

ABOUT THE WORKSHOP



The Construction industry is a major labour intensive economic sector that needs a large improvement in the speed, quality and productivity of the construction work. Robotic technology, Automation and Artificial intelligence may pave the way for automated processes, increased productivity, faster work with more precision and accuracy resulting in financial savings.

The workshop aims to introduce the role of robotics and automation technologies with applications in

- Building Health Monitoring
- Application of Artificial Intelligence and Machine Vision in Building Automation
- Application of Robotics in Building Automation
- Application of Artificial Neural Network

ABOUT SATHYABAMA INSTITUTE OF SCIENCE & TECHNOLOGY(Deemed to be University)



Sathyabama Institute of Science and Technology (A Christian Minority Institution) formerly known as Sathyabama Engineering College was established in 1987 by Dr. Jeppiaar. It is a premier institute imparting knowledge in the areas of engineering, science, technology and education. The institution's progress and contribution to the field of technical education for over two decades resulted in granting Deemed University status on 16th July, 2001. Sathyabama Institute of Science and Technology with the blessings of Founder Chancellor Colonel Dr. JEPPIAAR has been strengthening its developmental activities in bearing fruits of research for betterment of the society.

INNOVATIVE APPLICATIONS OF ROBOTICS & AUTOMATED SYSTEMS IN CONSTRUCTION MANAGEMENT



13th & 14th MARCH 2020

Department of Architecture

In Association with

International Association for Automation and Robotics in Construction

DEPARTMENT OF ARCHITECTURE SCHOOL OF BUILDING AND ENVIRONMENT

The Department of Architecture, School of Building and Environment, is a state of the art design and management oriented school striving to create a responsive built environment through energy efficient and structurally stable infrastructure thereby fostering students to face the challenges of the dynamic World. The Department nurtures students in the exploration of skills, their creativity in design, and their expressions and creates a platform to collaborate on projects in developing innovative strategies in the built environment by integrating research skills throughout the curriculum. The School of Building and Environment consists of Department of Architecture and Department of Civil Engineering. The Department of Architecture offers Bachelor of Architecture as UG programme and Master of Architecture (Building Management) & Master of Architecture (Sustainable Architecture) as PG programmes.

IAARC

The growing interest shown internationally towards the end of the 1980's in Automation and Robotics in Construction (ARC) matters led to the formation of IAARC International Association for Automation and Robotics in Construction in 1990. By then a number of

international symposia had already been convened and the creation of IAARC satisfied the demand for an umbrella organization. IAARC is a global community with specific concern for all fields of construction including civil and building engineering, machine automation, robotics applications to construction, IT technologies, planning, logistics, etc.

RESOURCE PERSONS

Dr. Benny Raphel,
Professor, IIT Madras & Vice-president of IAARC

Mr. S. Kavin Kumar, Director, Engineering Project Management Consultancy and Research Private limited (EPMCR(P)LTD)

Dr. Devyani Gangopadhyay,
Dean, School of Building and Environment

REGISTRATION

Students: Rs.750/- per person.
Academician: Rs.1000/- per person.
Industry: Rs.1500/- per person.
Last date for Registration: 9th March 2020

Mode of Payment : All payments are to be made by demand draft payable at Chennai drawn in favour.....

For Spot Registration on 13th March, prior confirmation is required.

DAY 1 (08:30 – 15:00)

08:30 Registration
08.45 Inauguration & Welcome Address
09.00 Introduction to 'Automation in Construction' : Dr. Benny Raphel.
09.45 Tea Break.
10.00 Opportunities for Automation- Brainstorming Session: Dr. Benny Raphel.
11.00 Application Examples: Mr. S. Kavin Kumar
12.00 Lunch
01.00 Formwork Challenge : Session 1: Mr. S. Kavin Kumar & Team.
03.00 End of Day 1

DAY 2 (09:30 – 15:00)

09.00 Formwork Challenge : Session 2: Mr. S. Kavin Kumar & Team.
09.45 Tea Break.
10.00 Hands on: Session 1 : Dr. Benny Raphel & Team
12.00 Lunch
01.00 Hands on: Session 2: : Dr. Benny Raphel & Team
02.45 Distribution of Certificates
02.45 Valedictory function

CONTACT US

Ar. Sukirtha Suresh : 9444830060
Email- sukirthasuresh2000@gmail.com

GREEN YOUR CAREER

There is tremendous opportunity for students who integrate sustainability into their education. Sustainability knowledge can help distinguish you in a competitive marketplace. It will help showcase your domain expertise, organizing and project management skills together with sustainability as the backdrop.

Establish credibility by earning a credential. The LEED Professional Credential indicates to the marketplace that you have a clear understanding of green building principles and the implementation of LEED. Consider earning one seriously.

The Green Associate credential attests to basic knowledge and skill in understanding and supporting green design, construction and operations. Internationally, there is general agreement in the industry that a LEED credential increases chances of employment.

Eddego – Advanced Sustainability Training for the New Green Economy

Eddego is the training division of En3 and works with core partners such as the US Green Building Council to create a platform for honest credentialing. By identifying new credentialing venues, linking and clustering certification programs, conducting focus groups and engaging various stakeholders and partners, Eddego is offering new and innovative programs in energy and sustainability ranging from green project and management skills to green building, energy efficiency power and smart power.

Eddego is a proven training expert in the field of green buildings with practical experience of working on more than 200 million square feet of green buildings in various parts of the world. Our instructors are industry professionals with years of experience working with LEED and delivering training to individuals studying to pass the LEED exam.

Students across the world are just starting to look at this important area of study. Take the lead and begin your journey to a sustainable career.

Who Should Attend:

Architects | Engineers | Project Managers | Top Management | Economists | Traders | Product Manufacturers | Energy Managers | Waste Managers | Water Specialists | Landscape Artists

This is one chance you will not want to miss!!

LEED v4 Green Associate Exam Study

Course Description

The course will be delivered over two and half days. The study material and course content will cover the information necessary to successfully prepare for the LEED GA exam. You will learn about:

- Process to become a LEED GA
- Overview of exam
- Green building basics
- USGBC, GBCI and LEED
- Minimum program requirements for LEED certification
- Process for LEED building certification
- Integrated Design Process
- Commonalities and linkages between various LEED credits
- Reference standards that you need to be familiar with
- Special tips on study methods and exam-taking skills
- Detailed information about LEED credit categories and building strategies related to the various LEED sections:
 - Location and Transportation
 - Sustainable Sites
 - Water Efficiency
 - Energy and Atmosphere
 - Materials and Resources
 - Indoor Environmental Quality
 - Innovation in Design
 - Regional Priority

During the course you will have the opportunity to ask questions to your instructor. You will also be able to test your knowledge during the course through the use of practice questions posed by your instructor. You will also be provided with additional study tools, including access to online practice exams, a copy of presentation slides etc.

Course Benefits:

- Find out what you need to know to successfully pass the LEED GA exam.
- Learn from highly qualified instructors with real life experience
- Gain access to valuable knowledge and access to quality study tools
- Special discounted student fees for the course and for the exam
- The fee would include in person course delivery. USGBC would conduct the certification exam on a planned date at Prometric.

Why Eddego?

Eddego is the training division of En3. We are a long-standing USGBC member high reputation. Eddego is a proven training expert in the field of green buildings with practical experience of working on more than 200 million square feet of green buildings in various parts of the world. Our instructors are industry professionals with years of experience working with LEED and delivering training to individuals studying to pass the LEED exam.

Some of our Faculty

Karthik Narayan T S, BE (Hons.) Chemical Engineering and MSc (Hons) Biological Sciences, Birla Institute of Technology & Science, Pilani; LEED AP BD+C; LEED AP EB O+M; IGBC AP, GRIHA Evaluator and Trainer; BEE certified energy auditor (All India 3rd on the merit list)

Karthik has over 17 years of experience in executing and managing several complex Development, Maintenance and Re-engineering projects for leading multinational IT companies. Besides being a LEED AP, Karthik is a Certified Energy Auditor and Manager by Bureau of Energy Efficiency, Ministry of Energy, Government of India and a certified trainer and evaluator for the TERI-GRIHA Rating System. He is also a trained expert in conformity assessment, is an ISO 9000, ISO 14064 and ISO 50001 certified lead assessor. He is also a Certified Software Quality Analyst (CSQA), administered by the Quality Assurance Institute, USA and is also a Project Management Professional (PMP), certified by the Project Management Institute, USA.

Deepa Sathiaran, B.E. Electrical and Electronics, College of Engineering, Guindy; Master in Business Administration Great Lakes Institute of Management; LEED Fellow

Deepa is a LEED FELLOW (the highest credential offered by the US Green Building Council) and LEED AP since 2003 and a leading international sustainable design expert working with diverse project teams and creating sustainable habitats in the U.S., India, Europe and Middle East. She is a recognized HVAC and refrigeration consultant. She serves on various technical committees for U.S. Green Building Council and has been one of the key technical members that recently drafted the alternate compliance paths for international projects for the

LEED rating system. She is also a trained expert in conformity assessment, is an ISO 9000, ISO 17020 and ISO 17025 certified lead assessor and has conducted numerous assessments of certifying bodies, laboratories and inspection agencies. She is the Past President of the ASHRAE South India Chapter and also the Past National Environment Chair for the Young Indians (Yi) arm of the Confederation of Indian Industry (CII).

Sathiaran Ram, BE (Hons) Civil Engineering, Birla Institute of Technology & Science, Pilani; Master of Science in Civil Engineering, University of Southern California; Master of Business Administration, The Anderson School at the University of California at Los Angeles; LEED AP BD+C

Sathia provides direction in technical concepts for En3's major consulting assignments; maintains key-client contacts and monitors the development of projects from concept through post-occupancy operations and maintenance. He is working closely with international bodies such as International Code Council (ICC) U.S.A., The World Bank Group and governments including the Government of Abu Dhabi and Bahrain to develop sustainability and energy efficiency standards, policies and codes. He is a certified lead assessor on ISO 9000, ISO 17025 and ISO 14064. Besides being a LEED AP, he is an internationally recognized assessor for accreditation of testing and calibration laboratories, inspection agencies in the U.S. and India.

Kavin N, is a LEED AP BD+C and IGBC AP with more than 10 years of experience in Teaching Research and industrial sectors, especially in the field of energy conservation and management, Green buildings design and certifications and sustainability. Involved in implementing projects under various Green rating systems including New construction, Green Homes, Green Factories, Core and Shell, Existing Buildings and Commercial Interiors.

Kavin has been involved in the design and commissioning of 80+ green projects across India to help achieve desired LEED / Green Homes / Green Factories certifications. Some of the prestigious projects include World Bank (Sudan), World Bank (Nairobi), Danfoss, Qualcomm, Oberoi group, Reliance, Tech Mahindra, Great Lakes Institute of Management (first Educational institution campus to achieve LEED NC Platinum in India), ABAD Nucleus Mall (first LEED certified project in Kerala), Grundfos Pumps, Schneider Electric, Heritage Resorts, Syntel Global Development Center, Manyata Tech Park, Embassy Tech

Square, Wockhardt Hospitals among others.

Kavin is currently a senior project manager with En3 Sustainability Solutions Pvt Ltd.

Ms. Manoranjani .R, B.Arch, MBEM, is a Project manager in En3 sustainability solutions Pvt Ltd. She completed her Masters in Building Engineering & Management in School of Planning & Architecture, New Delhi.

She has experience in working with Indian Green Building Council [IGBC] & she is an accredited IGBC AP & LEED AP [BD+C]. In addition to this she has proved her ability in handling multiple green building projects. She has been certified as GRIHA Trainer & Evaluator. She has presented about GRIHA PROJECT case studies in the GRIHA Workshop at CSIR & gave training to practicing engineering professionals @ Chennai on 21st November 2012 organised by ADARSH – GRIHA.

She is in the field of Sustainability practices for the past 4.5 years and been associated with En3 for the past 3 years and been involved in various key project of different rating system from concept to completion to Guide the team and implement the green measures and ensure the compliances with respect to the appropriate green building standards .

Scholastic Achievements:

- LEED Accredited Professional [LEED AP BD+C]
- Certified GRIHA Trainer
- Certified GRIHA Evaluator
- IGBC Accredited professional
- COA registered Architect
- Best out going student award - year 2009
- GATE scholar.(90.1 percentile score) 2009
- Best Outgoing student award – School of Planning & Architecture.
- Best student Architect award (2009) - From Builders Association,Tamil Nadu.
- Topper in under graduation (Architecture)
- Shortlisted in Green home design competition - Ethos (2007)

She has been involved in various Green projects handled by En3.

Mr.Elavarasan Govindarasu started his carrier in sustainability design and consulting practice with En3 sustainability solutions in 2010. He holds a Bachelors degree in Electrical and Electronics Engineering and a master's degree with Gold Medal in Refrigeration and Air conditioning engineering from Guindy Engineering College, Chennai. Currently he is handling 80+ Green building projects (LEED, IGBC & GRIHA) with regional and International clients in India, Afghanistan and Bangladesh. His area of expertise includes New Construction, Core & Shell, SEZs, Green Homes, Existing Building, Apparels, Schools, University Campus/College, Hotels, Healthcare and Factories. Some of the prestigious project which got LEED & IGBC certification under his supervision are Sun Carrier Omega- Platinum rating (One of the India's first Net Zero Energy Building), The Newtown School- Gold rating (One of the India's first New Green school), Shriram "The gateway-B4 & B5"- Platinum rating, Shriram "The gateway-A6"- Gold rating etc.

Mr. Bharathidhasan is an M.E. and a senior energy analyst with En3 since 2008 and has been working on several complex energy simulations and has worked on over 50 LEED certified projects till date as energy simulation expert and analyst.

Bharathidhasan is experienced in interdisciplinary approach to problem solving, with an understanding of developmental energy and environmental issues.

Besides being an IGBC AP, Bharathidhasan is a Building Energy Simulation Specialist with extensive experience in using software like DOE2 (eQuest, VisualDOE4.1), Energy Plus (Design Builder), Visual DOE-4, Design Builder CFD, Ecotect, Daysim, DiaLux amongst others.

FEES and CLOSING

The professional fee for carrying out the training program for Green Associate Exam Preparation as per the course details indicated above is as follows 2 slabs

NO of STUDENTS	FEE PER STUDENT	18%tax	COST IN TOTAL
40	7000	1260	8260
80	6500	1170	7670
120	6000	1080	7080

Taxes shall be extra as applicable. The current rate of service tax is 18%.

Exclusions: 1

- The above fee would be applicable for students only.
- Students would be required to pay 100 USD directly to USGBC for LEED GA exam registration and Certification

Terms of Payment

Total Cost of the workshop including service tax for the required number of participants to be made before the workshop.

Validity: 3 month from the date of this proposal

CLOSING

We relish the opportunity to work closely with the client to deliver a service of exceptional quality and integrity.

**Contact us at +91 9940271318 or email us at
shreeram.s@en3online.com**

About Us

En3 Sustainability Solution Pvt. Ltd. is the parent company of Eddego. En3's directors – Deepa Sathiararam and Sathiararam Ram started their sustainability design and consulting practice in 2003. Both building engineers – Sathiararam a civil and structural engineer from the U.S. and Deepa an electro-mechanical and HVAC engineer, got trained in green design while in the U.S. from the United States Green Building Council. Both are LEED Accredited Professionals and have been working on several green building projects ranging from 5000 square feet projects to 25,00,000 sq ft multi-use business parks and campuses in India, Europe, U.S. and the Middle East.

As leaders in sustainable design, En3 works with developers, architects, facility managers, and real-estate professionals to create high-performance buildings and communities that are less expensive to build (or retrofit), reduce the overall carbon footprint in your blueprints, more profitable to operate, easier to lease and healthier and more comfortable to occupy plus, they boost workforce productivity.

Core Team of En3

N. Vaidyanathan

Director, En3 Board & HVAC Consultant and Managing Director, Airfrige Engineers Pvt. Ltd.

Mr. Vaidyanathan is a ASHRAE Fellow and a renowned HVAC consultant. He consulted for diverse prestigious projects over the last four decades. He is a pioneer and proponent of energy-efficient, environment-friendly and life-cycle based systems design in India and has designed hundreds of millions of square feet of air-conditioned space. He is the Past President of the ASHRAE South India Chapter and the ISHRAE Chennai Chapter and has served on several technical committees and councils in the country. He teaches advanced courses as a visiting faculty at premier engineering schools India. He is also the MEP consultant for Ascendas for their International Tech Park project and Ascendas MIPL projects in Chennai and the upcoming Ascendas project in Coimbatore.

C. S. Ram

Director, En3 Board & Chairman and Managing Director, WELS Group of Companies

CS heads WELS group, a diverse organization with interests in electronics manufacturing, building safety and security equipment and security services. WELS manufactures and markets security and fire alarm products in technical collaboration with companies in Europe, U.S.A,

Taiwan & China. He has over 40 years of experience in the safety and security industry and has vast knowledge of international standards for design, engineering, manufacturing, installation and commissioning of building systems. He serves as Chairman, Institute of Standards Engineers (part of the Bureau of Indian Standards) and has served on several standards development and education committees in the country.

Sathiararam Ram

Managing Director, En3

Sathia provides direction in technical concepts for En3's major consulting assignments; maintains key-client contacts and monitors the development of projects from concept through post-occupancy operations and maintenance. He holds a Bachelors degree in Civil Engineering with Honors from the Birla Institute of Technology and Science, Pilani; a Master of Science in Structural Engineering from the University of Southern California , Los Angeles and a Masters in Business Administration from the Anderson School of Management at the University of California at Los Angeles. He is a trained expert in conformity assessment. Besides being a LEED AP, he is an internationally recognized assessor for accreditation of testing and calibration laboratories, inspection agencies and certifying bodies in the U.S. and India. He is a fellow of the Institute of Standard Engineers and life member of the Indian Concrete Institute.

Deepa Sathiararam

Executive Director, En3

Deepa is a LEED FELLOW and a LEED AP since 2003 and a leading international sustainable design expert working with diverse project teams and creating sustainable habitats in the U.S., India, Europe and Middle East. She is a recognized HVAC and refrigeration consultant. Deepa holds a Bachelors degree in Electrical and Electronics Engineering from Guindy Engineering College, Chennai and is currently pursuing a Masters in Business Administration from the Great Lakes Institute of Management. She is also a trained expert in conformity assessment, is an ISO 9000, ISO 17020 and ISO 17025 certified lead assessor and has conducted numerous assessments of certifying bodies, laboratories and inspection agencies. She is the Past-President of the ASHRAE South India Chapter and also the National Environment Chair for the Young Indians (Yi) arm of the Confederation of Indian Industry (CII)

Mr. Karthik Narayan

Director, En3

As Director-Operations in En3, Karthik is primarily responsible for conceptualizing, defining and maintaining the Operations in En3, that comprises of policies, processes, general and standard

operating procedures. Karthik holds a Bachelors degree in Chemical Engineering and Masters in Biological Sciences with Honors from the Birla Institute of Technology and Science, Pilani. Karthik has over 15 years of experience in executing and managing several complex Development, Maintenance and Re-engineering projects for leading multinational IT companies. Besides being a LEED AP, Karthik is a Certified Energy Auditor and Manager by Bureau of Energy Efficiency, Ministry of Energy, Government of India and a certified trainer and evaluator for the TERI-GRIHA Rating System. He is also a trained expert in conformity assessment, is an ISO 9000, ISO 14064 and ISO 50001 certified lead assessor. He is also a Certified Software Quality Analyst (CSQA), administered by the Quality Assurance Institute, USA and is also a Project Management Professional (PMP), certified by the Project Management Institute, USA.

C.P.Ramani, P.E., C.B.O

Advisor, En3 Board & President, International Accreditation Service Inc. (USA)

Chuck Ramani is the President of IAS, a subsidiary of the International Code Council in the United States. IAS is a non-profit public benefit corporation and a leading accreditation body since 1975 that accredits testing and calibration laboratories, inspection agencies, building departments, fabricator inspection programs and IBC special inspection agencies. He is an internationally renowned expert in product evaluation and has over 40 years of experience in construction quality control, including development, implementation and oversight of evaluation and testing programs. He is a registered civil and quality control engineer and certified building official in the U.S. and served on numerous committees and councils including American National Standards Institute (ANSI) and U.S. Department of Commerce.

We are Members of :



College Registration Form

Name of Institution:

Contact Person:

Address:

Tel:

Mobile:

email:

Number of students:

Preferred Dates for Course:

Preferred Dates for Exam:

Payment details:

for (institution name)

Authorized Signatory

(Seal)

For further information, contact us at +91 98402 71318 or email us at
shreeram.s@en3online.com

shreeram.s@en3online.com

Attachments

Fri, Nov 22, 11:47 AM (4 days ago)

to me, karthik.n

Dear madam

Further to the discussion had with you we can give you at a special price of 6000+18% tax which comes to total of RS 7080. we will be happy to conduct the workshop on 3 week of Jan 2020 after Pongal holidays.

Duration : 18 Hours of education session + One real time project site visit @ Chennai

Materials : One hard copy of the Entire course Program book with practice questions will be provided. The LEED Green Associate Program and the book will have all the required preparation materials with explanations covering the following data.

Process to Become LEED Green Associate Exam

Green Building design basics

About the LEED rating system

Intent implementation measures and LEED requirements to be implemented

In selection of site – Location & Transportation

LEED Measures to be implemented in site – Sustainable Site

Water efficiency measures – Water efficiency

Energy efficiency Measures In Building Design – Energy & Atmosphere

Indoor Environmental Quality &

Innovations.

Students who has attended the workshop will get the course completed certificate from us

Students has to pay \$100 extra for the LEED GA exam and it would be in chennai Prometric center.(We would help them in this process)

Value additions :

10 Mock test based on LEED Green Associate exam pattern with explanations

3 Online test in same actual exam pattern

Additional revision classes at En3 office @ T-Nagar before the actual exam in batches

	Students Names
	Group 1
	Venue: Ground Floor CAD LAB
1	Ashika P
2	Chitra S
3	Jagadish R
4	Jessy J
5	Kamalesvari S
6	Swetha S
7	Visalakshi C
8	Deepthi Krushnika A
9	Priyanga P
10	Rewanth Infant S
11	Rakesh Kumar M J
12	Ganesh Rajan S
13	Akshaya. C
14	Arkip Stelin D
15	Chandhini Menon S
16	Manjari A
17	Saptarshi Ghosh
18	Senthilvel.U
19	R.Shruthi
20	J.Trixie Leanna
21	S. Sahana
22	Subhashree .T
23	Yokesh .V
24	Arijeet Deb Roy
25	Haribalaji . K
26	Jaswanth Sakthi S A
27	Angeline Infancia D'Silva
28	Shivani S
29	Manisha S

	Students Names
	Group 2
	Venue: M Arch SUSTAINABLE LAB
1	Guruji V
2	Jasvi J
3	Kadambari L
4	Shrija S
5	Shruthilaxmi J
6	Sivamonika C
7	Kokhil S
8	Selva Priyadharshan B
9	Clintia Karen D
10	Shalini S
11	Suhail A S
12	Yazhini S
13	Aushwinlal J
14	Indravarman A
15	Manjula S
16	Aravind Balaji M P
17	Varun.M
18	DC Ligitto Miraclin
19	J.Infant Tiffancy
20	M.Sindhuja
21	M.Surya Shree
22	Jonnalagadda Rajesh
23	Lavanya .K
24	S Dinesh Aravindan
25	K.Sri Chaanthana
26	Sai Swathi Badri
27	Sneha C N
28	P Chaitanya Sai Janardhan
29	Elton Subin R E

Introduction-IES:

IES is world's leading provider of integrated performance analysis software and consulting services for sustainable building design. IES technology helps the world dramatically reduce CO2 emissions produced by the built environment and optimize the use of energy and other resources in buildings with the use of the powerful IES Virtual Environment tools.

Introduction-IESVE:

The IES Virtual Environment (IESVE), a super advanced model capable of absorbing information about your building, or building design, and the climate it's in to simulate how it will perform so that you can easily deduce how best to improve it within your particular budget. IESVE gives you the factual insights required to accurately establish everything from what building materials to use to reduce drafts and avoid overheating from the sun, to how best to right-size your systems, to dramatically reduce running costs, to how to reduce water consumption and overall energy demands.

Introduction-Ecologikol:

Ecologikol is a leading energy and environmental consultancy, with operations in India, Middle East, UK, SE Asia and Malaysia. Ecologikol has been at the forefront of energy simulation and green building advisory and has executed in excess of 50 million square feet of buildings globally for green certification & excess of 1 billion square feet in Energy Simulation. Ecologikol is also the **Authorised Training Partners for IES**, Glasgow, UK that controls ~80% of the world's energy simulation software market.

Corporates such as 3M, Himalaya, Mahindra, Tesco, Mainetti, JKTyre, MRF Ltd, OPG Power and Government Organizations like Integrated Coach Factory (MINISTRY Of Railways) have chosen Ecologikol to advise their Green Building & Energy Simulation Projects.

VE for Engineers:

IESVE for Engineers is a flexible, integrated system for performance assessment that brings productivity and excellence to every aspect of sustainable building design. IESVE for Engineers is used by leading sustainable design experts around the globe & it can virtually test the feasibility of different energy saving strategies and new technologies. It is an intelligent response to climate change.

References:

Leading International Companies like Atkins, SOM, ARUP, Gensler, AECOM, HOK, BuroHappold, URS, WSP Group, Stantec, RMJM, BDP, Broadway Malyan, Foster+Partners, Mott MacDonald, Syska Hennessy use IESVE Software.

Target Audience:

Students	Professionals
Architects	Lift Engineers& consultants
Civil Engineers	Facility Managers
Mechanical Engineers	Architects
Electrical Engineers	Civil Engineers& consultants
Environmental Engineers	Mechanical Engineers& consultants
Energy Engineers	Electrical Engineers& consultants
Instrumentation Engineers	Environmental Engineers& consultants
Mechatronics	MEP Consultants
Production Engineering	HVAC Consultants
Post Graduates from the above sectors	Lecturers & Professors

IESVE for New Buildings& Existing Buildings:

IESVE has found its vast potential in New Buildings starting from 3-D modelling, Passive Architecture, Material Selection, HVAC design, Lighting Design for Natural day lighting & Artificial lighting, Renewable Energy Design, CFD Analysis etc.

These applications are not limited to new buildings -IESVE can be very well used for retrofitting projects with sound prediction of return on investments and payback periods.

IESVEcan:

- ✓ Predict the monthly/Annual energy consumption and bills
- ✓ Predict the annual energy cost
- ✓ Compare and contrast different efficiency options
- ✓ Determine life cycle payback on various options
- ✓ Air conditioning loads (the amount of cooling/heating energy needed by a space/system/building)
- ✓ Volumetric air flow requirements (the amount of air needed to cool/heat a space)

Modules:

1. Whole Building 3-D Modeling:

IESVE enables us to create 3-D model of an entire building/facility from the scratch. Alternatively, we shall also import CAD data into the system in 3D or 2D.

We can also virtually construct a complete community or city using the open street map views available online.

2. Solar Shading Calculations:

IESVE allows us to perform shading and solar insolation analysis studies. IESVE generates shadows and internal solar insolation from any sun position defined by date, time, orientation, site latitude and longitude. It can track solar penetration through a building taking into account shading objects we have drawn and self shading from the building rooms and can generate images and animations quickly and easily.

3. Energy Simulation

IESVE enables us to perform whole building energy simulation and to design for the future with innovative low impact energy systems and strategies. It helps us assess heat gain of the buildings, thermal mass effect, passive performances, surface temperature, radiant exchanges and temperature distribution.

4. Detailed HVAC Design

IESVE uses a flexible schematic component-based approach that enables us to quickly assemble HVAC plant and control systems. IESVE helps us to Size and model conventional, advanced, and building-integrated systems, plants & controls in detail. Through this we shall Optimise HVAC operation and minimise energy consumption and carbon emissions – get the system right for the building, budget and environment.

5. Lighting Design

IESVE helps us to design the optimal lighting system for our building and the people who use it, taking into account quality of both natural and artificial light. IESVE helps us to ensure good natural daylight and visual comfort, reduce lighting gains, and test how our lighting designs will look and perform.

6. Computational Fluid dynamics (CFD Analysis)

Through IESVE we can perform CFD Analysis and determine the air flow and heat transfer in and around buildings, taking into account boundary conditions such as the effects of climate, internal energy sources and HVAC systems. We shall Predict occupant comfort temperatures, air temperature and airflow and ensure optimum ventilation and thermal comfort at the building, room and sub-room level.

Integration with other software:

IESVE's strength lies in its interoperability with most of the major building design softwares. It works exceptionally well with the world's leading architectural software such as Autocad, Revit, Sketchupetc:

Tools	Interoperability
Autocad	DXF
Revit Architecture & MEP	Dedicated Plug-in Toolbar
SketchUp Free & Pro	Dedicated Plug-in Toolbar
Any with IFC Export	IFC Import Function
Any with gbXML Export	gbXML Import Function
Any with DXF Export	DXF Import Function

Standards & Methodologies:

IES tools meet the following approved international standards and can undertake the following methodologies.

STANDARDS:

ASHRAE 140: 2004 & 07, BESTEST, CIBSETM33,

EU EN13791: July 2000, EPACT Qualified

South Africa National Building Regulations: Regulation XA3

METHODOLOGIES:

UK National Calculation Methodology

ASHRAE 55 calculation procedure

ASHRAE 90.1 Appendix G PRM calculation procedure (2004, 2007, 2010)

ASHRAE 62.1 calculation procedure

ISO 7730 calculation procedure

Extended Capabilities:

City level & Community level:

IESVE is capable of simulating individual buildings, Communities and now IESVE has the Capability to execute city level modeling & simulation with the help of open street Maps.

Simulation on Servers:

IESVE is also capable of running in servers which eliminates the need for upgrading individual systems in-order to cater to software requirements.

Benefits:

Our package offers the following advantages to your students:

1. Training software worth approx Rs. 10lacs available to every student for a period of one month for practice and training post completion of the certification course.
2. A unique opportunity to be market-ready and enter the rapidly-growing green building field with clarity and internationally recognized credentials.
3. Exposure to international systems of working which makes students ready to tackle future projects, higher-education, and the job market with greater confidence

System Requirements:

Desktop or laptop with following configurations

Supported Environments:

- Windows Vista
- Windows 7
- Windows 8
- Windows installations on Mac OS via:
 - o VMware Fusion
 - o Parallels Desktop
 - o Boot Camp

Note: IES-VE will run on 64bit versions of Windows, but it will run as a 32bit application

Recommended Hardware:

- 1280 x 960 screen resolution
- Dual core CPU (Intel Core 2, or AMD x2 series)
- 4Gb RAM

Deliverables:

- ✓ Training software worth approx Rs. 10lacs available to every student for a period of one month
- ✓ Certificate of course completion from IES - Glasgow, UK
- ✓ Module-wise Hands on training with case studies
- ✓ An introduction to the industry requirements and competencies

Commercial Proposal

Fee for the 3 day Training program is Rs 6000/- per candidate

(Rupees Six Thousand per Candidate)

Fee for the 2 day Training program is Rs5000/- per candidate

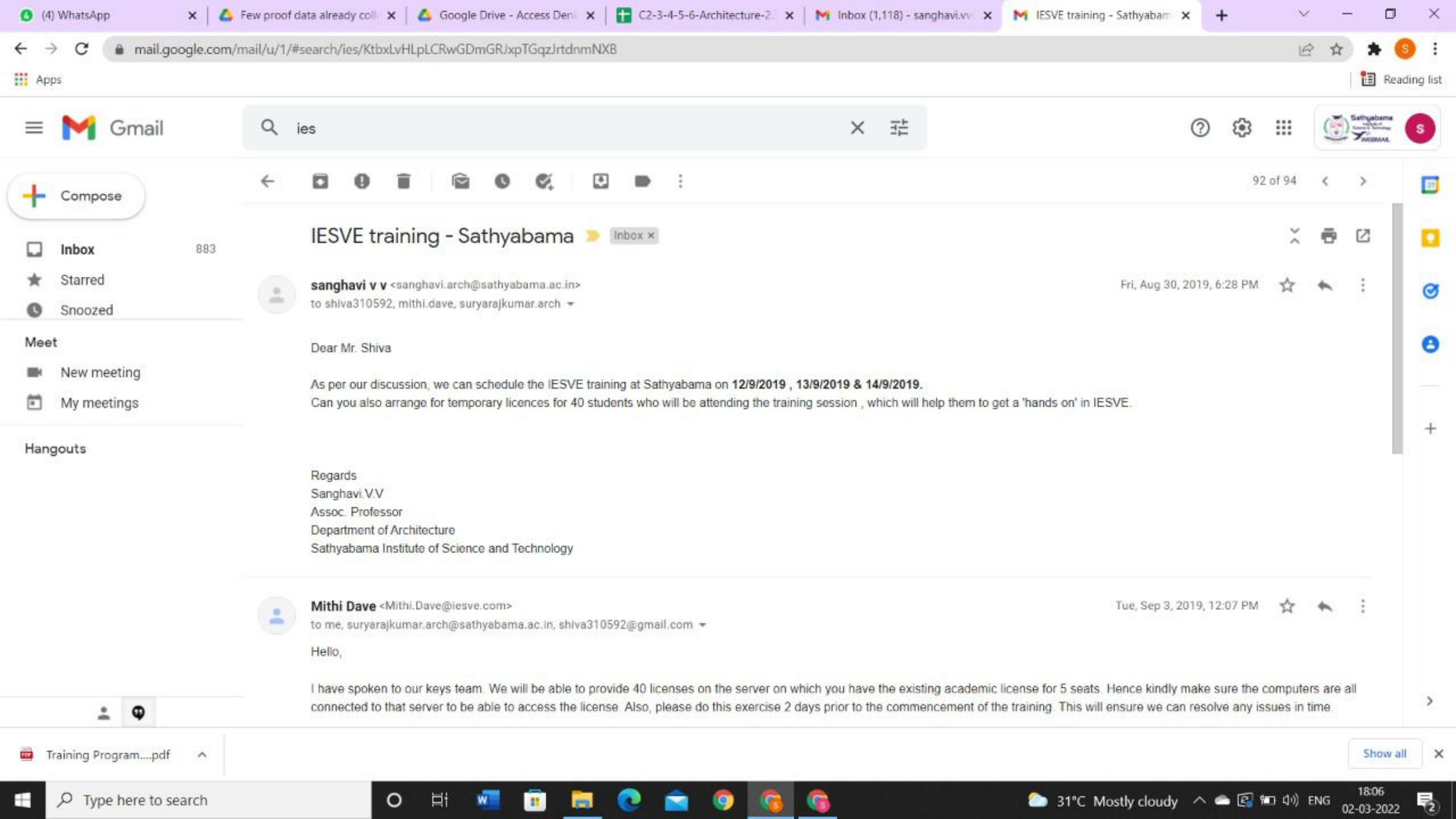
(Rupees Five Thousand per Candidate)

Payment terms: 100% advance

A team member shall be available on-site a day prior to the program to install the licences and cross check program requirements.

Terms and Conditions:

- Government taxes and levies at prevailing rates will be applicable
- Group size shall be a minimum of 20 and a maximum of 50.
- System, projectors and mike setup to be arranged well in advance
- 1 Faculty can train for free with every 20 candidates that may enrol
- The Training programme has been scheduled for 2/3 days + 1 day prior for program setup
- Local conveyance and food shall be arranged/ reimbursed by the college for 2 trainers.



Batch : 2017-2019 [A]
Course : Master of Architecture
Branch : SUSTAINABLE ARCHITECTURE

Max Assessment Marks :

S. No.	Reg. Number	Student Name
1	37890001	ANNE SWEETY. A
2	37890002	JUDAH .J. MICHAEL
3	37890003	KAVITHA. D
4	37890004	POORANIMA. J
5	37890005	SANDHYA. P
6	37890006	SUDHA. G
7	37890007	YOGESH. K

Batch : 2018-2020 [A]
Course : Master of Architecture
Branch : SUSTAINABLE ARCHITECTURE

Max Assessment Marks :

S. No.	Reg. Number	Student Name
1	38890001	ASHIKA. P
2	38890002	CATHERINE. S
3	38890003	CHITRA. S
4	38890004	GURUJI. V
5	38890005	JAGADISH. R
6	38890006	JASVI. J
7	38890007	JESSY. J
8	38890008	KADAMBARI. L
9	38890009	KAMALESVARI. S
10	38890010	KAVITHA. S
11	38890011	SHRIJA. S
12	38890012	SHRUTHILAXMI. J
13	38890013	SIVAMONIKA. C
14	38890014	SWETHA. S
15	38890015	VISALAKSHI. C
16	38890016	KOKHIL. S
17	38890017	SAMHITA.M



SATHYABAMA

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DEPARTMENT OF ARCHITECTURE CELEBRATE'S

MADRAS DAY 380



The first city of modern India, Chennai is celebrating its 380th birthday this year. Chennai, then Madras was founded on 22 August 1639. Madras Day is to celebrate the city its history, traditions and culture.

WE CORDIALLY INVITE YOU FOR
380TH MADRAS DAY CELEBRATION
ON

21ST & 22ND August '19

Inauguration | **Ar. SUJATHA SHANKAR** | 8.30am | 21-Aug-19
CONVENOR INTACT

22-Aug-2019 | **Ms. THIRUPURASUNDARI SEVVAL**
10:00 a.m | FOUNDER URBAN CONCLAVE

22-Aug-2019 | **Ar. NALINI THAKUR**
01:30 a.m | ARCHITECTURAL CONSERVATION INTACH

Venue | Auditorium | Department of Architecture



Programme Schedule

Invocation (tamil thai vazhthu)

Lighting of Kuthuvilaku

Welcome Dance

Dean's Welcome Address

Chief Guest Introduction

Chief Guest Felicitation

Students Events

Workshop

Ms. Thirupurasundari sevvai

Ar. Nalini Thakur Speech

Prize Distribution

Vote of Thanks

WITH THE BLESSINGS OF



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Founder Chancellor,
Sathyabama Institute of Science and Technology
Chennai

OUR ESTEEMED CHIEF PATRON,



DR. REMIBAI JEPPIAAR
Chancellor,
Sathyabama Institute of Science and Technology
Chennai

AND OUR ESTEEMED PATRONS



DR. MARIAZEENA JOHNSON, B.E., M.B.A., M.Phil., Ph.D.
Pro Chancellor,
Sathyabama Institute of Science and Technology
Chennai



DR. MARIE JOHNSON, B.E., M.B.A., M.Phil., Ph.D.
President,
Sathyabama Institute of Science and Technology
Chennai

Dean, School of Building & Environment

Dr. Devyani Gangopadhyay, Ph.D.,
Head of Department, Department of Architecture,
Sathyabama Institute of Science and Technology,
Chennai

Program Conveyer

Ar. S. Ebin Horrison
Department of Architecture,
Sathyabama Institute of Science and Technology,
Chennai

Program Coordinator

Ar. Monisha
Department of Architecture,
Sathyabama Institute of Science and Technology,
Chennai



Council of Architecture Training Program:

METHODOLOGY & EXPLORATION IN ARCHITECTURAL RESEARCH

Venue:

Activity Centre,
Department of Architecture,
**Sathyabama Institute of
Science and Technology**

Training Program dates:

3rd to 7th February 2020

Last day of registration:

Saturday 25th January 2020

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www.sathyabama.ac.in



Council of Architecture
Training & Research Centre
TRC

Convened by:

Prof. Jayashree Deshpande;
Director, COA-TRC, Pune

Coordinated by:

Dr. Devyani Gangopadhyay;
Dean, School of Building and Environment, Sathyabama Institute
of Science and Technology

Local coordinators:

Ar. Sheetal Amraotkar;
Associate Professor, Sathyabama Institute of Science and Technology
Tel: 9922991404; **Email:** sheetal.amraotkar31@gmail.com

Ar. Jhannupriyaa M;
Assistant Professor, Sathyabama Institute of Science and Technology
Tel: 9894384718; **Email:** jhannupriyaa90@gmail.com

Eminent Speakers and Topics Covered:

Research in Architectural Practice

Ar. Sriram Ganapathi, KSM Architecture
Studio, Chennai

Theorizing and Critiquing- A Dialogue

Ar. Sathya Prakash Varanashi, Sathya
Consultants, Bengaluru

**Publishing in Journals, Project Funding
and Proposal Writing**

Dr. Iyer Vijayalakshmi, Dean (Research),
SPA Vijayawada

**Qualitative Research and Quantitative
Research**

Dr. Lakshmi Thilagam, Director, Kalasalingam
School of Architecture, Krishnankoil

Research Processes in Architecture

Dr. Devyani, Dean, School of Building and
Environment, Sathyabama Institute of
Science and Technology

**Selecting Areas of Research in
Architecture**

Dr. Suresh Kuppusamy, Design Chair,
School of Architecture, Sathyabama
Institute of Science and Technology

Intellectual Property Rights

Dr. Dilshad Shaik, Dean, School of Law,
Sathyabama Institute of Science and
Technology

**Fundamentals of Triangulation with
Outcomes of a Basic Design Studio in
Architecture**

Ar. Arulmalar, Professor, Sathyabama
Institute of Science and Technology

Graphical Representation of Data

Dr. Rajasekar, Professor, Kongu Engineering
College, Perundurai

**Identification of Appropriate Research
Methods**

Dr. Kalaselvi, Professor, Rajalakshmi School
of Architecture, Chennai

**Curating Experiences for Interpretative
Discourse**

Ar. Ishita Shah, Independent Researcher,
Designer, Curator, Historian, Bengaluru

Significance and Objective:

Architecture encompasses tangible and intangible practices involving society, culture, quality of life, economics, innovation and so on. To further contribute to architectural education and practice, the need for architectural exploration arises. This calls for well defined research processes. This training program aims to enhance the ability to explore and investigate architecture following a constructive and effective methodology.

Intent of the Program:

- To open up new avenues in Architectural Research and allow a wide spectrum of exploration.
- To have a wholesome understanding through specific interventions using appropriate methodology.

Registration Process:

Teachers/ architects who wish to register for the training program either under Collaborative Training Program (CTP) or as independent individual may do so by filling up the Google form specified in the link below.

Registration Fees:

- Rs. 10,000/- (inclusive of delegate kit, course material and lunch + site visits if scheduled,)
- Rs. 15,000/- (inclusive of delegate kit, course material, accommodation on sharing basis, breakfast, lunch & dinner + site visits if scheduled)

Only in case nominated teachers registered for this program under CTP, require provision of accommodation, the facility of accommodation on sharing basis, breakfast and dinner for five days can be availed of by payment of Rs. 5,000/- per head by online payment/ bank challan. Kindly mail back scanned images of the proof of payment together with application form duly authenticated by HOD/Principal on ttpcoatrc.pune@gmail.com, directorcoatrc@gmail.com and E-mail id of local coordinators: **sheetal.amraotkar31@gmail.com**; **jhannupriyaa90@gmail.com**

Link for Application Form: <https://goo.gl/forms/wAW12nJKpVKBDGHp1>

Payment link for Online Payment/Bank Challan:
<https://easypay.icicibank.com/homePage>
(Institution Name= "COUNCIL OF ARCHITECTURE")

Note: Registration with/without accommodation shall be confirmed on receipt of payment towards the accommodation/registration.

Kindly send the hard copy of registration form and receipt of online payment/bank challan (as applicable) on the following address for the confirmation of participation:

Prof. Jayashree Deshpande, Director,
Council of Architecture Training & Research
Centre (COA-TRC), Academic Wing of Council of
Architecture, 2nd Floor, A-4 (B), Abhimanshree,
Off Pashan Road, Pune- 411008, Maharashtra,
India; Tel: 9764000352

NATIONAL INSTITUTE OF ADVANCED STUDIES IN ARCHITECTURE, PUNE
Training Programme on "Methodology and Exploration in Architectural Research "

Tentative schedule

Co-ordinators : Ar.Sheetal.A,Ar.Jhannupriyaa.M

Dates : 3rd feb 2019 - 7th feb 2019

Venue : Sathyabama University - Chennai

Session	Day 1	Day 2	Day 3	Day 4	Day 5
8.30 - 9.30	Registration	IPR - Dr.Dilshad Shaik	site visit and onsite exerise with guidance of Ar.Thirupura sundari	Research process in Architecture- Dr.Devayani&Ar.Arulmalar	Journal paper-Dr.Vijayalakshmi
9.30 - 10.00	Introduction - Dr.Devayani				
10.00 - 10.30	Inaugural Session - by Ar.Sriram ganapathy				
10.30 - 11.00	TEA BREAK			TEA BREAK	
11.00 - 12.00	Research in Architectural Practice- Ar.Sriram ganapathy	Conversion of qualitative research into quatitative research-Dr.Lakshmi Thilagam	Hands on works of site visit-how to interpre -Ar.Ishita shah	An insight into the fundamentals of triangulation with outcomes of a basic design studion in architecture- Dr.Arulmalar	Journal paper-Dr.Vijayalakshmi
12.00 - 13.00	selecting area of research in architecture-Dr.Suresh kupusamy				Theorizing and Critiquing - A Dialogue Ar.sathyaprakash Varanasi
13.00 - 14.00	LUNCH				
14.00 - 15.00	Identification of appropriate research methods-Dr.Kalaselvi	Conversion of qualitative research into quatitative research-Dr.Lakshmi Thilagam	Interdisciplinary approach to architectural research Ar.Ishita shah	Graphical representation of data- Ar.Rajasekhar	Theorizing and Critiquing - A Dialogue Ar.sathyaprakash Varanasi
15.00 - 15.30	TEA BREAK				
15.30 - 16.00	Identification of appropriate research methods-Dr.Kalaselvi	Research process in Architecture- Dr.Devayani&Ar.Arulmalar	Interdisciplinary approach to architectural research Ar.Ishita shah	Graphical representation of data- Ar.Rajasekhar	Valedictory
16.00 - 17.00					

"Methodology and Exploration in Architectural Research "

Participant List

Please find below the updated status of registration

S r.	Comm	Name of participant	Mo bile	Email	Name of College	Registr ation/ accom modati on fees	Hard copy of Regis tratio n form	Regis tratio n confir med
1	Yes	Rashmi P S	953 878 584 9	rashmin.rvca@rvei.edu.in	RV COLLEGE OF ARCHITECTURE	Not received	Not received	Not Confirmed
2	Yes	Anupriya Saxena	987 444 734 7	anupriyas.rvca@rvei.edu.in	R V College of Architecture, Bangalore	Not received	Not received	Not Confirmed
3	No	Surya Rajkumar	995 293 958 0	suryarajkumar.arch@sathyabama.ac.in	Sathyabama Institute of Science and Technology, Chennai	Received	Received	Confirmed
4	No	Innisai Rajasabai	984 126 762 8	info.designstrategy.arch@gmail.com	School of Architecture & Planning, Anna University	Not received	Received	Not Confirmed
5	No	S. Deepalakshmi	944 250 655 4	deepamoorthy00@gmail.com	Sathyabama Institute of Science & Technology	Received	Received	Confirmed
6	No	Maya Mohan	975 145 769 9	mayamohan.ns@nehrucolleges.com	Nehru School of Architecture	Received	Received	Confirmed
7	No	Leslie Jean Dias	988 040 094 5	lesliemail100@gmail.com	Srinivas School of Architecture	Received	Received	Confirmed
8	No	T Umashankari	944 427 333 5	rumashankari@gmail.com	BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH	Received	Received	Confirmed

9	Yes	Zeeshan Haider Khan	776 067 489 3	ar.zeeshanhaid@gmail.com	SRINIVAS INSTITUTE OF TECHNOLOGY	Received	Received	Confirmed
10	No	G.Monisha	994 064 331 4	ar.monishamihail@gmail.com	Sathyabama Institute of Science and Technology	Received	Received	Confirmed
11	No	Y Satya Ravi Kishore	955 392 579 9	satyaravikishore.yandamuri@gitam.edu	GITAM SCHOOL OF ARCHITECTURE,	Received	Received	Confirmed
12	No	Ch P V Gopalakrishna	938 125 113 9	krishna.chevukupalli@gitam.edu	GITAM SCHOOL OF ARCHITECTURE, GITAM UNIVERSITY	Received	Received	Confirmed
13	No	Divya.M	984 068 359 6	divyam3@srmit.edu.in	SRM School of Environment Architecture and Design	Not received	Not received	Not Confirmed
14	No	Preethima.D	994 024 860 7	preethid@srmit.edu.in	SRM School of Environment Architecture and Design	Not received	Not received	Not Confirmed
15	No	Ar. Nareshkumar K M	988 482 381 2	nareshkm@srmit.edu.in	SRM School of Environment Architecture and Design	Not received	Not received	Not Confirmed
16	No	Prof. Venkatesh Babu P	950 097 811 0	venkatep2@srmit.edu.in	SRM School of Environment Architecture and Design	Not received	Not received	Not Confirmed
17	No	Dhivya.J	978 900 768 8	j.dhivyabharathi@gmail.com	Rajalakshmi school of architecture	Not received	Not received	Not Confirmed
18	No	Sathyaseelan.R.K	994 116 661 1	sathyask@srmit.edu.in	SRM School of Environment Architecture and Design	Not received	Not received	Not Confirmed
19	Yes	K JASMINE VIDHYA	950 097 811 3	jasminevidhya@pmu.edu	PERIYAR MANIAMMAI INSTITUTE OF SCIENCE AND TECHNOLOGY	Not received	Not received	Not Confirmed



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DEPARTMENT OF ARCHITECTURE INVITE

ARCHITECTURAL CONSERVATION

WE CORDIALLY INVITE YOU FOR
LECTURE ABOUT MADRAS
ON

09ND September '19

Inauguration | **Ar. SUJATHA SHANKAR** | 8.30am | 09-Sept-19
CONVENOR INTACT

09-Sept-2019 | **AR. SARITHA VARADAN**
10:00 a.m | CONSERVATIONIST

09-Sept-2019 | **Ar. BINDU SUBRAMANIAM**
01:30 a.m | URBAN DESIGN

Venue | Auditorium | Department of Architecture



Programme Schedule

Invocation (tamil thai vazhthu)

Lighting of Kuthuvilaku

Welcome Dance

Dean's Welcome Address

Chief Guest Introduction

Chief Guest Felicitation

Students Events

Workshop

Ms. Thirupurasundari sevvai

Ar. Nalini Thakur Speech

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Founder Chancellor,
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OUR ESTEEMED CHIEF PATRON,



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Chancellor,
Sathyabama Institute of Science and Technology
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AND OUR ESTEEMED PATRONS



DR. MARIAZEENA JOHNSON, B.E., M.B.A., M.Phil., Ph.D.
Pro Chancellor,
Sathyabama Institute of Science and Technology
Chennai



DR. MARIE JOHNSON, B.E., M.B.A., M.Phil., Ph.D.
President,
Sathyabama Institute of Science and Technology
Chennai

Dean, School of Building & Environment

Dr. Devyani Gangopadhyay, Ph.D.,
Head of Department, Department of Architecture,
Sathyabama Institute of Science and Technology,
Chennai

Program Conveyer

Ar. S. Ebin Horrison
Department of Architecture,
Sathyabama Institute of Science and Technology,
Chennai

Program Coordinator

Ar. Monisha
Department of Architecture,
Sathyabama Institute of Science and Technology,
Chennai

