

MYP YEAR 1 DESIGN							
Unit title	Key concept	Related concept(s)	Global context	Statement of inquiry	MYP subject group objective(s)	ATL skills	Content (topics, knowledge, skills)
MS Word 2007 Advanced Features 40 sessions @ 40 min.	Communication	Invention Innovation	Personal and cultural expression Exploration- Artistry, Craft, Creation, beauty for designing a story book	Appropriate innovative communication techniques can help exchange information in this fast paced time and space giving the end users an opportunity to express their ideas.	Objective A : Inquiring and Analyzing Objective B: Developing Ideas Objective C: Creating the Solution Objective D: Evaluating	Skill: Communication Research Clusters: Information Literacy Media Literacy	1- Headers and footers. 2- Footnotes and endnotes. 3- Drop cap 4- Tab stop 5- Using show/hide tool. 6-• Format painter 7- Columns. 8- How to increase and decrease indentation. 9-• Thesaurus 10- Borders and shading. 11- • Page setup and margins. 12-• Applying built-in styles Connection Language & Literature Service As Action Students will design story books and will share the same with school community. Learning outcome- undertake challenges that develop new skills.
Introduction to Qbasic, QBASIC statements, QBASIC programming statements 40 sessions @ 40 min.	Communities	Perspective	Scientific and Technical Innovation Exploration- Products, processes and solutions for generating Quiz.	Communities can have many different perspectives that influence the way the ideas develop and new discoveries are made.	Objective A : Inquiring and Analyzing Objective B: Developing Ideas Objective C: Creating the Solution Objective D: Evaluating	Skill: Communication Research Clusters: Information Literacy Media Literacy	1- Starting QBasic. 2- Components of QBasic Window. 3-Using QBasic for programming. 4- How to open a program 5-How to save a program. 6- How to exit QBasic. 7-Character set. 8-Constants 9-Variables. 10- Print. 11- Let statement 12- Input statement. 13- REM statement 14-Sequential Statements. 15- Conditional statements. 16- If then else statements. 17- End if statement with if Connection All Subjects Service As Action Students will help all the subject tutors generate a quiz which the tutor can use as an assessment. Learning outcome- Discuss evaluate and plan student initiated activities.

MYP YEAR 2 DESIGN

Unit title	Key concept	Related concept(s)	Global context	Statement of inquiry	MYP subject group objective(s)	ATL skills	Content (topics, knowledge, skills)
Flash Tweening and Publishing 40 sessions @ 40 min.	Creativity	Innovation Invention	Scientific and Technical Innovation Exploration- Products, processes and solutions for creating animated movie/scene.	Creating a novel animated product, exploring digital life and virtual environment focussing on the advanced information age, plays an important role in enhancing scientific and technical innovations.	Objective A : Inquiring and Analyzing Objective B: Developing Ideas Objective C: Creating the Solution Objective D: Evaluating	Skill: Research Thinking Clusters: Information Literacy Media Literacy Creative Thinking	1- Using the Pen and Eyedropper Tools 2- Improving pictures 3- Transforming objects 4- Grouping Outlines and Fills 5- Working with Text 6- The Timeline and layers 7- Animation with both Motion and Shape Tweening 8- Using a Masking layer 9- Animation Using a Motion Guide 10- Applying Filters Service As Action The students will create animations for a social cause, entertainment, non-violence, peace, care etc. and will present in school assembly. Learning outcome- Undertake challenges that develop new skills.
Introduction to HTML, Elementary HTML-1 40 sessions @ 40 min.	Communication	Innovation, Invention	Scientific and Technical Innovation - Exploration- digital life, virtual environments and the information age.	The innovating invention namely Internet has evolved as a platform mainly focussing on communication and sharing of information.	Objective A : Inquiring and Analyzing Objective B: Developing Ideas Objective C: Creating the Solution Objective D: Evaluating	Skill: Thinking Clusters: Creative Thinking	1- HTML 2- HTML Editor 3- HTML tag and tag attributes 4- Important HTML tags 5- heading, center, comment, paragraph, line break, no break tags 6- formatting tags B,I,U,STRIKE, SUB, SUP 7- HR and IMG with attributes 8- introduction to anchors and linking Service As Action The students will create websites on different areas of their interest like DIY, cooking, skin care, life hacks, trip to some place etc . Learning outcome- Become more aware of their strengths and areas of growth.

MYP YEAR 3 DESIGN

Unit title	Key concept	Related concept(s)	Global context	Statement of inquiry	MYP subject group objective(s)	ATL skills	Content (topics, knowledge, skills)
Photo Editing 25 sessions @ 40 min	Creativity	Innovation	Personal and Cultural Expression Exploration- Artistry, Craft, Creatiion, beauty for editing images	Technology is a useful tool to express personal creativity.	Objective A : Inquiring and Analyzing Objective B: Developing Ideas Objective C: Creating the Solution Objective D: Evaluating	Skill: Thinking Skill Clusters: Creative Thinking	Content : 1- Selection tools 2- Working with images 3- Painting tools 4- Drawing tools 5- Retouching tools 6- Working with layers 7- Working with text 8- Using filters
Video Editing 30 sessions @ 40 min.	Communities	Perspective	Scientific and Technical Innovation - Exploration- digital life, virtual environments and the information age.	Communities can have many different perspectives that influence the way ideas develop and new discoveries are made	Objective A : Inquiring and Analyzing Objective B: Developing Ideas Objective C: Creating the Solution Objective D: Evaluating	Skill: Research Thinking Clusters: Information Literacy Media Literacy Creative Thinking	1-Overview 2-Importing Content from a File 3-Capturing from a Camera 4-Editing Your Content 5-Splitting a Clip 6-Using the Trim Tool 7-Customizing Your Content 8-Titles 9-Captions 10-redits 11-Transitions 12-Pan and Zoom 13-Visual Effects 14-Adding Audio 15-Example of a Customized Storyboard Pane 16-Saving Your Movie 17-Publishing Your Movie
Website authoring 25 sessions @ 40 min	Communities	Adaptation Form	Identities and Relationships Exploration-transitions in methods of presenting data.	Designers adapt the form in which information is communicated in order to make it accessible to the end-user.	A:Inquiring and Analyzing B: Developing Ideas C: Creating the Solution D: Evaluating	Skill: Research Thinking Clusters: Information Literacy Media Literacy Creative Thinking	Students should know:- - Create web pages using external stylesheets, tables and images Candidates should be able to create a structured website with stylesheets, tables and hyperlinks. Candidates should have a working knowledge of html.Candidates should demonstrate the ability to: Use stylesheets, Create web pages. Use images

MYP YEAR 4 DESIGN

Unit title	Key concept	Related concept(s)	Global context	Statement of inquiry	MYP subject group objective(s)	ATL skills	Content (topics, knowledge, skills)
Types and Components of Computer Systems 30 sessions @ 40 min	Systems	Ergonomics Function	Fairness and development - Exploration-imagining a hopeful future by looking at the old and new technological inventions.	Systems that are designed to meet an individual's ergonomic requirements can increase their ability to function within the world.	A-Inquiring and analysing	Skill: Research Clusters: Information Literacy	Candidates should be able to: 1- define hardware, giving examples; 2- define software, giving examples; 3- describe the difference between hardware and software; 4- identify the main components of a general-purpose computer: central processing unit, main/internal memory (including ROM and RAM), input devices, output devices and secondary/backing storage; 5- identify operating systems, including Graphic User Interface, command line interface; 6- Identify different types of computer including Personal Computer or desktop, mainframe, laptop, Palmtop and Personal Digital Assistant
Introduction to Computer Devices 25 sessions @ 40min	Development	Function, Form,Adaptation	Scientific and technical innovation Exploration-Systems, models and methods	Understanding the working of different form & functions of Computer devices for its adaptation .	A - Inquiring & Analysing C-Creating Solution D- Evaluating	Communication Skills Research Skills (Media Literacy ,Information Literacy) Thinking Skills(Creative,Critical)	1-Input Devices- keyboard, Mouse, Scanners, Tracker ball, Sensors..... 2-Processing Devices from Super Computers to small low Power consumption devices like Smart Phones & Microcontrollers 3-Storage Devices 4-Primary /Internal (RAM,ROM) 5-Secondary Devices- HDD,SDD,CD,DVD,CD-RW Output Devices - Printers, Monitors, Cutters.... (II) Working of Input Devices (i)Input Devices- keyboard, Mouse, Scanners, Tracker ball, 6- Sensors..... Processing Devices from Super Computers to small low Power consumption devices like Smart

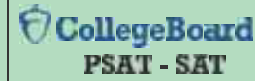
Data Representation & Binary Logic 25 sessions @ 40 min.	Communication	Ergonomics	Form	Representing & Communicating Data in various forms to be accessible to the user	Objective C: Creating the Solution Objective D: Evaluating	Thinking Skills (Critical)	Students should understand - 1- <u>Data Representation in</u> a- binary notation & to convert denary numbers to & from binary b-Hexadecimal notation & to Hexadecimal integers to & from Binary & Denary c-Significance of Hexadecimal in Computer System 2- <u>Data Communication</u> a-Of what is meant by transmission of data b-Distinguish between Serial & Parallel Data Transmission c-Reasons of choosing Serial or Parallel Data Transmission d-Need to check for Errors e-Explain How Parity bits are used for error detection f-Identify Current uses of Serial & Parallel Data Transmission such as Integrated Circuits (IC), Universal Serial Bus (USB) g-Show understanding of the concept of Media Access Control (MAC) address, Internet Protocol (IP) address h-Identify current uses of Hexadecimal numbers in computing Eg Defining colours in Hypertext Markup Language (HTML)
Data Integrity & Security 30 sessions @ 40 min	System	Persepective & Sustainability	Fairness & Development Exploration-Authority, Security ans Freedom	Sustainability of Computer System in different perspectives for fair development	Objective A : Inquiring and Analyzing Objective C: Creating the Solution Objective D: Evaluating	Thinking Skills Research Skills Communication Skills	Sub topics: - Candidates should have an understanding of a range of ICT applications in their everyday life and be aware of the impact of ICT in terms of safety and security. 1- Physical safety in an ICT based environment, E-safety, The security of personal and commercial data 2- Various Possible Effect of Security Risk 3- Methods to Remove Security Risk
Presentation authoring 50 sessions @ 40 min.	Communities	Adaptation Form	Identities and Relationships - Exploration-transitions in methods of presenting data.	Designers adapt the form in which information is communicated in order to make it accessible to the end-user.	Objective A : Inquiring and Analyzing Objective B: Developing Ideas Objective C: Creating the Solution Objective D: Evaluating	Skill: Research Thinking Clusters: Information Literacy Media Literacy Creative Thinking	The students should know to practice/ use 1- Master slides 2- Heading 3- Sub heading 4- Bulleted list 5- Animation 6- Transition 7- Save 8- Screen shot 9- Print Service As Action Students will be opening different gadgets and understand the mechanism and working of the gadgets. They will explain about the technology used in the gadgets for making every individual technically sound. The same will be done using a presentation. Learning outcome- Work collaboratively with others.

MYP YEAR 5 DESIGN

Unit title	Key concept	Related concept(s)	Global context	Statement of inquiry	MYP subject group objective(s)	ATL skills	Content (topics, knowledge, skills)
Communication 30 sessions @ 40 min	Communication	Collaboration	Scientific and Technical Innovation - Exploration-digital life, virtual environment and the information age by email.	Timely interaction with clients using appropriate techniques, drives design decisions and developing any digital or tangible product focusing on communication.	A : Inquiring and analysing	Skill: Communication Clusters: Communication	1-Students should be able to use email and the internet to gather and communicate information. a-Communicate with other ICT users using email b-Make effective use of the internet as a source of information
Document Production 50 Sessions @ 40 min.	Development	Ergonomics	Scientific and technical innovation - Exploration-	Systems that are designed to meet an individual's ergonomic requirements can increase their ability to function within the world.	A : Inquiring and Analyzing B: Developing Ideas C: Creating the Solution D: Evaluating	Skill: Research Clusters: Information Literacy	Candidates should be able to: 1-Format Text and Organize page layout- Format pages, Set the page size, Page orientation, page margins, Set the gutter, headers and footers, Widows and orphans, Page section, column breaks, use columns, text alignment, line spacing, tabulation settings, bullets and numbering. 2- Edit a table- Insert, delete, rows and columns, merge cells, formatting the table. 3-Mail Merge- What is mail merge, uses of mail merge, creating mail merge document, Run the mail merge, print mail merge documents.
Programming logic Building using Algorithm 40 sessions @ 40 min	Logic	Evaluation & Function	Identities & Relationship Exploration-Identity formation, Roles and Models	Developing & Evaluating the logical & functional relationship between Data & Process Identifies to design a Software Solution	C:Creating Solutions Strands D:Evaluation	Thinking Skills- Critical - Thinking	1-Introduction to Pseudocode - 2- design tools for representing logic for System development 3-Pseudocode - A simple method of showing an Algorithm(set of steps to complete a given task) 4- Reserved words & Statement in pseudocode- (a) for assignment (b) Conditional Statements - IF....THEN...ELSE...ENDIF - CASE OF OTHERWISE....ENDCASE (c) loop structures -FOR TONEXT -REPEAT UNTIL - WHILE ... DO ENDWHILE

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						<p>(d) input -output statements - INPUT and OUTPUT statements (READ & PRINT) (e) Standard actions - totaling, Counting, (eg- sum sum + number , Count count +1) 5- Developing & Representing logical solution by connecting Flowchart symbols for different processes or problem statement 6- Test data , v) Validation</p> <p>((a) Range Check (b) Length check (c) Type check (d) Character check (e) Format check (f) presence check (g) check digit 7- Verification (a) Double entry (b) Screen/Visual check (c) Parity check (d) Checksum 8-Using Trace Table (a) Identifying & Correcting Errors</p>	
Understanding & implementing Programming concepts in Python 40 sessions@40 min.	System	Evaluation & Function	Scientific and technical innovation Exploration- Systems, Models and Methods, Products, processes and solutions	Developing & Evaluating a Software System functional for a given task (or solving a given problem) using Scientific & technical Innovation	B: Developing Ideas C-Creating Solutions D-Evaluation	Thinking Skills Critical Thinking	1-Introduction to Python language 2- Features of Python, 3- Writing a Simple Program in Python 4-Compiling & Debugging a C++ Program 5- Different Data types 6- Types of Conditional Statements in Python. If Else , SwitchCase 7- Loop construct in Python (a) while (b) Do ...while, (c) For .. loop Writing C++ Program for various application task



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