VIDEO ONLINE RESOURCES

MODULE 1

UNIT 1
MAKING STEEL FROM IRON ORE
https://www.youtube.com/watch?v=pmKwSokiVGo&list=PLD2578763DBA61C3D&index=7

INDUSTRIAL REVOLUTION OVERVIEW
https://www.youtube.com/watch?v=d4joqYYcndqM

WORKING AND LIVING CONDITIONS DURING THE INDUSTRIAL REVOLUTION
https://www.youtube.com/watch?v=zm6v3o0jaZ0

UNIT 2

HOW NUCLEAR POWER PLANTS WORK
https://www.youtube.com/watch?v=_UwexvaCMWA

SOLAR ENERGY AND PHOTOVOLTAIC EFFECT
https://www.youtube.com/watch?v=1gta2ICarDw

WIND POWER
https://www.youtube.com/watch?v=SQpbTTGe_gk

MODULE 2

UNIT 1

PROPERTIES OF MATERIALS
https://www.youtube.com/watch?v=4qMNxpUsc1g

UNIT 2

STEEL: FROM START TO FINISH
https://www.youtube.com/watch?v=_UwexvaCMWA

HEAT TREATMENTS ON STEEL
https://www.youtube.com/watch?v=98Ih5QOMOcg

UNIT 3

POLYMERS
https://www.youtube.com/watch?v=o3dT1DX3Tsc

COMPOSITE MATERIALS
https://www.youtube.com/watch?v=201C6gpu8QU
MODULE 3

UNIT 1
STEEL FORGING
https://www.youtube.com/watch?v=mRA6RY2o9Lg

MOLDING AND CASTING TUTORIAL: RESIN CASTING TIPS
https://www.youtube.com/watch?v=l7n-uMmJevM

UNIT 2
MACHINE TOOL BASICS – CUTTING TOOLS
https://www.youtube.com/watch?v=J63dZsw7Ia4

THE FUTURE OF MACHINE TOOLS
https://www.youtube.com/watch?v=P9akTfuZoSc

UNIT 3
ELECTRON BEAM MACHINING
https://www.youtube.com/watch?v=jbY-tOcI2tM

HOW A LASER WORKS
https://www.youtube.com/watch?v=2YrKdq8TyFk

MODULE 4

UNIT 1
HOW TO WELD
https://www.youtube.com/watch?v=IE0q14WgXcA

BRAZING AND SOLDERING
https://www.youtube.com/watch?v=3UBd1HIXegM

ADVANTAGES OF ADHESIVE BONDING
https://www.youtube.com/watch?v=AD7pi_BqZvE

UNIT 2
SAFETY VIDEOS – 10 COMMANDMENTS OF WORKPLACE SAFETY
https://www.youtube.com/watch?v=3C6js5JtCIQ

FIRE SAFETY IN THE WORKPLACE
https://www.youtube.com/watch?v=91O1JkX8uYo

MODULE 5

UNIT 1
HOW TO DRAW A ROOM WITH ONE POINT PERSPECTIVE
https://www.youtube.com/watch?v=yEymlyLbiAI
INTRODUCTION TO ENGINEERING DRAWING
https://www.youtube.com/watch?v=z4xZmBpXlzQ

UNIT 2

COMPUTER BASICS – PARTS OF A COMPUTER
https://www.youtube.com/watch?v=kMRDmkFsUZs

COMPUTER BASICS – THE OPERATING SYSTEM
https://www.youtube.com/watch?v=76J0dNZ0MZc

COMPUTER AND INTERNET BASICS
https://www.youtube.com/watch?v=nMjc50yNwsw

UNIT 3

SOLID WORKS 3D CAD
https://www.youtube.com/watch?v=vl3WJ1JebQE

BUILDING A SIMPLE CAR WITH SURFACES IN SOLID WORKS
https://www.youtube.com/watch?v=45yF6J3fpQl

MODULE 6

UNIT 1

TINY SENSORS MONITOR HONEY BEE BEHAVIOUR
https://www.youtube.com/watch?v=xdk9Bh8W4js

MECHATRONICS
https://www.youtube.com/watch?v=7h2PIDXlo4Y

LIVING TOMORROW: HOUSE OF THE FUTURE
https://www.youtube.com/watch?v=9DJr8QwgLEA

UNIT 2

WORLD’S 10 MOST AMAZING ROBOTS
https://www.youtube.com/watch?v=hYo2EPYXGhU

ROBOT REVOLUTION, WILL MACHINES SURPASS HUMANS?
https://www.youtube.com/watch?v=DKiXM7bUpyk&index=34&list=PL85F8464A742759D1

ROBOTS OF THE FUTURE (FUTURE OF ROBOTICS)
https://www.youtube.com/watch?v=U_pCz0Fyvxk

MODULE 7

UNIT 1

THE FOUR-STROKE ENGINE
http://www.youtube.com/watch?v=0Gj80neMjek
HOW DIESEL ENGINES WORK
http://www.youtube.com/watch?v=s2WGFELXPNg

UNIT 2

HOW A TURBO WORKS
http://www.youtube.com/watch?v=vGhlgpbrBxA

ELECTRONIC FUEL INJECTION SYSTEM WORKING
http://www.youtube.com/watch?v=xG1w3l41lmQ

HOW DOES AN ELECTRIC MOTOR WORK?
http://www.youtube.com/watch?v=1W1sbFALXEA