

# MAINTENANCE MANUAL



Narayana Avenue, Muthukur Road, SPSR Nellore District, Andhra Pradesh-524004  
(Approved by the AICTE, Accredited by NAAC 'A+' Grade)  
(An Autonomous College under the jurisdiction of JNTU Anantapur, Ananthapuramu - 515002, AP, India)

**NARAYANA**  
**ENGINEERING COLLEGE::NELLORE**  
**(AUTONOMOUS)**

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# Maintenance Manual



**NARAYANA**  
Engineering College ::Nellore

There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports and games, computers, classrooms etc.

Narayana Engineering College has all necessary infrastructure facilities as per AICTE Norms. The campus has three Blocks named as A to C in which all the departments are housed, TWO Drawing halls, an R&D Lab, Computer Center, Digital Library with high bandwidth Internet connection, Wi-Fi campus and Workshop. It has a Canteen, Well equipped Gym, Cricket ground, Volleyball court, Handball Court, Foot Ball court and Open area for other Sports & Games, Car parking & Bike Parking facility, and a Clinic. Narayana Engineering College has student support facilities such as Student Activity Centre (SAC), Career Guidance Cell, Training & Placement Cell, Entrepreneurship Development Cell, innovation and Incubation Centre, Industry Institute Interaction Cell and Hobby Clubs.

The planning, development, management and maintenance of physical, academic and support facilities: laboratory, library, sports and games facilities, computers, classrooms etc., are being monitored by the Director, Office Manager, In-charge of Systems Administration Department and Maintenance Staff. Schedules are prepared for breakdown maintenance and preventive maintenance as per Warranty and Guarantee Cards of the particular supplier.

However there is an established system and procedure given below to be followed by each Department.

### **Laboratory Equipment**

The equipment in the laboratory/workshop is maintained by the lab In-Charge(s)/Workshop In-Charge(s) with the advice of HOD. Record of maintenance account is maintained by lab technicians and supervised by HODs of the concerned departments. Other measures to maintain laboratories are as follows:

- The calibration, repairing and maintenance of sophisticated lab equipments are done by the technicians of their related Laboratory.
- The equipment used for experiments are annually cleaned and maintained by the concerned departments and record of maintenance is maintained by lab technicians and supervised by HODs of the concerned departments.
- Annual stock verification is done in all departments and reports of Damaged/Nonfunctional equipments are forwarded. Necessary repair is undertaken accordingly.
- There is systematic disposal of waste of all types of equipment and e-waste. Narayana Engineering College insists on all departments to provide annual budget to maintain the existing facilities in laboratories. The annual budget is periodically approved by the Director, channeled through the Principal. Funds are allotted to ensure optimum utilization and the maintenance of lab equipment. The laboratories in the college are furnished according to the statutory rules. Necessary equipment and material is procured to students for the best standards of education.

All the departments take care of timely maintenance of the laboratory equipment. Most of the maintenance work is completed during summer break and a close monitoring of maintenance activities is a prime responsibility of Heads of the Departments.

### **Civil and Electrical Maintenance:**

The Civil and Electrical work is adequately monitored and maintained by the Estate Office. Periodic reporting on requirements of repairs and maintenance are collectively processed in every semester break so as to keep things ready for new semester. Pest control of library books and records is done every year by the maintenance department. AO and his team are involved in the maintenance of civil works such as furniture repairs, masonry and plaster works, painting, carpentry, plumbing and housekeeping. The non-teaching staff is also trained in maintenance of science and computer equipment. The estate office workers look after the maintenance of rest rooms, approach roads and neatness of the entire premises. Housekeeping services are regularly executed and monitored.

The study environment of students in class rooms plays a pivotal role in their performance. It becomes extremely necessary to provide them with a surrounding that is peaceful, comfortable and spacious. The benches and windows are cleaned and mopping of the class rooms is done every day. In case of any damage to the projector, internet, the class mentor brings it to the notice of the

administration. The necessary follow up is done by the administration and steps are taken to fix whatever is broken.

The maintenance of generator is regularly done with its company persons as and when required. All the water tanks are being cleaned regularly at the intervals of three months as per the contract management cleaners. Water purifiers for drinking water facility are maintained and cleaned regularly. All the fire equipment is regularly upgraded as when required by the local party. All fire equipment are in contract with five years validity.

Repairing and maintenance of following facilities are ensured through annual maintenance contracts (AMC) with respective suppliers.

- Generator
- Air Conditioner
- UPS and Batteries
- Drinking Water Coolers
- Water Purifiers

Any minor or major repair/ problem is to complain in written duly signed by concerned HoD including Library to the AO and he will attend and visit the place along with his maintenance staff, rectify if it is a minor. If it is a major repair /problem prepare an estimated cost and submit to the Principal/Director duly signed by AO. As per the decision by the Principal/Director problem will be solved within a week. Finally, feedback on satisfaction of the work by maintenance

staff along with the date & time of completion to be filed and updated from time to time.

The following format is used to write a complaint about repair/problem as far as the civil and electrical works are concerned and send the same duly signed to the Estate Office Manager.

<b>NARAYANA ENGINEERING COLLEGE</b>			
<b>NELLORE</b>			
<b>SERVICE CALL REPORT(COUNTER FOIL)</b>			
<b>DEPARTMENT OF</b>			
<b>Problem Reported On:</b>		<b>Problem Attended On:</b>	
<b>Time:</b>		<b>Time:</b>	
<b>S.No</b>	<b>Name of work/Problem</b>	<b>Location</b>	<b>Action taken/Remarks</b>
<b>Signature of Maintenance In-charge</b>		<b>Signature of Lab In-charge/HOD</b>	

### Computers Hardware, Software and Networking:

The college has adequate number of the computers with internet connections and the utility software's distributed in different locales like office, laboratories, library, departments etc. All the stakeholders have equal opportunity to use those facilities as per the rules and the policies of the institution. The central computer laboratory connected in LAN is open for the students as time permits them, the office computers which are also connected through the LAN is consisting of the office software making work easier and systematic are restricted their use only to the appointed office staff.

The library is also provided LAN facility for the computers and they are loaded with the library software. The departments and the staff can make use of the computer system with internet at their seating places in addition that majority of the staff has their own laptops and the internet providing instruments; all those computer related facilities are given a contract of their maintenance annually.

A separate computer maintenance team handles the departmental requirements. For every computer centre, a programmer / technician is recruited and a faculty member is made in-charge of the centre. An exclusive department headed by the in-charge Systems Administration Department with six hardware engineers along with two system administrators is functioning in the college to cater to the needs of day-to-day computer maintenance. However, minor software and hardware problems are being handled by the concerned lab technicians.

The computer systems and other sensitive equipment (servers, Projectors, Printers, Scanners, Xerox machines, Bio-metric machines) are provided with UPS systems to avoid any damage during power outages.

Upon receiving the complaint from Programmer/Technician of any computer lab, the hardware engineer of that block visit the lab and identify the problem. After discussing the problem with In-charge, system administration department, the problem will be rectified at the earliest by procuring the required components/accessories. The status of the rectification of the problem is noted down by the concerned engineer by using the following format and the same



will be filed duly signed by In-charge Systems Administration Department and Head of the department.

**NARAYANA ENGINEERING COLLEGE**

**NELLORE**

**Department of System Administration**

Name of the Service Engineer: \_\_\_\_\_

Department Name : \_\_\_\_\_

Location : \_\_\_\_\_

(Write in Block Letter Only)

Complaint Status:

Remarks if any: \_\_\_\_\_

Complaint Closing Date: \_\_\_\_\_

Signature of HOD/User    Signature of Sys-Admn In-charge    Signature of Sys-Admin

**Library:**

The central library has its dedicated human resource and the Departmental libraries are taken care of by office assistant and a faculty In-charge of the department concerned. Yearly stock (Books) verification being taken up by library committee members during summer break and Add / Minus books yearly as per requirement based on the students' feedback and HoD recommendations.

The Institute has constituted a library advisory committee to help in the development activities of the library. The committee follows up with the librarian and regularly monitors the library to ensure and maintain all text books, reference books, articles,

competitive examination books, magazines, journals, e-magazines, e-books and e-journals.

- Regular swabbing of the library floors, regular cleaning of the racks, up keeping the quality of the books with needed binding are in place.
- The chairs and tables are cleaned and mopping of the Library is done every day.
- Library maintenance is computerized and automated with regular/constant up-keeping.

### **Physical Education:**

The physical education department is facilitated by the physical director to educate the students. The marker of the department makes the play field ready for the students, by marking the ground and providing the play kits.

Institute's physical director is responsible to take care of sports equipments, facilities and regular sports activities, maintenance of playground is ensured under construction department trust.

### **Health Centre:**

The health center of the college is governed by the Medical officer. The Doctor is supported by a nurse. The health center has two beds and has enough space to cater the needs of the patients and it is utilized by students, staff and by the village dwellers around college campus.

### **Campus Security:**

CCTV cameras are installed in the campus to prohibit malpractices and security guards are also appointed on campus and these services are maintained by the Estate Office. The Security of the college is headed by the Security Officer. Security Officer assigns the duty to the security guards to control and monitor the entire college premises. The Security Officer takes care of the cleanliness inside the college with the support of Housekeepers and sanitary workers.

### **Internet Facility:**

Institute is provided internet facility through Wi-Fi by using access points. Internet connection is provided to students after registration of mobile and laptop MAC address.