

Information about Explorer Programmes

Explorer Programmes are offered by Pearson to give learners who are considering a sector-based course a realistic idea of what the sector will be like to work in. This includes the vast opportunities the sector will present but also the challenges. Explorer Programmes are available in a variety of sectors, including construction.

The Explorer Programmes are suitable for learners who are considering either BTEC or Apprenticeship routes. The purpose is for learners to find out if a career in construction is one that will work for them and to plan for the future. We have also produced a video to support each course, including advice about career progression from the Pearson sector manager for construction.

This course is split into the following four modules:

Module 1: Finding out about yourself

Module 2: Finding out about the sector

Module 3: The construction course

Module 4: Next steps towards your career

Explorers are delivered as an accredited course using a regulated qualification or a single unit to support delivery, which can be certificated. The options are funded for 19+ learners under the local flexibility funding stream of the Adult Education Budget.

Centres can choose to deliver Explorers as:

- **Option 1:** An accredited qualification **or** unit. This means the learner will be certificated by Pearson for the Level 1 Award in WorkSkills, **or** a single sector unit. We have linked Explorers to the Level 1 Award in WorkSkills and in most cases to an individual sector unit, so learners can potentially take more than one Explorer in different sectors.
- **Option 2:** An accredited qualification **and** unit. This means the learner will be certificated by Pearson for the Level 1 Award in WorkSkills **and** a single sector unit. Centres should consider this option carefully as it may result in content duplication and affect funding.

The Construction Explorer leads to achievement of the following full qualification or single additional unit:

- 601/9014/0 Pearson BTEC Level 1 30-GLH Award in Workskills. The qualification specification can be found [here](#), and the units can be found [here](#).
- [M/502/3695 Starting Work in Construction](#) (Level 1 unit from BTEC Award in Construction) (40 glh/4 credits) (unit 9, page 76).

It is vital when delivering accredited courses, that the evidence is full. Centres need to refer to the qualification and/or unit specification. Learners need to follow specification instructions, for example, when 'describing', 'listing' or 'identifying'. The workbook signposts individual unit assessment criteria.

What next?

Learners who have taken this Explorer Programme could potentially complete the following qualifications and apprenticeships in the sector:

Apprenticeship

- Construction Building – specialisms include decorative finishing and industrial painting, wood occupations and trowel occupations
- Construction Civil Engineering – specialisms include construction operations, formwork occupations, specialist concrete occupations, highways maintenance, plant operations, and road building
- Construction Specialist – trades that are available for you to specialise in include access and rigging, applied waterproof membranes, cladding occupations, interior systems, mastic asphalt, roofing occupations, stonemasonry, wall and floor tiling, interior fitting, floor covering, plastering, and thermal insulation
- Building Services Engineering Technology and Project Management
- Construction Technical and Professional – you can specialise in construction contracting operations, construction site supervision, civil engineering for technicians, occupational work supervision, building control, or town planning technical support
- Construction Management

Qualifications, full-time study

- BTEC Level 2 Diploma in Construction Occupations
- BTEC Level 3 Diploma in Construction and the Built Environment
- BTEC Level 4 HNC Diploma in Construction and the Built Environment
- BTEC Level 5 HND Diploma in Construction and the Built Environment



Construction Sector Explorer Programme Workbook

Construction is the foremost industry shaping your world today. It embraces everything you can see and interact with in the built environment: from buildings, roads, bridges, houses, to vital utilities like water supply networks, the list is endless. People employed within construction have the satisfaction of seeing a project they have worked on, such as a new school, being used and making a difference in their community.

Construction sector employees have the opportunity to travel both within the UK and abroad. You can enter the industry at any level and potentially progress to become the director of a construction company!

The construction sector contributes £99,300 million to the UK economy, and has the same importance across the world – last year China built half of the world's tallest skyscrapers, above 200m. Currently 2.8 million people are employed in the sector, so there are a lot of opportunities, both to work for a company or for yourself, if you prefer being your own boss. Many skills are in extremely high demand, which can make salaries very attractive.

Roles within the construction industry are varied and you may not realise the full breadth of the potential careers available. For example, you can start in an entry level role with just a short qualification, such as a labourer, or you can train to use plant and machinery on site. Alternatively, you might decide to learn a skilled trade in a recognised qualification or apprenticeship.

Many specialised trades are needed to complete a construction project, for example:

- **formwork occupations** workers are needed to prepare the moulds and supporting system for a concrete building and to receive the concrete
- **specialist concrete occupations** workers will place the concrete
- **cladding occupations** workers will attach the building covering
- **stonemasons** will chisel the feature stones
- **tradespeople skilled in decorative finishes and industrial painting** will finish the walls.

You do not necessarily have to go to university to progress to the higher level jobs such as professional engineer or project manager. Vocational qualifications for technicians and degree apprenticeships, reached by taking higher national qualifications, allow you to earn while you learn or study part-time. Career pathways in the construction industry are clearly defined with professional progression routes to chartered level in the main disciplines.

Module 1 – Finding out about yourself

The first step in this course is to consider the skills and aptitudes that you have and then match these to what is required in the sector.

It is really important to consider what you are good at when planning your career path. The most successful people are usually well aware of what they are good at and how they can use these strengths. This section also considers weaknesses, but in planning your career it is most important that this matches with what you are comfortable and happy doing.

Icebreaker Activity 1a – Myers-Briggs Personality test

Have you ever taken a personality test? It is informative and also a fun way of finding out about yourself. It is also interesting to compare similarities and differences between people and it will help you to get to know other people in the group. If you have taken it before try again to see if you get the same result.

Task 1: Take the test on this website: <https://www.16personalities.com/free-personality-test>

Task 2: Record the main outcomes of your test in the table below:

Personality type	
Individual traits	
Role	
Strategy	
Strengths	
Weaknesses	
Career paths	

Task 3: Reflection

Discuss the following points as a group:

- Do you agree with the results of this test?
- Compare results to others – what are the similarities and differences?
- How do you think this result is useful?

Activity 1b – Self-assessment (J/508/3479 1.1 ; 1.2)

Notes

The aim of this activity is to help you to understand what you are good at and enjoy. People are more successful in jobs that match the type of person that they are and what they are good at. To help you understand – a strength is something you are good at, and a weakness is something you are not so good at. While a skill is something you have learned (like riding a bike) but a quality is something you are born with, such as being a good listener.

Fill in the table on the next page as honestly and as fully as you can, using bullet points. Don't be modest!

Task 1: Fill in the table on the next page on your own. Aim for five points in each box.

NB if you are claiming unit J/508/3479 the minimum requirement is two points.

Task 2: Review the table with three people who know you well, such as a good friend, a work colleague, your supervisor, family, or a college tutor. Ask the people if they agree and whether they can think of any other points.

Describe your strengths?	What are your weaknesses?
What do you enjoy?	What do you dislike doing?
Describe the skills and qualities that you have?	What skills need developing?

Activity 1c – What is needed in the construction sector?

Task 1: The table below identifies some of the key skills/ values/ competencies for the construction sector. Rate your own skills between 1 (low) and 5 (high) for each.

Personal skills, values and qualities	Score (1=low, 5=high)					Comments
	1	2	3	4	5	
Practically minded with the ability to harness plant, people and resources to achieve an outcome						
Imaginative and creative, able to visualise and sketch spaces.						
Logical and mathematically minded with strong numeracy skills						
Excellent administrator able to plan and manage multiple activities						
Charismatic 'people' person, with well-developed communication skills						
Inventive, able to apply knowledge to solve multifaceted problems						
Bold and strong leader with the vision to forge the future						
Conscientious thinker with an eye for detail						
An energetic and enthusiastic team player						
Flexible and perceptive, enjoys changing challenges and living on the edge						

Task 2i:

Having completed module 1, to what extent do you think that you are suited to working in the construction sector? What do you think you need to develop to be successful and happy in this sector?

Task 2ii: (J/508/3496 1.1; 1.2)

Knowing what you are good at and considering your strengths, skills and qualities are important steps in planning for your future. It might seem odd to think about the jobs and activities you will be carrying out in years to come but a little bit of planning at this stage can make all the difference in the future.

Planning your career doesn't mean making choices that you are stuck with, but it does mean that you are able to recognise the skills and qualities you are developing so that you can move from job to job. This is known as career progression.

Working in pairs, discuss with your class partner why you think career progression might be important and how you will benefit from progressing. Then use the space below to describe the ways in which career progression will be important for you.

Describe **three ways** that career progression is important and describe at least **two benefits** to you of progressing in your career.

Module 2 – Working in the sector

In this module you will find out more about the construction sector and will start to think about what working in the sector will be like.

Try to be open-minded about what the sector is like to work in and the opportunities available to you.

Activity 2a – Pearson construction video

Watch the Pearson construction video, which concentrates on the different options and career routes available in the construction sector. Use the space below to make notes about the qualifications and career opportunities that the sector manager talks about.

Notes

Activity 2b – True/false activity to get you thinking

Task 1: Place a tick by true or false for the questions below. If you aren't sure, then make your best guess, some may not even have an absolute correct answer.

Statement	True	False
Working in construction give you the opportunity to travel both in the UK and abroad		
It is possible when pursuing a career in construction to gain responsibility early		
You can choose to be self-employed within the construction sector or to work for a company		
Working within the construction industry is dirty and dangerous		
Only men have successful careers working within the construction sector		
There is a wide range of career opportunities available in construction including roles for labourers, skilled tradespeople, professional engineers and managers		
Only people who don't do well in their examinations pursue a career in construction		
It is possible to become a chartered professional in the construction industry (for example a civil engineer, structural engineer or manager) without going to university		
Construction is a very simple sector comprised mainly of manual workers		
Construction is a dead-end career and there is no way to become really successful		
Construction is just about building houses		
Construction offers a great deal of job variability, with the potential to work as part of a team on a range of projects		
It is not possible to work in the construction industry and be based in an office		
Construction is just about bricks and concrete, there is no opportunity to get involved with virtual reality, high tech computers or software		
Construction work does not pay as well as a desk job		
Some opportunities in construction mean that you are able to work in the great outdoors, either on site or visiting locations to conduct surveys		
There are many opportunities to learn and gain qualifications to progress your career in construction while working in the industry		
Construction companies build, renovate and maintain some of the most iconic beautiful and meaningful buildings, parks, bridges etc. in the world		
You can enter the construction industry at any level, with ambition and potential you can progress to become the director of a construction company		

Task 2: Compare and discuss the answers that you have with another member of the group. Has this activity made either of you rethink anything? If there are answers you are unsure about, discuss these with your tutor.

Notes

Activity 2c – Would I like/be good at this job?

There are lots of resources available online to help you find out more about the construction sector and specific roles. For further information on the careers and professional opportunities available to you in the construction industry you can check out the following websites:

- general construction career advice – www.goconstruct.org or <https://targetcareers.co.uk/career-sectors/construction-and-property>
- construction news and job opportunities – www.constructionnews.co.uk
- architecture – www.architecture.com (Royal Institute of British Architecture)
- civil engineering – www.ice.org.uk (Institution of Civil Engineers)
- structural engineering – www.istructe.org (Institution of Structural Engineers)
- surveying – www.rics.org (Royal Institution of Chartered Surveyors)
- building services and utilities – www.cibse.org (Chartered Institution of Building Services Engineers)
- UK vital road network maintenance – either www.ciht.org.uk (Chartered Institution of Highways and Transportation) or www.theihe.org (Institute of Highway Engineers)
- project management/contractual operations – www.ciob.org (Chartered Institute of Building).

Activity 2d – The construction industry (M/502/3695 2.1)

Task 1: You will have seen that the sector is a wide one, and among other disciplines, includes structures, housing, bridges, rail, highways, water, ground engineering, surveying, construction management, architecture, building services, health and safety, transportation, civil engineering, renewable energy, ports and offshore structures.

In the space below, describe three different types of organisation in the industry their size and the types of work they undertake. At least one should be a large organisation involved in major construction projects, and at least one should be a small or medium sized organisation.

Organisation and size	Work undertaken
1	1
	2
	3
2	1
	2
	3
3	1
	2
	3

Task 2: Select two career case studies from the construction sector – read as many of the online case studies as you can before you select two. This links should help you:

<https://www.goconstruct.org/learn-about-construction/find-the-role-for-you/roles-in-construction/>

Summarise each of the two roles and, using the tables provided, identify things that you would like and would not like about each.

A. Role 1

Job title	
Main tasks	
What you would like	
What you would dislike	

B. Role 2

Title	
Career path	
What they are doing now	
What you would like	
What you would dislike	

Activity 2e – Where can I find out about jobs? (J/508/3479 2.1)

Finding the right job for you is based on knowing where to look. There will be a number of places where you can find jobs available in the local area. Use the space below to list different sources of local job information.

Activity 2f – Can I do this job?

Find out the following information about jobs in the construction sector. Feel free to include anything else that you find that is of interest.

- Normal working patterns once qualified
- Contract status (zero hours/permanent etc.)
- Pay rates
- Requirements in relation to health and fitness/reasonable adjustments for disability
- Any other requirements, e.g. criminal record/insolvency
- Anything else of interest

Use the following links to help you:

- www.constructionnews.co.uk – Construction News
- www.icerecruit.com – Institution of Civil Engineers live job vacancies
- www.newcivilengineer.com – New Civil Engineer Magazine (online)
- www.newcivilengineercareers.com – New Civil Engineer job vacancies
- www.archdaily.com or www.architectsjournal.co.uk – architectural news
- www.careersinconstruction.com – general job vacancies in construction.

Activity 2g – Available jobs (J/508/3479 2.1

M/502/3695 1.1)

Find three job adverts for roles in the sector in your local area in which you will want to work. Collect printouts of the roles you have looked at and write on each one where you found it, (these should be from different places). For each job, fill in the information in the table below. You must ensure that at least one role is professional and technical in nature, and one role is craft and operative in nature.

	Role 1	Role 2	Role 3
Job title			
Description of job			
Work pattern			
Salary			
Benefits			
Qualifications needed			
Other requirements			

Employer information			
Skills needed			
Qualities needed			

Module 3 – The construction course

In this section you will find out more about the different routes into the industry and it will help you to decide what the best course of action is for you.

There is a range of options, including classroom-based courses and work-based apprenticeships where you learn on the job. You will also take part in explorer activities that will give you an idea about the difference between the BTEC and Apprenticeship routes, and what may be expected on the different courses.

Activity 3a – Finding out about the options

This activity concentrates on you understanding what the options are for entering the construction sector.

Task 1: Watch the section of the Pearson construction video where the Pearson sector manager explains the differences between the qualifications.

Notes

Task 2: Referring to the Construction progression routes on the webpage, identify the career route and level you think would suit you best and explain why in the box below.

- Apprenticeships – Opportunity to earn while you learn
- Technical – College-based learning
- Applied – Full time college-based learning

Notes

Activity 3b – Construction explorer activity M/502/3695 5.1; 6.1; 6.2)

The London Eye



The London Eye is a giant Ferris wheel situated on the South Bank of the River Thames in London.

It is constructed primarily from steel and glass; with a rim formed from a triangulated truss, internal tension cables and specially designed glass capsules to transport passengers. The internal diameter of the wheel itself is 120m, and standing at 135 m high, the London Eye is the tallest Ferris wheel of its kind in Europe.

The London Eye was formally opened on 31 December 1999 by the Prime Minister, as part of the celebration of the new millennium. At that time, it was known as the Millennium Wheel.

For the tasks below you will be observed by your tutor to assess your team working skills.

Task 1: working as part of a group, prepare a scale sketch of the London Eye, clearly identifying the key components of the structure. You should include the rim, A-Frame, tension cables, spindle, hub and bearing, capsules and boarding platform. You can find images of the London Eye at www.londoneye.com.

Task 2: working in the same group, review a map of the South Bank area in London where the wheel is located. Decide how you might transport and raised the 135 m high wheel into position.

Now watch the following videos on the development and construction of the London Eye:

- Building the London Eye extracts from 'The Biggest Wheel' in the World at <https://www.youtube.com/watch?v=gUkLy-7M8f8>
- Raising the London Eye at <https://www.youtube.com/watch?v=gfrCVHd6NQo>

Task 3: Given what you have learned about the London Eye project and potential careers in construction, discuss with your group all of the different construction job roles that played a part in the London Eye's design, construction and erection.

Task 4: Since the completion of the London Eye in 1999, a number of other Ferris wheels have been built across the world. Working in your group, research the; location of these wheels and who constructed them.

Assessor observations to be completed by tutor

How did the individual demonstrate good team working skills?

How successful was the individual in following instructions?

How well did the individual communicate? (Provide examples)

Signed

Date

Module 4 – Next steps towards your career

This section is where you put plans together to enter the construction sector. This includes reflecting on the course so far, and planning your next steps by setting goals to work towards.

Activity 4a – Reflecting on the Explorer Programme

(J/508/3479 1.3; 2.2; 2.3 J/508/3496 2.1; 2.2; 2.3 M/502/3695 3.1, 4.1)

Take an hour to reflect individually on what you have learned about yourself, the sector and potential courses. Write some notes/thoughts in response to the prompts below.

Explain how your own skills, qualities and interests help you in your personal life, and how they can be transferred to support you in work.

Use the information you have gained to choose two suitable career paths within the construction industry and describe the skills and experience that will be needed to succeed in that area.

How do your skills and experience match up to these career paths, note where you have suitable skills and experience already and identify where there is not a match.

Make a list of potential jobs that interest you within your chosen career paths.

Choose one role that you think offers you the best chance of success should you apply for it and match your strengths, skills and qualities against the role, identifying any gaps that you would need to develop before you could apply.

Is it something that practically fits with your life? Explain how your lifestyle might be affected by the career choice that you make. Think about impacts in your health, your working conditions, your hours of work, travelling time and the impact on your family and social life.

What are you looking forward to/worried about?

Activity 4b – Planning next steps (J/508/3479 3.1; 3.2; 3.3 J/508/3496 3.1; 3.2; 3.3)

To plan next steps, you need to set yourself goals based on what you need to develop in order to be successful in the construction sector. In order to do this, you need to set one long-term goal, two medium-term SMART goals and two short-term SMART goals, and include a plan about how you are going to achieve them. Make sure you include career and course options.

SMART goals are:

S = Specific – well defined and clear

M = Measurable – able to monitor/measure ‘the journey’

A = Achievable – goals should be possible, don’t set yourself up to not achieve

R = Realistic – is the objective relevant and appropriate to your overall objective?

T = Time bound – is there enough time available to enable you to achieve the objective?

Long-term goals (in the next 3 years)	
Goals	How I will achieve this
1	

Medium-term goals (in the next year)	
Goals	How I will achieve this
1	
2	

Short-term goals (in the next 2 months)

Goals	How I will achieve this
1	
2	
3	

For more information please contact your Pearson Subject Advisor

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