Handsworth Grange
Community Sports College

YEAR 10 KS4 DESIGN & TECHNOLOGY LEARNING JOURNEY

Autumn Term 1st half

NEA prep Design
- Generating ideas
- Unit 6 The work of others

Practical
- Modelling/Developing ideas
- 'Lighting'

- Determination
- Innovative
- Resilience

Theory
- **Unit 1** industry and enterprise.
- **Unit 1** Sustainability and the environment

- Environment
- Industry
- Society

Autumn Term 2nd half

NEA prep Design
- Design problem, design brief and design/product specification

Practical
- **Unit 5** Working with wood and manmade boards or Textiles
- 'Storage'

- Problem solver
- Independence
- Resilience

Theory
- **Unit 3** materials and their working properties
- **Unit 4** forces and stresses

Spring Term 1st half Xmas

NEA prep Design
- Analysis
- Unit 6 Communicating ideas

Practical
- Developing ideas and problem solving
- 'Mechanisms'

- Problem solver
- Independence
- Resilience

Theory

Recall and extension: Half term 1
- **Unit 1** People, culture and society
- **Unit 6** investigating primary and secondary data
- **Unit 3** Mechanical devices

- Environment
- Global influence
- Culture
- Faith/ religion

Spring Term 2nd half

Practical
- **Unit 7** Tolerances/processes
- 'caring for animals'

- Resilience
- Consistent
- Expressive

Theory

Recall and extension: Half term 2
- **Unit 5** specialist material area
- Metals or polymer-basedmaterials or Textiles

Theory

Recall and extension: Half term 1
- Designing principles
- **Unit 6** Design Strategies
- **Unit 6** The work of others

- Cultural capital designers and iconic design

Summer Term 1st half Easter

NEA prep
- Independent Design, research, Develop and model task CAD

Practical
- Practical MINI NEA Paper and boards/natural woods/ man-made boards/ CAD/CAM

- Environment
- Industry

Theory
- **Unit 4** Ecological and social footprint
- Unit 4 Scale of production
- **Unit 1** Production techniques and systems
- **Unit 1** Informing design decisions

- Environment
- Industry

Summer Term 2nd half

Start of Y11 NEA

Recall and extension: Half term 3
- Research and product analysis

Start of Y11 NEA

Recall and extension: Half term 3
- Identifying and investigating design possibilities
- client needs

Start of Y11 NEA

Recall and extension: Half term 1,2,3,4,5
- Generating ideas
- Developing ideas

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YEAR 11 KS4 DESIGN & TECHNOLOGY LEARNING JOURNEY

Autumn Term 1st half

- NEA
  - Producing a design brief and specification
- NEA
  - Generating ideas
  - Developing ideas
- Theory RECALL
  - Y10 autumn half term 1 and 2
  - Identifying common errors and knowledge gaps
  - Environment
  - Industry

Autumn Term 2nd half

- NEA
  - Developing ideas
  - Client/Peer feedback
  - Further on going research
- Theory RECALL
  - Y10 Spring half term 1 and 2
  - Identifying common errors and knowledge gaps
  - Environment
  - Global influence
  - Culture
  - Faith/ religion
- MOCK EXAM 1

Spring Term 1st half

- NEA
  - Analysis of development models
  - Client feedback
- NEA
  - Developing from feedback
  - Realizing Ideas
- Theory RECALL
  - Y10 Summer half term 1 and 2
  - Identifying common errors and knowledge gaps
  - Environment
  - Global influence
  - Industry
  - Cultural capital designers and iconic design

Spring Term 2nd half

- NEA
  - Realizing idea
  - Analysing final prototype
- Theory
  - Unit 2 energy, materials, systems and devices
  - Exam prep specialist Knowledge
  - Environment
  - Industry
  - STEM
- MOCK EXAM 2

Summer Term 1st half Easter

- NEA
  - finalising idea
  - testing against design specification
  - modification
- Theory
  - Exam preparation
  - Specific to groups and Identified target groups
- Theory
  - Bespoke exam preparation for targeted individuals HPA, LPA etc.

Summer Term 2nd half

NEA course work encourages Character including: Resilience, Consistent, Expressive, problem solver, Independence, accountability, Creative thinking, problem solving, Empathy, time management, communication skills, to be adaptable.

- FINAL DESIGN TECHNOLOGY EXAM