D&T Journey

"Whatever you do, work at it with your whole heart, as though you were working for the Lord." Colossians 3:23

Succeeding Together

Careers

Many creative, technical, scientific, engineering and manufacturing careers are open to people with creative qualifications.

University

Universities offer a range of creative courses to go into, that can lead onto great careers in industry in a range of fields.

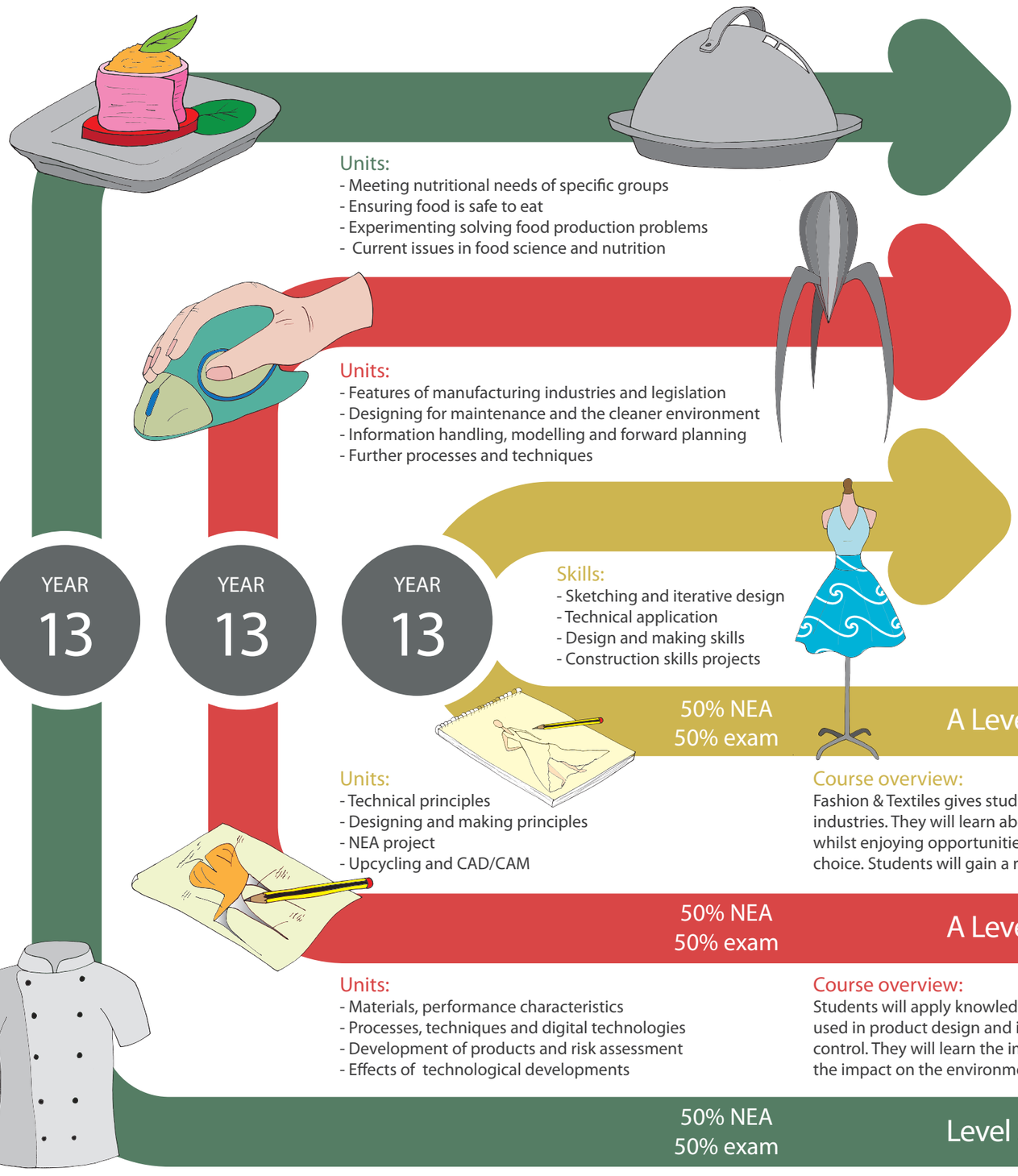
College

Colleges are a great option to bridge the gap with university or to expand on creative skills. Foundation courses can also support routes.

Apprenticeships

The creative industry offers many options for apprenticeships in a range of diffferent fields and industry areas.

- Dieticians
- Nutritionists
- Sports Coaches
- Public Health Roles
- Product Development
- Architecture
- Industrial or product design
- Engineering
- Graphic design
- Exhibition design
- Automotive design
- Furniture design
- Interior and spatial design
- Fashion design
- Costume design
- Protective clothing design
- Technical textiles design
- Fibre technology
- Styling and trend forecasting
- Merchandiser
- Retail and advertising



YEAR 13

Units:
- Meeting nutritional needs of specific groups
- Ensuring food is safe to eat
- Experimenting solving food production problems
- Current issues in food science and nutrition

Units:
- Features of manufacturing industries and legislation
- Designing for maintenance and the cleaner environment
- Information handling, modelling and forward planning
- Further processes and techniques

Skills:
- Sketching and iterative design
- Technical application
- Design and making skills
- Construction skills projects

50% NEA
50% exam

A Level: Fashion & Textiles

Units:
- Technical principles
- Designing and making principles
- NEA project
- Upcycling and CAD/CAM

Course overview:
Fashion & Textiles gives students practical skills, knowledge, especially those in the creative industries. They will learn about historical, social, cultural, environmental and economic influences, whilst enjoying opportunities to put their learning in to practice by producing prototypes of their choice. Students will gain a real understanding of what it means to be a designer.

YEAR 12

50% NEA
50% exam

A Level: Product Design

Units:
- Materials, performance characteristics
- Processes, techniques and digital technologies
- Development of products and risk assessment
- Effects of technological developments

Course overview:
Students will apply knowledge and understanding of a wide range of materials and processes used in product design and industrial/commercial practices, including ICT skills and systems and control. They will learn the important contribution key historical movements have on design and the impact on the environment/society, applying Mathematical and scientific principles.

50% NEA
50% exam

Level 3 Diploma: Food Science & Nutrition

Skills
- Independent learning and problem solving
- Project based work, applying mathematics and ICT skills
- Developing a range of transferable skills
- Ensuring own dietary health and well-being

Course overview:
Food science and nutrition is relevant to many industries. Care providers, fitness instructors and sports coaches use this knowledge. Hotels and restaurants, manufacturers and government agencies use this understanding to develop menus, food products and policies that that support healthy eating initiatives.

YEAR 12

YEAR 11

50% NEA
50% exam

GCSE: Design & Technology

NEA:
- Understand and apply iterative design processes
- Design and make prototypes, using modelling to develop ideas
- Solve real world problems, considering others wants, needs and values
- Apply knowledge from other disciplines; Art, Maths, Humanities and Science

Theory:
- Understand materials and manufacturing processes used in manufacture
- Develop an awareness of practices from industry
- Develop an understanding of impact of design on daily life/the wider world
- Understand that high quality design is important to culture, the world and people

50% NEA
50% exam

GCSE: Food Preparation & Nutrition

NEA:
- Apply skills to plan, prepare, cook and present a range of dishes
- Design and make meals for a particular brief
- Analyse and evaluate menus based on ingredients
- Suggest ingredients based on functional/working characteristics

Theory:
- Develop knowledge of food science, food safety and application
- Develop knowledge of food choice and food provenance
- Know about food nutrition and links to health
- Know characteristics, functional and chemical properties of ingredients

YEAR 10

YEAR 9

Food 3	Systems & Control 3	Multi-materials 3	Textiles 3	CAD/CAM 3
Planning & Making	Planning & Making	Planning & Making	Designing & Making	Designing & Making
Researching diets	Programming	Plastic forming	Commerical design	Traditional model making
Function of foods	Quality control in systems	Batch production techniques	Patterns and construction	Presentation of ideas
Food miles	Everyday electronics	Industrial manufacture	Properties of knitted fabrics	Working as a design team
Food analysis	Fault-finding	Risk assessment	Understanding user's needs	Producing design proposals

YEAR 8

CAD/CAM 2	Textiles 2	Multi-materials 2	Systems & Control 2	Food 2
Designing & Making	Making & Evaluating	Designing & Making	Making & Evaluating	Planning & Making
Construction using CAD	Woven fabrics	Design movements	Types of mechanism	Balanced diet
Accuracy in CAD	Overlockers	Cutting and finishing	Gears and gear trains	Food groups
Developing CAD designs	Embroidery	Properties of materials	Adjusting speed	Seasonality
Using CAD tools	Applique	Acrylic processes	Building mechanisms	Food provenance

YEAR 7

Transition	Food 1	Systems & Control 1	Multi-materials 1	Textiles 1	CAD/CAM 1
Designing & Making	Planning & Making	Making & Evaluating	Planning & Making	Designing & Making	Designing & Evaluating
Communicating ideas	Food choice	Electronic components	Properties of timber	Properties of fabrics	Purpose of CAD/CAM
Sketching with creativity	Nutritional properties	Symbols vs physical	Wood groups	Printing techniques	Quality control issues
Problem solving	Functional properties	Resistors	Joining wood	Using a sewing machine	New technologies
Structures & construction	Healthy eating	Soldering	Woodwork tools	Using an iron	Laser cutting