# Certificate Course Title: AI in Education

#### **Course Description:**

This certificate course delves into the transformative role of Artificial Intelligence (AI) in reshaping the landscape of education. Participants will explore cutting-edge AI technologies and their applications in various educational contexts. Through a combination of theoretical insights and hands-on exercises, learners will gain practical skills to leverage AI tools effectively to enhance teaching, learning, and administrative processes in educational settings.

#### **Course Objectives:**

- Understand the fundamentals of Artificial Intelligence and its relevance to education.
- Explore innovative AI-driven solutions for personalized learning and adaptive assessment.
- Examine ethical considerations and challenges associated with AI integration in education.
- Develop practical skills to implement AI tools for pedagogical enhancement and student engagement.

### **Course Structure:**

#### Module : 1 Introduction to AI for Education

- Overview of AI technologies and their applications in education
- Importance of AI in modern teaching and learning environments

#### Module : 2 Understanding Copilot

- Introduction to Copilot, an AI-powered coding assistant
- Exploring Copilot's features and functionalities
- Integrating Copilot into lesson planning and coding activities

#### Module : 3 Utilizing ChatGPT for Education

- Introduction to ChatGPT, a conversational AI model
- Creating interactive learning experiences with ChatGPT
- Implementing ChatGPT in virtual classrooms and online discussions

#### Module : 4 Enhancing Content Creation with AI

- Leveraging AI for content generation and curation
- Using AI tools like Copilot and ChatGPT to create educational resources, quizzes, and assessments
- Customizing content to meet the needs of diverse learners

#### **Module: 5 Personalized Learning with AI**

- Understanding the role of AI in personalized learning
- Implementing AI-driven adaptive learning platforms
- Providing tailored feedback and support to individual students using AI tools

#### **Module : 6 Exploring Curipod for Educational Podcasts**

- Introduction to Curipod, an AI-powered podcast creation platform
- Designing educational podcasts with Curipod
- Integrating podcasts into teaching and learning activities

#### Module : 7 Ethical Considerations in AI

- Addressing ethical considerations in AI-enhanced education
- Ensuring fairness, transparency, and accountability in AI algorithms and applications
- Promoting responsible use of AI tools in educational settings

#### **Module : 8 Capstone Project**

• Participants will undertake a capstone project to apply AI concepts and tools to solve a realworld educational challenge.

#### **Teaching Methodology:**

- Interactive lectures by experts in AI and education
- Personal Laptop with MS Office 365 and Internet is Mandatory
- Hands-on workshops and practical exercises using Copilot, ChatGPT, and Curipod
- Group discussions and collaborative projects
- Guest lectures by industry professionals and AI practitioners

#### **Evaluation and Certification:**

- Continuous assessment of participants' engagement and understanding throughout the course
- Completion of practical assignments and projects demonstrating proficiency in using Copilot, ChatGPT, and Curipod for educational purposes
- Certificate of completion awarded to participants who meet the course requirements and demonstrate competency in leveraging AI technologies in teaching

#### Assessment Criteria:

Participation in discussions and activities: 20%

Assignments and quizzes: 30%

Course Completion Exam: 50%

#### Credit:

3 Credits (equivalent to 45 hours of instruction)

#### **Prerequisites:**

Basic understanding of education systems and technology usage.

#### Who Should Attend:

Educators

Educational administrators

EdTech professionals

Policy makers in education

#### **Delivery Method:**

Online, asynchronous learning platform

#### **Certificate:**

Upon successful completion of the course, participants will receive a certificate of completion.

# **Course Title: Certificate Course in Microsoft Excel in Education**

#### **Course Overview:**

This course is designed to provide educators with the knowledge and skills to leverage Microsoft Excel as a powerful tool for data analysis, organization, and instructional planning in educational settings. Participants will learn essential Excel functionalities and explore practical applications of Excel in curriculum development, assessment, and data-driven decision-making.

#### **Objectives of the Course:**

- To use MS Excel in data analysis, organization, and instructional planning in education.
- To use MS Excel for Research Purpose and Decision making.

#### **Course Modules:**

#### **Introduction to Microsoft Excel**

- Overview of Excel interface and functionalities
- Importance of Excel skills for educators & researchers
- Basic operations and navigation in Excel

#### **Data Entry and Formatting**

- Entering and editing data in Excel worksheets
- Formatting text, numbers, and cells for clarity and consistency
- Using styles, themes, and formatting options to enhance visual appeal

#### **Formulas and Functions**

- Introduction to Excel formulas and functions
- Performing basic calculations (e.g., addition, subtraction, multiplication, division)
- Using built-in functions (e.g., SUM, AVERAGE, COUNT) for data analysis

#### **Data Analysis and Visualization**

- Sorting and filtering data in Excel
- Creating charts and graphs to visualize data trends
- Using Excel's data analysis tools (e.g., PivotTables, PivotCharts) for deeper insights

#### Managing Worksheets and Workbooks

- Organizing data across multiple worksheets and workbooks
- Linking and referencing data between worksheets and workbooks
- Protecting and securing Excel files

#### **Advanced Excel Techniques**

- Using advanced functions and formulas (mean, median, mode, range, standard deviation, frequency, distribution, ANOVA, ANCOVA.)
- Conditional formatting for data visualization and analysis

#### **Teaching Methodology:**

- Interactive tutorials and demonstrations of Excel functionalities
- Personal Laptop with MS Office is Mandatory
- Hands-on practice sessions with guided exercises and real-world scenarios
- Group discussions and collaborative problem-solving activities

#### **Evaluation:**

- Participation in discussions and activities: 20%
- Assignments and quizzes: 30%
- Course Completion Exam: 50%

#### **Course Duration:**

2 Credits (30 Hrs.)

#### **Resources:**

- Course materials, tutorials, and resources provided electronically
- Access to online Excel resources, templates, and tutorials
- Recommendations for further reading and self-paced learning on Excel

# Title: Certificate Course in English Language Proficiency

#### **Overview:**

The Certificate Course in English Language Proficiency is designed to enhance participants' understanding and application of the English language in various contexts. This comprehensive program covers grammar, vocabulary, writing skills, speaking skills, and comprehension. Through interactive sessions, practical exercises, and personalized feedback, participants will develop confidence and competence in using English effectively.

#### **Objectives of the Course:**

- To Comprehend English Language Grammar, Vocabulary, Reading Skill and Writing Skill
- To use English Language in formal-informal writing, editing. Skimming, Scanning

# **Course Structure:**

# Module 1

## Week 1-2: Foundations of English Grammar

- Parts of speech
- Sentence structure
- Tenses and verb forms
- Subject-verb agreement
- Common grammatical errors and how to avoid them

## Module 2

#### Week 3-4: Building Vocabulary and Word Usage

- Strategies for expanding vocabulary
- Synonyms, antonyms, and idiomatic expressions
- Prefixes, suffixes, and root words
- Effective use of dictionaries and online resources

# Module 3

#### Week 5-6: Writing Skills

- Sentence construction and paragraph development
- Essay writing techniques
- Formal vs. informal writing
- Editing and proofreading

## Module 4

#### Week 7-8: Comprehension and Reading Skills

- Understanding different types of texts (fiction, non-fiction, academic)
- Skimming and scanning techniques
- Note-taking and summarizing
- Critical reading and analysis

# Module 5

#### Week 9-10: Practical Application and Assessment

• Real-life scenarios and simulations

# • Group projects and presentations **Methodology:**

- Interactive lectures and discussions
- Group activities and pair work
- Multimedia presentations
- Assignments and quizzes
- Individual feedback and coaching sessions

#### Assessment:

- Weekly quizzes to gauge understanding of concepts
- Assignments to apply learned skills in practical scenarios
- Mid-term and final exams to assess overall proficiency
- Participation and engagement in class activities

#### **Duration:**

• 30 Hrs. ( 2 Credits)

#### **Evaluation:**

- Participation in discussions and activities: 20%
- Assignments and quizzes: 30%
- Course Completion Exam: 50%

#### **Certification:**

Upon successful completion of the course and passing the final assessment, participants will receive a Certificate in English Language Proficiency, recognizing their achievement and competency in the English language.

#### **Enrolment Requirements:**

Proficiency in basic English (speaking, reading, and writing)

Access to a computer with internet connection

Commitment to attend classes and complete assignments

3030 hrs.

બાળસંભાળ અને બાળવિકાસ (૦૨ ક્રેડિટ)

અભ્યાસક્રમ

એકમ-૧ : બાળવિકાસનો પાયો

• બાળકનો અર્થ

એકમ-ર : બાળસંભાળ

- બાળવિકાસના મુખ્ય ખ્યાલો
- બાળવિકાસના સિદ્ધાંતો બાળવિકાસના ઐતિહાસિક અને પ્રવર્તમાન પરિપ્રેક્ષ્ય

• બાળવિકાસની અવસ્થાઓ

• બાળસંભાળની અનિવાર્યતા

• બાળકનો ચેપ્ટા વિકાસ

• બાળકનો ભાષાવિકાસ

• બાળવિકાસના વિવિધ તબક્કાઓની વિચાર પ્રક્રિયા

જન્મથી ૨ અઠવાડિયુ : બચ્યું

તંદુરસ્ત બાળવિકાસ માટે ધ્યાનમાં લેવાની કાળજીઓ

(Neonate)

• ૨મત આધારિત શિક્ષણ અને સંશોધન

બાળકોની ટેવો અને તેની સુધારણા

• બાળકને સ્વાવલંબી બનાવવા શું કરવું?

બાળવિકાસને અસર કરતા પરિબળો : જાતિ, વર્ગ, લૈંગિકતા, સંસ્કૃતિ

૦ શૈશવકાળ - જન્મથી ૦૫ વર્ષ સુધી (Childhood)

શૈશવકાળ - इ થી ૧૧ વર્ષ (Late Childhood)

બાળકના જ્ઞાનાત્મક, ભાષા, સામાજિક અને ભાવનાત્મક વિકાસ

- ગર્ભ બંધાય ત્યારથી જન્મ સુધી (ગર્ભાવસ્થા) (Prenatal Stage) પ્રથમ ૨ વર્ષ : શિશુ (Infant)

ર થી ૫ વર્ષ : બાળક (Chilling)

• બાળકના સારસંભાળમાં મનોવૈજ્ઞાનિક ભૂમિકા

સંદર્ભગ્રંથો :

- बाल विकास एवं पारिवारिक-संबंध सुरेश भटनागर
- Advanced Child Psychology K.C.Shukla, Tara Chand

• વિશિષ્ટ બાળક : પ્રતિભાશાળી બાળકો, દિવ્યાંગ બાળકો, ધીમી ગતિના બાળકો

- बाल विकास भगवानदास
- बाल विकास एवं बाल मनोविज्ञान सुरेश भटनागर
- बाल मनोविज्ञान विजेन्द्रकुमार वशिष्ठ
- बाल मनोविज्ञान त्रिलोक चंद्रा, रंजना पाण्डेय
- વિકાસાત્મક મનોવિજ્ઞાન અરવિંદ શાહ
- 🔹 બાળવિકાસ અને શિક્ષણ સુમતીબેન વૈદ્ય
- •ં બાળપણ અને બાળઉછેર ડો. જયેન્દ્રસિંહ ગોહિલ તથા અમ્ય (અમાદ પ્રકાશના બાજી પ્રકાશના વ્યવસાય છે. જયેન્દ્ર ગોહિલ તથા અમ્ય (અમાદ પ્રકાશના વ્યવસાય છે. જે ગાંધી ગોળવા છે. જે જે જે ગોળવા છે. જે જે ગોળવા છે. જે જે જે જે ગોળવા છે. જે ગોળવા છે