Department Curriculum Intent – DT – Engineering & Catering

Campsmount Academy's curriculum aims to:

Ambition

1. be ambitious, challenging and aspirational
2. be reading and literacy rich

Integrity

3. be inclusive through 'quality first teaching'

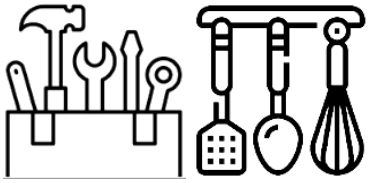
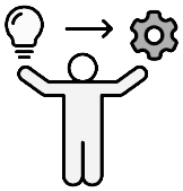
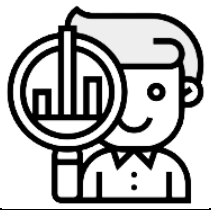
Pride

4. build students' cultural capital

Responsibility

5. develop the wider person

The DT Department's vision is to develop:

Developing Resilient Learners 	The department develops confident independent learners, who embrace challenges set to them and who will develop their practical skillset throughout the different key stages enabling them to have the confidence to take on all challenges set to them in order to achieve their goals.We aim to embed self-reflection, using analysis techniques and evaluative processes. Students are provided with key terminology, to ensure their reflections are informed and students can clearly link ideas, explain intentions and plan as work progresses.
Exploring appropriate Tools & Materials 	We develop the curriculum to ensure students have access to a variety of tools and equipment, which they will be taught how to use correctly through demonstrations. Students are then encouraged to select the correct tools appropriate for the set tasks as they progress through to KS4, from the taught skills in KS3 they will be able to make the correct informed choices.
Creating accurate and informed Projects. 	Students have the facilities to create practical work in all units of the DT curriculum. There will be parameters set to ensure that the projects are in line with the set brief and specification, and accuracy is encouraged in measuring / weighing to ensure a viable end product. Students will draw from primary & secondary sources, use observational studies and show developed ideas and plans which will lead to and original outcome. The work will be informed; with connections to the briefs given.
Analysing & evaluating skills. 	Students will use their higher-level thinking skills to analyse and evaluate either their own design ideas or those of existing products. Students will be guided through the methods of doing both using acronyms such as ACCESS FM, or star diagrams to gauge the success of the products against set criteria from the specification or briefs.

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What are the aims of our curriculum at Campsmount? How does it incorporate the educational principles evident in the whole school intent?

Design and technology is an inspiring, rigorous and practical subject. It covers lots of disciplines, such as Electronics, Engineering, Food, Graphics, Hospitality and Catering, Resistant materials and Textiles. Using creativity and imagination, pupils build skills to draw, design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants, and values.
Students will acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science and computing throughout their DT lessons. Pupils will develop the confidence to take risks, becoming resourceful, innovative, enterprising, and capable.
Through the evaluation of areas of the curriculum such as Recipes, Chefs, past and present Designers, along with products and pieces of their work and the techniques used, students develop a critical understanding of the impact on daily life and the wider world. High-quality DT education makes an essential contribution to the creativity, culture, wealth, and well-being of the nation.
Our local context is classed as 'more deprived' with a high proportion of students on Free School Meals and Educational Healthcare Plans. In light of this, we feel it is important that our students are given the opportunity to be exposed to high quality skills and vocabulary, consistently every day so they can build their cultural capital, which will further nourish their skills and abilities. We also provide ingredients for our PP students so as they have the access to the same level of engagement as non PP students.

The Aim of our Curriculum?
Our curriculum aims to ensure that all pupils:

- Develop the creative, technical, and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.
- Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users.
- Critique, evaluate and test their ideas and products and the work of others.
- Understand and apply the principles of nutrition and learn how to cook.

How do we ensure our curriculum meets and exceeds the requirements of the National Curriculum?

Students from Campsmount will experience a board curriculum which covers all the National curriculum criteria throughout the different projects. The curriculum planned is rigorous and challenging so as all students are stretched to achieve their highest capabilities.
We have looked at the skills and techniques required to achieve at KS4 and have embedded the fundamental aspects of these throughout the KS3 Curriculum. Along with teaching the formal elements of the subject and the subject specific vocabulary which supports this knowledge.
KS3 projects are assessed in line with the National Curriculum descriptors so as we ensure that the students are receiving a broad spectrum of all of the National Curriculum requirements.

What specifications do we follow at KS4 and 5 and why?

The selected Specifications.
Current OCR Cambridge National Engineering Design Level 2 certificate -Selected due to the flexibility of submission, the availability of tools and materials in the school workshop and the ability to meet the LO's with the products which we have available. Also, the weightings of the Units, as 40% is externally assessed so 60% in controllable internally, with 2 submission dates for all CA and 2 opportunities to submit each unit including sitting the exam. The course content also relates to current career opportunities in the surrounding area.

WJEC EDUQAS Level 1/2 Vocational Award in Hospitality and Catering selected due to the course content relating to current career opportunities. The skills learnt and developed throughout the course and the knowledge taught is relevant to the career path in H&C but also life skills for students. The opportunity to offer early entry in the exam allows students 2 chances to obtain their highest grade if required, and relieving pressure in the summer of y11, along with the 60% weighting of CA this allows students to have less pressure on them in the external exam.

Links to the local community and Career progression.
Students from Campsmount historically have successful careers in the creative and manufacturing sector. We have

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students who are successful fabric designers, graphic illustrators, logo artists, Chefs, Mechanical and rail engineers. We have a wealth of students with a desire to be practical in their careers and excel with their practical skills. Along with the need for people in these professions there is local opportunity to further their education in these areas with the New Rail and Engineering College, the Catering College and Universities in Yorkshire excelling in educating in these areas at degree level as well as offering Foundation courses with an excellent depth of course. The local area also has apprentice opportunities in such areas as the building trade, the catering industry, and the engineering sectors.

How do we ensure that we meet the needs of all learners and in particular those who are Pupil Premium or SEND?

How we ensure learning and retrieval are secured and embedded in our courses.
Our Strategies….
This method of kinaesthetic and academic learning embeds the knowledge and skills within the students and allows them to grow in confidence as they become more able and resilient. They become more willing to try new skills. We give students the tools to evaluate their work and critique it, looking for ways to improve and develop their ideas.
As staff we guide and embed a growth mind-set in students allowing them to understand that it is OK to make mistakes so long as they continue to develop solutions.
For theory we have use retrieval grids, and visual aids for artist's techniques.
We include revisions sessions, mini practical tasks, and mini tests to ensure that the knowledge and skills are understood and can be used interpreted appropriately for the relevant LO's.
Students are taught to research independently and encouraged to seek information out for themselves.
We also provide ingredients for our PP students so as they have the access to the same level of engagement as non PP students.

Why do we teach the topics/schemes in the order we teach them?

Our Schemes of learning & Skills acquired at each year.
Throughout KS3 in Art and DT embed and develop the fundamental skills required to achieve in the KS4 courses. In both disciplines we build skills through kinaesthetic learning, teaching skills and allowing the students to use them.

Year	
7	*DT* *Rotation of Practical work - Electronics including CADCAM, Food technology, including food preparation techniques and the eat well plate, Woodwork including designing and technical drawing, developing measuring and marking out skills and how to utilise the tools available to them in the workshop and follow the H&S and work independently and responsibly.* *Art Students begin on colour theory and build their basic skills and understanding of the fundamental*
8	*Rotation of Practical work – Woodwork, Product design, Food Technology and Textiles, developing prior skills and introducing new techniques to the student's skillset. Students are taught more in-depth knowledge and more technical practical techniques and drawing skills to prepare them for the more technical products to be created.*
9	*Rotation of Practical work – between Engineering and Catering, building up skills and knowledge for the relevant KS4 courses allowing students to understand the requirements of the KS4 courses and obtain the basis of knowledge and skills required to complete the courses and make an informed decision at option time*
10	*Catering – theory knowledge and embedding the information to be used in the External exam. Understanding of the catering sector and where food comes from. Practical skills for the Practical aspect of the coursework so as students can independently create their own dishes by planning and analysing their clients' needs.* *Engineering – theory knowledge and embedding the information to be used in the External exam. Researching and disassembling products looking at the manufacturing techniques used and making critical judgements. Developing technical drawing skills and practical skills for independent CA completion.*
11	*Catering – theory knowledge and embedding the information to be used in the External exam. Understanding of the catering sector and where food comes from. Practical skills for the Practical aspect of the coursework so as students can independently create their own dishes by planning and analysing their clients' needs.* *Engineering – theory knowledge and embedding the information to be used in the External exam. Researching and disassembling products looking at the manufacturing techniques used and making critical judgements. Developing technical drawing skills and practical skills for independent CA completion.*

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How do we develop our subject knowledge effectively? What impact does this have on curriculum planning?

Throughout KS3&4 in DT we work on embedding the fundamental skills and understanding and developing these, we introduce the different skills required to complete the course successfully throughout the student's projects. In order to do this successfully we look at the curriculum end points for the GCSE syllabus and work backwards making the skills accessible and current by implementing them in projects which attract and inspire the students and allow them to demonstrate and develop their skills. These skills are built upon year on year through development and utilising them in their projects, linking them to design movements, product analysis and practical skills. Students are also taught the key terms and vocabulary for the projects, and this is embedded through the literacy policy. Analysis of Existing Products and development of practical skills, along with materials theory knowledge is paramount and so these are taught from year 7 throughout the KS3 projects where students can analyse and research products and information, create design ideas, explain their opinions and link to fundamental skills and knowledge with reasoning. The effect this has on planning is to ensure that the skill and demand of each project increases, but also ensuring that all aspects of the skills required are taught prior to each project.

Statement of assessment intent:

- Throughout KS3&4 in DT we assess students regularly, we have generated specific end point expectations for each year group by looking at the GCSE grade descriptors and seeing how we can embed the knowledge required for this learning objective and create projects suitable for their current project and key stage.
- The assessments are done termly, assessing the skills undertaken and demonstrated from the taught project and the understanding of the vocabulary introduced.
- KS3 this is via project related assessments, KS4 & 5 this is via exam style extended PPE sessions.
- The assessments are of an encouraging nature to ensure that students are guided to improve and enhance their work further.
- Vocabulary, Knowledge and application are assessed to ensure students receive timely feedback on their work, with the guidance they require to add to the work. This is done in line with the school's CLEAN and Marking colour policy, along with the departmental marking policy.
- Assessments occur once per term in KS4, and at the end of the project in KS4 (4projects per year) in an effort to minimise workload and achieve better quality outcomes that are more accurate reflections of students' abilities.
- Activate tasks are also used to check prior learning, memory and metacognition tasks are also utilised to recap and embed the taught knowledge.
- All final assessments are completed in booklet form in KS3 and once assessed and fed back to the students are filed in Assessment folders, In KS4 assessments are either done as a past paper PPE, or as a practical application towards their CA (Catering - Practice Practical exam, Engineering – extended time on a Controlled assessment aspect.)
- All marks from assessed pieces are inputted onto departmental assessment trackers.
- Marking crib sheets/tables and self/peer assessment can be used for each assessment to aid understanding of areas of strength and improvement.
- Students will receive personalised feedback.
- After marking, staff will strive to go over areas which were not embedded as well as possible and target students with weaker assessment grades to ensure understanding of how to move forward for the next project. This can be challenging in KS3 as the students rotate around teachers, so the assessment is gone over in class post completion.
- Pink for Progress lessons clearly follow assessments so that students receive support in a timely fashion. If this work is not of a good enough standard or a student is still unsure as highlighted in subsequent class work, it is the teacher's responsibility to actively seek to address this.
- If further intervention and therefore assessment to measure impact is required, it should be put in place. This will be looked for when completing work scrutiny.

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Curriculum sequencing:

	Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
Year 7	**A rotation of 4 Projects**					
	Resistant Materials Bug Hotel		Product Design Puzzle Project		Food Technology Food Prep Skills & Portion Control	Textiles Coaster
Year 8	**A rotation of 4 Projects**					
	Resistant Materials Spinner Project		Electronics Cultural Lantern Project		Food Technology Food Prep Skills & Meal making	Textiles Mobile Phone holder
Year 9	**A rotation of 4 Projects**					
	Engineering Frame & Technical Drawing		Hospitality&Catering Mini GCSE context		Construction Tiling Project	Graphics Logos &Technical Drawing
Year 10	**Engineering**					
	R038 / R039 CA Skills and application	R038 / R039 CA Skills and application	R038 / R039 CA Skills and application	R038 / R039 CA Skills and application	R038 / R040 CA Skills and application	R038 / R040 CA Skills and application
	Hospitality and Catering					
	H&S Legislation / Practical skills	Food legislation / Portion Control / Practical skills	Catering Industry theory / Practical skills	Menu planning / Practical skills	Environmental issues / Practical skills	Food testing / Practical skills
Year 11	**Engineering**					
	R038 / R039 Exam theory / CA Skills and application	R038 / R039 Exam theory / CA Skills and application	R038 Exam theory	R038 Exam theory	Submission of all CA re-entry if needed	
	Hospitality and Catering					
	Diet and Nutrition / Practical skills/ CA written up	Client requirements and selection dishes / Practical skills / CA written up	Time Plans / Practical skills / CA written up	Hospitality industry / Practical Exam / CA written up	CA written up / Consolidation of exam theory	