MAILER (FRONT PAGE)

HOD MESSAGE

DEAN MESSAGE

BRIJESH SIR MESSAGE

SALUTATION

NOVEMBER 15 2020

Salutations from "American Society of Civil Engineers" student chapter at Vellore Institute of Technology, Vellore, Tamil Nadu.

'A horse never runs so fast as when he has other horses to catch up and outpace'. With a clear perception of hosting a remarkable event at Vellore Institute of Technology backed by definite agenda to involve the young aspirants and to give everyone an immense feeling of confidence and potential, we would like to proudly present to you the official ASCE MAILER I of India Region Student Conference 2021.

This correspondence will serve as MAILER I, the first of three information packages that each university will receive as the India Region Student Conference 2021 approaches. Please be sure that you keep these packages for your further records and carefully read and dispense the information provided, because the details that are given here may not be repeated in subsequent mail. We have attached the following closure for your kind reference:

- Receipt confirmation
- Deadline summary
- School registration
- Tentative conference schedule
- Competition rules
- Eligibility requirements for advancement to national competitions
- Contact details

Receipt of this mailer should be confirmed by mailing the form in the following page by NOVEMBER 21st, 2020. Please note the school registration deadline is NOVEMBER 30th, 2020.

If you have any queries, please contact us at asce@vit.ac.in.

Regards,
Dr. Brijesh Nair A. N
Faculty Member - India Region Student Conference 2021

RECEIPT CONFIRMATION

Please complete and send to asce@vit.ac.in not later than

School Name:

_____

Faculty Advisor(s):

_____

Faculty Advisors' Phone Number:

_____

Faculty Advisors' Email:

_____

Conference Chair Contact (Student):

_____

Student Conference Chair Contact Phone Number:

_____

Student Conference Chair Email:

_____

This confirms that we have received Mailer I regarding the ICES 2021

DEADLINE SUMMARY

Host:

November 15, 2020 - Mailer I
December 30,2020 - Mailer II
January 30, 2021 - Mailer III

Participants:

November 21, 2020 - Mailer receipt confirmation
November 30, 2020 - School Registration
March 19-21, 2021 - Conference

SCHOOL REGISTRATION FORM

COLLEGE NAME:

❑ We are attending the conference and will send approximately ___ students and faculty.
❑ We are not attending the conference
Kindly write ‘yes’ if you are interested in competing in the mentioned event and ‘no’ if you aren’t interested in the mentioned event:

S.NO	EVENT NAME	YES/NO
1.	ASCE Concrete Canoe Competition	
2.	ASCE Sustainable Solution Competition	
3.	ASCE UESI Surveying Competition	
4.	Unbreakable(quiz)	
5.	Paper presentation	
6.	Ace the Space	
7.	Cad-A-Thon	

S.NO	WORKSHOP	YES/NO
1.	BIM	
2.	Modular and Nano housing	
3.	Self healing concrete	

We (Name of School/College/University) hereby confirm our interest for participation in the India Region Student Conference Confirmation 2021 hosted by VIT’s ASCE Student Chapter from **19th March 2021 - 21st March 2021**. I also confirm that I have gone through all details mentioned in this Mailer
Name of the person filling up the receipt: (Add Name Here)
Name of Team Leader: (Add Name Here)

Date: (Add Date here)

PRELIMINARY SCHEDULE

DAY 1

S.NO.	EVENT NAME	TIMING
1.	INAUGURATION(2 guest)	09.30 am to 11.00 am
2.	CAPTAINS MEET	11.15 am to 12.15 pm
3.	BUSINESS MEET	2:00 pm to 3:00 pm
3.	LUNCH BREAK	12.30 pm to 01.30 pm
4	Special talks(1 guest)	1:30 pm to 2:00 pm
5.	UNBREAKABLE QUIZ	01.30 pm to 04.30pm
6.	SELF HEALING CONCRETE + Guest speaker	11.15 aM TO 6.00PM

DAY 2

S.NO.	EVENT NAME	TIMING
1.	GUEST	9.00AM 10:00.AM
1.	ASCE SUSTAINABLE SOLUTION COMPETITION	10.30 AM TO 05.00 PM
2.	CADATHON	10.00 AM TO 5.00PM
3.	CANOE TECHNICAL PROPOSAL DAY	10.15 AM TO 11.15 AM
4..	LUNCH BREAK	12:30 PM - 01:30 PM
5.	Special talks	1:30 pm to 2:00 pm
6.	CANOE ORAL REPRESENTATION	2:30 PM TO 4:00 PM
7.	ASCE SURVEYING COMPETITION	10.30 TO 6.00 PM
8.	BIM WORKSHOP+Guest Speaker	11.00aM TO 6.00PM

DAY 3

S.NO	EVENT NAME	EVENT TIMING
1.	PAPER PRESENTATION	9.00 am to 12.30 pm
3.	MODULAR AND NANO HOUSING	9.00 am to 4.30 pm
4.	ASCE SUSTAINABLE SOLUTION PRESENTATION	1.30 PM - 4.00 PM
5.	ACE THE SPACE	1.30 PM - 4.30PM
6.	LUNCH BREAK	12.30 pm to 1.30 pm
7.	VALEDICTION	5.00 pm to 7:00 pm

DAY 3

COMPETITION RULES

ASCE CONCRETE CANOE COMPETITION

The Request for Proposal (rules) for the NCCC 2020 is written and governed by the CNCCC (Committee on National Concrete Canoe Competition).

https://www.asce.org/uploadedFiles/Conferences_and_Events/Event_Subpages/Content_Pieces/2020_nccc_request_for_proposals-rules.pdf

ASCE SUSTAINABLE SOLUTIONS COMPETITION

The theme for the competition is: Parks and recreation challenge

https://www.asce.org/uploadedFiles/Membership_and_Communities/Student_Chapters/Content_Pieces/2020_sustainable_solutions_competition_rules.pdf

ASCE BLUE SKY COMPETITION

With the ASCE Future World Vision being the contest's base, the students are free to develop their innovations for the built environment.

Challenge yourself into the domain of transportation to learn, and understand, how a simple idea can be converted into a galvanizing product which can create a solution for certain problems as far as into the future of 2070.

Out of the box, radical, unconventional, as well as transformational solutions are encouraged.

https://www.asce.org/uploadedFiles/Membership_and_Communities/Student_Chapters/Content_Pieces/2020_blue_sky_competition_rules.pdf

SURVEYING COMPETITION

This competition's educational and professional objective is to recognize the importance of basic surveying concepts to all civil engineering projects.

A team of three members must demonstrate their ability to apply and implement the ways and methods of land surveying over four separate tasks.

The rules for the Indian region conference are the same as the 2021 ASCE Surveying Championship Finals Competition.

https://www.asce.org/uploadedFiles/Membership_and_Communities/Student_Chapters/Content_Pieces/asce-surveying-rules_final.pdf

ASCE CONSTRUCTION INSTITUTE STUDENT CONFERENCE COMPETITION

This competition provides a construction engineering experience for civil engineering students through a challenge project. Team tasks include developing a schedule, estimate, and risk management documents.

UNBREAKABLE QUIZ

Objective: To distinguish the most talented out of the rest, we provide a platform to express your knowledge and skill set, to fight it out and come on the top.

Prerequisites: The topics will primarily be focused on structural engineering but could also come from any aspects of civil engineering.

Participants:

- The students should attend the quiz as pairs. The students in a team should be from the same College/University.
- Only 1 team shall be allowed to participate from each college

Description:

Round 1: The contestants will have to answer a given number of questions in a given time. The number of questions and the time allotted will be informed later. The primary aim of this round is to test your knowledge and bring out the best in you. Each correct answer will be given 1 mark and there will be no negative marking for wrong answers.

Only half of the candidates will be passed to the next round.

Round 2: The selected students can take part in the round 2, which will be the final round. To race up the competition and get your adrenaline pumping, we will be organizing a buzzer round where the questions shall be displayed on the screen and the first to answer will bag all the points. Additional information regarding the quiz will be communicated in the due course.

PAPER PRESENTATION

Objective: To dive deeper into the topic given to the participants and write and present a research paper on the same.
Prerequisites: The papers to be written shall be based on basic civil engineering knowledge.
Participants: Teams of two can participate in the competition from each college. More than one team can also participate from the same college.
Description:

Green Technology

Green technology describes the use of science and modern technology to create products and services that are more environmentally friendly. It also refers to clean energy production, which uses alternative fuels that are less harmful when compared to fossil fuels. Some examples of green technology include infrastructure used to purify water, recycle waste and conserve nature's resources. It's main goal is to protect and conserve the environment as well as to repair the past damage done by various human activities wherever possible.
Although the market for green technology is comparatively new in India and around the world, it is now turning increasingly lucrative due to the significant amount of interest of investors. This is mainly due to the rise in awareness of the impact of climate change and the slow depletion of natural resources.

Sustainable Construction Material

In India tremendous environmental problems are arising in the construction industry due to rapid urbanization. Increase in demand of residential dwelling units which leads to consuming more energy, resources, raw materials which are responsible for the rise in the carbon footprint. All metros are already facing environmental impact issues such as change in weather pattern, destruction of ecology. The solution lies in the use of sustainable construction materials. Using locally available building materials which are energy efficient and durable. It provides an opportunity to living inhabitants to live with healthy, comfortable conditions throughout the building's full life cycle. The life cycle consists of material production, construction planning, design, construction, operation and maintenance processes. However, because of the complexity of sustainability and the fragmentation of the construction industry, the level of implementation of sustainable construction practices is still low.

Smart Building

It has been widely acknowledged that India is in need of world-class infrastructure to provide the foundation for faster and sustained economic growth. Smart buildings allow owners and operators to understand the occupant's needs. Smart solutions continue to improve the efficiency and effectiveness of the building. The goal is to enhance the well-being and productivity while simultaneously increasing building efficiency and reducing the cost. In addition to energy efficiency of the buildings, they also increase productivity by providing a comfortable environment for the users. A smart building can be seen as a long-term solution supported by a strong degree of communication and data sharing.

Energy Efficient Building

Energy efficient building design involves constructing or upgrading buildings that are able to get the most work out of the energy that is supplied to them by taking steps to reduce energy loss such as decreasing the loss of heat through the building envelope. Energy efficient homes, whether they are renovated to be more efficient or built with energy efficiency in mind, pose a significant number of benefits. Energy efficient homes are less expensive to operate, more comfortable to live in, and more environmentally friendly.

Inefficiencies that are not removed in the building process can pose issues for years. However, keeping energy efficient building design in mind when construction is underway is a more effective way to approach making a home more efficient, which is less expensive for a homeowner in the long run. Building codes exist around the world to ensure that buildings are energy efficient to a certain degree, however sometimes it is wise to go above and beyond these recommendations to have an even more energy efficient home. As well, since a house operates as a system, a home must be looked at as a whole in order to fully increase the energy efficiency. For example, expensive heating and cooling equipment do nothing to improve the energy performance of the house if insulation isn't keeping heat in during the winter and out in the summer.

Affordable Housing System

They refer to the housing system that is affordable by that section of society whose income is below the median household income.
Affordable housing should address the housing needs of the lower or middle income households. Affordable housing becomes a key issue especially in developing nations where a majority of the population isn't able to buy houses at the market price.
Disposable income of the people remains the primary factor in determining affordability. As a result, it becomes the increased responsibility of the government to cater to the rising demand for affordable housing. The Government of India has taken various measures to meet the increased demand for affordable housing along with some developers and stressing on public-private partnerships (PPP) for development of these units.

Rules:

- After the topic is given, the first step would be to send an abstract via email before the deadline. The abstract should have all the necessary details of the team such as names, university, year, department, contact number, etc. It should consist of 150-180 words.
- Meanwhile, they would be preparing a fully-fledged research paper on their topics. These research papers will also be received via email and will be judged on various criteria such as innovation, creativity, practicality, format etc. The detailed rubric will be given to the participants with their topics.

ACE THE SPACE

Objective: The task is to design a “Micro Home” with an area not more than 25 m^2 that can accommodate a couple.

Prerequisites: A basic idea on the PERT method of project management in designing Compact/Micro Homes.

Participants: Individual participation or teams of up to 3 participants from the same or different college(s) are allowed.
(In case of a team member arrangement, event coordinators will see through it.)

Description:

- Participants are tasked to come up with a ‘Space Efficient', ‘Creative’ and ‘Modernized’ design of a “Micro Home” for an area of 25 m^2 that can accommodate a couple.
- The design must be planned and scheduled as per the PERT method and is to be submitted along with a detailed rate estimate.
- The scale of the design can be as per participants’ interest.
- The design will be evaluated based on uniqueness, efficiency and under the economic point of view.

Rules:

- The design and other requested details are to be submitted within the provided time limit.
- Participants are requested not to use their electronic gadgets or any other reference materials once the event has commenced.
- Participants are requested to bring their designing equipment necessary. (Only sheets will be provided.)
- It is also requested that the discussion between teammates is to be kept at a conversational decibel to avoid disturbance to other participants.

CADATHON

Objective: The task aims to test the technical drawing of the participants as well as AutoCAD software skills in a limited time constraint.

Prerequisites: The participant must have a basic knowledge of AutoCAD software and its tools along with technical specifications of drawings and buildings.

Participants:

- Only one team will be allowed from every participating college /university.
- A team may be composed of three members from the same participating college/university.

Description:

- The participant will be given a topic on the spot and will have *duration* to draft the drawing.
- The participant must make a plan of adequate size and scale to attain aesthetic finesse along with technical accuracy.
- Efficient and creative use of AutoCAD software tools is recommended.

Rules :

- The design must be submitted within the time limit.
- The construction code used must be mentioned and specifications should be consistent with the same.

BIM WORKSHOP

Objective: The workshop aims to educate about the feasibility and working of BIM softwares.

Prerequisites: The participant should have a basic concept of Autodesk and it's features.

Description:
BIM is an intelligent model-based process that provides insight to help us plan, design, construct and manage building and infrastructure.

It goes further than traditional CAD drawings by providing intelligence to individual building components(e.g. windows, walls) as well as providing systems and building wide information and awareness in addition to simple spatial relationships .

These models combine intelligent 2D and 3D objects, used to define a building design along with external factors such as location and local conditions.

BIM reduces the chances of extra work or re-work.The model can be updated easily due to its digital nature.

MODULAR AND NANO HOUSING

Objective: The workshop aims to impart knowledge on numerous aspects of modular and nano housing.

Prerequisites: The participants should have some basic knowledge on varying construction materials and techniques along with a general idea about prefabricated structures.

Description:

- Modular and nano houses are built on the idea of constructing the smallest possible sustainable and eco-friendly houses.
- This pre-engineered concept involves the use of sustainable architecture and renewable energy systems for the creation of flexible spaces.
- These houses can be used by a family of two or three in an area of 25 square metres, incorporating the concept of 'suspending technology'.

- This helps in doubling the size of the living area so that it can be used as two bedrooms at night.
- The advantage of suspending technology is that it can be used both in new constructions and also be incorporated in existing structures.
- Thus, modular and nano housing provides an optimistic and environmental solution for the global housing issue of very small living spaces at extremely high prices.

SELF HEALING CONCRETE

Objective:
Infrastructure covers a very broad spectrum of materials. Self-healing concrete provides a solution to high level service and performance, high durability and minimum negative ecological impact. The main focus of this workshop is to explore the topic in-depth.
Prerequisites:
The participant must have fundamental knowledge about concrete technology and the building materials used.
Description:

- Tiny cracks on the surface of concrete structures makes the building vulnerable to water seepage thus leading to degradation of concrete and corrosion of steel reinforcement. This greatly reduces the lifespan of a structure.
- This concrete was created by a microbiologist who was inspired by the self-healing capacity of bones.
- Self-healing of cracks in concrete would contribute to a longer service life of concrete structures and would make the material not only durable but also sustainable.
- The self-healing agents can lie dormant within the concrete for up to 200 years.
- The use of Bio concrete in India is beneficial. The climate in India is diverse and varies from region to region. The temperature change deteriorates the concrete surface.

Eligibility requirements for advancement to national competitions

The following qualifications are required of all ASCE Student Organizations to participate in an ASCE-sponsored National Competition.

1. Be in good standing with ASCE:

a. Have paid their Annual Dues, as received by ASCE, before the start of the Student Conference; and

b. Have submitted their student chapter full Annual Report in time to be graded (reports submitted on or before February 1 meet this qualification), and have received a minimum score of 40 points out of a possible 100. Student Chapters that submit an EZ annual reporting form do not qualify; and

c. Act appropriately. As representatives of ASCE and the civil engineering profession, all competition and conference participants are expected to and must act professionally and courteously. The use of alcohol, marijuana, or other controlled substance is strictly prohibited.

Note: Invitations to Conference and National Competitions are a privilege, not a right. Failure to act appropriately can result in letters of reprimand, mandatory behaviour management plans, and loss of invitations to further competition for individual institutions and/or entire conferences.

2. Attend and participate in their assigned Student Conference as shown through their school's:
a. Good faith participation in the Student Conference Business Meeting (at least one (1) student representative present at the start of the Business Meeting);
b. Good faith participation in the Student Conference Paper Competition, including submission and presentation by at least one (1) member of the ASCE Student Chapter. Note that any papers/presentations created for any other competition do not count as an entry into the Student Conference Paper Competition; and
c. Meeting any additional requirements of Student Conference participation set by the Student Conference at the previous year's business meeting or in their written and approved bylaws, standing rules, or constitution.

CONTACT DETAILS

CONFERENCE CHAIR:
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