ORGANIZING COMMITTEE

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Dean Civil Engineering Saintgits College of Engineering

Dr. Susan Rose

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DISHA 2024 Pathway to Future Horizons

Last date for online registration: 8th Nov 2024 Date of intimation to participants regarding guidelines (via Google meet): 10th Nov 2024

SAINTGITS COLLEGE OF ENGINEERING

(AUTONOMOUS)

Kottukulam Hills, Pathamuttom, Kottayam, Kerala – 686532 www.saintqits.org



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DEPARTMENT OF CIVIL ENGINEERING

Student Orientation Programme

DISHA 2024 Pathway to Future Horizons

November 16th 2024

About the Institute

Saintgits College of Engineering (Autonomous) seek to expose young minds to the world of technology and encourage all-round development of the mind. The college offers B Tech Degree course in 10 Engineering disciplines, and Masters degree courses in Engineering, Computer Application and Business Administration. Saintgits College of Engineering has been granted Autonomous status by the University Grants Commission (UGC), making the institution one among the first three Engineering Colleges in Kerala to achieve this coveted status. The status was conferred in recognition of the academic excellence, expert faculty, industry connect, placement records, extracurricular activities and state of the art infrastructure offered by the institution. Saintgits is the only unaided institution in Kerala with 8 NBA accredited programmes.

About the Department

Department of Civil Engineering is one of the premier departments in SAINTGITS. The department offer three programmes, one bachelor and two sought-after masters programmes, affiliated to APJ Abdul Kalam Kerala Technological University. The B. Tech. Civil Engineering programme offered by Department is accredited by NBA (National Board of Accreditations) as a recognition of the continuous efforts of Department towards maintaining quality standards in education. Department offers NBA accredited B. Tech. programme in Civil Engineering. Additionally, accreditation by the Institution of Engineers (India) is an acknowledgment of our commitment to keeping high professional standards in education. The department is fully equipped with state of the art laboratories, committed and qualified teaching professionals, a well stocked department library.

About DISHA

DISHA is an orientation program tailored for school students, aiming to provide them with essential guidance for their academic and career journeys. The program focuses on helping students understand their strengths, interests, and potential career paths through interactive workshops, expert sessions, and engaging activities. DISHA encourages students to explore various fields, build a strong foundation of self-awareness, and make informed decisions about their future. By offering insights into different academic streams and career opportunities, DISHA empowers students to set clear goals and develop a roadmap for success, ensuring they are well-prepared to face the challenges of the future confidently.

DISHA 2024

DISHA 2024 is designed to guide school students in exploring their academic and career options after 12th grade. Key highlights include a session on "What's Next After 12th?" covering future academic and career paths for both general and technical students, and an expert talk on "The Future of Work: Engineering in a Digital World," focusing on how digital technologies are reshaping engineering. The program also features a 3D printing demonstration in the concrete lab, interactive technical competitions like bridge building and sustainable city planning, non-technical games, and a campus walk to introduce students to the college's facilities.

Resource Persons



Session 1: Er. Vinay Mathew John, Chief Training Officer, ASAP Community Skill Park, Perumbayoor



Session 2: Dr. Reebu Zachariah Koshy, Professor (Dept. of Civil Engg.) & Director, Institutional Development, Saintgits College of Engineering.

Registration

Interested participants may scan this QR code to register



Eligibility

The higher secondary school students and students from technical schools from both Government and private sectors are eligible to attend the event.

Faculty Coordinators

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Er. Alice Johny

Mobile No: 9400424835 Email: alice.j@saintgits.org

Student Orientation Programme

DISHA 2024- Pathway to Future Horizons

SCHEDULE

November 16th 2024 09:30 AM INAUGURAL FUNCTION

TIME	10.00 AM 11.00 AM	11.00 PM 11.10 AM	11:10 AM 11:40 AM			
DATE	SESSION 1		SESSION 2			
Nov 16, 2024	Er. Vinay Mathew John	TEA BREAK	Dr. Reebu Zachariah Koshy			
	What's Next After 12th		Future of Work: Engineering in a Digital World			
	Chief Training Officer, ASAP Community		Professor & Director, Institutional			
	Skill Park, Perumbavoor		Development, Saintgits College of Engg.			

- **❖** Technical Competitions
- In-house Competitions
- Campus walk & 3D Printer Demo
- ❖ Valedictory Function

Student Orientation Programme

DISHA 2024- Pathway to Future Horizons

TECHNICAL COMPETITIONS

	EVENT NAME	
E' P.: P. 1000	MODEL MANIA	1. FUTURISTIC HOME DESIGN
First Prize- Rs. 1000		2. SELF SUFFICIENT VILLAGE MODEL
Second Prize- Rs. 750		3. FLOATING PLATFORM CHALLENGE
	THE BIG IDEA BATTLE	1. AI ENABLED HOME DESIGN
First Prize- Rs. 1000		2. INNOVATIVE WASTE MANAGEMENT
		3. FLOOD RESILIENT CITY

IN-HOUSE COMPETITIONS

	EVENT NAME		
First Prize- Rs. 750 Second Prize- Rs. 500	SKY HIGH CHALLENGE	CREATIVE CANVAS	

Student Orientation Programme

DISHA 2024- Pathway to Future Horizons

MODEL MANIA

Guidelines:

Submit a 3D model.

Include explanations of technological and sustainable features.

Maximum team size:4 participants

- **1. Futuristic Home Design:** Create a home design concept that embodies futuristic aesthetics, advanced technology integration, and sustainability. Focus on innovative use of materials, energy efficiency, and smart home systems. Designs should be visually striking and functional, considering the needs of future residents.
- **2. Self-Sufficient Village:** Design a self-sufficient village that thrives on renewable resources, closed-loop systems, and community resilience. Emphasize efficient land use, renewable energy sources, waste management, and food production. The design should cater to a harmonious balance between modern amenities and environmental stewardship.
- **3. Floating Platform:** Design a floating platform that can support living spaces or communal activities on water bodies. Focus on structural stability, adaptability to different water conditions, and self-sufficiency. Floating platforms carrying maximum weight will be awarded. Maximum size of the platform may be limited to 30cm*30cm.

Student Orientation Programme

DISHA 2024- Pathway to Future Horizons

THE BIG IDEA BATTLE

Guidelines:

Submit a detailed plan outlining the technology or method as a PowerPoint presentation.

Include diagrams, concept sketches or process flows for clarity.

Maximum team size: 4 participants.

Presentation time: 10 minutes.

- **1. AI-Enabled Home Design:** Propose a home design concept that leverages AI for enhanced living experiences, energy efficiency, and convenience. Focus on features like predictive maintenance, automated climate control, and smart security systems. The design should illustrate how AI improves daily life while optimizing resource use and sustainability.
- **2. Innovative Waste Management:** Present a waste management solution that employs new technology or creative methods to minimize waste and maximize resource recovery. The focus can include waste-to-energy technologies, circular economy models, and community-level waste processing. The solution should be scalable and environmentally friendly.
- **3. Flood-Resilient City Model:** Design a city model that can adapt to and withstand flooding events, integrating water management systems, elevated infrastructure, and community resilience plans. Emphasize sustainable urban planning, green spaces, and innovations like permeable surfaces or floating structures to mitigate flood risks.

Student Orientation Programme

DISHA 2024- Pathway to Future Horizons

IN-HOUSE COMPETITIONS

1. Sky High Challenge (Paper Tower Competition): Build the tallest freestanding tower using only paper and minimal adhesives. The competition tests creativity, structural stability, and design thinking. Participants must construct a tower that can withstand a set weight without collapsing, emphasizing balance and innovative building techniques.

Guidelines:

Allowed materials: A4 paper sheets and masking tape, Adhesives (like glue) are allowed.

Tower must be freestanding and built within 1 hour.

Height will be measured; stability tested with a 100g weight.

Maximum team size: 2 participants.

2. Creative Canvas (Poster Competition): Express your creativity by designing a poster that communicates a theme effectively through visuals and text. The competition focuses on artistic skills, clarity of message, and originality. Participants can use any medium to create a visually striking and thought-provoking poster.

Guidelines:

Theme: "Tech for Good"

Poster size: A3 sheets provided at the spot

Participants can bring any art materials of their choice (paint, markers, etc.).

Digital designs are not allowed.

Maximum time: 1.5 hours.

Individual participation only.