

# Welcome to the Design and Technology Department

Design &  
Technology

Edexcel  
GCSE Design &  
Technology

OR

Technical Award in  
Engineering  
Level 2 Vcert

KS4 Options



Food Technology

GCSE Food  
Preparation &  
Nutrition

OR

WJEC Hospitality &  
Catering level 1/2



# Design and Technology Department

**Design &  
Technology**

**The  
Team**

**Food  
Technology**

**Miss Smith  
Mr Neilson  
&  
Mr Rothwell  
(Technician)**



**Ms Crane  
Mrs Combey  
&  
Mrs  
Featherstone  
(Technician)**

### Course overview



- ▶ **Project based** working with polymers.
- ▶ Time will be spent in the computer room and Design Studio.
- ▶ Design based course where students must **be independent, creative and interested in making and design.**
- ▶ **50 % Non-exam assessment (NEA)** – internal coursework project where students specialise in designing and making a product.
- ▶ **50 % Written external exam** based on core technical principles (40 marks) and specialist material knowledge (60marks).
- ▶ Leads on to further study courses at college and university or working in industry.
- ▶ It gives students an opportunity to identify and solve problems by designing and making products for the modern world.
- ▶ It prepares students to communicate confidently and successfully giving them a firm foundation for the world of work.
- ▶ All materials are provided for a contribution of £25 per year



#### Year 10

- Skill building projects – working with polymers

Photo opportunity – Marking , cutting and bending  
A passion for chocolate – Melting and moulding.  
The 3<sup>rd</sup> dimension– CAD drawing and 3D printing.

- Mock NEA – Design and make project.
- Theory content delivered through practical skill building projects - with exam question practice.
- Launch NEA

#### Year 11

- Continue with NEA- Term 4 hand in.
- Revision of theory topics - Final GCSE
- Final exam – 1hour 45mins





# NCFE Level 2 Vcert Technical Award Engineering

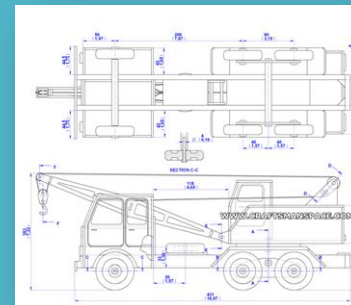
## Course overview

- ▶ You will produce written coursework evidence and practical work using Woods, Metals and Polymers with Hand and Computer Aided Drawing. You will sit an end of Year 11 Final exam.

You will study

- ▶ Engineering disciplines,
- ▶ science and mathematics
- ▶ engineering drawings,
- ▶ engineering materials
- ▶ engineering applications,
- ▶ engineering tools, equipment and machines

- ▶ *This is a subject where students must be independent, have pride in their work and be willing to learn new skills to succeed.*
- ▶ 40 % **Written external exam** on theory information relating to engineering terms and the world of engineering, math, science and technology.
- ▶ 60% **internal teacher assessed coursework** task involving a design brief to produce a product with evidence; CAD and hand-drafted engineering drawings of your product, evidence of materials and of choice of tools and equipment, tools and machinery testing, a production plan, a learning log and an evaluation of the project.
- ▶ This course leads on to further practical study such as college and apprenticeships in the world of engineering and industry.
- ▶ A 'Level 2 Pass' is the equivalent of a GCSE grade 4.



# NCFE Level 2 Vcert Technical Award in Engineering Curriculum overview breakdown



## Year 10 – Term 1

- Course introduction and assessment overview. Workshop H&S
- **Coursework** – Materials, CAD engineering drawing, Materials, Tools and Justification, “Practical Progress Log”, Gantt Charts, Flowcharts. Engineering drawing by hand Drawing conventions, British standard BS8888, Materials and their properties –Timbers, Metal, Polymers and Smart Materials. Analyse and Evaluate knowledge & understanding.
- **Exam prep** - Engineering disciplines, Health & safety – H&S at work act, PPE, RIDDOR manual handling regulations, COSHH.
- **Practical Tasks - Wood Project:** measure, mark, cut shape, process, assemble and finish made products.
- **This year we make a small cabinet to practice use of tools and accuracy, learning how to draw and read technical drawings**



## Term 2

- **Exam prep** – revision on all key topics covered, Practice exam questions and feedback.
- **Coursework** – Flowchart, Production Plan , “Practical Progress Log”, Evaluation
- **Practical – Metal project, we make a simple coat hook, to help learn essential skills and knowledge.** measure, mark, cut shape, process, assemble and finish made product.

## Term 3

- **Exam prep** - Engineering disciplines Health & safety – H&S at work act, PPE manual handling regs, COSHH RIDDOR Drawing conventions
- **Coursework** – Materials & Testing – Engineering drawing Materials, Tools and Justification – “Practical Progress Log”
- **Practical – Plastics Project** measure, mark, cut shape, process, assemble and finish made product.
- **Exam Prep** - Drawing conventions
- Summer revision packs to be handed out and explained
- **Coursework** – Engineering drawing “Practical Progress Log” Production Plan Flow Chart, Evaluation

# NCFE Level 2 Vcert Technical Award Engineering

## Final Year Course breakdown



### Year 11 - Term 1

- **September Unit 2 Practical-** Synoptic Assessment task (set by NCFE)
- 20 official hours allowance
- Exam prep ready for November Mock exams–
- November Mock exams for Unit 1 - understanding the engineering world.
- **Coursework** – Research Task, Materials and Tools  
Equipment selection and justification, CAD and Hand drawn Technical Drawings, Planning, (Gantt or Flow Chart)  
Manufacturing, Project Evaluation

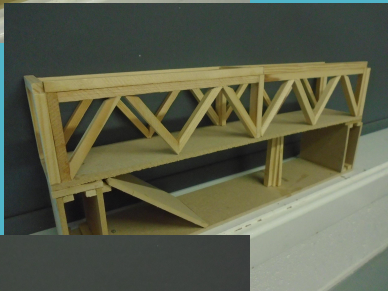




# NCFE Level 2 Vcert Technical Award Engineering Final Year Course breakdown

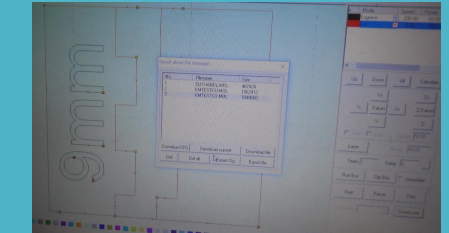
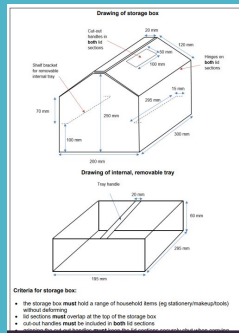
## Year 11 - Term 2

- **Practical** - Continue Synoptic Assessment task set by NCFE (practical log)
- **Coursework** – Evaluation
- Mark Project and submit to the NCFE Moderator.



## Year 11 - Term 3

- **Exam prep** – revision on all key topics covered, Practice exam questions and feedback., **ready for final exam May/June 2024**



**ncfe.**

End of Year 11  
Summer Exam for  
Unit 1

## Progression opportunities

Depending on the grade the learner achieves in this qualification, they could progress to:

- A Level in Design Technology or Physics
- Level 2 Technical Certificate in Engineering
- Level 3 Applied General in Engineering
- Level 3 Technical Level in Engineering
- An apprenticeship sector such as Aerospace Engineer or an Electrical/Electronic Support Engineer or Engineer





Which other subjects fit along side  
**Design & Technology**

Art & Design

Media

Science

Maths

Geography

History

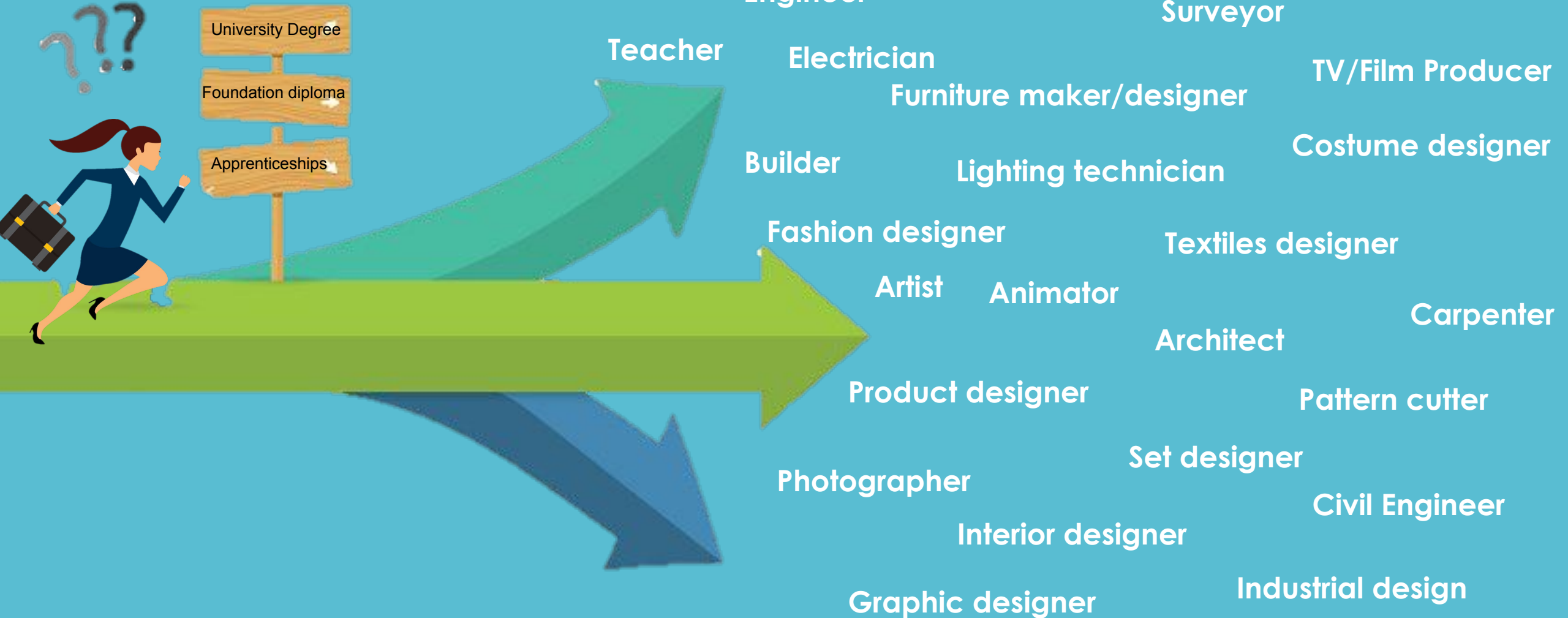
Computer Science

Business studies





# Design and Technology CAREERS



# WJEC level 1/2 Hospitality and Catering

## Course overview

- Practical based subject using **ingredients** in the food room.
- For students who are interested in food preparation in a commercial catering environment
- A subject where students must be **independent**, and **interested in cooking and learning to cook like a chef**.
- **YOU MUST BRING INGREDIENTS FOR EVERY PRACTICAL LESSON**
- 40 % **Written external exam** on theory information taught in Y10 relating to food and catering.
- 60% **internal CA coursework involves researching and analysing a task to recommend two dishes, one** for each of the customers named in the brief. Produce a production plan and prepare and cook the **two** dishes in 3Hrs. Evaluate and review the dishes and review your own performance
- Level 2 pass equivalent to GCSE grade 4



# WJEC level 1/2 Hospitality and Catering Curriculum overview



## Year 10

### Unit 1

**Exam content 40%**

#### Autumn 1&2

- LO3 Understanding how hospitality and catering provision meets health and safety needs
- LO4 Know how food can cause ill health.

#### Spring 1

- LO1 Understanding the environment in which hospitality and catering providers operate
- LO2 Understanding how hospitality and catering provision operates.

#### Spring 2

- LO5 Be able to propose a hospitality and catering provision to meet specific requirements.

## Year 10

### Summer 1&2

- LO1 Understanding the importance of nutrition and planning menus
- LO2 Understanding menu planning
- LO3 Able to cook dishes
- Revision for year 10 mock exam.



# WJEC level 1/2 Hospitality and Catering Curriculum final year breakdown



## Year 11

### Term 1

#### Unit 2 Controlled assessment

#### Coursework 60%

#### Internal assessment brief.

analyse the assignment brief and recommend **two** dishes, **one** for each of the customers named in the brief.

each dish may be either a starter, a main course or a dessert and each dish should include any appropriate accompaniments.

produce a production plan to show how the practical preparation, cooking, and presentation will be completed within the allocated time.

complete the preparation and cooking of the **two** dishes.

evaluate and review the dishes.

review your own performance.

### Mock exam

## Year 11

### Term 2

- Finish Unit 2 and complete 3H practical exam

### Term 3

- Exam preparation
- Past papers
- Revision cards



# GCSE Eduqas Food Preparation and Nutrition

## Course overview

- ▶ Practical based subject gives you the opportunity to develop and enhance **practical skills** and theoretical knowledge in **food science and nutrition**.
- ▶ Learn how to prepare and cook dishes the professional way.
- ▶ You must be **organised, hardworking** and able to **work in a team**.
- ▶ **YOU MUST BRING INGREDIENTS FOR EVERY PRACTICAL LESSON**
- ▶ **50 % Controlled Assessment –**
  - Assessment 1: The Food science Investigation 15%
  - Assessment 2: The Food Preparation Assessment 35% including 3 hour practical exam
- ▶ **50 % Written external exam** on theory of food science and nutrition
- ▶ Leads on to further study courses at college and university so aimed at more academic students (Set 1 & 2 for English)



# GCSE Eduqas Food Preparation and Nutrition

## Curriculum overview breakdown



### Year 10

**50 % Written theory of food science and nutrition**

#### Autumn 1

- Food hygiene and safety
- Food spoilage
- Principles of nutrition
- Diet and good health

#### Autumn 2

- The science of cooking food
- Food provenance and food waste
- Cultures and cuisine

#### Spring 1

- Technological developments
- Factors that affect food choice
- Basic mixtures and food science experiments

### Year 10

#### Spring 2

Food commodities

- Fruit and vegetables
- Cereals
- Dairy

#### Summer 1

Food commodities

- Meat, fish, eggs
- Alternative proteins
- Fats and sugars

#### Summer 2

- NEA practice – practical exam
- Core knowledge
- Revision

# GCSE Eduqas Food Preparation and Nutrition

## Final year curriculum breakdown



### Year 11

#### Autumn 1

##### NEA 1

- Food investigation assessment (8 hours CA)

#### Autumn 2

##### NEA 2

- Food preparation controlled assessment (12 hours CA)
- Mock exam

#### Spring 1

##### Finish NEA2

- Food preparation assessment
- 3 hour practical exam

### Year 11

#### Spring 2

- Revision
- Core Mock 2

#### Summer 1 & 2

- Revision
- Exam





# What practical lessons will you do?



YOU will need to bring ingredients as EVERY practical will be assessed as part of your coursework.

- Cutting skills - carrot
- Minestrone soup and bread
- Cauliflower au gratin
- Pineapple upside down cake
- Chocolate fudge cake
- Quiche
- Christmas cake



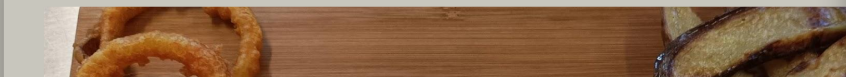
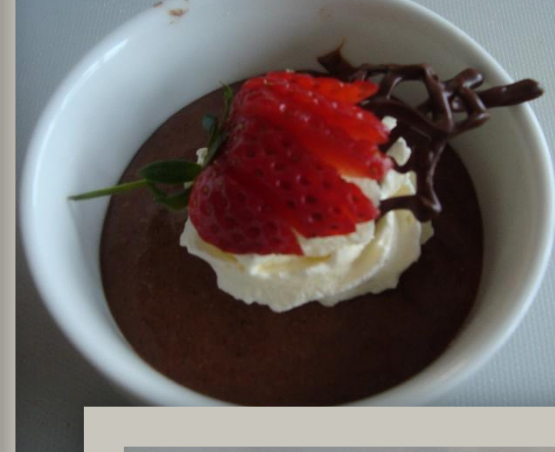
We will provide basic ingredients and ask for £30 per year to cover this cost.

- Chicken casserole (boning a full chicken)
- Fish goujons (filleting a whole fish)
- Cheese and onion pasty (puff pastry)
- Profiteroles
- Lasagne (H/M pasta)
- Bakewell tart
- Decorated chocolate mousse
- Chelsea buns
- Plan and run cake sale





# Gallery of work



# Choose Food Prep or Catering?



Both subjects do the same amount of practical making and the same practical skill building so you **CANNOT** study both  
**YOU MUST BE PREPARED TO BRING INGREDIENTS**

## GCSE Food preparation and nutrition

- ▶ Looks at the food nutrition in detail.
- ▶ Is science based – 50% coursework
- ▶ Requires independence and more academic.
- ▶ Cook at least every other week.
- ▶ More choice in making.
- ▶ Must want to cook and be prepared to bring ingredients
- ▶ 3 hour practical exam
- ▶ 50% external exam

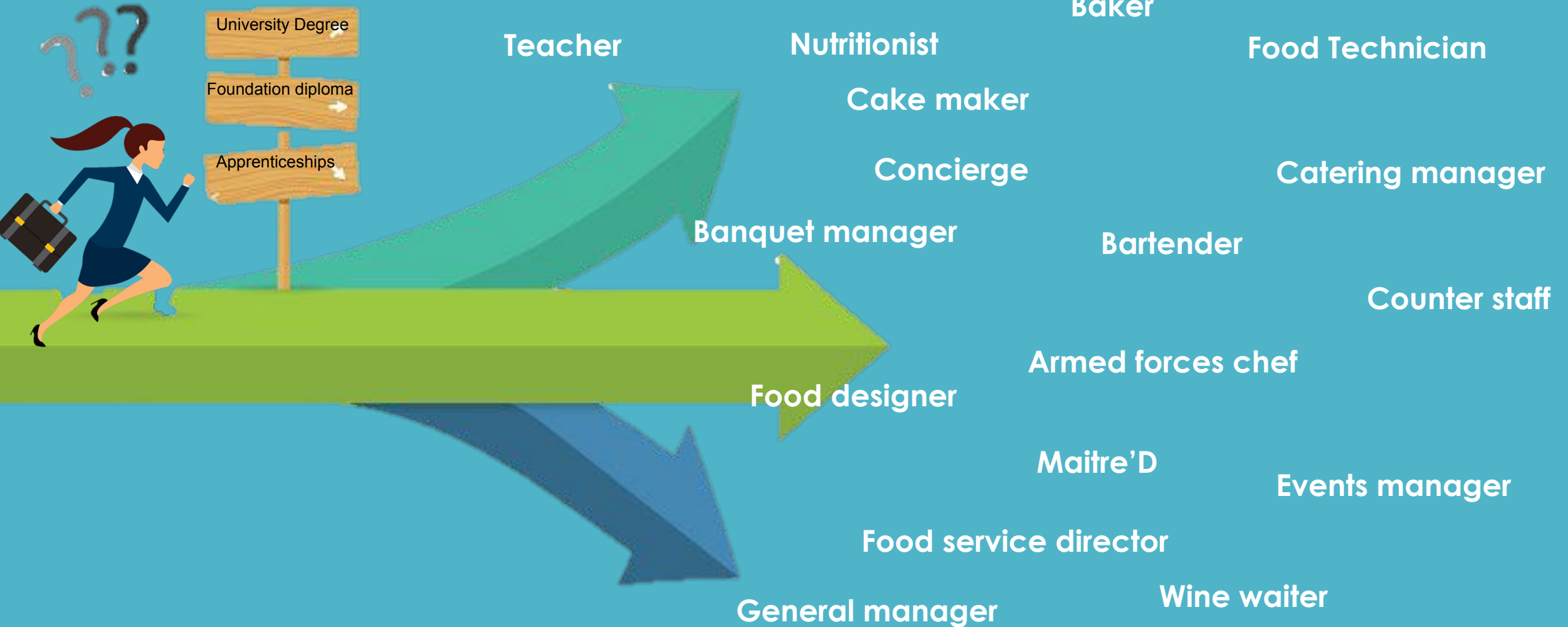
## WJEC hospitality and catering level 1/2

- ▶ Looks at the hospitality industry.
- ▶ Is portfolio practical based -
- ▶ 60% written coursework
- ▶ Taught to cook like a chef.
- ▶ Cook at least every other week.
- ▶ Told what making to learn necessary skills.
- ▶ Must be able to cook and have some skill and be prepared to bring ingredients
- ▶ 3 hour practical exam
- ▶ 40% external exam





# Food & Catering CAREERS





# Questions?

If you have any questions contact the team on

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Further information on course specifications  
can also be found at:

<https://qualifications.pearson.com/>

[www.eduqas.co.uk/qualifications/food-preparation-and-nutrition-gcse/](http://www.eduqas.co.uk/qualifications/food-preparation-and-nutrition-gcse/)

[www.wjec.co.uk/qualifications/hospitality-and-catering-level-1-2/](http://www.wjec.co.uk/qualifications/hospitality-and-catering-level-1-2/)



**Design and Technology  
teachers plant the seeds  
of knowledge that last a  
life time**