

ENGINEERING AND AUTOMOTIVE

BROMSGROVE CAMPUS

SUMMER PROJECTS
YEAR 11 STUDENTS

ENGINEERING:
ENGINEERING PRINCIPALS



HEART OF
WORCESTERSHIRE
COLLEGE

KICK START YOUR STUDY AT HOW COLLEGE WITH ONE OF OUR CURRICULUM BRIDGING PROJECTS

Background:

Engineering covers a wide variety of subjects and includes a number of specialist areas such as Mechanical, Civil, Manufacturing, Chemical and Electrical. As part of your Engineering course at Heart of Worcestershire College, you will study units on Mechanical and Electrical Engineering.

Tasks:

Students in year 10 and 11 visit the college facilities and workshops and meet staff members to have a better overall idea about engineering.

We would like you to produce an A3 poster that we could display in our campus to provide an easy way to understand information about Engineering principles.

Key information to include:

- Safety is extremely important in an Engineering environment. List down signs you would find in an Engineering workshop and the purpose of these signs. Please show a clear illustration of the signs you have chosen.
- Write an introduction that explains what electronics is and where it is used.
- Find examples of at least 5 different electronic components (e.g. speaker, capacitor, LED, etc.), explain what they are and demonstrate everyday products you are likely to find them in.
- List the types of careers and jobs available to Engineers with Engineering knowledge.

Use the internet to help with your research. Here are a couple of examples to get you started:

www.khanacademy.org/

www.bbc.co.uk/bitesize/guides/z826y4j/revision/1

learnabout-electronics.org/Resistors/resistors_11.php

Remember:

- Try to be as creative and engaging as possible.
- Use images, diagrams and pictures.
- You may use Photoshop or any photo editing software if needed.

Indicative time for this project:

15 hours.

Instructions on how to submit this:

You can email your submission to:

e. engineeringbroms@howcollege.ac.uk

How will I benefit from this project:

You will gain a basic understanding of Mechanical engineering principles that you will use to build upon when you start the course at HoW in September.

What can I expect to get back after I submit my project work:

You will receive a feedback from our expert tutors on the start of your course in September.

Key information you should include:

Your name

Your email address

A contact telephone number