

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=d4joqYycnqM>

WORKING AND LIVING CONDITIONS DURING THE INDUSTRIAL REVOLUTION

<https://www.youtube.com/watch?v=zm6v3oOjaZ0>

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=1gta2lCarDw>

WIND POWER

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

MODULE 2

UNIT 1

PROPERTIES OF MATERIALS

<https://www.youtube.com/watch?v=4qMNxpUscIg>

UNIT 2

STEEL: FROM START TO FINISH

https://www.youtube.com/watch?v=_UwexvaCMWA

HEAT TREATMENTS ON STEEL

<https://www.youtube.com/watch?v=98lh5Q0M0cg>

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=J63dZsw7la4>

THE FUTURE OF MACHINE TOOLS

<https://www.youtube.com/watch?v=P9akTfuZoSc>

UNIT 3

ELECTRON BEAM MACHINING

<https://www.youtube.com/watch?v=jbY-tOcl2tM>

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=76J0dNZOMZc>

COMPUTER AND INTERNET BASICS

<https://www.youtube.com/watch?v=nMjc5OyNvws>

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=45yF6J3fpQI>

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=DKiXM7bUypk&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=OGj8OneMjek>

HOW DIESEL ENGINES WORK

<http://www.youtube.com/watch?v=s2WGFELXPNg>

UNIT 2

HOW A TURBO WORKS

<http://www.youtube.com/watch?v=vGhlgphrBxA>

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>