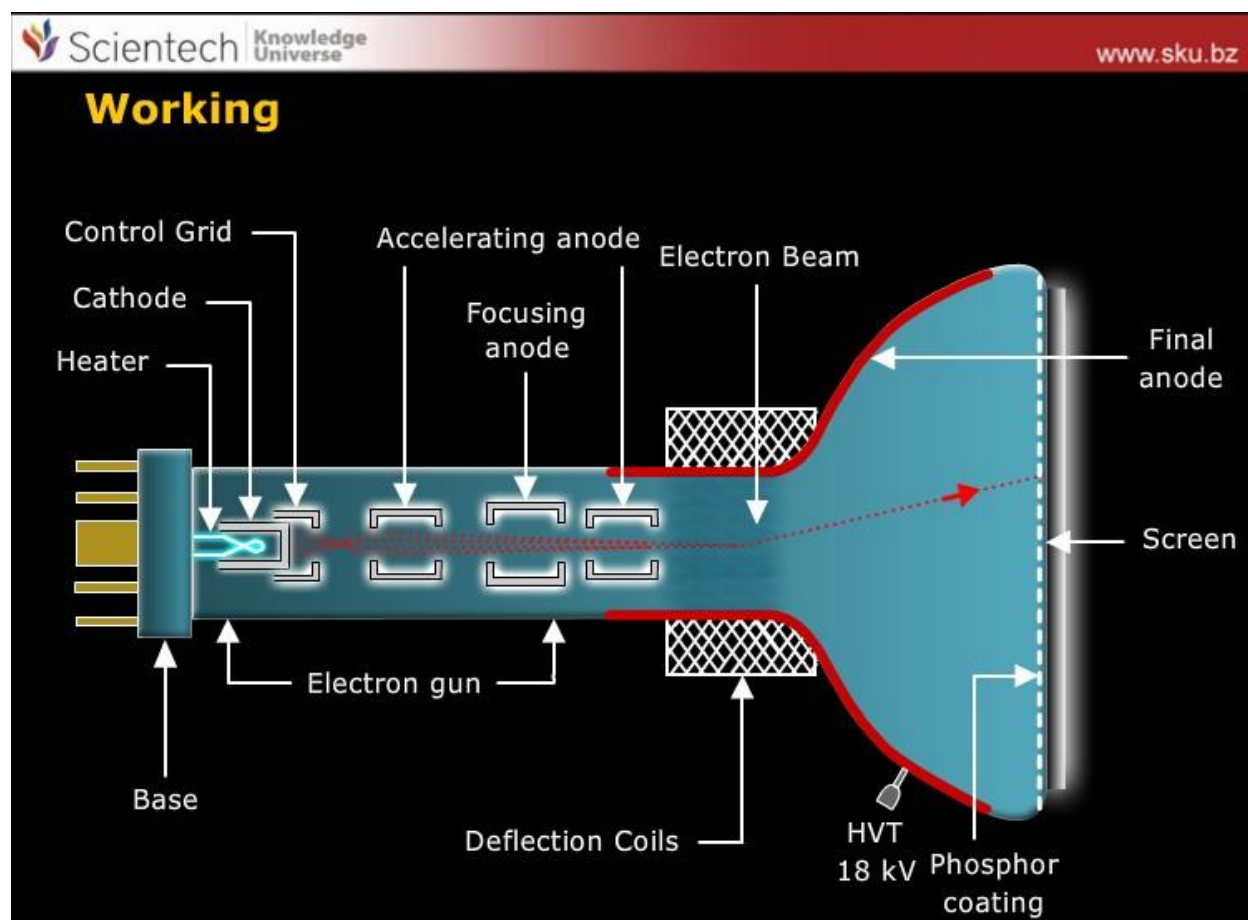


SKU-Television and Radar Engineering

Television (TV) and Radar Engineering is a subject which has been designed to meet the requirements of Modern Technology on 'Television Engineering' for Electrical and Electronics Engineering students at the Degree level. It will also meet the needs of a comprehensive course on TV and Radar Engineering in Polytechnics and Technical Schools. In addition to this Course, it also helps the students who are engaged in self study will get the benefits very much from the Contents and Simulation Process.

The matter has been so presented that any Engineering student with a basic knowledge of the various electronic building blocks and fundamentals of communication systems will have no difficulty in understanding the subjects.



Topics covered in SKU-Television and Radar Engineering:

Elements of a Television System

Topics covered: Television Transmitter and its Working, Television Receiver and its Working, Scanning, Different ways of Scanning, Number of Scanning Lines, Flicker, Interlaced Scanning, Scanning periods (Horizontal and Vertical) and Scanning Sequence.

Composite Video signal

Topics covered: Composite Video signal, Video Signal Dimension, Pedestal height, Horizontal SYNC Details, Vertical SYNC Details, Synchronization Banking and Equalizing Pulses.

Signal Transmission and Channel Bandwidth

Topics covered: Modulation, Need of Modulation, Types of Modulation preferred in TV, Channel bandwidth, Vestigial Sideband (VSB) Transmission, VSB Advantages and disadvantages, Inter carrier sound system.

The Picture Tube and TV camera Tube

Topics covered: The Picture tube, Types of Picture Tubes, Construction details of Picture Tube, Working and characteristics. Image Orthicon, Vidicon Camera Tube, Plumbicon Picture Tube.

Television Signal Propagation and Antennas

Topics covered: Radio Wave Propagation, Interference Suffered By Carrier Signal, Antenna Requirement, TV Transmitter Antenna, TV Receiver Antenna, Colour TV Antenna.

Colour Signal and its Transmission and Reception

Topics covered: Essentials of Colour Television, Frequency Interleaving, NTSC Color System Transmitter, NTSC Color System Receiver, Pal Colour Television System, Pal-D Colour System, Pal-D Colour Receiver, SECAM Color System Transmitter, SECAM Color System Receiver.

Television Applications

Topics covered: Requirement of TV Broadcast system, TV Broadcast Channel Allocation, Closed Circuit Television System (CCTV), High Definition Television (HDTV), Plasma Display, and Liquid Crystal Display (LCD).

Radar Engineering

Topics covered: Radar Basics, Pulse Radar, Continuous Wave Radar, FMCW Radar, MTI Radar, Delay Line Canceller, Synthetic Aperture Radar (SAR), Airport Surveillance Radar, and Instrument Landing System.

Print shots of SKU-Satellite Communication:

