

Smart Campus Policy of JSS Academy of Higher Education& Research

Preamble:

JSS Academy of Higher Education & Research (JSS AHER) envisions transforming its campuses into smart, sustainable, and technologically advanced environments. The Smart Campus Policy aims to leverage cuttingedge technologies and data-driven solutions to enhance efficiency, improve campus operations, and provide an innovative and engaging learning experience for students and staff. This policy outlines the principles, guidelines, and objectives for developing JSS AHER into a Smart Campus.

JSS Academy of Higher Education & Research, Mysuru has established its state of art Campus using cutting edge technology. It has achieved smart campus status in implementing the below technologies like:

- Smart Physical Security and Surveillance "Safety & Security"
- Smart Wi-Fi Enabled Campus "Connectivity and Digitization"
- Smart Buildings "Establishment & Development"
- Smart Recycling Process "Waste, Water, Air Management"
- Smart Working &Transportation System "Services & Connectivity".
- Smart Energy Conservation and Utilization practice "Water, gas, electricity &infrastructure"
- Smart Environment Management "Green environment resilient"
- Smart Hostel & Smart Canteen management "Food & Health"
- Smart Teaching & Learning "Education, learning & digitization"
- Smart Extra Activities "Sports, cultural & Recreation"
- Smart Out Reach Activities "Social Service & Connectivity"

Policy Brief & Purpose:

The Smart Campus Policy aims to create a connected and intelligent ecosystem that integrates technology, infrastructure, and services to enhance the overall campus experience. It seeks to foster a culture of innovation, digital transformation, and sustainability while promoting the use of technology for educational, administrative, and research purposes.

Scope:

This policy applies to all campuses and facilities of JSS Academy of Higher Education & Research. It covers the implementation of smart technologies, data analytics, and information systems to improve campus operations and academic delivery.

Objective:

- Embed the use of smart technology into daily life of the campus; providing an opportunity for the development and application of innovation and technology to support a smart campus.
- Integrate an enhanced process and programme focussed on materials, security, health, transport, energy, and environmental management.
- Focus on maintaining "Eco friendly institution" thorough best practice.
- Provide world class facilities and enable nationally and internationally renowned industrial/institutional partners to co-locate on the campus.

Policy Guidelines:

1 Smart Infrastructure:

- a) JSS AHER will invest in smart infrastructure, including smart buildings, energy-efficient systems, and advanced communication networks to enhance connectivity and data transmission across campuses.
- b) The institution will adopt Internet of Things (IoT) devices and sensors to monitor and manage utilities, such as energy consumption, water usage, and waste management, to optimize resource efficiency.
- c) Smart security systems will be deployed to ensure the safety of students, faculty, staff, and campus property, including the use of CCTV cameras and access control mechanisms.

2 Technology-Enhanced Learning:

- a) JSS AHER will implement digital learning platforms and interactive tools to support technology-enhanced learning experiences for students.
- b) The institution will encourage faculty to incorporate digital resources, online assessments, and virtual labs to enrich the teaching and learning process.
- c) Smart classrooms equipped with audio-visual aids, interactive displays, and collaborative tools will be established to facilitate dynamic and engaging lectures.

3 Data Analytics and Decision Support:

- a) JSS AHER will leverage data analytics and artificial intelligence to gain insights into campus operations, student performance, and administrative processes.
- b) The institution will use data-driven decision-making to optimize resource allocation, streamline workflows, and enhance overall efficiency.
- c) Smart data management systems will be implemented to ensure the privacy and security of sensitive information.

4 Smart Mobility:

- a) JSS AHER will promote smart mobility solutions, including campus shuttle services, ride-sharing apps, and bicycle-sharing programs, to facilitate easy and sustainable commuting.
- b) Smart parking management systems will be established to optimize parking space utilization and reduce traffic congestion on campus.

5 Sustainability and Energy Efficiency:

- a) The institution will integrate smart energy management systems to monitor and control energy consumption, aiming to reduce the carbon footprint and promote renewable energy sources.
- b) Sustainability initiatives, such as rainwater harvesting, solar power generation, and waste recycling, will be incorporated into the campus design and operations.
- 4.6 Internet Connectivity and Digital Access:
- a) JSS AHER will ensure robust and reliable internet connectivity across all campuses to support seamless access to online resources and research materials.
- b) The institution will promote digital literacy and provide training for students, faculty, and staff to effectively utilize technology and digital resources.

Responsible Units:

The following units will be responsible for implementing and monitoring the Smart Campus Policy at JSS AHER:

- a) Smart Campus Committee: The Smart Campus Committee will oversee the implementation of smart technologies and ensure alignment with the policy objectives.
- b) IT Department: The IT and Innovation Department will lead the deployment and management of smart technologies and digital solutions across campuses.
- c) Campus Facilities, maintenance Operations Department : The Campus Facilities and Operations departments will coordinate the implementation of smart infrastructure and sustainability initiatives.

Smart campus initiatives:

Over all activities:

- The JSS Academy of Higher Education & Research implemented CCTV Cameras regarding students from the year2010.
- The surveillance has built in analytic and intelligence for immediate remedial measures.
- Students are always connected to smart Wi-Fi.
- Healthy environment to support the mental, physical and social well being of the students and staff of the JSS Academy of Higher Education & Research.

- Daily power and water consumption data per student and room basis captured and analysed for reducing consumption cost.
- Smart help system for students to attend to all their hostel requirements on the services front.

Students Centric Smart Campus:

- Students are fully safe and secure with homely atmosphere and are being monitored round the clock.
- Students have dedicated band width with high speed internet both on campus and hostel rooms.
- Smart Metering has given lot of data in terms of consumption pattern based on which several optimization measures have been implemented.
- Smart portal has a great impact on both students and other stakeholders who are directly involved in daily hostel operations.
- Physical security of students in the campus.

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ICT Based Smart Campus:

- 400 CCTV cameras are always in operations for surveillance.
- Internet plays a vital role in enabling students to pursue their academic goals. Internet with adequate band width was provided to make the campus Wi-Fi enabled.
- SMART portal where in all services are taken care centrally from student entry in hostel and to their exit. Smart Portal was made operational for connectivity with students at all times.

Smart Optimal Use of Energy / Resources:

Optimization and improvement can only be brought about by identifying consumption patterns. The goal was to reduce the consumption of water and electricity to the lowest levels possible. Smart Metering was implemented for taking optimal decisions.

Environment Friendly Smart Campus:

In order to minimize energy usage, improve the efficiency of all energy/ resources (natural resources, water, electricity) consuming systems and equipment, and improve the environment in all facilities, JSS Academy of Higher Education & Research has adopted an energy / resources conservation and recycling policy.

Conservation of energy and natural resources and recycling process is an integral part of JSS Academy of Higher Education & Research facilities' design and usage.

The JSS Academy of Higher Education & Research employs a variety of energy conservation, recycling, and other techniques to lessen the consumption of resources and achieve the lowest feasible life cycle costs.

Energy conservation measures will be achieved by using the most cost-effective, energy- efficient approach with consideration given for flexibility of use and future remodeling convenience. Recycling efforts are encouraged at the Institution/department level.

All faculty, staff, students, design consultants, and construction contractors observe energy and resource conservation measures employed by the campus.

The Campus Facilities Maintenance & Management Authority- Deputy Registrar shall be the principal coordinator of all design disciplines, which includes responsibility for the implementation of this policy.

Constituent Colleges & Departments are responsible for internal energy conservation and recycling efforts.

The Transport Policy provides the JSS Academy of Higher Education & Research with a standard procedure for the acquisition, enhancement, use, control, maintenance, repair, checking fuel efficiency and disposal of the JSS Academy of Higher Education & Research's vehicles and for the management of related forms of transport engaged for official purpose.

Review and Amendment:

This policy will be reviewed periodically to assess its effectiveness and make necessary amendments based on feedback and advancements in smart technologies.

The Smart Campus Policy aims to transform JSS Academy of Higher Education & Research into an innovative, technologically advanced, and sustainable learning environment. By adopting smart infrastructure, technology-enhanced learning solutions, data analytics, and sustainability initiatives, the policy seeks to create a connected ecosystem that enhances campus operations and the overall educational experience. The policy emphasizes data-driven decision-making, digital access, and smart mobility solutions to optimize resources and promote a culture of innovation and digital transformation.

The Vice-Chancellor, Registrar and Deputy Registrar holds delegated authority from and is responsible for all aspects of the Smart Campus Policy of JSS AHER.

Date of Implementation: 03.06.2016

Date of Last Revision: 03.06.2023

Date for Next Revision: 03.06.2026

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