INSPIRING WORCESTERSHIRE

TOMORROW'S ENGINEERS WEEK 2023

RESOURCE GUIDE

Engineering Jobs of the Future

This is a research activity task for students to complete which focuses on engineering growth areas. There are 3 parts to the activity:

·Job role research.
·Create a 3 slide/page presentation focusing on one role.
·Present the presentation.

Depending on how many elements are completed, this activity could take place during tutor time, within a curriculum session or assigned as homework. The activity is targeted at years 9/10/11 however this is just a guideline. Access to the internet will be required.

This activity will contribute to Gatsby Benchmark 2 – Learning from careers and Labour Market information. It will also develop transferable skills in research, resource develop and public speaking/presentation skills.

Find Your Future Engineering Research Activity

This is another research activity using our new LMI website, Your Future Opportunities. Students can complete 3 tasks which will encourage them to explore the website and it's content. Access to the internet will be required.

This activity can be completed within class, tutor time or as a homework activity. 30-60 minutes would be the suggested time to complete all 3 tasks. This activity could be used with KS3/4 students.
This activity will contribute to Gatsby Benchmark 2 – Learning from careers and Labour Market information.

The Your Future Opportunities website covers several industries and could be utilised within other activities or curriculum work. If you would like any support or guidance on the tool, please get in touch with the team.

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ENGINEERING PATHWAYS

WORCESTERSHIRE

Find Your Future Engineering - Quiz Answers

1. How much could you earn as an experienced 'Engineering Technician'? **£40000**
2. What does CNC stand for? Hint – there is a role with CNC in its name – **Computer numerically controlled.**
3. In what role would you be required to use a heated forge, hammer and tongs? Explore the job roles to find the answer – **Blacksmith**
4. What industries could you work in as a 'Welder'? – **Aerospace, construction and civil engineering**
5. Watch the 'Toolmaker' video, what two sub-sectors of engineering has George worked in? – **Oil and Gas/Aerospace**
6. Name two of the degree options you could take if you wanted to be a robotics engineer. – **Artificial intelligence and robotics/mechatronics/robotics engineering**
7. Watch the video using the link on the Civil Engineering job profile. What other skills will you learn when training to be a Civil Engineer? – **Design/problem solving/project management/creative thinking.**
8. Explore the Marine Engineering Technician job profile. What 5 locations are highlighted as the potential workplace? **Office, shipyard, port, ship or underwater.**

Engineering Resource Directory

This resource can be shared with students, parents, and staff.
It provides a directory of engineering specific resources with links.

To support Benchmark 4 (Careers in the curriculum), we would suggest that this directory can be shared with STEM curriculum staff to enable them to access resources which can complement their lessons and help highlight careers within the engineering and manufacturing industries.

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Engineering Pathways Fact Sheet

This resource presents all the Engineering pathways available to students within Worcestershire (23/24). The document will have live links so students can easily access further information.
This document will help inform benchmark 7 and benchmark 3

Advanced Manufacturing and Engineering (AME) LMI Resource

This resource provides a 2 page introduction to the manufacturing and engineering industry, which includes the top 10 AME businesses in Worcestershire and key growth areas of the sector.
Page 3 and 4 of the resource are designed as an LMI data infographic. These have been produced for students as the main audience however, should be useful for careers teams, teaching staff and parents/carers. We have collated data that is relevant and not too technical and should provide a snapshot of the industry both locally in Worcestershire and nationally.

This resource could be used to support curriculum, adviser meetings, enterprise activities and option sessions. However, please use as you best see fit and extract elements of the data to make it suitable for multiple audiences.

The 2 page infographic document is also available as its own resource.

Parent and Carer Sector Guide - AME

This is a one page document which provides an introduction to the Advance Manufacturing and Engineering sector, targeted at parents and carers. The majority of the content has been drawn from the newly produced Tomorrow's Engineers Week resources, with the addition of parent/carer specific content.