**Engineering Curriculum 2025/2026**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year**  | **Autumn 1**  | **Autumn 2**  | **Spring 1**  | **Spring 2**  | **Summer 1**  | **Summer 2**  |
| **7**  | **Zapper Game Project**H&S in the workshop Characteristics of natural wood Product Analysis: GamesDesigner Analysis: Celia Smith  |  **Zapper Game Project** Characteristics of metal Bending and shaping metalProduct Design DrawingsCAD zapper game designs | **Consolidation Learning Links**[**Core design skills KS3 | Y7 Design and technology Lesson Resources | Oak National Academy**](https://www.thenational.academy/teachers/programmes/design-technology-secondary-ks3-l/units/core-design-skills-a819/lessons?sid-df29fa=AX_mMEvyi5&sm=0&src=3) |  Rotation  | Rotation  | Rotation  |
| **Assessment**  |  Formal Assessment at the end of rotation  | Formal Assessment at the end of rotation  |   |   |   |   |
|  | *Reading Presentations, Carryout worksheet activities, Use of Knowledge organisers, Use of written tutorials , News articles, Comprehension tasks, Word-searches, Homework Tasks, Use of word banks and find the missing word, Use of learning logs for recount and recall, DO NOW tasks*  |
| **8**  |  **Sweet Dispenser Project** H&S metal casting process Types of woodProduct Analysis: Sweet DispensersDesigner Analysis: Alessi  |  **Sweet Dispenser Project** Product Design DrawingsIntro to acrylicShaping PlasticLogo’s and backdropsWood working skills  | **Consolidation Learning Links**[Future tech now! KS3 | Y9 Design and technology Lesson Resources | Oak National Academy](https://www.thenational.academy/teachers/programmes/design-technology-secondary-ks3-l/units/future-tech-now-81fd/lessons?sid-1d1abc=KsU4mueUO0&sm=0&src=3)  | Rotation  | Rotation  | Rotation  |
| **Assessment**  | Formal Assessment at the end of rotation  | Formal Assessment at the end of rotation  |   |   |   |   |
|  | *Reading Presentations, Carryout worksheet activities, Use of Knowledge organisers, Use of written tutorials , News articles, Comprehension tasks, Word-searches, Homework Tasks, Use of word banks and find the missing word, Use of learning logs for recount and recall, DO NOW tasks*  |
| **9**  | **Automata Toy**H&S in the workshop and processes CAM MechanismsMechanical ToysProduct Analysis: Traditional ToysDesigner Analysis: Rob Ives | **Automata Toy**Drilling techniques Measuring accurately Product DesignsColour ApplicationHand tools and machines  | **Consolidation Learning Links**[Design in the natural world KS3 | Y9 Design and technology Lesson Resources | Oak National Academy](https://www.thenational.academy/teachers/programmes/design-technology-secondary-ks3-l/units/design-in-the-natural-world-cc65/lessons?sid-1b0ca0=jOvD7nNR-3&sm=0&src=3) |   |   |   |
| **Assessment**  | Written test, overall practical grade  | End of unit written test  |   |   |   |   |
|  | *Reading Presentations, Carryout worksheet activities, Use of Knowledge organisers, Use of written tutorials, News articles, Writing frames and scaffolding techniques, Use of word banks, DO NOW tasks, Revision guide comprehension tasks for theory element, exam question analysis and breakdown tasks*  |
| **10**  | Component 1 Project 1Intro to project: mood boards and mind mapsDesigner Analysis x3Designer Responses with model making x3Primary Source ImagesWood Joints WorkshopsProduct Design Drawings  | Component 1 Project 1Measuring accuratelySoldering Graffiti workshopsAcrylic BendingCasting WorkshopsWorkshop documentationIntro to 3D CAD  |  Component 1 Project 1Developing ideas of Product DesignsFinishes workshopFinal Designs DrawingsPrototype of Final Design | Component 1 – Project 1 Practical Final Design Production  | Component 1- Project 2- Mock Exam Intro to titlesProduct AnalysisDesigner AnalysisResponse to designers and model making  | Component 1- Project 2- Mock Exam Creative workshopsTechnique workshopsUse of hand tools and machines |
| **11**  | Component 1- Project 2- Mock Exam Developing ideas of Product DesignsFinishes workshopFinal Designs DrawingsPrototype of Final Design |  Component 1- Project 2- Mock Exam PracticalFinal Design Production | Component 2 – External set exam Preparation and delivery of external set exam in January. | Component 2 – External set exam Preparation and delivery of external set exam in January. | Component 2 – External set exam Preparation and delivery of external set exam in January.Practical Exam |  End of Course |

*Digital Literacy Student Leadership: Actively promote news related articles on: Being Safe, Use of Software, Cyber Security, Health and Well Being, New Technology*

*ICT Competition Key:* **CEIAG SMSC ICT Enrichment**

**Engineering Curriculum 2025/2026**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |
|  | *Reading Presentations, Carryout worksheet activities, Use of Knowledge organisers, Use of written tutorials , News articles, Writing frames and scaffolding techniques, Use of word banks, DO NOW tasks, Revision guide comprehension tasks for theory element, exam question analysis and breakdown tasks*   |