

Outline: Coding Program for Educators

Introduction	<ul style="list-style-type: none"> • How coding can benefit teaching and learning process • Benefits of learning coding for Educators from Non-Technical Field (Without Computer Science Background) • How new Digital platform has made learning of coding easier for Educators from Non-Technical Field. • How coding can help educators to learn 21st Century Skill sets • Why leaning Computational thinking will be important for every Educators in this Digital Age & how they can learn it using Coding • Cross Curricular integration of coding & New National Education Policy • Importance of Coding in Stem Education • How Educators can integrate coding with Maths, Language & Arts, Science, at all levels to create engaging class
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Fundamental of Coding using Scratch and Google for Education

Introduction to coding with Animation	<ul style="list-style-type: none"> • Step by step process of understanding block-based coding for Educators from Non-Technical Field • Understand basic elements of Animation • Learn important coding concepts, like sequencing, and functions • Create an animation project in Scratch
Create a Virtual Tour	<ul style="list-style-type: none"> • Understand important elements of a Virtual Tour • Step by step process of creating Virtual Tour for Educators from Non-Technical Field • Upload your characters and Backdrops • Learn important coding concepts, like events, and loops • Create a virtual tour/interactive presentation in Scratch
Create a Story Telling App	<ul style="list-style-type: none"> • Important elements of Story Telling App • Step by step process of creating Story Telling App for Educators from Non-Technical Field • Understanding Keyboard Events, Sensing command, Conditional Statements.
Create a Basic Gaming App	<ul style="list-style-type: none"> • How using Gaming App teachers can create engaging lessons • Step by step process of creating Basic Game for Educators from Non-Technical Field • Understanding the concepts of Variables, Score, Control structure
Create a Chatbot (Talking Machine)	<ul style="list-style-type: none"> • Important elements of Chatbot and how it can be useful for every teacher. • Beginners Concept of creating the chatbot • Training the Chatbot • Understand Control Structures & Text to Speech Command

Mobile App Development Using MIT App Inventor

Create a Magic App	<ul style="list-style-type: none"> • Be familiar with MIT App Inventor Interface • Step by step process of design an App on MIT • Understand Button ,Image Components, properties, and events • Learn important coding concepts like events and sequencing • Connecting Apps to your phone
Information App	<ul style="list-style-type: none"> • Get familiar with important functions of Information App • How information app can add great value to teaching & learning process • Understanding about Horizontal layout • Adding Text to Speech Components, its properties, and methods • Creating a file to install the app on your phone
Develop a Google Translator	<ul style="list-style-type: none"> • Understand basic elements of Google Translator and how it can be used in Education. • Step by step process of creating Google Translator for Educators from Non-Technical Field • Understand the Translate Component, properties & methods • Speech Recognizer Component, its properties, and methods • List view component, its properties, and methods • Conditional Statements and Events • Relational and Logical Operators
Develop a Paint Editor	<ul style="list-style-type: none"> • Basic Paint Editor Features • Step by step process of creating a Paint Editor • Understand Canvas/Camera/Sharing/Slider Component, properties, and methods • Understand Variables & Operators ,Import and Export Projects
Alexa App	<ul style="list-style-type: none"> • Basic Features of Alexa App and how it can help in Teaching & learning process • Alexa App (WebView) Component, its properties, and methods • understand Conditional Statements, Relational and Logical Operators, Procedures

Coding using Code.org

Design a website	<ul style="list-style-type: none"> • Orientation of using code.org platform for coding • Introduction to web pages • Styling WebPage and add interactive elements • Multi-page Website • Hands-On: Designing a website
Game Design	<ul style="list-style-type: none"> • Get Familiar with interaction games/animations in Game Lab • Step by step instructions to create a Game Design • Drawing in Game Lab

	<ul style="list-style-type: none">• Playing with Shapes and Parameters• Understand Variables, Random Numbers, Functions, Velocity, Collisions and Text• User input through Keyboard and Mouse• Interesting Gaming elements: Complex Characters Movement
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Introduction to Microsoft Minecraft

Introduction to Microsoft Minecraft	<ul style="list-style-type: none">• Introduction to Minecraft• Designing a project on Minecraft
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Coding in Teaching Learning Process

Coding in Teaching	<ul style="list-style-type: none">• Integrate coding in regular subjects: Science, Maths, Language & Arts at all levels• Introduction to various coding platform that you can use to teach coding• Orientation on things to keep in mind while teaching coding to students.
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