

# Apprenticeship Degree: Geotechnical Engineer Level 7

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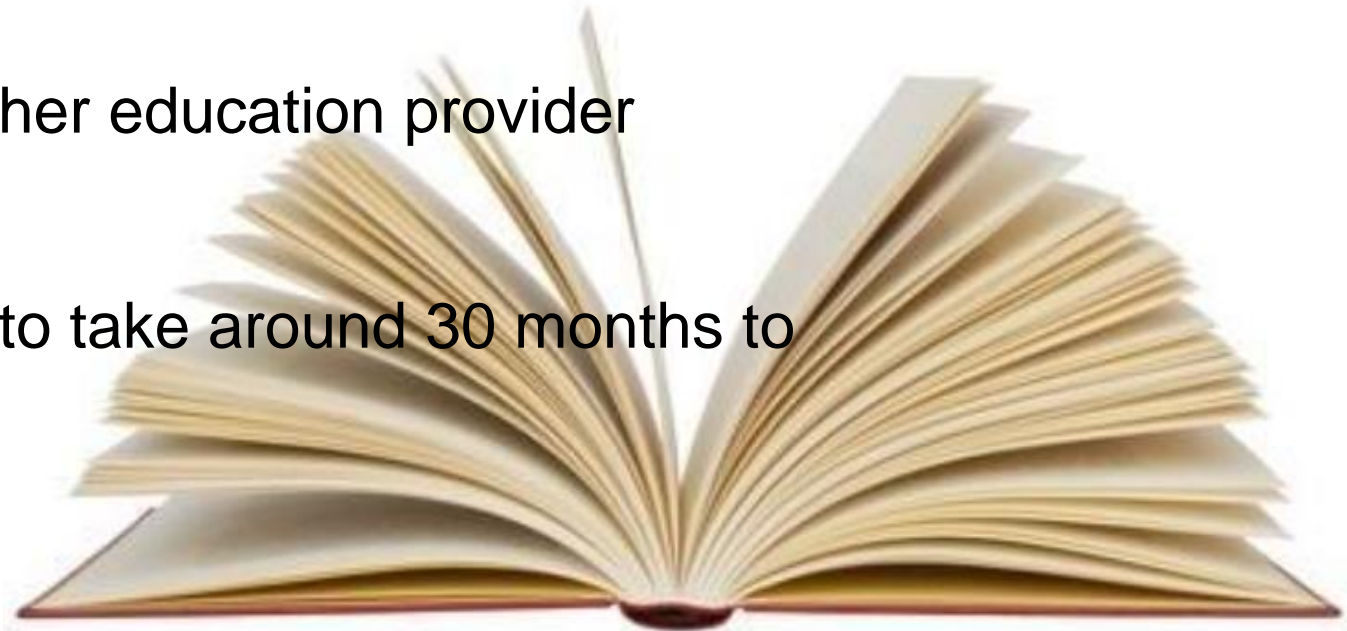
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# 1. What is the apprenticeship degree?

- Apprenticeship Degree for Geotechnical Engineer
- Apprenticeship is based on an occupation not an academic course
- Level 7: equivalent to a masters degree (MEng, MSc, Msci)
- Integrated degree
- Split between the workplace and further education provider
- Minimum off the job learning is 20%
- L7 Geotechnical Engineer expected to take around 30 months to gateway + 9 months for EPA



## 2. How does it work?



Similar to current apprentices (e.g. Piling Attendant L2, Civil Engineering Technician L3, Civil Engineer L6)



Employers will advertise for an apprentice and employ them as a Geotechnical Engineer (or equivalent)



Employer will need to find a training provider



Employer can take funding for their apprentice from the Apprenticeship Levy which they are (probably) already paying into



Additional courses are expected such as SMSTS etc to meet the required knowledge, skills and behaviours



Open to as many people as possible – entry requirements can be negotiated with the FE provider but English and Maths expected at L3 (A-level), ideally undergraduate degree in engineering/geoscience

### 3. What funding is available?

- The allocated funding band for the degree is £21,000
- This can be taken from the Apprenticeship Levy
- This can be used to fund the apprentice including the cost of learning outside the work place as provided by the higher education provider (university)
- Cost of off the job learning is not fixed based on funding band but expectation is that it will be around the allocated funding band

The Apprenticeship Levy logo is displayed on a dark blue background. It features a large, light blue stylized number '25' in the background. The text 'The Apprenticeship Levy' is written in white, with 'The' on the first line, 'Apprenticeship' on the second line, and 'Levy' on the third line. A vertical white line is positioned to the left of the text.

The  
Apprenticeship  
Levy



## 4. What is the content of the degree?

- Degree is split into required Knowledge, Skills and Behaviours (K,S,Bs) required by a Geotechnical Engineer.
- KSBs will be obtained by gaining experience in the work place and off the job learning
- KSB's are mapped to 14nr duties listed in the Geotechnical Engineer Occupation Standard
- Duties and KSBs designed to meet the requirements for CGeol and CEng post apprenticeship



The  
Geological  
Society



Institution of Civil Engineers

## Example Duties

**Duty 7** Design geotechnical structures for example, slopes, foundations, retaining structures including optioneering and detailed design, allowing for consideration of sustainability, constructability and ground conditions.

**Duty 8** Produce geotechnical reports throughout the phases of investigation, optioneering, design and construction for stakeholders for example, engineers and clients.

**Duty 12** Manage stakeholders for example, communicate and negotiate with other engineers, clients, subcontractors and regulatory bodies .

# Example Knowledge, Skills and Behaviours:

**K3:** Soil and rock behaviour (soil and rock mechanics) when exposed to changes in load and/or environmental conditions and the implications this can have on the short- and long-term performance of geotechnical assets.

**B2:** Adaptable, flexible and resilient in challenging and/or changing environments.

**S2:** Interpret the ground investigation data and develop a ground model including the identification of geohazards, contaminated land and other risks to the project as appropriate.

**K11:** The need for 'buildability' and consideration of long-term asset performance during the design stage.

**B6:** Collaborates and promotes team work across diverse teams: internal, external and across disciplines.

**S9:** Use project management techniques. For example, estimating, programming, cost and budget control and resource management



## 5. Training providers

Confirmed provider for 2022 intake



Potential providers for 2022 intake



Other potential future providers



## 6. Useful Info

- Institute for Apprenticeships Geotechnical Engineer L7 information and Occupational Standard can be found [here](https://bit.ly/3CDQutH)  
<https://bit.ly/3CDQutH>
- End Point Assessment Plan can be found [here](https://bit.ly/31or8IL)  
<https://bit.ly/31or8IL>

## 7. Other relevant apprenticeships in development

- L6 Geosciences apprenticeship degree in development (Paul Roberts at AECOM chairing trailblazer group)
- L7 Tunnel Engineer apprenticeship degree in development

## 8. Questions?



# Companies involved:

- |  |   |   |   |   |
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| <ul style="list-style-type: none"><li>• <b>Card Geotechnics</b></li><li>• <b>Arcadis</b></li><li>• <b>RSK STATS</b></li><li>• <b>Geoconsult Ltd</b></li><li>• <b>AMC Consultants</b></li><li>• <b>Central Piling Ltd</b></li><li>• <b>WSP Ltd</b></li><li>• <b>CGC</b></li></ul> | <ul style="list-style-type: none"><li>• <b>Environmental Scientifics Group</b></li><li>• <b>AECOM</b></li><li>• <b>Red Rock Geoscience Ltd</b></li><li>• <b>Concept Consultants</b></li><li>• <b>Rock and Alluvium</b></li><li>• <b>Leap Environmental</b></li><li>• <b>PBA</b></li></ul> | <ul style="list-style-type: none"><li>• <b>Geo Consulting Eng Ltd</b></li><li>• <b>Mott MacDonald</b></li><li>• <b>Landscience</b></li><li>• <b>Soils Limited</b></li><li>• <b>Franki Foundations UK Ltd</b></li><li>• <b>GEA Ltd</b></li><li>• <b>SLR</b></li><li>• <b>Cementation Skanska Ltd</b></li></ul> | <ul style="list-style-type: none"><li>• <b>SRK</b></li><li>• <b>Geological Society of London</b></li><li>• <b>Arup</b></li><li>• <b>Geotechnical Engineering Ltd</b></li><li>• <b>Soil Engineering</b></li><li>• <b>Concept Consultants</b></li><li>• <b>Capita</b></li><li>• <b>Atkins</b></li><li>• <b>Soils Ltd</b></li><li>• <b>Wardell Armstrong Ltd</b></li></ul> | <ul style="list-style-type: none"><li>• <b>ESG</b></li><li>• <b>Socotec</b></li><li>• <b>Amey</b></li><li>• <b>Network Rail</b></li><li>• <b>Roger Bullivant</b></li><li>• <b>Jacobs</b></li><li>• <b>Geotechnics</b></li></ul> |
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