

Curriculum

Only for Wiingy Employees

Grade 1-3				
SI No.	Modules	Learner	Creator	Innovator
1	Animation and Story telling through Code.org	6	6	6
2	Robotics Fundamentals	7	7	7
3	Science Exploration	7	7	7
4	Coding through Game Development		10	10
5	Robotics in Everyday Life		10	10
6	Everyday Science & Technology		8	8
9	Minecraft - Advanced Coding			20
7	Maths through Coding			20
8	App Development through Code.ORG			18
10	AI / ML			20
11	Advance Robotics			14
	Total Classes	20	48	140

Key Learnings

Grade 1-3			
	Alphabet	Word	Sentence
Key Points	Learner	Creator	Innovator
Coding	<p>1) In coding fundamentals kids will learn about logic building and algorithm designing, which is the most important part of coding. If we relate this with the English learning we will say he will learn about the alphabets of english.</p> <p>2) In this module kid will learn about independent commands like Events,Conditions(if,if-else),Loop(repeat,forever) etc. Using these commands the kid will learn to create different animation using coding</p>	<p>1) As in the Learner course, the kid already learned about the independent commands,so now in the creator he will learn how to build logic to solve a problem using all or some commands together, this is the same as using alphabets to learn how to make a word.</p> <p>2) In this module to learn how to build logic using multiple commands kid will create his own games in code.org</p>	<p>1) As in creator kid already learned how to use multiple commands together,now in innovator kid will learn some advance coding concepts like nested condition,nested loops,functions etc.</p> <p>2) Using these advanced concepts kid will learn to create create complex codes and logic using minecraft like he will learn to create his own game world which includes some advance coding like code to change weather,change position of character etc.</p> <p>so basically in this module kid learned how to make sentences.</p>
Robotics	<p>1) In robotics foundation kid will learn basics about robots like what is robot,how they worketc.</p> <p>2) While learning basics he will also learn about hardware software,hardware coding,input,output control and using all these he will make some interesting projects like Traffic Light,A robot that avoids obstacle etc</p> <p>Again this is equals to learning alphabets of english</p>	<p>1) As in learner kid already finished basic of robot ,so now in creator using the basics of robots and basics of hardware programming kid will learn how to solve real life problem using robotics, like the problem of home safety etc.</p> <p>2) In this module he will Learn about the different displays,How led tv will works or how tv remote will work etc, using those concepts he will create different projects like remote controlled car, Sound controlled equipments etc.</p> <p>Again this is equals to learning word formation using alphabets</p>	<p>1) As in creator kid already learned much about robots and how to solve real life problem using robots,now in innovator kid will learn about advance robotics technology like how your car remote will work, how mobile bluetooth will work etc</p> <p>2) In this module while learning these technologies kid will create some interesting projects also like mobile controlled robot etc.</p> <p>Again this is equals to how to form sentence using words</p>
Science & Tech	<p>1) In this module kd will learn basic concepts from school science book.</p> <p>2) Like what are sense organs and relate this with robotic sensors,what is motion,basics of electricity.</p> <p>so in school kid learned these concepts theoretically but now kid will apply his theoretical knowledge to build those projects practically,like building a circuit etc.</p>	<p>1) As in Learner kid learned and applied some basic concepts of science practically,now in creator he will learn about practical science and tech like science behind home appliances,</p> <p>2) Example - Fan, why fan rotates because of motor in this way he understood the need of motor and then create a project using motor also so he understood this practically also this is how he will learn science practically</p>	<p>1) As in creator kid learned about real life science and now in innovator he will learn about advance tech like how mobile hotspot will work,What is 3G,4G communication etc</p> <p>2) Apart from this he will also learn about Artificial Intelligence and Machine Learning like how mobile face unlock will work and finally create a face detection algorithm etc.</p>
Maths			<p>The most interesting topic of Innovator is the maths through coding in this module kid will learn basics of School maths like addition subtraction multiplication in a gamified version by creating a game using Coding and solve the maths puzzle.</p>

Grade 4-5				
SI No.	Modules	Learner	Creator	Innovator
1	Coding Fundamentals	6	6	6
2	Robotics Fundamentals	7	7	7
3	Science Exploration	7	7	7
4	Coding through Game & Web Development on Code.org		10	10
5	Robotics in Everyday Life		10	10
6	Everyday Science & Technology		8	8
9	Minecraft - Advanced Coding			15
7	Maths through Coding			15
8	App development through MIT			20
10	Advance Robotics			12
11	AI/ML			15
12	AR/VR			15
	Total Classes	20	48	140

Key Learnings

Grade 4-5			
Key Points	Learner	Creator	Innovator
Coding	<p>1) In coding fundamentals kid will learn about logic building and algorithm designing that is the most important part of coding. If we relate this with the English learning we will say he will learn about the alphabets of english.</p> <p>2) In this module kid will learn about independent commands like Events,Conditions(if,if-else),Loop(repeat,for ever) etc, Using these commands the kid will learn to create different animation using coding</p>	<p>1) As in Learner course kid already learned about the independent commands,so now in creator he will learn how to build logic to solve a problem using all or some commands together, this is same as using alphabets learn how to make a word.</p> <p>2) In this module to learn how to build logic using multiple commands kid will create his own games in code.org</p>	<p>1) As in creator kid already learned how to use multiple commands together,now in innovator kid will learn some advance coding concepts like nested condition,nested loops,functions etc.</p> <p>2) Using these advance concepts kid will learn to create create complex codes and logic using minecraft like he will learn to create his own game world which includes some advance coding like code to change weather,change position of character etc. so basically in this module kid learned how to make sentences.</p>
Robotics	<p>1) In robotics foundation kid will learn basics about robots like what is robot,how they worketc.</p> <p>2) While learning basics he will also learn about hardware software,hardware coding,input,output control and using all these he will make some interesting projects like Traffic Light,A robot that avoids obstacle etc</p> <p>Again this is equals to learning alphabets of english</p>	<p>1) As in learner kid already finished basic of robot ,so now in creator using the basics of robots and basics of hardware programming kid will learn how to solve real life problem using robotics, like the problem of home safety etc.</p> <p>2) In this module he will Learn about the different displays,How led tv will works or how tv remote will work etc, using those concepts he will create different projects like remote controlled car, Sound controlled equipments etc.</p> <p>Again this is equals to learning word formation using alphabets</p>	<p>1) As in creator kid already learned much about robots and how to solve real life problem using robots,now in innovator kid will learn about advance robotics technology like how your car remote will work, how mobile bluetooth will work etc</p> <p>2) In this module while learning these technologies kid will create some interesting projects also like mobile controlled robot etc.</p> <p>Again this is equals to how to form sentence using words</p>
Science & Tech	<p>1) In this module kd will learn basic concepts from school science book.</p> <p>2) Like what are sense organs and relate this with robotic sensors,what is motion,basics of electricity.</p> <p>so in school kid learned these concepts theoretically but now kid will apply his theoretical knowledge to build those projects practically,like building a circuit etc.</p>	<p>1) As in Learner kid learned and applied some basic concepts of science practically,now in creator he will learn about practical science and tech like science behind home appliances,</p> <p>2) Example - Fan, why fan rotates because of motor in this way he understood the need of motor and then create a project using motor also so he understood this practically also this is how he will learn science practically</p>	<p>1) As in creator kid learned about real life science and now in innovator he will learn about advance tech like how mobile hotspot will work,What is 3G,4G communication etc</p> <p>2) Apart from this he will also learn about Artificial Intelligence and Machine Learning like how mobile face unlock will work and finally create a face detection algorithm etc. and he will also learn about AR and VR technology and create his own projects related to this technology.</p>
Maths			<p>The most interesting topic of Innovator is the maths through coding in this module kid will learn basics of School maths like addition subtraction multiplication in a gamified version by creating a game using Coding and solve the maths puzzle.</p>

Grade 6-7				
SI No.	Modules	Learner	Creator	Innovator
1	Coding Fundamentals	6	6	6
2	Robotics Fundamentals	7	7	7
3	Science Exploration	7	7	7
4	Java Script coding through Game development		10	10
5	Robotics in Everyday Life		10	10
6	Everyday Science & Technology		8	8
9	Minecraft - Basic Python			20
7	App Development through MIT			20
8	Python Coding			15
10	Advance Robotics (IoT)			12
11	AI / ML - Advance Python			15
12	AR/VR			10
	Total Classes	20	48	140

Key Learnings

Grade 6-7			
Key Points	Learner	Creator	Innovator
Coding	<p>1) In coding fundamentals kid will learn about logic building and algorithm designing that is the most important part of coding. If we relate this with the English learning we will say he will learn about the alphabets of english.</p> <p>2) In this module kid will learn about independent commands like Events,Conditions(If,If-else),Loop(repeat,forever) etc, Using these commands the kid will learn to create different animation using coding</p>	<p>1) As in Learner course kid already learned about the independent commands,so now in creator he will learn how to build logic to solve a problem using all or some commands together and also in this module he will learn some basics of java script, this is same as using alphabets learn how to make a word.</p> <p>2) In this module to learn how to build logic using multiple commands kid will create his own games in code.org</p>	<p>1) As in creator kid already learned how to use multiple commands together,now in innovator kid will learn some advance coding concepts like nested condition,nested loops,functions etc using the python.</p> <p>2) Using these advance concepts kid will learn to create create complex codes and logic using minecraft in python language like he will learn to create his own game world which includes some advance coding like code to change weather,change position of character etc.</p> <p>so basically in this module kid learned how to make sentences.</p>
Robotics	<p>1) In robotics foundation kid will learn basics about robots like what is robot,how they worketc.</p> <p>2) While learning basics he will also learn about hardware software,hardware coding,input,output control and using all these he will make some interesting projects like Traffic Light,A robot that avoids obstacle etc</p> <p>Again this is equals to learning alphabets of english</p>	<p>1) As in learner kid already finished basic of robot ,so now in creator using the basics of robots and basics of hardware programming kid will learn how to solve real life problem using robotics, like the problem of home safety etc.</p> <p>2) In this module he will Learn about the different displays,How led tv will works or how tv remote will work etc, using those concepts he will create different projects like remote controlled car, Sound controlled equipments etc.</p> <p>Again this is equals to learning word formation using alphabets</p>	<p>1) As in creator kid already learned much about robots and how to solve real life problem using robots,now in innovator kid will learn about advance robotics technology like how your car remote will work, how mobile bluetooth will work etc</p> <p>2) In this module while learning these technologies kid will create some interesting projects also like mobile controlled robot etc.</p> <p>Again this is equals to how to form sentence using words</p>
Science & Tech	<p>1) In this module kd will learn basic concepts from school science book.</p> <p>2) Like what are sense organs and relate this with robotic sensors,what is motion,basics of electricity.</p> <p>so in school kid learned these concepts theoretically but now kid will apply his theoretical knowledge to build those projects practically,like building a circuit etc.</p>	<p>1) As in Learner kid learned and applied some basic concepts of science practically,now in creator he will learn about practical science and tech like science behind home appliances,</p> <p>2) Example - Fan, why fan rotates because of motor in this way he understood the need of motor and then create a project using motor also so he understood this practically also this is how he will learn science practically</p>	<p>1) As in creator kid learned about real life science and now in innovator he will learn about advance tech like how mobile hotspot will work,What is 3G,4G communication etc</p> <p>2) Apart from this he will also learn about Artificial Intelligence and Machine Learning like how mobile face unlock will work and finally create a face detection algorithm etc using python language and he will also learn about AR and VR technology and create his own projects related to this technology.</p>