

# **Course Outline: Microsoft Certified Educator**

Training by upEducators, an initiative of Tech for Educators prepares you for Microsoft Certified Educator and also make you proficient in Implementation of Technology in the Classroom to create 21<sup>st</sup> Century Learning Design (21 CLD)

#### Introduction

- Need to develop 21st century skills among our students.
- How technology can benefit the teaching and learning process
- How innovative teaching practices can support student learning to develop 21<sup>st</sup> Century Skills
- How to use Digital Tools in all formats of the classroom:
  - o Project-based Classroom,
  - Blackboard-based classroom,
  - o Computer-based Classroom and
  - o Online Classroom
- Learn to integrate 21st Century Skills into your lessons as per the New National Education Policy (NEP) 2020.
- Plan and customise incorporating 21st Century Skills in lessons and activities to support teaching in International Curriculums such as IGCSE and IB
- How you can use technology to prepare for the future
- How to pick the right tool for your objective
- How you can help your students behave responsibly online as well as using technology in school.

# **Digital Pedagogy**

- Introduction to Digital Pedagogy
- Difference Between Digital Pedagogy and Classroom Pedagogy
- 3 most effective types of Modern Classroom techniques
  - Blended Learning
  - Project Based Learning
  - o Flipped Classroom

# **Al Features in Microsoft Tools**

- Create newsletter content using Bing AI Chat in Sway
- Create lesson plan using Bing AI Chat
- Use Bing AI Chat to analyze Excel data and learn prompts to get Excel Formulae
- Create quizzes using Bing AI Chat and easily integrate the same in MS Forms
- Learn to write powerful prompt to create presentations in minutes.
- Create levelled and differentiate classroom activities for a topic using Bing AI Chat
- Create evaluation rubrics to assess students work objectively using Bing AI Chat
- Evaluate student' work using Bing AI Chat and and also provide feedback



## **OneNote & Class Notebook**

- Create an e-book & learn best practices of creating an e-book.
- Purpose of creating a digital book
- Creating Notebook as a Content Library, Collaborative Space, Student notebooks, & Teacher Space
- Set up a digital Notebook & add Sections and Page
- Manage and Distribute section and pages.
- Insert text, images, handwritten notes, attachments, links, voice, video, and more in eBook.
- Review students work using digital ink
- Solve an equation using Math button.
- Share notebook with Colleagues

#### **MS Teams**

- What Microsoft Teams is and how it can be used in classrooms and schools?
- Best Practices of how Teams can be used in Physical Classroom or Online Classroom
- How Digital Classroom can be created in Teams
- How to integrate different digital tools in Teams
- Understand the different types of Teams: Class, PLC, Staff & Others
- Add colleagues and students to Teams
- How to create a Team and channels within a Team, including private channels
- How to navigate within a Team and manage the Team's permissions
- How to upload/create Files, start and reply to conversations, and post announcements
- How to use the built-in OneNote notebook as well as add additional apps that can be used in Teams
- How to create an assignment and quiz within Teams
- Different strategies for giving student feedback: Rubrics, Personalized Comment, Video Feedback
- How to give consistent and transparent feedback which can help students to improve their work
- Best Practices of using Channels for Group communication and collaboration

#### **One Drive**

- How One Drive can be used for your own cloud storage
- Understand the difference between One Drive and Share Drive
- Best Practices of managing all the files and folders in Drive
- How to upload documents & create to One Drive
- How to create documents within One Drive
- How MS Teams works seamlessly with SharePoint



# **MS Forms**

- Create formative and summative assessments with Microsoft Forms
- Best strategies to conduct formative and summative assessment using MS Forms
- Create survey forms & Quizzes.
- Add videos and images in the form
- Create section wise quiz and add progress bar
- Create adoptive quiz for effective formative assessment
- How to create a lesson plan or sharing learning content using MS Forms
- Add text and video feedback
- Capture responses in a spreadsheet & analyze response using charts
- Explain how to share or duplicate Microsoft Forms to collaborate with colleagues
- Use auto grading, manual grading, branching, and equation options to streamline the assessment process

# **Word Online**

- Know the basic and advanced features of Word Online useful for a teacher.
- How to support collaborative learning with Word
- Prepare Table of Contents with auto update
- Different sharing options in Word Online and how to publish the doc on web.
- Know how to translate documents with ease
- How to dictate text to help write a report
- Control docs using version history
- How to create Authentic Documents using Citation and Footnote

#### **Excel Online**

- Know the basic & advanced features of Excel Online useful for a teacher.
- Develop effective methods of collecting the data required.
- Determine what process to use to discover various methods of data analysis
- Learn sorting, filter, filter view & other important functions
- Learn Merge cell, freeze cell, remove duplicates
- Learn advanced excel features such as conditional formatting, data validation, flash fill

### **PowerPoint Online**

- Explain how to create flipped lessons using PowerPoint Recorder
- How to make your presentations look better and more effectively communicate your point
- How to add dynamic and engaging content into your presentations
- How to use presenter notes features to deliver impactful presentation
- Add a variety of presentation themes, hundreds of fonts, embedded video, animations, and more
- How to use Slide Master to enable consistent in the slide layout

## **MS Sway**

- Create a digital story telling board
- Explain how Sway works to share text, images, video, and dynamic content to tell a rich digital story
- Explain a variety of ways Sway can be used in the classroom
- Learn how to collaborate and share on Sway



# **Calendar & Teams Meeting**

- Why it's important to plan your meetings for maximum efficiency.
- How you can use Teams Meeting to conduct productive online meetings
- Different ways of inviting students or educators to a Teams Meeting
- How to share your screen with others, pin screen, change background.
- Advance features in Teams Meeting to make it more effective
- How to schedule a meeting, add participants
- How to keep track of who will be attending your meeting
- Need to share MS Word for meeting agendas, minutes and follow-up.
- Set reminders and notifications for events in your calendar.

# Flip

- Learn about a powerful tool which helps student and the community have their voice heard.
- Learn how to create a Group, Topics, and share with students.
- Discover ways to use Flip within their learning communities.
- How to give assignments using Flip
- How to improve Oral and Visual Communication of students using Flip

# **21st Century Learning Design**

- Learn the need for 21st Century Learning Design
- Innovative teaching and learning: what is "innovative teaching practice"?
- What are the characteristics of a "21st century educator"?
- What are the characteristics of a "21st century learner"?

#### Collaboration

- What are the big ideas in Collaboration?
- What does working together mean?
- What does shared-responsibility mean?
- What does making substantive decisions mean?
- What does working interdependently mean?
- Learn the rubrics and decision tree of Collaboration
- Apply the skill of Collaboration in Classroom
- Learn about Collaboration in Action

#### **Skilled Communication**

- What are the big ideas in Skilled Communication?
- What does extended-communication or multi-modal communication mean?
- What does supporting evidence mean?
- How can you design communication for a particular audience?
- Learn the rubrics and levels of Skilled Communication
- Apply the skill of Skilled Communication in Classroom
- Learn about Skilled Communication in Action



# **Knowledge Construction**

- How to apply knowledge in a new context?
- How to design lessons, so that the main requirement is knowledge construction?
- What does knowledge construction mean?
- What are the big ideas in knowledge construction?
- Learn the rubrics and levels of Knowledge Construction
- Apply the skill of Knowledge Construction in Classroom
- Learn about Knowledge Construction in Action

# **Self-Regulation**

- What are the big ideas in Self-Regulation?
- What do we mean by long-term activity?
- How important is defining learning goals and success criteria in advance of undertaking work?
- How important is having the opportunity to revise work based on feedback?
- Learn the rubrics and levels of Self-Regulation
- Apply the skill of Self-Regulation in Classroom
- Learn about Self-Regulation in Action

# **Real World Problem Solving and Innovation**

- What are the big ideas in problem-solving and innovation?
- What are the problems experienced by real people?
- Are there specific, explicit contexts for problem-solving?
- How can actual data be used to solve a problem?
- Learn the rubrics and levels of problem-solving and innovation
- Apply the skill of problem-solving and innovation in Classroom
- Learn about problem-solving and innovation in Action

# **Use of ICT for Learning**

- What are the big ideas in ICT for learning?
- How can ICT be used to learn or practice basic skills or reproduce information?
- How can ICT be used to support knowledge construction?
- How can an ICT product be created for authentic users?
- Learn the rubrics and levels of use of ICT for Learning
- Apply the skill of use of ICT for Learning in Classroom
- Learn about use of ICT for Learning in Action



# **MasterClass - Advanced Digital Tools and Apps for Educators**

# **Graphic Design for Education**

- Basics of Design Tools
- Elements required to create impactful Design for Social media
- Design Infographic, Brochures, Banners and Social Media posts
- Create Worksheets for various subjects
- Create Social Media Posts & dynamic Presentation

# **Video Editing**

- Add Animation, transition, banner and sound
- Learn to merge or crop the videos
- Learn to create an impactful video for Teaching Learning Process
- Learn how to record and Edit Educational Video
- Create Video Testimonials to drive quality leads
- Create a Video for YouTube Channel to get more subscribers and views
- Create Story videos to engage your audience

# Al in Education

- Generate examples of real-world applications of class concepts.
- Create stories by providing context
- Learn to create images using AI
- Generate reading comprehension questions.
- Learn to draft emails and circulars with ease
- Paraphrase a long text to a precise, shorter form
- Learn Google Lens to identify objects and provide relevant information through a smartphone camera or image.

# **Introduction to Coding**

- Understand basics of coding
- Learn how to use coding for your subjects
- Design a fun activity using coding

# **Gamification in Education**

- Understand the differences between Game Based Learning Vs Gamification
- Learn how gamification can increase student engagement
- Learn about Game elements and mechanisms
- Learn 3 most powerful gamification tools and Apps that you can use in your lesson plan
- Learn the best practices for creating educational content and activities using Gamification

### **Interactive Learning Experience**

- How to create an interactive presentation
- Learn to add simulation, and 3D Content to your teaching content
- Learn to add Virtual Reality, Quizzes to the presentation
- Learn to add Quizzes within YouTube Videos
- Learn to share the resources in different ways
- Learn how to use Nearpod for free



# **AR/VR** in Education

- Brief history and evolution of AR/VR technology
- Benefits of AR/VR in education
- Examples of how AR/VR can enhance traditional classroom learning
- Case studies of successful implementation of AR/VR in the classroom
- Learn how to enhance your lesson using Google AR/VR, Nearpod VR, BBC VR
- How to use ARVR in Maths/Science/ English/Social Science

### **Productivity Tools**

- Learn to use of Screencastify software to provide video feedback to students or record informational videos
- Learn how to use Miro, an online collaborative whiteboard platform that enables the creation of mind maps, and brainstorming boards, and visually collaborate in real time.
- Learn to annotate and add comments or notes, to various types of digital content, such as images, videos, documents and websites using Annotate.net
- Auto-generate step-by-step guides and instruction manuals using Scribe

# **Subject Specific Apps**

# Languages

- Using Book Creator, learn to improve students' writing skills in a fun and creative manner.
- Build a story and record yourself through a story-building app using Story Jumper
- Learn Duolingo to provide practice while learning new languages
- Develop levelled reading skills, grammar skills and improve vocabulary using interactive and engaging learning experiences by using ReadAlong by Google
- Develop reading comprehension skills in an engaging environment by using Read Works.
- Use Google input tools to type in any language
- Learn to translate text to any language using Google Translate

#### **Social Science**

- Design Virtual trips and projects using Google Earth
- Use map layout for teaching locations and pinning locations while teaching
- Use a timeline for creating historical events in chronological order
- Access 360-degree panoramas of historic landmarks, 3D models, Information in AR, photos, videos, and virtual tours of museums, galleries, and cultural institutions around the world.
- Bring art, history, and culture to life in an interactive and engaging way.

#### Science

- Tools like Physics Classroom and Chem Collective to simulate real-world laboratory experiments in chemistry and physics
- Use Arduino Science Journal to conduct scientific experiments by measuring the surrounding world with sensors
- Nearpod 3D Models related to various scientific topics
- Phet Virtual Simulation to provide hands-on learning of complex science problem



# **Mathematics**

- Use Geogebra to visualize and manipulate mathematical objects to perform calculations and analyse mathematical relationships using graphing calculator
- Use Phet Simulation tool to explain complex mathematics problems
- Use gamification app to build mathematical concepts
- Equatio to Create and format mathematical equations, formulas, and expressions in a quick and easier manner
- RoboCompass for geometric constructions.
- Geoboard to draw line segments and polygons to investigate perimeter, area, and angles.
- Google Earth and Maps to measure areas

#### **Preschool**

- Use apps like Reading Bear to develop phonics skills using interactive animations, audio, and video segments
- Provide educational games and activities in Literacy, Numeracy and Skills using Abcya
- Build a story and record yourself through a story-building app using Story Jumper
- Make phonics learning fun and engaging with Jolly Phonics App

**Note:** We will conduct these Masterclasses within 6 months of completing the Microsoft Certified Educator program, providing an excellent opportunity for learners to further enhance their technological skills. Please note that masterclass topics are subject to change.