinking and not looking at the faults or shortcomings of others.

FACULTY CORNER

FACULTY ACTIVITIES

SL.NO:	NAME OF FACULTY	DATE	FDP/SHORT TERM COURSE	DETAILS
1	Geethu Thomas	1 st - 5 th June 2015	Five Days QIP on "NMEICT and other e-Learning Resources for Class Room Instruction"	Mangalam College of Engineering, Ettumanoor
	Alice Johny			
	Tissa Sebastian			
	Nissy Susan Mani			
	Susan Mathew			
	Akhil Lal			

ECO-TOWERS

'Eco-towers' will fight climate change. A new generation of green skyscrapers could help alleviate worldwide climate change, writes a University of Illinois at Chicago urban planner in a new book.

"Eco-Towers: Sustainable Cities in the Sky" describes groundbreaking designs and built projects around the world, with 250 color photographs and drawings. The book explores seawater-powered air conditioning, large-scale recycling of gray and black water, helical wind turbines and sunlight-sensing LED lights.

The author examines green rating systems, including the U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design).



WELCOME TO THE APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

APJ Abdul Kalam Technological University (initially Kerala Technological University), a State Government University has come into existence on May 21, 2014 with an aim to give leadership to the technology related policy formulation and Engineering Planning for the State. It also

emphazies to improve the academic standards of the Graduate, Post Graduate and Research Programmes in Engineering Science, Technology and Management and regulate the academic standards of all colleges affiliated to the University. The main thrust areas of the University are Research, Development and Innovation .

B. TECH. PROGRAMME STRUCTURE

i) B. Tech. / B. Tech. (Honours) programme in all branches of study is structured on a credit based system following the semester pattern with continuous evaluation allowing flexibility for students to decide on the duration of programme completion.

ii) The duration for the B. Tech. /B. Tech. (Honours) programme in all branches of study, will normally be 8 semesters.

iii) The maximum duration shall be six academic years spanning 12 semesters.

iv) Each semester shall have 72 instructional days, followed by end semester examinations.

v) A student can opt for B.Tech. (Honours) at the end of the fourth semester.

vi) The curriculum of any branch of the B. Tech. programme is designed to have a minimum of 180 academic credits and 2 additional pass/fail credits, for the award of the degree.

vii) The University follows Credit System and Credits are apportioned among the following knowledge segments.

*If nothing ever
changed, there'd be
no butterflies.
-Unknown*





STUDENT'S CORNER



STUDENT AWARDS

1. Students of 2011-2015 participated in intercollegiate football competition and achieved Ettumanoorappan trophy in August 2014 organized by MG University.

2. Students of 2012-2016 batch achieved fifth position in State Cycle Polo Championship in FACT Ernakulam in November 2014.

'The function of education is to teach one to think intensively and to think critically. Intelligence plus character - that is the goal of true education.' -
Martin Luther King, Jr.

Be the change
you wish
to see in the world.
-Gandhi

STUDENT ACTIVITIES

1. As part of the curriculum, S3 students(B batch) visited “ India Center for Social Change at Theeram Centre, Nalunnakkal



Kottayam”and also “Vikas Vidyalaya, Kottayam” from 10/6/15 to 12/6/15.

2. As part of the curriculum, S3 students(A batch) visited “ Vikas Vidyalaya, Puthupally. Kottayam”

from 10/6/15 to 12/6/15.



'The best way to find yourself is to lose yourself in the service of others'

- Mahatma Gandhi

Makers of Architectural and Structural Symphony

Association of Civil Department

The department of Civil Engineering made a new stepping stone to our success story by inaugurating the Association of Civil Department "MASS" on February 06th 2015 by Smt. B. G. Sreedevi (Director, NATPAC).

As the first venture of our association we organized our technical fest "REINFORCE" on August 11th & 12th 2015. Along with that to empower and promote the innovative ideas of budding engineers, a project exhibition was also organized.



MASS