

LESSON DISTRIBUTION AT SENIOR SCHOOL

The number of lessons in each of the compulsory learning areas shall be 4; while the optional areas shall be 6 lessons each. A lesson shall be 40 minutes. The "free" lessons shall be used for development of ICT skills, Pastoral Instruction Programme (PPI), projects, collaborative study and further reading.

ESSENCE STATEMENT

Electricity is an essential form of energy in the modern world. People use electricity for lighting, heating, air conditioning, refrigeration and for powering appliances like computers, electronics, and transportation systems. The continuing connectivity of electricity across Kenya and beyond requires sustained technical labour supply. This justifies the need to offer Electrical Technology as a subject in Senior Secondary Schools to help orient learners towards the development of a skilled workforce in electrical technology.

Electrical technology forms part of the STEM education and training discipline. STEM has been prioritised in the Kenya Vision 2030 as well as Sessional Paper No. 1 of 2019 as being pivotal in the development of Science, Technology and Innovation for human capital development. Electrical technology as a subject at Senior Secondary School builds on the competencies developed in Pre-Technical studies and Integrated Science at Junior School. It equips the learner with competencies of analysis, installation and maintenance of electrical and electronic equipment.

It is envisaged that this subject will provide an opportunity to gain knowledge, practical skills, attitudes and values that will enable the learner to use electricity and electrical appliances competently. It will also prepare the learner to either pursue further training in middle level colleges and universities in such courses as electrical engineering, mechatronics, telecommunication, communication electronics, industrial electronics, power engineering or join the world of work as an electrical wireman or fitter.

SUBJECT GENERAL LEARNING OUTCOMES

By the end of Senior School, the learner should be able to:

1. Observe personal safety, safety of tools, equipment and machines in the practice of electrical engineering works.
2. Analyse, design, and construct electric circuits.
3. Troubleshoot and fix faults in electrical and electronic systems.
4. Apply appropriate communication skills across varied settings and audiences in interpretation of Electrical Engineering works.
5. Practise good citizenship in waste management and ethical use of electronic and electrical technology.
6. Adhere to the established standards and regulations in Electrical Technology to uphold professional and ethical practices.
7. Utilise acquired skills, knowledge and attitude for career growth and further education and training in electrical engineering.
8. Appreciate electrical technology in the socio-economic development of the country.