Project Duration	Year 7	Year 8	Year 9
September - December	**Steady Hand Game** ● Design and Make ● Electronics ● Timbers ● Electronics ● Soldering ● Hand Tools ● Machine Tools	**Mechanical Toy** ● Design and Make ● Motions and Movement ● Cams, Gears, Pulleys and Levers. ● Timbers ● Hand Tools ● Machine Tools	**LED Frame** ● Design and Make ● CAD ● CAM ● Electronics ● Soldering
December - March	**Wooden Car** ● Design and Make ● Timbers ● Aerodynamics ● Hand Tools ● Machine Tools	**Wooden Box** ● Design and Make ● Timbers ● Wooden Joints ● CAD ● CAM	**Trainer/Sneaker** ● Design and Make ● Prototypes ● Papers and Boards ● Textiles
April - July			

Note: Students rotate on a 13 week carousel. Students will complete all 13 week projects throughout the duration of the academic year. Project timings may vary depending on class.

Project Duration	Year 10
September - October 6 Week Project	**Prototype Project** • Papers and Boards • Methods of Production • Stock Forms • Hand Tools and accuracy

Project Duration	Year 10
October - February 12 Week Project	**Games Controller** • Timbers • Bag Press • Metal Work • Metal Lathe • Brazing • Printing • Surface Finishes and Treatments • Advertising and Packaging

Project Duration	Year 10
February - June 12 Week Project	**Wooden Storage Organiser** • Timbers • Wooden Joints • Veneers • Surface Finishes and Treatments • Polymers • Hand Tools • Machine Tools

Project Duration	Year 10
June - July 7 Week Project	**Disassemble Project** • Timbers • Hand Tools • Fabrication • Production Methods • Stock Form • CAD • CAM

Note i: Project timings may vary depending on class.

Note ii: Students will have a focus on exam techniques, materials and production methods.

Note iii: NEA released by examination board on 1st June.

Project Duration	Year 11	
September - May	**NEA (Non-Exam Assessment** **Investigate (16 marks)** ● This includes investigating design possibilities through research involving a user/client, the identification of a suitable design brief, and writing of a specification. **Design (42 marks)** ● This includes producing different design ideas, reviewing these ideas against the specification and with a user/client, refining and developing a chosen design, the review of the chosen design, and the communication of design ideas through written, CAD and graphical methods. **Make (36 marks)** ● This includes selecting appropriate materials and component parts, the manufacture of the solution evidencing skills and processes, and a focus on quality and accuracy. **Evaluate (6 marks)** ● This includes testing of the made solution against measurable and technical criteria from the specification, and reflective analysis and evaluation, including a life cycle	● Investigating environmental, social and economic challenges ● Investigating and analysing the work of others ● The impact of new and emerging technologies ● How the critical evaluation of new and emerging technologies inform design decisions ● Design strategies ● Develop, communicate, record and justify design ideas. ● Development of modern and smart materials ● Mechanical Devices ● Metals ● Timbers ● Papers and Boards ● Polymers ● Flow charts ● Testing ● Evaluation

Note: Students will have a focus on exam techniques, materials and production methods.