

Curriculum Map GIS 2018-19	Qualifications: MYP												
Subject: Design	Subject Leader: Gabriel Kyne												
Key Concepts: Communication, Communities, Development, Systems	Global Context (Main): Scientific and technical innovation												
Related Concepts: Adaptation, Collaboration, Ergonomics, Evaluation, Form, Function, Innovation, Invention, Markets & trends, Perspective, Resources, Sustainability.	ATL: Thinking skills, Social skills, Communication skills, Self-management skills, Research Skills.												
<p>Aims</p> <p>The aims of MYP Design are to encourage and enable students to:</p> <ul style="list-style-type: none"> • enjoy the design process, develop an appreciation of its elegance and power • develop knowledge, understanding and skills from different disciplines to design and create solutions to problems using the design cycle • use and apply technology effectively as a means to access, process and communicate information, model and create solutions, and to solve problems • develop an appreciation of the impact of design innovations for life, global society and environments • appreciate past, present and emerging design within cultural, political, social, historical and environmental contexts • develop respect for others' viewpoints and appreciate alternative solutions to problems • act with integrity and honesty, and take responsibility for their own actions developing effective working practices. 	<p>Objectives</p> <p>A Inquiring and analysing Students are presented with a design situation, from which they identify a problem that needs to be solved. They analyse the need for a solution and conduct an inquiry into the nature of the problem.</p> <p>B Developing ideas Students write a detailed specification, which drives the development of a solution. They present the solution.</p> <p>C Creating the solution Students plan the creation of the chosen solution and follow the plan to create a prototype sufficient for testing and evaluation.</p> <p>D Evaluating Students design tests to evaluate the solution, carry out those tests and objectively evaluate its success. Students identify areas where the solution could be improved and explain how their solution will impact on the client or target audience.</p>												
<p>Assessment</p> <p>Assessment for Design courses in all years programme is criterion-related, based on four equally weighted assessment criteria:</p> <table border="0" data-bbox="174 1273 779 1401"> <tr> <td>Criterion A</td> <td>Inquiring and Analysing</td> <td>Maximum 8</td> </tr> <tr> <td>Criterion B</td> <td>Developing Ideas</td> <td>Maximum 8</td> </tr> <tr> <td>Criterion C</td> <td>Creating the Solution</td> <td>Maximum 8</td> </tr> <tr> <td>Criterion D</td> <td>Evaluating</td> <td>Maximum 8</td> </tr> </table>	Criterion A	Inquiring and Analysing	Maximum 8	Criterion B	Developing Ideas	Maximum 8	Criterion C	Creating the Solution	Maximum 8	Criterion D	Evaluating	Maximum 8	
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Units	MYP1	MYP2	MYP3	MYP4	MYP5
Unit 1 KC RC GC SOI Criteria ATL Content	Computing Systems Function Invention S&TI Using functional systems aids invention A Thinking skills, Self-management skills Scratch 1 - programming elements	Computing Systems Function Invention S&TI Using functional systems aids invention A Thinking skills, Self-management skills Scratch Advanced - using scratch to drive robotics Ohbot	Computing Systems Function Invention S&TI Using functional systems aids invention A Thinking skills, Self-management skills Expanding knowledge of python to all control and variable elements	Computing or Textiles Systems Function Invention S&TI Using functional systems aids invention A Thinking skills, Self-management skills Computing and communication Textiles	Computing or Textiles Systems Function Invention S&TI Using functional systems aids invention A B Thinking skills, Self-management skills Ethical hacking and security or Textiles
Unit 2 KC RC GC SOI Criteria ATL Content	Computing Systems Function Invention S&TI Using functional systems aids invention A B Thinking skills, Self-management skills Scratch 2 - using variables and data structures	Computing Systems Function Invention S&TI Using functional systems aids invention A B Thinking skills, Self-management skills Building an APP - introduction to simple python	Computing Systems Function Invention S&TI Using functional systems aids invention A B Thinking skills, Self-management skills Expanding Python to use objects Web design	Computing or Web Systems Function Invention S&TI Using functional systems aids invention A B Thinking skills, Self-management skills Option: Computing gaming in unity Option: web design	Computing or Web Systems Function Invention S&TI Using functional systems aids invention A B Thinking skills, Self-management skills Option: Computing gaming Option: web technologies
Unit 3 KC RC GC SOI Criteria ATL Content	Engineering Systems Function Adaptation S&TI Adapting systems improves functionality B C Thinking skills, Self-management skills Cardboard Engineering levers and pulleys creating simple lever toys	Engineering Systems Function Adaptation S&TI Adapting systems improves functionality B C Thinking skills, Self-management skills Engineering 2 Laser cutting and gears creating machines	Engineering Systems Function Adaptation S&TI Adapting systems improves functionality B C Thinking skills, Self-management skills CAD and 3D printing and laser cutting	Engineering Systems Function Adaptation S&TI Adapting systems improves functionality B C Thinking skills, Self-management skills Option: Build a combined tech and engineering project. Retro gaming console or PC. Option: 3D furniture design and making	MYP Personal Project Systems Function Adaptation S&TI Adapting systems improves functionality B C D Thinking skills, Self-management skills Building on GCSE Project to show advancement
Unit 4 KC RC GC SOI Criteria ATL Content	Applications Development Evaluation Form S&TI Developing new forms through evaluating A D Thinking skills, Self-management skills Image processing Photoshop to make T-shirts	Applications Development Evaluation Form S&TI Developing new forms through evaluating A D Thinking skills, Self-management skills Sound Editing making a sound or music	Applications Development Evaluation Form S&TI Developing new forms through evaluating A D Thinking skills, Self-management skills Video Editing	Applications Development Evaluation Form S&TI Developing new forms through evaluating A D Thinking skills, Self-management skills Office Automation and modelling with Spreadsheet	MYP Personal Project Development Evaluation Form S&TI Developing new forms through evaluating A B C D Thinking skills, Self-management skills Building on Project to show advancement
Unit 5 KC RC GC SOI Criteria ATL Content	3D structures Development Function Form S&TI Function guides development of form B C Thinking skills, Self-management skills Building Bridges	Building Skills Development Function Form S&TI Function guides development of form B C Thinking skills, Self-management skills Plumbing & Wiring	Building Skills Development Function Form S&TI Function guides development of form B C Thinking skills, Self-management skills Woodwork & metalwork	Project A B C D	Assessments A B C D
Unit 6 KC RC GC SOI Criteria ATL Content	Robotics Development Function Form S&TI Function guides development of form C D Thinking skills, Self-management skills Basic Robot Control - animatronics Final Year Project 1	Robotics Development Function Form S&TI Function guides development of form C D Thinking skills, Self-management skills Advanced Robotics - animatronics Final Year Project 2	Robotics Development Function Form S&TI Function guides development of form C D Thinking skills, Self-management skills Spy Cameras (animatronics this year) Final Year Project 3	Project A B C D	Assessments A B C D