

K. S. R. M. COLLEGE OF ENGINEERING

(UGC-AUTONOMOUS)

Kadapa, Andhra Pradesh, India – 516 005

Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu.

An ISO 14001:2004 & 9001:2015 Certified Institution



Maintenance Policy and Procedure Manual

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Introduction

The KSRM College of Engineering Maintenance Policy and Procedure Manual provides the policies and procedures for systematic operations to be performed from time to time in maintenance of all Infrastructure. The Standard Operating Procedure should follow in Maintenance of Infra related to Academics, Research and administrative areas in the Institution. It also provides guidelines to follow to administer these policies.

KSRMCE will keep all Maintenance policies current and relevant. Therefore, from time to time it will be necessary to modify and amend some sections of the policies and procedures, or to add new procedures.

Maintenance Policy Goals

The inclusion of the following goals should help a Facility formulate a successful operation and maintenance of institute program:

1. Perform maintenance on a periodic basis.
2. Provide functional facilities that (a) meet the Institute requirements; (b) have an environmentally acceptable atmosphere for students, faculty, and staff; and (c) ensure the health and safety of all personnel.
3. Identify potential problems early within the context of the preventive maintenance system so that corrective action may be planned, included in the budget cycle, and completed in a timely manner.
4. Follow an orderly program so that administrative costs are minimized and the workload for personnel is maintained at a relatively constant level.
5. Conserve energy and resources by ensuring maximum operating efficiency of energy-consuming equipment and systems.
6. Maintain credible relations with users by providing well-maintained facilities and information on preventive maintenance activities.
7. Identify and implement possible improvements that will reduce costs, improve service, and result in more efficient operation.

Any suggestions, recommendations or feedback on the policies and procedures specified in this manual are welcome and will be incorporated in next revision of after thorough review by stakeholders.

In order to provide a safe, healthful, and secure environment, the Institute requires the use of two types of maintenance: preventive, and break down.

1. **Preventive Maintenance Policy**
2. **Breakdown Maintenance Policy**

Preventive Maintenance Policy

Preventive maintenance is maintenance that is regularly performed on a piece of equipment that it provides periodic inspection, adjustment, minor repair, lubrication, reporting, and data recording necessary to minimize building equipment and utility system breakdown and maximize system and equipment efficiency. It is performed while the equipment is still working so that it does not breakdown unexpectedly. Preventive maintenance will be taking care by In-house staff only for most of the places. KSRMCE takes the help of outsourcing for the equipment like copier machines, Air Conditioners etc which are under annual maintenance. Preventive maintenance requires for Classrooms, Tutorial rooms, Seminar Halls, Laboratories, Research Centers, Library, Sports complex, and Computers etc.

Purpose of the Policy

This policy provides guidelines for the maintenance of physical, academic and support facilities of the university to ensure that not to break down unexpectedly. Preventive Maintenance Program procedures are designed to fulfill the needs of the Facility. The purpose of the program is to produce cost savings by:

1. Reducing the downtime of critical systems and equipment.
2. Extending the life of facilities and equipment.
3. Improving equipment reliability.
4. Ensuring proper equipment operation.
5. Improving the overall appearance of facilities.

Procedures

Maintenance of Classrooms and Tutorial Rooms

Classrooms and Tutorial rooms with furniture and teaching aids are maintained by the respective department staff and attendants and supervised by the respective Head of the Department. The Heads of Departments report to the administration periodically for all the maintenance works. Students optimally utilize all classrooms during the daylong working hours and are also mentored to upkeep the furniture. The following services are in work force for up keeping of classrooms and tutorial rooms.

Service	Frequency	Responsible Authority
Cleaning of Classrooms, and Chalkboards	Daily	Attender
Floors dust mop, wet mop, High and low dusting		
Emptying wastebaskets		
Removing of unwanted circulars from Notice Boards		
Working condition of computer system, projector, and projector screen		Technician

Maintenance of Laboratories and Research Centers (RC)

The respective faculty members, staff, lab assistants and other service personnel are given responsibility to maintain the equipment's under their purview. Stock registers, asset registers, log books, tools and plant registers are maintained by the respective laboratories to report entries and defects arising for rectification. All major repairs are identified and external expertise sought for maintenance of equipment wherever necessary with the permission of the Registrar.

Standard operating procedures for all high-end equipment are made available to the users. In-campus users register in the log books and are responsible for the safe handling of the equipment. Breakage and repair if any are reported to the Head of Department or the faculty-in charge as the case may be and suitable measures are taken for speedy functioning of the equipment. Breakage of glassware intended for use by students is entered in the breakage register and charges levied based on the cost of the equipment payable by the students at the end of the year.

The condemned/obsolete items are discarded by procedure after getting the report of the IMF and the same is entered in the stock register. Annual maintenance contract (AMC) is sustained for maintenance of high-end equipment and high-end servers and computers.

The following services are in work force for up keeping of Laboratories and Research Centers

Service	Frequency	Responsible Authority
Cleaning of Laboratories/RC, and Chalkboards	Daily	Lab Technician
Floors dust mop, wet mop, High and low dusting		
Emptying wastebaskets		
Working condition of equipment in laboratory/RC		

Maintenance of Conference Halls, Seminar Halls and Auditoriums

Conference halls, Seminar halls and auditoriums are under the various departments. Cleanliness is taken care of by the housekeeping team. Effective utilization of classrooms, seminar halls and auditoriums for organizing academic meetings, seminars, conferences, and cultural events is made. For accessing the facilities, the organizing faculty/staff member submits a request form, through HOD and the date of event is registered. Then the halls are accessed on priority basis. The following services are in work force for upkeep of Conference halls, Seminar Halls and Auditoriums.

Service	Frequency	Responsible Authority
Cleaning of Conference Halls\ Seminar Halls\ Auditoriums	Daily	Attender
Floors dust mop, wet mop, High and low dusting		
Emptying wastebaskets		
Working condition of PA system, Computer system, projector, and projector screen		Technician

Maintenance and Utilization of Library and Library Resources

The library staff is clearly instructed in the care and handling of library documents, particularly during processing, shelving and conveyance of documents. The following steps need to be taken:

- Bound volumes are not to be sorted out from their fore edges, as this process weakens the binding.
- Shelves should not be fully packed. A too-full shelf can crack spines and cause damage when a reader tries to remove a volume. Huge volumes need to be kept flat.
- Dust should not be allowed to deposit on the documents because the collection of dust causes staining of documents and promote chemical and biological problems. Cleanings should be done regularly and carefully.
- Magnetic discs or documents containing disc(s) should not be kept open or near any magnetic or electric equipment, i.e. tape recorders, air-conditioners, etc. Such materials should be kept in a dust-free, temperature and humidity-controlled room.
- Proper pest management is done to minimize the problems caused by insects. Borax or common salt is used to prevent cockroaches. Sodium fluoride is applied to bound volumes to save them from silverfishes. Spread of kerosene oil, DDT or gammaxene powder over the affected area can help in removal of termites or white ants. Proper cleaning, fumigation and exposure to sunlight to the documents are done to reduce the effect of insects in the library. Repellants are used to save materials from Rats.

The following services are in work force for maintenance of library and library resources.

Service	Frequency	Responsible Authority
Book Binding	Once in a	Asst. Librarian
Taking of Pest control measures	Semester	
Old Volumes maintenance	Once in a Year	

Cleaning of Tables, Chairs, and Bookshelves	Daily	Attender
Floors dust mop, wet mop, High and low dusting		

Maintenance of Sports Complexes

The sports equipment, fitness equipment, ground and various courts are supervised and maintained by the Physical Directress and Faculty members of Physical Education Department respectively. Ground level maintenance is done annually during vacation in addition to the seasonal maintenance done in once in every three months. Grounds men, vendors of Sports goods and students of Physical Education jointly maintain the sports equipments. Seasonal maintenance of all equipment and ground are carried out regularly by the Physical Education students as part of their curriculum. Gymnasium and playgrounds are maintained by the staff of the Department of Physical Education. The following services are in work force for upkeeping of sports complexes.

Service	Frequency	Responsible Authority
Watering	Daily	Physical Education Staff
Rolling		
Marking		
Grass Pulling		
Grass Cutting in Cricket Court	Weekly	

Maintenance of Computers

The hardware department and its support staff maintain the ICT facilities including computers, servers. The maintenance includes the required software installation, antivirus and up gradation. Campus Wi-Fi is maintained by respective centre. The following services are in work force for upkeeping of computers.

Service	Frequency	Responsible Authority
Software Installation	Weekly	Respective Staff
Hardware Repairs		
Computer Peripherals		

Maintenance of Housekeeping

Cleaning of the campus areas including the academic and administrative buildings is performed daily in the morning before the regular classes begin with the help of the housekeeping team. Toilets are cleaned twice every day. The whole campus area is maintained by the housekeeping supervisor who will be reporting the completion of work to the Assistant Registrar.

Service	Frequency	Responsible Authority
Offices		
Cleaning of office rooms, furniture	Daily	Attenders

Floors dust mop, wet mop, High and lowdusting		
Emptying wastebaskets		
Staircases and Corridors		
Cleaning of steps and floor	Daily	Attenders
Wet mop		
Rest Rooms		
Cleaning of Toilets	Twice in a	
Disinfecting all Washbasins and restrooms	Day	
Wet mop, High and low dusting		
Emptying Waste Baskets		

Breakdown Maintenance Policy

The breakdown maintenance is a type of maintenance that involves using a machine until it completely breaks down and then repairing it to working order. KSRMCE has technical staff who takes care of all the maintenance activities in various levels. Breakdown maintenance of any asset, facility, and equipment whether under AMC or under preventive maintenance is urgent requirement where the institute works in mission-mode. Breakdown maintenance will be taken care of by In-house staff only. If it requires KSRMCE takes the help of outsourcing.

All breakdown maintenance activities are classified into following four categories.

1. Building Maintenance
2. Electrical Maintenance
3. Computer Maintenance
4. Workshop Maintenance

Purpose of the Policy

This policy provides guidelines for the maintenance of various facilities of the university to ensure that it is in working condition.

Procedures

Building Maintenance

Concerned personnel should be appointed for looking after building maintenance activities such as plumbing, sanitation, and painting works etc. The following is the procedure for resolving the building maintenance request.

- Step1** : Respective department register the complaint
- Step2** : Building maintenance administrator monitors the complaint to identify the services requested by various departments
- Step3** : He initiates the actions to solve the problem with his supporting staff and technical staff such as plumbers, carpenters etc.,
- Step4** : He updates after completion of the service request

Electrical Maintenance

Concerned personnel should be appointed for looking after electrical maintenance activities such as repair works of all electrical equipment like fans, lights, MCBs, UPS, exhausters etc. The following is the procedure for resolving the electrical maintenance request.

- Step1** : Respective department registers the complaint in portal
- Step2** : Electrical maintenance administrator monitors the complaint to identify the services requested by various departments
- Step3** : He initiates the actions to solve the problem with his supporting staff and technical staff such as electricians etc.,

Step4 : He updates after completion of the service request

Computer Maintenance

Concerned personnel should be appointed for looking after computer maintenance activities such as software updates, hardware repairs, antivirus installations, and network issues etc. The following is the procedure for resolving the computer maintenance request.

Step1 : Respective department register the complaint

Step2 : Computer maintenance administrator monitors the complaint to identify the services requested by various departments

Step3 : He initiates the actions to solve the problem with his supporting staff and technical staff such as hardware technicians etc.,

Step4 : He updates after completion of the service request

Workshop Maintenance

Concerned personnel should be appointed for looking after workshop maintenance activities such as carpentry works, flexes erection, furniture repairs etc. The following is the procedure for resolving the workshop maintenance request.

Step1 : Respective department registers the complaint

Step2 : Workshop maintenance administrator monitors the portal to identify the services requested by various departments

Step3 : He initiates the actions to solve the problem with his supporting staff and technical staff such as, carpenters and mechanics etc.,

Step4 : He updates after completion of the service request