

Programme on
Building Energy Simulation
(October 30 - November 01, 2024)



Administrative Staff College of India
(accredited as उत्कृष्ट by Capacity Building Commission, GoI)

PROGRAMME OVERVIEW

The Building Energy Simulation programme is designed to equip professionals in the fields of Architecture, Engineering, Energy professionals, Sustainability Specialists, and Building construction professionals with the knowledge and skills needed to simulate and analyse the energy performance of buildings. Participants will acquire proficiency in utilizing advanced simulation tools and techniques to optimize building designs, enhance energy efficiency and minimize environmental impacts for sustainability. The programme integrates a blend of hands-on workshops, online modules, software tutorials and practical exercises, providing participants with access to energy simulation software for experiential learning. Key components of the programme include:

KEY COMPONENTS

1. Fundamentals of Building Energy Simulation

Comprehensive introduction to the principles and theoretical underpinnings of building energy simulation, emphasizing its critical role in sustainable building design.

2. Energy Modeling Software

Experiential training on application of industry-standard energy modeling software, such as Energy Plus, IESVE, or Open Studio. *(Modelling accurate building models, defining energy-efficient parameters interpret simulation results for informed design decisions.*

3. Climate Analysis

Importance of climate analysis in building energy simulation integrating local climate data into simulations and evaluate the effects of climate variations on building performance.

4. HVAC Systems Simulation

Simulation of heating, ventilation, and air conditioning (HVAC) systems. Techniques to optimize HVAC system designs for both energy efficiency and occupant comfort.

5. Renewable Energy Integration

Integration of renewable energy sources, such as photovoltaic panels and wind turbines into building energy systems along with assessing the feasibility and benefits of renewable energy integration.

6. Parametric Analysis

Parametric analysis, a robust technique for evaluating multiple design scenarios and their impact on energy performance Enabling data-driven design optimization.

7. Case studies:

Real-world case studies illustrating successful building energy simulations and optimizations. *(These examples provide insights on concrete applications of the concepts and techniques covered, reinforcing learning through practical scenarios)*

EXPECTED OUTCOMES

By the end of the programme, participants will be able to:

- Develop accurate building energy models using advanced simulation software.
- Evaluate and optimize building designs for superior energy efficiency and sustainability.
- Analyze the influence of climatic conditions, HVAC systems and renewable energy sources on building performance.
- Conduct comprehensive parametric analysis to explore and compare various design scenarios.
- Contribute to the development of energy-efficient and environmentally responsible buildings.

OBJECTIVE

Building Energy Simulation training is designed to equip participants with the knowledge and skills needed to effectively use simulation tools for assessing and improving building energy performance. The primary objectives of such training programmes typically include:

- **Understanding Simulation Tools:** To familiarize participants with various energy simulation software and tools, including their features, capabilities, and limitations.
- **Model Development:** To teach participants how to develop accurate and comprehensive building energy models, including data input, defining building geometry, and setting up building systems and schedules.
- **Scenario Analysis:** To enable participants to perform and analyze different scenarios, including variations in building design, operational strategies, and energy systems, to evaluate their impact on energy performance.
- **Regulatory and Standards Compliance:** To ensure that participants are aware of and can apply relevant building codes, standards, and guidelines for energy performance and sustainability.

- **Problem-solving Skills:** To develop problem-solving skills for addressing common challenges and troubleshooting issues that may arise during the simulation process.
- **Integration with Other Disciplines:** To teach participants how to integrate energy simulations with other aspects of building design and analysis, such as daylighting, thermal comfort, and indoor air quality.
- **Case Studies and Best Practices:** To provide real-world examples and case studies that illustrate successful applications of building energy simulations and highlight best practices.
- **Updates and Innovations:** To keep participants informed about the latest developments and innovations in simulation technology and methodologies, ensuring that they stay current with industry trends.

PARTICIPANT PROFILE

Architects and architectural firms, Building designers and engineers, Energy consultants, HVAC professionals, Sustainability consultants, Real Estate developers, Government agencies and energy policymakers, Building owners and Facility managers.

PEDAGOGY

The programme will be delivered through a combination of lectures, case studies and practical exercises, ensuring a comprehensive learning experience.

Note: Organizational sponsorship is essential

VENUE

The programme is fully residential and the participants will be accommodated in air-conditioned single occupancy rooms. Please note that the college does not provide accommodation for family members. The entire campus is comprehensively equipped with Wi-Fi.

DURATION

The programme spans three days, from **October 30 to November 1, 2024**. Participants are expected to arrive on October 29, 2024, and may depart after the programme concludes on November 1, 2024.

PROGRAMME FEE

Residential Fee: Rs. 43,700/- (US \$683 for foreigners) plus GST as applicable (presently 18%) per participant. The fee includes tuition, board and lodging, course materials (in electronic form) and access to other facilities of the college including internet usage.

Non-Residential Fee: Rs. 37,700/- plus GST as applicable (presently 18%) per participant. The fee includes tuition, course materials (in electronic form), working lunch and access to other facilities of the college including internet usage.

A 10% discount on the programme fee is available for organizations enrolling three or more participants, provided the payment is credited to our bank account by **October 28, 2024**.

Note: Kindly forward us the details of Bank/Wire transfer of fee payment indicating the Programme Code **(Prg/24 - 25/1/96)** to poffice@asci.org.in for confirmation.

Bank details are given below:

For Indian Participants:

| | |
|---------------------|---|
| Bank Account Number | 62090698675 |
| Beneficiary Name | Administrative Staff College of India |
| IFSC Code | SBIN0020063 |
| Bank Name | State Bank of India |
| Branch Address | Bellavista Branch, Raj Bhavan Road, Somajiguda, Hyderabad - 500 082. |

For Foreign Participants:

| | |
|---------------------|---|
| Bank Account Number | 62090698675 |
| Beneficiary Name | Administrative Staff College of India |
| Swift Code | SBININBB327 |
| Bank Name | State Bank of India |
| Branch Address | Bellavista Branch, Raj Bhavan Road, Somajiguda, Hyderabad - 500 082. |
| Country | India |

MEDICAL INSURANCE

The nominees are requested to carry with them the proof of Medical Insurance. The sponsoring agency is required to endorse the nominees' medical coverage in the event of hospitalization.

LAST DATE FOR NOMINATION

Please use the prescribed/attached form. Last date for receiving nominations is **October 16, 2024**. Kindly contact the Programmes Officer for further details (contact details are given at the end of the nomination form).

LAST DATE FOR WITHDRAWAL

October 23, 2024. Any withdrawals after this date will entail forfeiture of fee paid, if any.

ASCI ALUMNI ASSOCIATION

Participants of the College programmes will automatically become members of the ASCI alumni association.

CERTIFICATE OF PARTICIPATION

The College issues a Certificate of Participation upon conclusion of the programme.

Programme Directors

Prof. RajkiranV Bilolikar/ /Sri Pavan Kumar Parnandi

Email: rajkiran@asci.org.in / pavan@asci.org.in

Administrative Staff College of India (ASCI) is taking all the precautionary measures and following all the norms (in light of COVID 19) to provide a safe environment for the participants who are visiting our Campus to attend the Training Programmes.



ABOUT ASCI

ASCI is the first Management Development Institution set up in the country at the instance of the Government of India and industry in 1956 to impart state-of-the-art management education for practicing managers, a legacy that we proudly take forward with a strong alumni of over 1,69,000. We are proud of our alumni which includes the leaders of Indian industry and senior Civil Servants in the government, public sector undertakings to be a part of this unique organisation. We are thankful to you all for the support extended in the past and look forward to your continuing patronage in 2024-25.

Also, ASCI conducts customized programmes for Government of India, State Governments, Public Sector, Private Sector and various international organisations. Our experienced faculty bring to the table a wealth of academic credentials, rich industry exposure and act as a catalyst in the classroom discussions, case study analyses and tutorials. Our faculty also conduct international programmes which provide an exposure to the global best practices. In addition to this, faculty at ASCI also carry out large number of management research activities (typically about 100 each year) which helps them provide the much needed value addition in the training programmes. In addition, we conduct non-residential programmes at our New Delhi Centre as well as off-campus programmes at the venue of the client's choice.



Administrative Staff College of India

Bella Vista, Raj Bhavan Road, Khairatabad, Hyderabad - 500 082, India.

Telefax (Programmes Office) : 0091-40-23324365

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College Park Campus

ASCI, Road No.3, Banjara Hills,
Hyderabad-500 034, Telangana, India
+91-40-66720700/01/02/05
+91-40-66720725

Delhi Campus

ASCI, C-24, Institutional Area, South of IIT
Behind Qutub Hotel, New Delhi-110016.
+91-11-26962204, 26961750, 26961850
+91-11-26866097



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Leadership through Learning

ADMINISTRATIVE STAFF COLLEGE OF INDIA

Bella Vista, Raj Bhavan Road, Hyderabad - 500 082, India

Nomination Form

Programme on

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Nominee's Contact Information

| | | | | |
|--------------|---|---------------|----------------|-------------|
| Name (Mr/Ms) | : | _____ | Date of Birth: | _____ |
| Designation | : | _____ | Qualification: | _____ |
| Organisation | : | _____ | | |
| Address | : | _____ | | |
| Phone(s) | : | Office: _____ | Mobile: _____ | Home: _____ |
| e-mail | : | _____ | Fax: | _____ |

Sponsors Details

| | | | | |
|-----------------------------------|---|----------------------|---------------|-------|
| Name of the Sponsoring Authority: | : | _____ | Designation: | _____ |
| Organisation | : | _____ | | |
| GSTIN Number: | : | _____ | | |
| Address | : | _____ | | |
| | : | _____ Pincode: _____ | | |
| Phone(s) | : | Office: _____ | Mobile: _____ | |
| e-mail | : | _____ | Fax: | _____ |

Fee particulars

| | | | | |
|--------------------|---|-------|-------------------------------|-------|
| Amount Payable | : | _____ | Mode of Payment (DD/Ch/NEFT): | _____ |
| Name of the Bank | : | _____ | Date of Instrument/Transfer: | _____ |
| Instrument Number: | : | _____ | UTR Number for NEFT | _____ |

Medical Insurance:

| | | |
|---|---------------|---------------|
| Name of the Insurance Agency | Policy Number | Validity upto |
| _____ | _____ | _____ |
| Note: Coverage should be available in Hyderabad, India. | | |

Signature and Official Seal of the Sponsoring Authority:

NOTE: Forward nomination form to: **Mr. G. Sreenivasa Reddy, Programmes Officer,** Administrative Staff College of India, Bella Vista, Hyderabad-500 082. Phone: 0091-40-66534247, 66533000, Mobile: 9246203535, Fax: 0091-40-66534356, e-mail: poffice@asci.org.in