Golden Jubilee School
ATL Syllabus 2025-26
Class:-10

Month	Syllabus
June	What is innovation? Case studies of Great innovators and innovations.
	July Learning To becoming creative by learning 1.Digital literacy 2.Ideation 3.Design Thinkng 4.Computational Thinking 5. Physical computing.
	• Resistors • Capacitors • Diodes • Transistors • Buzzer • Jumper wires • LED (Light Emitting Diode) • Switches • RGB LED • Voltage Regulator • IC (Integrated Circuit) • Seven Segment • LDR Sensor • IR Sensor • 555 Timer
September	• Built Seven Segment Circuit On Breadboard. • Two Finger Touch Lamp Using Transistor • Water Level Indicator • Smart Fan Using IR Sensor
October	555 TIMER BASED ACTIVITIES • Introduction of 555 Timer IC and its Application • Led Flashing Using 555 Timer • Alternate Led Blinking • Touch switch using 555 timer • Street light control using LDR and 555 Timer IC. • Rain alarm system
November	. INTRODUCTION TO ARDUINO • About Arduino • Arduino IDE Software Setup • Arduino on Board
December	ARDUINO UNO BASEC ACTIVITIES • Led Blinking Using Arduino • Infrared (IR)Sensor Interface With Arduino • IR (Infrared)Controlled Led Blinking • Ultrasonic Sensor Interface With Arduino • Ultrasonic Sensor Based Motor Control • Bluetooth Interfacing With Arduino • Bluetooth Based LED Control • L293D Motor Interface • Bluetooth Based Motor Control • DHT11 Basic Temperature-Humidity Sensor Interface With Arduino • Rain Sensor Interfacing With Arduino • RFID Control using Arduino • Interfacing the Gas Sensor with Arduino • Controlling the NODE MCU
January	3D PRINTER • Introduction of 3D Printer. • Application of 3D Printer • How To Print • How To Design
February	DIGITAL MULTIMETER MEASURING TOOL • How to use Digital Multimeter. • Application of digital Multimeter.
March	DIGITAL VERNIER CALIPER MEASURING TOOL • How to use Vernier Caliper. • Application of Vernier Caliper. 9. SOLDERING IRON TOOL • How to use Soldering Iron. • Application of Soldering Iron.
Projects	*PROJECTS* *Obstacle Avoider/Follower Robot Using Ultrasonic Sensor* *Print Geometrical Shapes-3D Printer* *Bluetooth Controlled Car* *RFID Based Smart Locking System*

Golden Jubilee School
ATL Syllabus 2025-26
Class:-9

Month	Syllabus	Remarks
June	What is innovation? Case studies of Great innovators and innovations.	Working on ATL Project As mentioned on Dash board
July	Learning To becoming creative by learning 1.Digital literacy 2.Ideation 3.Design Thinking 4.Computational Thinking 5. Physical computing.	Working on ATL Project As mentioned on Dash board
August	• Resistors • Capacitors • Diodes • Transistors • Buzzer • Jumper wires • LED (Light Emitting Diode)	Working on ATL Project As mentioned on Dash board
September	• Built Seven Segment Circuit On Breadboard. • Two Finger Touch Lamp Using Transistor	Working on ATL Project As mentioned on Dash board
October	555 TIMER BASED ACTIVITIES • Introduction of 555 Timer IC and its Application • Led Flashing Using 555 Timer	Working on ATL Project As mentioned on Dash board
November	. INTRODUCTION TO ARDUINO • About Arduino • Arduino IDE Software Setup • Arduino on Board	
December	ARDUINO UNO BASEC ACTIVITIES • Led Blinking Using Arduino • Infrared (IR)Sensor Interface With Arduino • IR (Infrared)Controlled Led Blinking • Ultrasonic Sensor Interface With Arduino • Ultrasonic Sensor Based Motor Control • Bluetooth Interfacing With Arduino	
January	3D PRINTER • Introduction of 3D Printer. • Application of 3D Printer • How To Print • How To Design	
February	DIGITAL MULTIMETER MEASURING TOOL • How to use Digital Multimeter. • Application of digital Multimeter.	
March	DIGITAL VERNIER CALIPER MEASURING TOOL • How to use Vernier Caliper. • Application of Vernier Caliper. 9. SOLDERING IRON TOOL • How to use Soldering Iron. • Application of Soldering Iron.	
Projects	PROJECTS ⍰ RADAR System Using Ultrasonic Sensor ⍰ Smart Home Automation ⍰ Smart Dustbin	

Golden Jubilee School
ATL Syllabus 2025-26
Class:-8

Month	Syllabus	Remarks
June	What is innovation? Case studies of Great innovators and innovations.	Working on ATL Project As mentioned on Dash board
July	Learning To becoming creative by learning 1.Digital literacy 2.Ideation 3.Design Thinking 4.Computational Thinking 5. Physical computing.	Working on ATL Project As mentioned on Dash board
August	DIGITAL VERNIER CALIPER MEASURING TOOL □ How to use Vernier Caliper. □ Application of Vernier Caliper. 9. SOLDERING IRON TOOL □ How to use Soldering Iron. □ Application of Soldering Iron	Working on ATL Project As mentioned on Dash board
September	INTRODUCTION TO ARDUINO • About Arduino • Arduino Ide Software Setup • Arduino On Board	Working on ATL Project As mentioned on Dash board
October	3DPrinter Learning how to set up 3D printer Learning To Print Common geometrical shapes	Working on ATL Project As mentioned on Dash board
November	3DPrinter Learning to print complex 3D objects	
December	Learn to use Drill machines , learn to use wrenches hot gun .	
January	PBL (PROJECT BASED LEARNING) ELECTRONICS KIT • Introduction To Program Based Learning Kit (PBL) • MODKIT Introduction • GUI Based LED Pattern &Running Light	
February	• GUI Based RGB LED Programming • GUI Based Pushbutton &Buzzer Programming	
March	. INTRODUCTION TO ARDUINO • About Arduino • Arduino Ide Software Setup • Arduino On Board	
Projects	Breadboard Based- Smart Home Model, 0-9 Counter Using Seven Segment Display • PBL Based- LCD Name Display • PBL Based- Seven Segment Counter • PBL Based- LDR Controlled LED Pattern • PBL Based- IR Controlled Smart FAN • Robot Chassis Interface • Robot Assembling And Programming • Line Follower Robot Using IR Sensor • Print a cube shape- 3D Printer	

Golden Jubilee School
ATL Syllabus 2025-26
Class:-6th and 7th

Month	Syllabus
June	What is innovation? Case studies of Great innovators and innovations.
July	Learning To becoming creative by learning 1.Digital literacy 2.Ideation 3.Design Thinking 4.Computational Thinking 5. Physical computing.
August	3D PRINTER • Introduction of 3D Printer. • Application of 3D Printer • How To Print • How To Design
September	Learn to use Drill machines, learn to use wrenches hot gun . Learning to use sewing machine
October	INTRODUCTION OF ELECTRONICS COMPONENT Resistors Capacitors Diodes
November	Transistors Buzzer Jumper wires LED (Light Emitting Diode) Switches RGB LED Voltage Regulator IC (Integrated Circuit) Seven Segment LDR Sensor IR Sensor
December	Working on Avishkaar ER Advanced and Pro Robotics Kit
January	Build A LED Circuit LED Glowing Using Switches RGB LED Glowing Circuit RGB LED Glowing Circuit Using Switches LED Patterns On Breadboard Using Switches Introduction To Seven Segment Display

Golden Jubilee School
ATL Syllabus 2025-26
Class:-4th and 5th

Month	Syllabus
June	What is innovation? Case studies of Great innovators and innovations.
July	Learning To becoming creative by learning 1.Digital literacy 2.Ideation 3.Design Thinking 4.Computational Thinking 5. Physical computing.
August	Introduction To Mechanical Parts In Robotics Avishkaar ER Advanced and Pro Robotics Kit
September	• Robotic Sweeper Mechanical Assembling • Robotic Fan Bot Assembling Avishkaar ER Advanced and Pro Robotics Kit
October	• Mechanical Speedster Assembling • Wheeled Robot Rider Avishkaar ER Advanced and Pro Robotics Kit)
November	SCRATCH IS A VISUAL PROGRAMMING LANGUAGE • About Scratch • Software Setup
December	SCRATCH IS A VISUAL PROGRAMMING LANGUAGE • Getting Familiar With Sprite And Tools
January	SCRATCH ACTIVITY- HOW TO PAINT YOUR OWN SPRITE □ Introduction About Paint Tool In Scratch □ Draw Simple Shapes and Animate. □ How To Fill Colors In Your Sprite □ Activity To Show Facial Expressions Using Sprite □ How To Make Copy Of Structures Or Shapes □ How To Use Costume Feature □ How To Change Expressions Using Programming Your Sprite
February	SCRATCH ACTIVITY- HOW TO MAKE AQUARIUM □ How To Use Background In Scratch □ How To Do Change Costume Of Background
March	• How To Synchronize Backdrop And Sprite • Do The Activity Of Aquarium Using Multiple Fishes
Projects	

Golden Jubilee School
ATL Syllabus 2025-26
Class:-1st , 2nd and 3rd .

Month	Syllabus
June	What is innovation? Case studies of Great innovators and innovations.
July	Learning To becoming creative by learning 1.Digital literacy 2.Ideation 3.Design Thinking 4.Computational Thinking 5. Physical computing.
August	Working on simple Tweak Robot.
September	Assembling Tweak Robot
October	Learning Logic behind various sensors used in Tweak robot.
November	Ways to design tweak robot
December	Tweak coding
January	Tweak as a Traffic Police | Coding Tweak
February	Tweak as a Rodeo Bull | Coding Tweak
March	Tweak as a Sunflower Alarm | Coding Tweak | LDR Sensor