

INDUSTRIAL TECHNOLOGY (MATERIALS AND TECHNOLOGY SPECIALISATIONS 1)

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| STATUS: | ELECTIVE SUBJECT | |
| COURSE OVERVIEW: | This subject provides students with a range of learning experiences focusing on devising, refining, producing and evaluating products used in the home environment. Students are exposed to an extensive array of problem solving strategies and become practiced in applying a structured approach to take a given problem from initial identification to a final solution and evaluate its success. | |
| COURSE OUTLINE: | <p>This course aims to:</p> <ul style="list-style-type: none"> • equip students with problem solving skills to foster enquiring minds • enhance student knowledge and use of modern technology • promote written and graphical communication • promote awareness of safety issues and • promote awareness of environmental issues. <p>Students will follow the design process to complete a range of practical projects during the course using traditional and modern methods and materials.</p> <p>Unit 1 – Electronics Trade - LED Lamp (Timber structure and Electronics) Unit 2 – Construction and Metal Trades – Timber and metal projects Unit 3 – Plastics Industry – 3D and Orthographics Unit 4 – Cabinetry Trades – Carcass construction with hardware</p> <p>Technologies used include injection molding, vacuum forming, digital printing, laser cutting, electronics, robotics, traditional hand and power tools and methods.</p> | |
| COURSE ASSESSMENT: | <p>Students will be assessed through a variety of assessment tasks. These include:</p> <ul style="list-style-type: none"> • design folios • observation of practical skills • completion of major design projects. | |
| STUDY REQUIREMENTS: | <p>Approximately 40min per week</p> <ul style="list-style-type: none"> • Key assessment task work and finalisation of practical tasks. | |
| SPECIAL REQUIREMENTS: | <p>Whilst in the workshops, safety glasses, protective aprons and enclosed leather shoes must be worn at all times. Furthermore, all long hair must be tied back or enclosed in hair nets.</p> | |
| POSSIBLE CAREER PATHWAYS: | Furniture Design Interior Design Engineer Industrial Design Pattern Maker Product Design | Carpenter Builder Plumber Cabinet Maker Electrician Brick Layer |
| PARENT/CARER SUPPORT: | <p>Monitor completion of key assessment tasks.</p> | |