



COMPLESSO SCOLASTICO INTERNAZIONALE

GIOVANNI PAOLO II

Programma Annuale

PROGRAMMAZIONE DIDATTICA

ISTITUTO: Istituto Tecnico Informatico e delle Telecomunicazioni

CLASSE: 3^a A

MATERIA: Lingua Inglese

DOCENTE: Prof.ssa Romina Capriati

Modulo n° 1	Contenuti Cognitivi
<p><u>ELECTRICITY AND ELECTRONICS</u></p> <p>ELECTRICAL ENERGY</p>	<p><i>UNIT 1:</i> <i>Electricity and Current</i></p> <ul style="list-style-type: none">• Electricity and current• Conductors and insulators• Battery and voltage• Types of battery• How to take care of rechargeable batteries• The fuel cell• Superconductors and semiconductors <p>Safety: Ground Yourself -ESD risks Culture: How the battery was invented</p>

Modulo n° 2	Contenuti Cognitivi
<p>ELECTRIC CIRCUITS</p>	<p><i>UNIT 2:</i> <i>A simple circuit</i></p> <ul style="list-style-type: none">• Series and Parallel• Current voltage and resistance• Tools• Measuring tools• New ways of lighting

Safety: Working with electricity
Culture: How electrifying Edison changed the world
Culture: Units and scientists

Modulo n° 3	Contenuti Cognitivi
ELECTROMAGNETISM AND MOTORS	<p>UNIT 3: Electricity and Magnetism</p> <ul style="list-style-type: none">• The electric motor• Types of electric motor• Application of electromagnetism• Programming languages most in demand• Electric cars• Supercars• Maglev: the transport of the future <p>Culture: A short history of electric transport Culture: Famous British cars Safety: Electric motor maintenance</p>

Modulo n° 4	Contenuti Cognitivi
GENERATING ELECTRICITY	<p><i>UNIT 4: Methods of producing electricity</i></p> <ul style="list-style-type: none">• The generator• Fossil fuel power station• Nuclear power station• Renewable energy 1: water and wind• Renewable energy 2: sun and earth• Innovative energy• Energy saving at home <p>Citizenship: Facing climate change Culture: Fracking and its dangers Safety: Controlling a nuclear reactor</p>

Modulo n° 5	Contenuti Cognitivi
<p>DISTRIBUTING ELECTRICITY</p>	<p><i>UNIT 5:</i> <i>The power distribution grid</i></p> <ul style="list-style-type: none"> • The domestic circuit • Managing the grid • The transformer • The smart grid • Solar smart installation • Storing energy on the grid <p>Culture: The 2021 Texas power outage Safety: Emergency action</p>