

# DESIGN, SURVEYING AND PLANNING FOR CONSTRUCTION

## PATHWAY: SURVEYING AND DESIGN FOR CONSTRUCTION AND THE BUILT ENVIRONMENT

### **CORE CONTENT**

All students will develop a general understanding of construction, including:

- · health and safety
- the science behind building design, surveying and planning
- making accurate and appropriate measurements
- · construction methods
- building regulations and standards
- data management and information standards in construction
- relationship management and customer service

- how the Internet of Things (IoT) impacts construction
- · digital engineering techniques
- mathematical techniques to solve construction problems
- construction design principles and processes
- the construction industry and its role in the economy
- sustainability and the environmental impact of construction
- business, commerce and corporate social responsibility

### **CORE CONTENT**

They will also learn about topics specific to design, surveying and planning, including:

- · project management
- budgeting and resource allocation
- · procurement
- · risk management



## EDUCATION AND CHILDCARE

## PATHWAY: ASSISTING TEACHING; EARLY YEARS' EDUCATOR

### CORE CONTENT All students will develop an understanding of:

- understanding the education and childcare sector from ages 0 to 19
- · child development
- how to support children and young people's education
- safeguarding, health and safety and wellbeing
- understanding and managing behaviour
- observing and assessing children and young people

- · equality and diversity
- special educational needs and disability
- · English as an additional language
- working with parents, carers and wider families
- working with agencies and services that support children, families and carers
- reflective practice and other forms of professional development

- In addition to the core content, each student must choose one of the following specialisms:
- · early years educator
- · assisting teaching
- supporting and mentoring students in educational settings



## HEALTH

### PATHWAY: SUPPORTING THERAPY TEAMS

#### **CORE CONTENT**

### All students will develop a general understanding of health and science:

- working within the health and science sector
- health, safety and environmental regulations
- managing information and data
- principles of good scientific and clinical practice
- core science concepts including the structure of cells, tissues and large molecules, genetics, microbiology and immunology
- They will also learn about topics specific to health, including:
- understanding the healthcare sector
- providing person-centred care
- supporting health and wellbeing
- further knowledge of both human anatomy and physiology and of diseases and disorders
- · infection prevention and control

- In addition to the core content, each student must choose one of the following specialisms:
- supporting the adult nursing team
- · supporting the midwifery team
- · supporting the mental health team
- supporting the care of children and young people
- · supporting the therapy teams



### CRAFT AND DESIGN

## PATHWAY: TEXTILES AND FASHION MAKER

### **CORE CONTENT**

All students will develop an understanding of a broad range of issues relevant to the sector, including:

- · the creative economy
- the individual in the creative industries
- $\boldsymbol{\cdot}\,$  cultural context and vocabulary
- · audience and consumer needs
- · legal and regulatory requirements
- professional standards and conduct in the workplace
- equality, diversity and inclusion requirements
- · research skills
- project methodology and administration
- · continued professional development

- In addition to the core content, each student will also complete at least one module of occupation - specific content.
- The specialisms available in the Craft and Design T Level are:
- · jewellery maker
- · ceramics maker
- furniture maker
- · textiles and fashion maker



## MAINTENANCE, INSTALLATION AND REPAIR FOR ENGINEERING

### PATHWAY:

LIGHT AND ELECTRICAL VEHICLES

### **CORE CONTENT**

Students will develop an understanding of a broad range of issues relevant to the sector, including:

- working within the Engineering and Manufacturing Sectors an understanding of how materials, conditions and context influence design processes and products
- essential mathematics for engineering and manufacturing a knowledge and understanding of mathematics including standard matrices and determinants and standard trigonometry
- Materials And Their Properties Understanding Material Processing Techniques And Their Effects On Materials And Material Quality, The Condition Of Materials, How These Are Managed, And Materials Testing Methods And Techniques
- business, commercial and financial awareness basic commercial principles including commercial priorities and markets, customers/clients/partners and resource allocation

- In addition to the core content, each student will also complete at least one module of occupation-specific content.
- The specialisms available in the T Level in Maintenance, installation and repair for engineering and manufacturing are:
- · maintenance engineering technologies: mechanical
- · maintenance engineering technologies: mechatronic
- · maintenance engineering technologies: electrical & electronic
- · maintenance engineering technologies: control & instrumentation



## DIGITAL, PRODUCTION, DESIGN AND DEVELOPMENT

## PATHWAY: DESIGN AND DEVELOPMENT

### CORE CONTENT Students will develop an understanding of:

- how digital technologies impact business
- the ethical and moral implications of digital technology
- using data in software design
- using digital technologies to analyse and solve problems
- digital environments, including physical, virtual and cloud environments
- emerging technical trends, such as Internet of Things (IoT), Artificial Intelligence (AI), Augmented Reality (AR), Blockchain, 3D printing
- legal and regulatory obligations relating to digital technologies
- the privacy and confidentiality of personal data
- the technical, physical and human aspects of internet security
- · planning digital projects
- testing software, hardware and data
- digital tools for project management and collaboration

- analysing a problem to define requirements and acceptance criteria aligned to user needs
- · designing, implementing, and testing software
- · changing, maintaining and supporting software
- · creating solutions in a social and collaborative environment
- · discovering, evaluating, and applying reliable sources of knowledge
- applying ethical principles and managing risks in line with legal and regulatory requirements when developing software





## T- LEVEL OFFER | APPLY NOW

TAMESIDE COLLEGE AND CLARENDON SIXTH FORM COLLEGE IS OFFERING THE FOLLOWING T-LEVEL QUALIFICATIONS FROM SEPTEMBER 2023

### DESIGN, SURVEYING, AND PLANNING FOR CONSTRUCTION

Pathway – Surveying and design for construction and the built environment

### MAINTENANCE, INSTALLATION AND REPAIR FOR ENGINEERING T LEVEL

Pathway - Light and electrical vehicles

### DIGITAL, PRODUCTION, DESIGN AND DEVELOPMENT

Pathway - Design and development

### **HEALTH**

Pathway - Supporting the therapy teams

### **EDUCATION AND CHILDCARE PATHWAYS**

Pathway - Assisting teaching & Early years' educator

### **CRAFT AND DESIGN**

Pathway – Textiles and fashion maker