



ANNAMALAI UNIVERSITY
Faculty of Engineering and Technology
Department of Civil Engineering

CITIZEN-20

(Civil Engineering Technical Innovative Magazine
Civil Engineers are proud to be a responsible Socio-techno Citizen)

VISION

To become School of Excellence in Civil Engineering With Conformity, Quality and Standards in teaching, research, training and consultancy towards producing globally competent Civil Engineers.

MISSION

- M1: To Promote quality in education, research and professional training for satisfying the needs of industry and society.
- M2: To provide state-of-the-art facilities and resources that contributes to a congenial learning environment.
- M3: To establish Centers of Excellence in emerging areas of Civil Engineering for the students to acquire domain specific expertise and also facilitate Industry- Institution interaction.
- M4: To inspire the students to pursue higher education and take competitive examinations and various career enhancing programs.
- M5: To instill the professional ethics and their role for sustainable development and corruption-free country.

Hod's Desk



It is indeed very happy to bring out the Technical cum Innovative Magazine "CITIZEN" by the Department of Civil Engineering, Faculty of Engg. and Tech., Annamalai University. It is expected to open up new views with inspiring deliberations on various aspects and challenges of Civil Engineering. I trust and wish that students will do their best with their involvement and intellect contribution to make the magazine meaningful which should eventually imbibe a great tradition.

Editor's Desk



It gives me immense pleasure to note that the Department of Civil Engineering, Faculty of Engg. and Tech., Annamalai University bringing out the Technical Magazine "CITIZEN" for the academic year 2019-20. I am sure this magazine provides an opportunity to the student's and the Faculty of the Civil Engineering Department to project their talents through articles, reports of the various academic and extra curricular programmes.



About the Institution

The Faculty of Engineering and Technology (FEAT) was established in the year 1945, as the Second Engineering College of the composite Madras State. The FEAT proudly celebrated its Golden Jubilee in the year 1996 and Diamond Jubilee in the year 2005. The FEAT has eleven departments of study namely Chemical Engineering, Civil Engineering, Civil & Structural Engineering, Computer Science & Engineering, Electrical Engineering, Electronics and Communication Engineering, Electronics & Instrumentation Engineering, Information Technology, Mechanical Engineering, Manufacturing Engineering and Pharmacy.

About The Department

The Department of Civil Engineering presently offers undergraduate programme in B.E. Civil Engineering, Postgraduate programmes in Environmental Engineering, Water Resources Engineering & Management, Environmental Engineering & Management and Ph.D. in Civil Engineering. The Department has received financial assistance of Rs. 100 lakhs through UGC -SAP DRS Phase II. The Department has strong infrastructure with well-equipped laboratories under UGC - SAP, AICTE and other funding agencies. The Department has received grants through major and minor research projects for a tune of Rs.225 lakhs and till date produced 67 Ph.Ds in the last 15 years. The Department had MOU/Collaboration for student exchange programme with Fukii University, Japan. The centre for Environment, Health and Safety (CEHS) an integral part of the Department, is accredited as EIA consultant by QCI under NABET scheme for MoEF & CC for several industrial sectors. The centre has completed industrial consultancy projects for a tune of Rs.100 lakhs and also pursuing work for about Rs.300 lakhs.

Programme Educational Objectives (PEO'S)

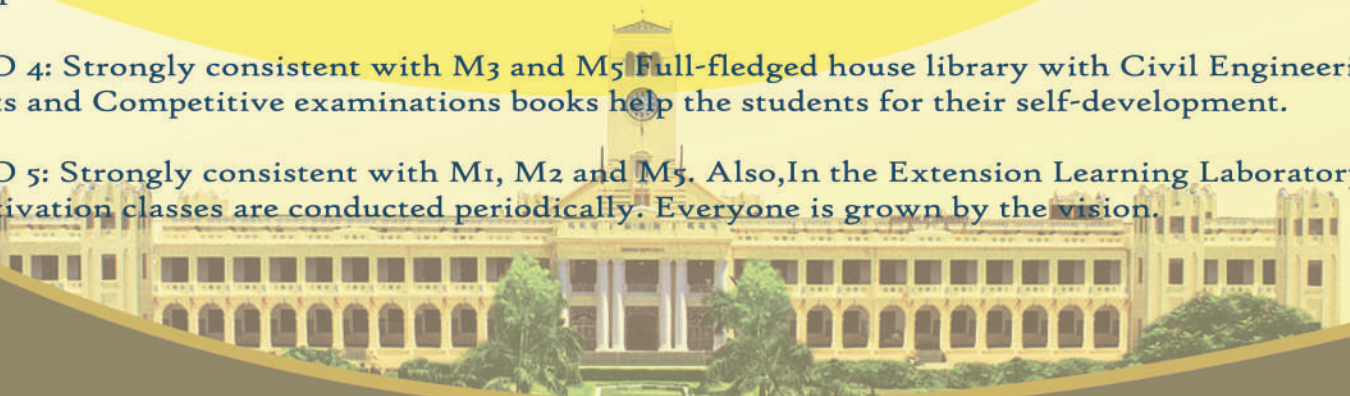
PEO 1: Strongly consistent with M₁, M₂ and M₅ and moderately consistent with M₃ & M₄. Curriculum of program consists of sufficient number of core courses in theory related to Civil Engineering and Professional Elective Courses.

PEO 2: Strongly consistent with M₁, M₂, M₅ and moderately consistent with M₃ and M₄. Adjunct faculty, expert lectures, laboratories equipped with state of art equipment, provide professional skills and knowledge. Civil Engineering extension learning programmes such as Survey camp, Professional Practices and Training, Field visit and Project improve the quality of learning

PEO 3: Strongly consistent with M₁ Moderately consistent with M₂, M₃, M₄ and M₅. An exclusive soft computing laboratory with soft trainers in the background of Surveying, Planning, Design of Structural Engineering which support the students to enhance their soft skill

PEO 4: Strongly consistent with M₃ and M₅ Full-fledged house library with Civil Engineering texts and Competitive examinations books help the students for their self-development.

PEO 5: Strongly consistent with M₁, M₂ and M₅. Also, In the Extension Learning Laboratory, motivation classes are conducted periodically. Everyone is grown by the vision.



In-house Events Organized

Civil Engineering Association was inaugurated on 9th August, 2019. Dr.M.Senthil Kumar, Head, Environmental Corporate Cell, NLC India Limited inaugurated the office bearers of the Civil Engineering Association,



Engineers Day Celebration was celebrated on 15th September, 2019. Prof. Dr.M.P.Chockalingam delivered Engineers Day address.



AICTE Sponsored PRERANA GATE Coaching class was inaugurated on 10th October, 2019 by Mr.Vishu Magajan Sub Collector, Chidambaram



The All India Council of Technical Education sanctioned the Short-term Training Programme on Real time Monitoring of Environmental Parameters using Remote Sensing Techniques (Remote'19) vide AICTE sanction letter No- F.No 34-56/ 46/ RIFD/ Policy-1/2017-18 Dt 10.5.2019. This programme was conducted successfully from 17-02-2020 to 22-10-2020. The very purpose of this programme is to impart understating about the natural environment which is essential for human survival and development since it provides water resources, land resources, biological resources, and climate resources



PREPARATORY CLASS FOR GATE-2019
AICTE sponsored PRERANA preparatory class for GATE 2019 was conducted by Dr.S.Palanivelraja, Professor, Department of Civil Engineering to the GATE aspirants.




Engineers Day Address

Dr.M.P.Chockalingam,
Formerly Professor and Head,
Department of Civil Engineering,
Annamalai University

The Engineering Community across India celebrates Engineers Day on 15 September every year as a tribute to the greatest Indian Engineer Bharat Ratna Mokshagundam Visvesvaraya. "Role of Engineers in a devolving India" is the theme of Engineers Day 2019. Mokshagundam Visvesvaraya was born on 15 September, 1861, near Chikkaballapur in South Karnataka. He went on to become India's most prolific civil engineer, dam builder, economist, statesman, and can be counted among the last century's foremost nation-builders. M. Visvesvaraya was also the Diwan of Mysore from 1912 to 1918. He was the chief engineer responsible for the construction of the Krishna Raja Sagara Dam in Mysore as well as as the chief designer of the flood protection system for the city of Hyderabad. Known world over for his contribution to harnessing water resources, Visvesvaraya was, among other things, responsible for the building and consolidation of dams across the country. He is also credited with inventing the Block System, automated doors that close in the conditions of overflow. Due to his outstanding contribution to the society, Government of India conferred 'Bharat Ratna' on this legend in the year 1955." He was also awarded the British knighthood by King George V, and hence has the honorific "sir".

**ANNAMALAI UNIVERSITY**
Accredited with "A" Grade by NACC
Celebrating 90th Anniversary



CIVIL ENGINEERING STUDENTS ASSOCIATION 2019-2020
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING AND TECHNOLOGY

SPECIAL LECTURES

VENUE: MECH HALL
DATE & TIME: 16-08-2019, 2.00 p.m. to 4.00 p.m.

Welcome Address	: Prof. S.Palanivel Professor of Civil Engineering
Presidential Address	: Prof.V.Nehru Kumar Professor & Head, Department of Civil Engineering.
Special Lectures	: "My experience in American University as a Researcher" Prof. Dr. M. P.Chockalingam, M.S.(USA), PhD (USA) Adjunct Professor, Bharath University, Selaiyur
	: "My Success Story from Builder to Township Developer" Dr.K.I.Manirathinam, M.E., PhD Chairman cum Managing Director NavaskthiSatelliteTownship Developers Limited
Vote of Thanks	Dr.B.Kumaravel, Staff Advisor Assistant Professor, Department of Civil Engineering.

YOU ARE CORDIALLY INVITED



Faculty Article

Pilot scale anaerobic digester for the in-situ generation of Methane from Organic Fractions of Municipal Solid Waste in Chidambaram

Prof. Dr.S.Palanivelraja, Professor of Civil Engineering and
Prof. Dr.S.Mohan, Professor of Civil Engineering

The DBT funded project aimed to demonstrate the workability of the pilot scale anaerobic digester for the in-situ generation of Methane from Organic Fractions of Municipal Solid Waste in Chidambaram was developed. Study was published two papers one in International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8 Issue-4, November 2019, Pg. 4159 – 4162 in the title “ Solid State Anaerobic Fermentation of Sorted Municipal Solid Waste under Thermophilic Condition” and other one in International Journal of Scientific & Engineering Research Volume 12, Issue 5, May-2021, ISSN 2229-5518, Pg. 103 -110 in the title “Pilot Scale Study On Anaerobic Digestion Of Municipal Solid Waste”, This study provide pilot scale Anaerobic digester suitable for converting Municipal Solid waste to Energy (Biogas).



BIOGAS GENERATION BY FLOATING DRUM DIGESTER FOR RURAL HOUSEHOLDS

U.Soundarya, M.Ragavi, T.Ezhilarasi

Methane gas releases from the household wastes when those wastes started to degrade. Methane gas is listed as one of the harmful greenhouse gases which takes part in global warming. In the contrast, this gas can be used as source energy and also can be a suitable alternative option of natural gas. Experimental investigation was done for bio gas production from the prefabricated HDPE made floating drum biogas digester. This study aims to design and fabricate a portable bio-gas digester for household use. It consists of four main part; inlet for feeding waste, digester tank, outlet for slurry and gas collector. Prototype digester was fabricated for experiments to carry out 2 kg of food waste mixed with water (volumetric ratio 1:1) fed into digester tank for 21 days to ensure sufficient methane gas to be produced from household waste.



NAI TALIM

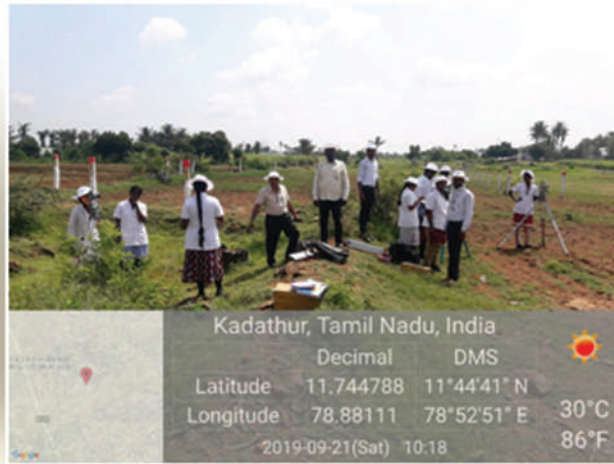
As per the Government of Tamilnadu letter No 15478 /A2/2019 dt 17.9.2019 from Higher Education (A2) Department, The NAI TALIM week for promoting Gandhiji NaiTalim experimental Education was observed on the occasion of Gandhiji 150th birth anniversary from 2-10-2019 to 8-10-2019 at Vilathur Thirupaniyapuram Village.



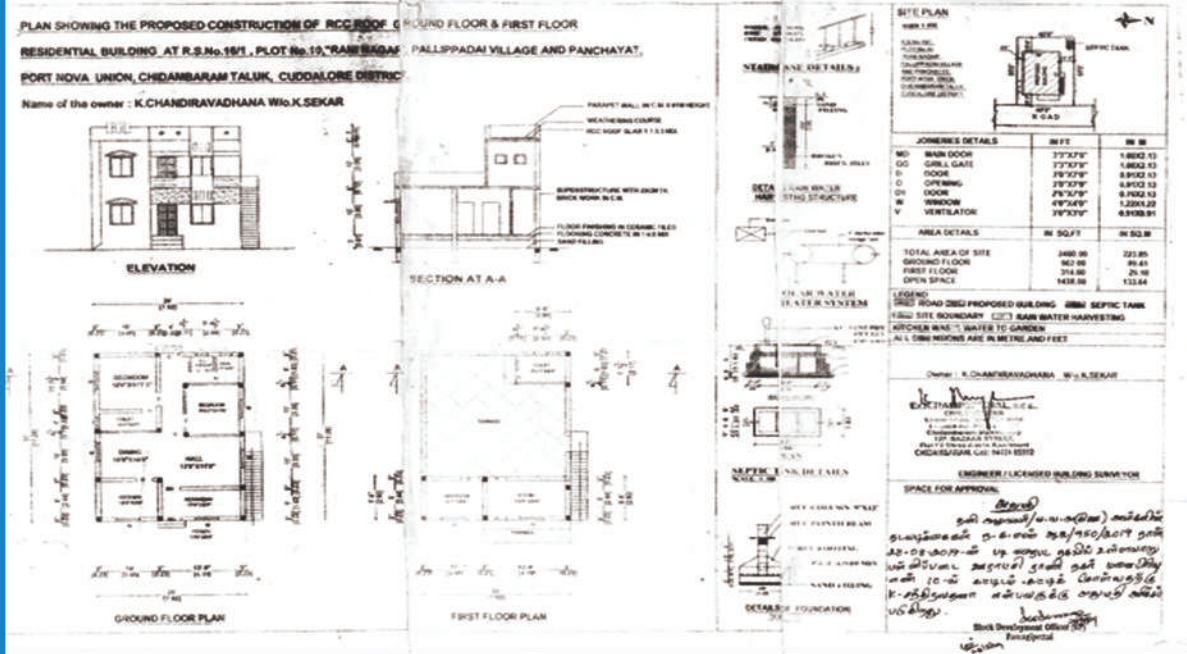
ANNUAL SURVEYING CAMP – 2019

The annual survey camp is held every year for third year B.E., Civil Engineering students to develop self-confidence by solving field problems during survey camp. The Annual Survey Camp -2019 was conducted at Kachirapalayam, Near Kallakurichi from 16-09-2019 to 22.9.2019.

The field exercises such as Hill contour, block contour, LS and CS of an Embankment and Curve settings were carried out.



Faculty / Students Art & Literary Gallery



Extension Activity by B.E., Final Year Civil Engineering Students

அண்ணாமலை அரசே!
 ஆதித் தமிழ் கிரகே!
 பைந்தமிழ் முரசே - உமக்கு
 வான் பரந்த மனசே!
 பாரியின் வழிவந்த
 பார்போற்றும் பரிசே!
 ஈட்டல் வகுத்தல் காத்தல் - நின்
 ஈடில்லா வாழ்கை பெருக்கல்
 கடைசி மனிதனின் அறிவுகோல்
 திறந்திட்ட திறவுகோல் - இன்று
 வாழ்வதே உம்மால்
 வழிநடக்கிறோம் நின் பின்னாலும்...



- Prof. S. Palanivel Raja

Editorial Board

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