

Newsletter

Volume 4 Issue 2

HORIZON

JULY- DEC 2021

DEPARTMENT OF CIVIL ENGINEERING



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VISION & MISSION

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To become a department of excellence in Civil Engineering education and research producing globally competent civil engineers to serve the industry and society.

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Mission



- Imparting necessary skills, cultivating moral and ethical values.
- Establishing regular interaction and collaboration with industries
- Motivating the students to take up competitive exams and pursue higher education.
- Promoting research and development activities in emerging areas of civil engineering and offering services to society and industry through education, research and consultancy activities



MOU SIGNED

Signed a Memorandum of Understanding (MoU) with Construction Management Training Institute(CMTI), Bengaluru on 2nd September 2021. The scope of the MoU is as follows:

- Providing Industrial exposure to students in terms of Internships/Inplant Trainings,Expert Lectures,Site visits, Projects etc.
- Preparing students for Competitive exams
- Providing access to self learning courses designed by industry
 Professionals
- Placement/Career Guidance
- Joint programs between SVCE and CMTI and so on.







PUBLICATIONS IN JOURNALS

- R.Kumutha, K.Vijai, & S.K.Vinu. (2021). "Compressive Strength of Ternary Blended Geopolymer Concrete Composites" Electronic Journal of Structural Engineering, 21(1), 10–18. (Scopus Indexed)
- Mr.S.Hariswaran published paper titled "Experimental Investigation on the Behavior of a Defective Pile Subject to a Lateral Load" in Issue No.4 (2021) -Volume 58-Page 326-331 in the International Journal "Soil Mechanics and Foundation Engineering". (DOI 10.1007/s11204-021-09747-7)
- Ruby Freya, G. Ashish Kumar, T. Bharath Vazhvarasan, Richin John Charly and A. Shanmugam, "Nano Silica Based Shear Thickening Fluid (STF) In Structural Damper", JHIT, Vol.53, Issue no. 9, pp.52-61, Sep 2021.
- R.Sathia and R.Vijaya Lakshmi ."Fresh and mechanical property of caryota-urens fiber reinforced flowable concrete", Journal of material research and technology, Elsevier, Vol.15, 2021, pp.3647– 3662.
- Mr.S.Hariswaran, Published a paper titled "Response of Pile Groups considering Pile Cap – Soil Interaction in Multi Layered Soil" in the "Proceeding of Sixth International Conference on Science, Technology, Engineering and Management – ICONSTEM 2020" organized by Jeppiaar Engineering College dated 15/07/2020. (ISBN: 978-93-89817-32-4)

LECTURES DELIVERED

- Dr.R.Kumutha delivered a Keynote lecture on "Demountable Reinforced Concrete Structures - An Overview" in the 9th International Conference on Mechanical Engineering, Materials Science and Civil Engineering held in Xian, China (Virtual) on 07.12.2021.
- Dr. P. Venkateswara Rao delivered a guest lecture on "Conventional and smart Techniques in Aseismic design" on 11.09.2021 for Civil engineering students of St.Joseph College of Engineering, Sriperumbudur, Chennai-602117.
- Dr. P. Venkateswara Rao has been a resource person on 15.09.2021 on the eve of Engineers day celebration organized by the Department of Civil Engineering, SeshadriRao Gudlavalleru Engineering College, Gudlavalleru, AP.(st) and has delivered an expert lecture on "Magnetorheological materials for seismic isolation applications"



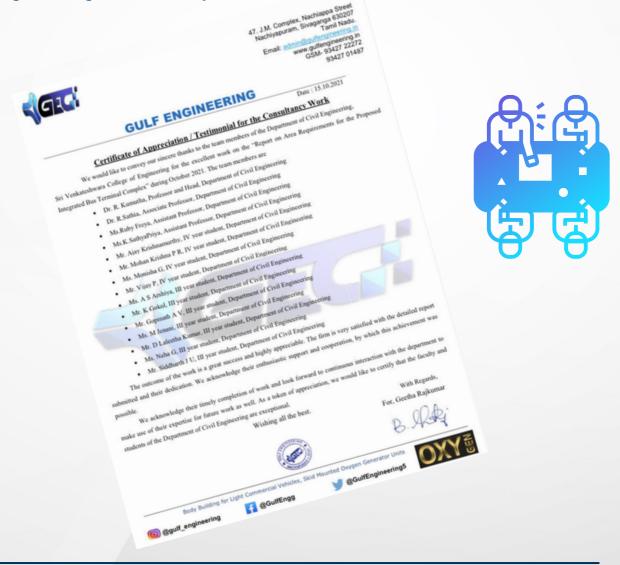
PAPERS REVIEWED

- Dr.R.Kumutha has been recognised as a Peer Paper reviewer for the 11th Spring International Conf. on Material Sciences and Technology (MST-S) that will be held on April 19-21, 2022 in Suzhou, China.
- Dr.R.Kumutha reviewed the paper titled "Rapid Curing Prospects of Geopolymer Cementitious Composite Using Frontal Polymerization of MethylMethacrylate Monomer" on 15th September 2021 for Construction and Building Materials (Elsevier).
- Dr.M.Selvakumar reviewed a technical paper entitled 'Evaluating Rail Surface Roughness from Axle-box Acceleration Measurements' for Journal of Transportation Engineering, Part A Systems (ASCE).
- Mr.S.Hariswaran reviewed a paper titled "Effect of Reinforcement Ratio and Bar Diameter on the Compression Strength of Confined Concrete Stub Column Reinforced with GFRP Bars" for the Conference Organized by SSN College of Engineering (ICEMT - 2021)



CONSULTANCY PROJECT

 Dr. R. Kumutha (Professor & Head), Dr. R. Sathia (Associate Professor), Ms. Ruby Freya (Assistant Professor) and Ms. K. SathyaPriya (Assistant Professor) have done a consultancy project on Area Requirements for Integrated Bus Terminus to Gulf Engineering Consultancy



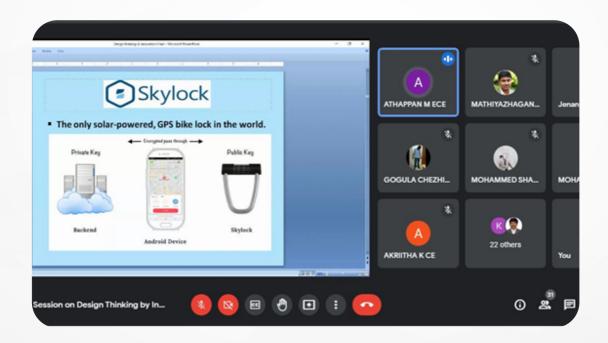
A Webinar on "Pathways 2021 - Building a future with Civil Engineering" was organised for the engineering aspiring students and their parents on 3rd July 2021. Dr. R. Kumutha, Prof/HOD has organised. Ms. Ruby Freya, Assistant Professor, and Mr. R. Mathiyazhagan, Assistant Professor coordinated the program.

Speakers of the event are,

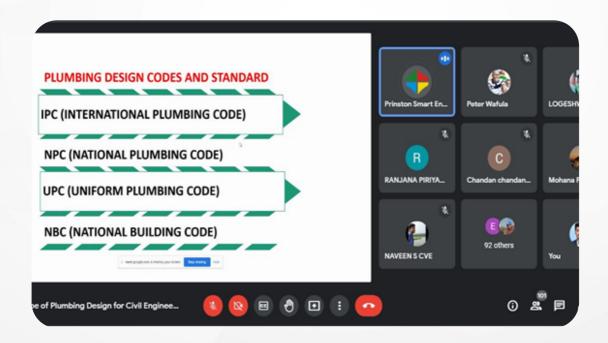
- > Er. S G Ashok Kumar, CMTI, Bengaluru.
- > Dr. R. Kumutha, Professor and Head, Civil engineering, SVCE
- Ms. Ruby Freya, Assistant Professor, Civil Engineering, SVCE
- Mr. S. Vignesh, (2016' batch), CHA Consulting Inc., Columbus, Ohio, USA
- Mr. R. Prashanth (2017' batch), Design Engineer, Utracon Structural Systems Pvt. Ltd., Chennai
- Mr. A. S. Praveen Raj (2018' batch), Founder, Blend Groups, Chennai.
- Ms. R. Kaavya, final year student
- Mr. Abishek Murali, third year student
- Ms. K. Kavin Malar, second year student.



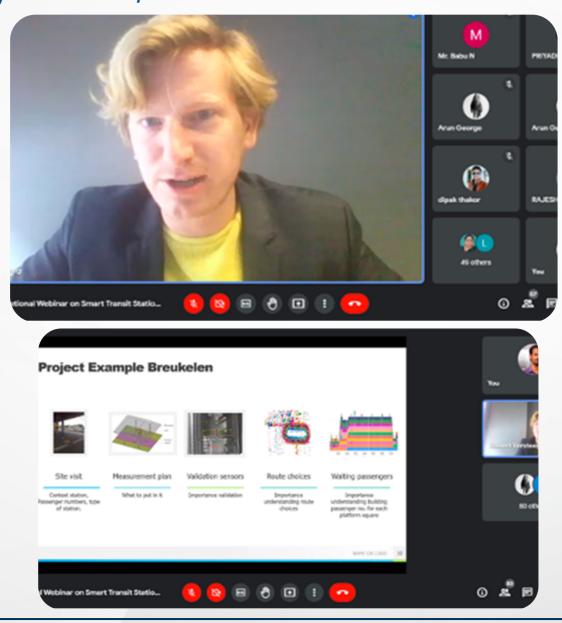
An Orientation session on "Design Thinking" in association with IIC-SVCE was organised for students and faculty members on 16-07-2021. The session was delivered by Mr.M.Athappan, Assistant Professor/ECE Department, SVCE. Dr.R.Kumutha, HoD and Mr.A.Vijay Vignesh, Assistant Professor, have coordinated this program.



A Technical talk on "Scope of Plumbing Design for Civil Engineers" was organised for the industry persons, faculty members and students on 31–08–2021. Technical talk was delivered by Mr.Asif, CEO, Prinston Smart Engineers, New Delhi. The Program was organised by Dr.R.Kumutha, HoD/Civil Department. Mr.S.Diravia Balan AP/CVE and Mr.A.Vijay Vignesh AP/CVE have coordinated this program.



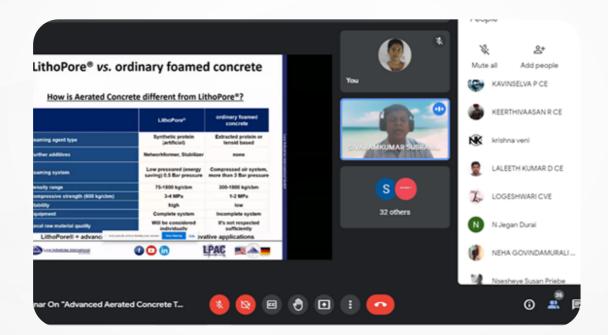
An International webinar on "SMART TRANSIT STATIONS IN A SMART CITY" was delivered by Robert Versteeg Consultant, Smart City Consultants, Amsterdam, The Netherlands on 26/08/2021, organised by Mr. G. Arun AP/CVE.



A 30 hours Certification Course on "Interior and Exterior Design using Sketch-up and V-ray Software" for 2 credits in association with Sarva Sudarsanaa Academy, Chennai. The course was conducted offline in CAD lab, Civil department from 6th to 27th September 2021 organised by Ms. Ruby Freya AP/CVE and Mr. G. Arun AP/CVE.



Mr. Sivaram Kumar delivered a webinar on "Advanced Aerated Concrete Technology and its Applications" on 29 September 2021. This webinar was organised by Ms. K. Sathyapriya.

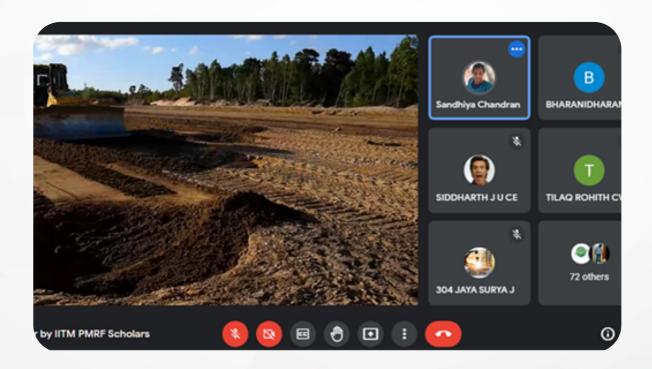


Ms. Ruby Freya and Mr. G. Arun organised a Seminar on "Energy Conservation and Automation in Buildings" on 9th October 2021.

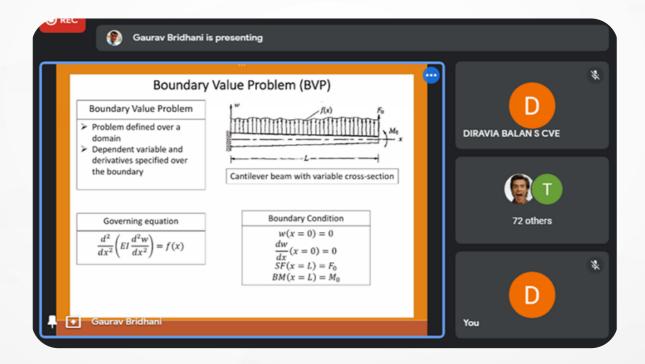
- Session 1 on Energy Demand Reduction in Residences: Challenges in the Indian Context by Dr. Rajasekar Elangovan, Associate Professor, Department of Architecture and Planning, Indian Institute of Technology Roorkee.
- Session 2 on Energy Efficiency in Buildings by Mr. Girish R
 Visvanathan, Director Tech., Earthonomic Engineers Pvt Ltd,
 Chennai.
- Session 3 on Building Automation System and Energy Optimization Opportunities in Buildings by Mr. Mayur Dangare, Delivery Manager, Johnson Controls India Pvt. Ltd. Pune, Maharashtra.



Mr. S. Diravia Balan organised a Webinar on "Ground Improvement by Compaction and Replacement Methods and Finite Element Analysis" on 27th November 2021. Session 1 on Ground Improvement by Compaction and Replacement Methods by Ms. Sandhiya C, Prime Minister's Research Fellow, Geotechnical Division, Department of Civil Engineering, Indian Institute of Technology Madras.



Session 2 on Finite Element Analysis by Mr. Gaurav Chandra Bridhani, Prime Minister's Research Fellow, Structural Division, Department of Civil Engineering, Indian Institute of Technology Madras.



Mr. R. Mathiyazhagan organised an Alumni Talk by Mr. Sathish V, SVCE CE Alumnus (2012 -2016 Batch), Entrepreneur and Farmer at Aral Farms on "BUSINESS OPPORTUNITIES FOR ENGINEERS IN FARMING SECTOR" on 18th December 2021.



Ms.Ruby Freya organised a webinar on "Overview of Architectural Acoustics for Civil Engineers" on 4th December 2021 and lecture delivered by Ms. Shilpa Vardharajan, Acoustic Design Consultant, Sonosphere, Acoustic Design Consulting & Testing, Pune and Mr. Bhavin Makwana, Production Manager – Acoustics and IAQ, Saint Gobain Gyproc, Mumbai.



Virtual Labs awareness cum training programme was conducted for faculties and students on 08-12-2021, 10-12-2021 & 11-12-2021. Training programme was coordinated by Mr.Kalaivanan R, AP/CVE. 02 faculties and 44 students (I year and II year students) had benefited from the program.



- Mr. A. Vijay Vignesh participated and completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Applications of Remote Sensing and GIS" from 27.12.2021 to 31.12.2021 at Deenbandhu Chhotu Ram University of Science & Technology, Murthal.
- Ms. K. Sathya Priya attended and completed successfully AICTE –
 ISTE approved Orientation/Refresher Programme on "Pedagogy
 and Research Methodologies" held during 21.12.2021 to 28.12.2021
 organised by Gokaraju Rangaraju Institute of Engineering and
 Technology, Kukatpally, Hyderabad, Telangana.
- Ms. K. Sathya Priya presented a paper on "An Experimental Investigation On The Effect Of GGBS And Steel Fibers On Deep Beams" on International Conference on Civil Engineering, Architecture and Sustainable Infrastructure (ICCEASI - 21), organised by BBD University, Lucknow and IFERP - 23 &24th September 2021.

- Mr.A.Vijay Vignesh attended a PALS-VLAB Online Faculty
 Development Programme (FDP) from 06-09-2021 to 08-09-2021.
- Dr.P. Venkateswara Rao attended the NAAC sponsored one day online seminar on "qualitative and quantitative metrics in RAAF of NAAC conducted on 17/09/2021 by Rajalakshmi Engineering college, Chennai.
- Mr.A.Vijay Vignesh participated in Online International Workshop on "Basic Statistical Analysis and its Interpretation using SPSS" from 18-09-2021 to 20-09-2021 organised by Inspire Softech Solutions, Chennai.
- Dr.P. Venkateswara Rao participated in a workshop on "NEP 2020
 Opportunities and challenges organized by NEETI, mastersoft on 20/09/2021.
- Mr.S.Diravia Balan has participated in the three day workshop on "Boundary Layer Theory" organised by Department of Mechanical Engineering SVCE from 22nd to 24th September 2021.
- Mr.S.Diravia Balan has participated in the International Webinar on "Advanced Aerated Concrete Technology & its applications" Organised by Department of Civil Engineering SVCE on 29th September 2021.

- Mrs. K. SathyaPriya, Assistant Professor has attended Online Live FDP on 'Central Air conditioning of a House using Revit' conducted by ICT Academy from 28 June to 2 July 2021.
- Mr.A.Vijay Vignesh has participated in Innovation Ambassador training (Foundation Level) conducted by MoE's Innovation Cell & AICTE during the period from 30th June - 30th July 2021.
- Mr.R.Mathiyazhagan has participated in an orientation session on "Design Thinking" organised by the Department of Civil Engineering in association with IIC-SVCE on 16-07-2021.
- Mr.R.Mathiyazhagan has participated in the webinar on "Prototype Validation: Converting Prototype into a Startup" organised by the Department of Civil Engineering in association with IIC-SVCE on 20-07-2021.
- G. Arun has attended AICTE AICTE Training and Learning (ATAL)
 Academy sponsored FDP on "Redemption from plastic pollution:
 Indian Railways" during 05th to 09th July 2021
- G. Arun has attended AICTE AICTE Training and Learning (ATAL)
 Academy sponsored FDP on "Leadership Excellence for Academic Development(LEAD)-Elementary" from 12th to 16th July 2021.

ONLINE COURSES UNDERGONE BY FACULTY

- Ms. K. SathyaPriya has completed the AICTE NITTT Course Module (Module 3 - Communication Skills, Modes & Knowledge Dissemination, Module 4 - Instructional Planning and Delivery, Module 6 - Student Assessment and Evaluation)
- Mr. S. Diravia Balan has completed the AICTE NITTT Course Module (Module 3 - Communication Skills, Modes & Knowledge Dissemination, Module 4 - Instructional Planning and Delivery, Module 6 - Student Assessment and Evaluation)
- Mr. A. Vijay Vignesh has completed the AICTE NITTT Course Module (Module 3 - Communication Skills, Modes & Knowledge Dissemination, Module 6 - Student Assessment and Evaluation)
- Mr.S.Hariswaran completed the NPTEL Course title "Geotechnical Engineering - 1 (12 Week Course)" with the "Elite + Gold Medal + 5% Topper Batch" Certificate through SWAYAM portal during July to October 2021.

Mr. Ajay Krishnamurthy, Mr. S. Naveen and Ms. Sharadha Lakshmi (IV Year Civil Engg.) had won First Prize under the category Innowel in The First Edition of iCube – A State level technical event organised by SVCE Science Club of Sri Venkateswara College of Engineering, Sriperumbudur held between 19.09.2021 and 03.10.2021.



Ms. R. Logeshwari, Ms. H. Nancy, Ms. S. Kiruthiga and Ms. D. Pershiya (IV Year Civil Engg.) had won First Prize under the category Ideo-o-lite in The First Edition of iCube - A State level technical event organised by SVCE Science Club of Sri Venkateswara College of Engineering, Sriperumbudur held between 19.09.2021 and 03.10.2021.



Ms. A. Jenisha, Mr. D. Laleeth Kumar, Mr. N. Gogula Chezhiyan and Ms. G. Harshavarthani (III Year Civil Engg.) had won Second Prize under the category Ideo-o-lite in The First Edition of iCube – A State level technical event organised by SVCE Science Club of Sri Venkateswara College of Engineering, Sriperumbudur held between 19.09.2021 and 03.10.2021.



INDUSTRIAL VISITS

A team of ten students along with two faculty members visited ATAL Tunnel located at Manali, Himachal Pradesh State (15–20 Nov 2021). The entire trip from Chennai to Manali & back was sponsored by AICTE (Rs.2 lakhs) under 'Youth Undertaking Visit for Acquiring Knowledge (YUVAK)' scheme. Students learned about the importance of this tunnel and its construction methods. Apart from this, they are also exposed to the social and cultural life of local people



- Mohammad Salmaan Shariff K N and Promoth Madavan K P have won II prize in Paper Presentation event in XIPHIAS 2K21on 10 Dec 2021,organized by Department of Civil Engineering ,DMI engineering college,Chennai.
- Baala Subramaniyan K, has won I place in Photography contest in XIPHIAS 2K21 on 10 Dec 2021,organized by Department of Civil Engineering, DMI engineering college, Chennai.
- Mr.Puviarasu(II year)secured I place in the poster presentation event at National level Technical Symposium CONSTRUO 2021, held at Valliammai Engineering College, Chennai on 28th August 2021.
- Mr.AURUDRA ADISESHAIAH KRISHNA (II year)secured II place in the ADZAP event at National level Technical Symposium CONSTRUO 2021, held at Valliammai Engineering College, Chennai on 28th August 2021.

STUDENTS ACTIVITIES

- Aadeshwar S of 1st Year Civil Engineering Student has participated in "QUIZ FEST DEC'21" on 22nd December 2021 organized by Department of Applied Mathematics, SVCE. Rohan Lewis (II Year Civil Engg), Ms.U. Amaravathy and Ms. N. Srilekha of I Year Civil Engineering participated in the Competition.
- AURUDRA ADISESHAIAH KRISHNA,BAALA SUBRAMANIYAN K ,MOHAMMAD SALMAAN SHARIFF K N,SHANTHA GOWTHAM S and PROMOTH MADAVAN K P have participated in a Quiz event in XIPHIAS 2K21on 10 Dec 2021. organized by the Department of Civil Engineering DMI engineering college,Chennai.
- AURUDRA ADISESHAIAH KRISHNA,BAALA SUBRAMANIYAN K, have participated in a Techno Drafter event in XIPHIAS 2K21 on 10 Dec 2021,organized by Department of Civil Engineering ,DMI engineering college,Chennai.
- SHANTHA GOWTHAM S participated in a Brain Teaser event in XIPHIAS 2K21on 10 Dec 2021,organized by Department of Civil Engineering, DMI engineering college, Chennai.
- Aadeshwar S of 1st Year Civil Engineering Student has participated in "QUIZ FEST DEC'21" on 22nd December 2021 organized by Department of Applied Mathematics, SVCE.

STUDENTS ACTIVITIES

- Mr. Guruprakash K, Ms. Hemalatha R, Ms. Jenani M and Mr. Laleeth Kumar D successfully completed 4 weeks internship under Larsen & Toubro Limited, Construction, Water & Effluent Treatment, Manapakkam. from 6th September to 11th October 2021.
- Mr. Hariharan V, Ms. Hemalatha R, Mr. Bharanidharan B, Mr Kavinselva P and Mr. Saravanapandi G attended Fire and Electrical Safety in Work Places organised by YRC on 7th October 2021.
- Logeshwari R, Vengadesh V, Jenisha A, Siddharth J U and Kavinselva P have participated in 5 Day Online Certification Training Program on "Digital Construction" from 29.11.2021 to 07.12.2021, conducted by Construction Management Training Institute, Bengaluru (CMTI)
- Mr. B. Bharanidharan participated in the International Webinar on Advanced Aerated Concrete Technology & its Applications organised by the Department of Civil Engineering, SVCE on 29th September 2021.
- Mr. Bharanidharan B, Mr. Hariharan V, Ms. Hemalatha R, Mr. Laleeth Kumar D, Mr. Ramanan B B, Mr. Saravanapandi G and Mr. Vignesh A attended the Teacher's Day - speech competition organized by YRC, SVCE on 6th September 2021.

STUDENTS ACTIVITIES

- 33 Students successfully completed a 30 hours Certification Course on "Interior and Exterior Design using Sketch-up and V-ray Software" conducted by department of Civil Engineering, SVCE in association with Sarva Sudarsanaa Academy, Chennai from 6th to 27th September 2021.
- Mr. Bharanidharan B, Mr. Gokul K, Mr. Hariharan V, Ms. Hemalatha R, Mr. Laleeth Kumar D, Mr. Padmanaban N, Mr. Ramanan B B, Mr. Saravanapandi G, Mr. Siddharth J U and Mr. Vignesh A attended the inaugural function of YRC SVCE activities for AY 2021-22 and Awareness program on COVID '19 and it's prevention organised by YRC, SVCE on 1st September 2021.

CEA ACTIVITIES

CIV -QUIZ A Technical Quiz programme was conducted for II year civil engineering students on 09th December 2021 in the classroom CB-526. Team 3 (Prathiba S ,Monica V) has won the first place and Team 7 (Vinnu Vikram & Chandravasan) has won the second place.





PROGRAM OUTCOMES (POs)

Students in the Civil Engineering program should, at the time of their graduation, be able to

- Apply the knowledge of mathematics, science, engineering fundamentals and concepts of Civil Engineering to the solution of complex engineering problems. (Engineering knowledge)
- Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences. (Problem analysis)
- 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. (Design/Development of Solutions)
- 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 for complex problems. (Conduct Investigations of Complex Problems)
- Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations. (Modern Tool Usage)
- 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. (The Engineer and Society)
- Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development. (Environment and Sustainability)
- Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice. (Ethics)
- Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings. (Individual and Team Work)
- 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. (Communication)
- 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. (Project Management and Finance)
- Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change. (Life-long Learning)

PROGRAM SPECIFIC OUTCOMES (PSOs)

Students in the Civil Engineering program should, at the time of their graduation, be able to

- Provide solutions for real life problems related to core areas of civil engineering by applying knowledge of mathematics, Basic and Engineering Sciences and by using appropriate engineering tools.
- Plan, analyse, design, execute and manage infrastructure projects considering safety, societal and environmental factors.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

Civil Engineering graduates during the first few years of graduation will:

- Practice civil engineering in construction industry, government or public sector undertakings by applying ethical principles and following norms of civil engineering practice.
- Pursue higher education and research to hone-up latest civil engineering technologies and to adapt to the changing global scenario.
- Exhibit leadership and team working skills as an entreprenuer with demonstrable attributes to contribute to the societal needs.







