JSS ACADEMU OF HIGHER EDUCATION & RESEARCH
SMART CAMPUS POLICY

INTRODUCTION:

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:

1. Smart Physical Security and Surveillance "Safety &Security"

2. Smart Wi-Fi Enabled Campus "Connectivity and Digitization"

3. Smart Buildings "Establishment &Development"

4. Smart Recycling Process "Waste, Water, Air Management"

5. Smart Working &Transportation System "Services & Connectivity".

6. Smart Energy Conservation and Utilization practice "Water, gas, electricity & infrastructure"

7. Smart Environment Management "Green environment resilient"

8. Smart Hostel & Smart Canteen management "Food &Health"

9. Smart Teaching & Learning "Education, learning &digitization"

10. Smart Extra Activities "Sports, cultural &Recreation"

11. Smart Outreach Activities "Social Service &Connectivity"

I. 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 program focused on materials, security, health, transport, energy, and environmental management.

- Focus on maintaining "Eco friendly institution" thorough best practice.

- Provide world class facilities and enabling nationally and internationally renowned industrial/institutional partners to co-locate on the campus.

II. SMART CAMPUS INITIATIVES:

a). Over all activities:

- The JSS Academy of Higher Education & Research implemented CCTV Cameras regarding student's day and night from theyear2010.

- 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 analyzed for reducing consumption cost.

- Smart help system for students to attend to all their hostel requirements on the services front.

b). 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.

c). ICT Based Smart Campus:

- Physical security of students in the campus was a big challenge.

- 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.

- 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.

- Many students join every year. JSS Academy of Higher Education & Research needed a SMART portal where in all services are taken care centrally from student entry in hostel and to their exit. Smart Portal was always made operational for connectivity with students.

d). 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 a 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, 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.

a). Digital Environment

- Open, flexible, integrated, interoperable, secure, and scalable ICT architecture.
- Sense, capture, monitor and evaluated to support and study the performance of the campus in real time.

b). Integrated Urban Energy Systems

- Low carbon, low impact energy in a complex urban environment, focusing on generation,

storage, distribution, and management.

c). Data-driven Infrastructure Innovation

- Resilient infrastructure systems.
- Innovation in infrastructure design and delivery.
- Building Information Modelling (BIM) for design and life-cycle performance.

d). Health &Wellbeing

- Evaluate, understand, and improve the physical environment
- Develop new practices for workplace wellbeing.
- Develop the technology, including wearable technology, to measure and influence health related behaviour.

e). Student Experience and Pedagogy

- Data-driven services and spaces for an improved student experience.
- Technology- enabled earning& teaching (including active learning, interactive teaching, flexible study).
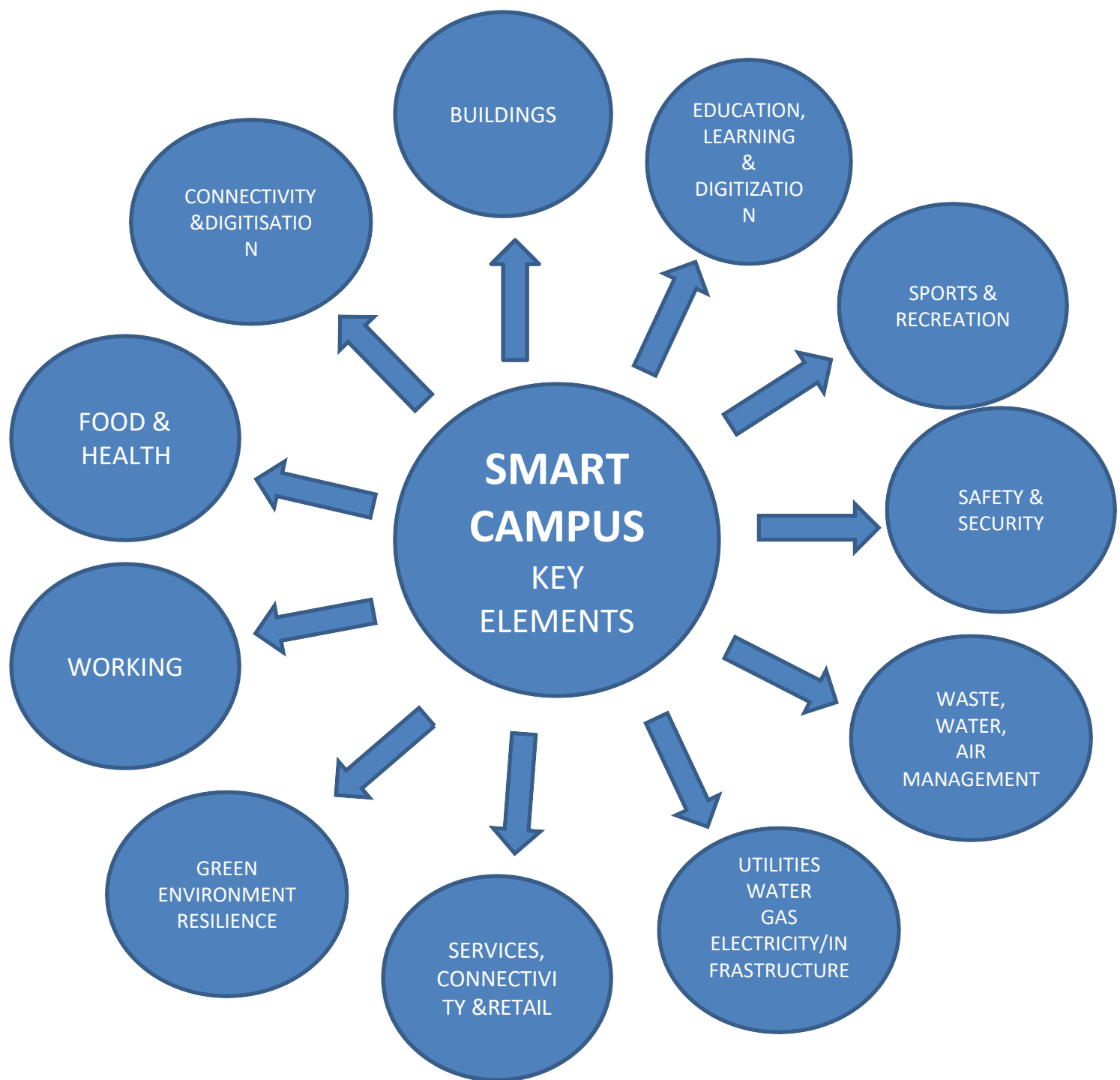
IV. AUTHORITY:

The Vice-Chancellor, Registrar & Deputy Registrar of JSSAHER holds delegated authority and is responsible for all aspects of the JSS Academy of Higher Education & Research's "SMART CAMPUS POLICY".

The Smart Campus Policy of JSS Academy of Higher Education & Research follows:

- The Swachh Bharat Mission (Urban) guidelines, Government of India.

- National conservation strategy and policy statement on environment and development, Government of India.

- National Cyber Security Policy, Ministry of Communication and Information Technology, Government of India.

V. Date of Revision:

01.01.2020

SMART CAMPUS KEY ELEMENTS

- BUILDINGS
- EDUCATION, LEARNING & DIGITIZATION
- CONNECTIVITY &DIGITISATION
- SPORTS & RECREATION
- FOOD & HEALTH
- SAFETY & SECURITY
- WORKING
- WASTE, WATER, AIR MANAGEMENT
- GREEN ENVIRONMENT RESILIENCE
- SERVICES, CONNECTIVITY &RETAIL
- UTILITIES WATER GAS ELECTRICITY/INFRASTRUCTURE

Ministry of Human Resource Development Government of India

As per MHRD, parameters for a Smart Campus were/are

- **Student/toilet ratio**

- **Kitchen hygiene**

- **Availability of running water**

- **Modernity of toilet & kitchen equipments**

- **Campus green cover**

- **Garbage disposal in Hostels and Academic buildings**

- **Disposal techniques**

- **Water supply systems**

SMART CAMPUS – EDUCATION & LEARNING

- INTEGRATION OF SUSTAINABILITY ACROS CURRICULUM

- INTEGRATION OF RESEARCH, TEACHING & OUTREACH

- EDUCATE STUDENTS ON SUSTAINABILITY

- ASSIGNMENTS IN THE FORM OF ACTIVITIES AND EFFECTIVE DISCUSSION ON TOPICS RELATED TO SUSTAINABILITY

- SUPPORT INTER-DISCIPLINARY RESEARCH IN SUPPORTING SUSTAINABLE DEVELOPMENT GOALS

- COMMUNITY OUTREACH AND AWARENESS ON SUSTAINABLE DEVELOPMENT GOALS