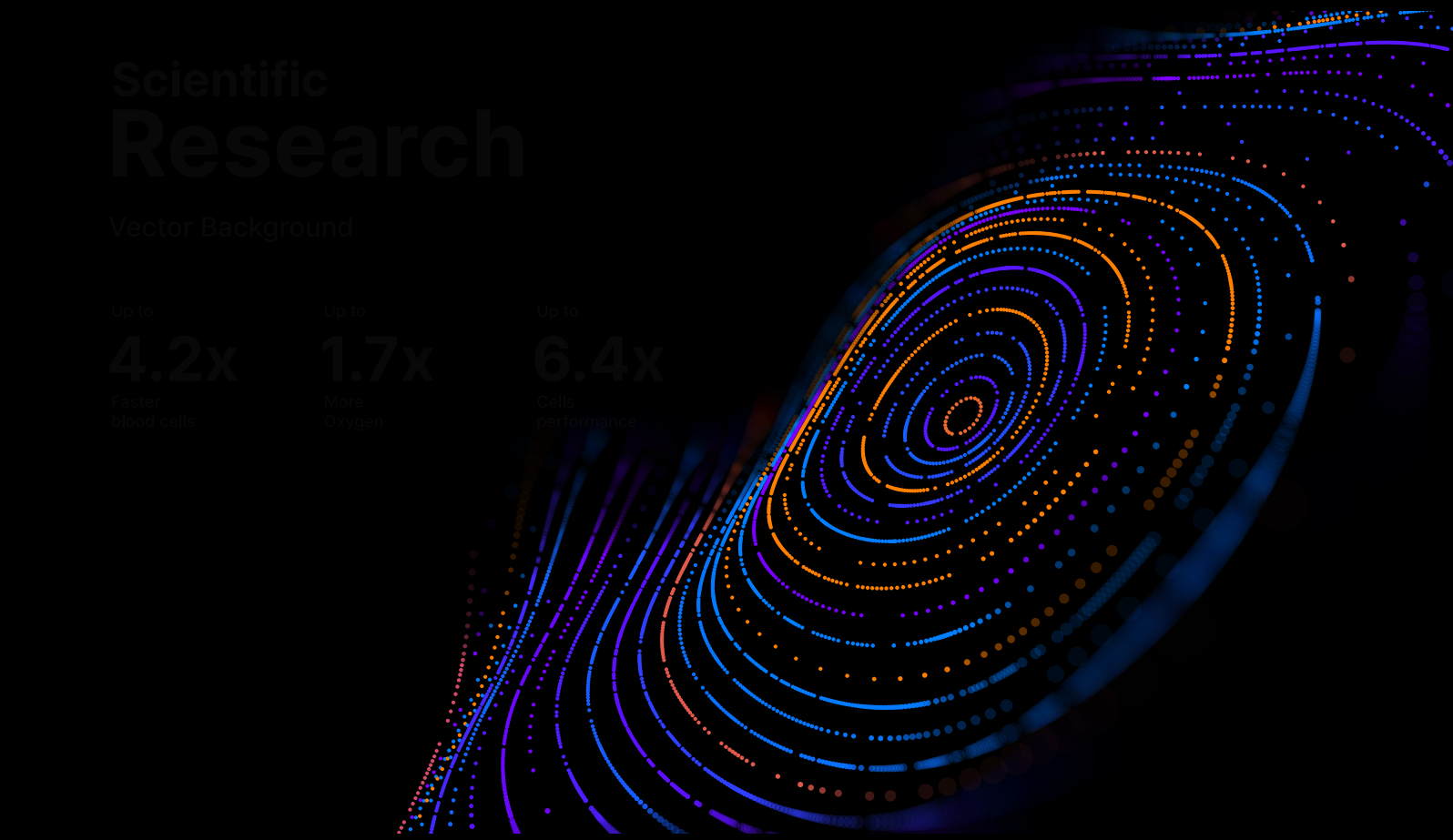
Microsoft 365 Copilot

powered by upGrad

DB-AI: Accelerated Doctoral Research with Copilot

Master the Future of Research with Microsoft 365 Copilot



Unlock the power of AI for your Research

A Comprehensive Program Designed to Transform
Your Doctoral Research Journey

Programme Description

- This program is designed for doctoral candidates and professionals looking to enhance their research process and productivity using ethical AI tools like Microsoft Copilot while maintaining academic integrity and leveraging advanced AI-driven techniques.

- Here are some ways AI and Microsoft 365 Copilot can boost your Doctoral Research

Accelerate Your Research
Reduce time on literature reviews, data analysis, writing, and formatting.

Enhance Research Quality
Refine your research question, strengthen arguments, and produce compelling results.

Advance Data Exploration and Presentation
Refine your thesis and prepare compelling presentations.

Master Microsoft 365 Copilot
Leverage Word, Excel, PowerPoint, OneDrive, and Outlook.

Ethical AI Integration
Develop a strong ethical framework for responsible AI use.

Future-Proof Your Skills
Acquire in-demand AI-assisted research capabilities.

Master the Microsoft 365 Tool Suite

Hands-On Experience with Leading AI and Productivity Apps

01

Word

Advanced writing, summarising, and formatting with Copilot

02

Excel

Data cleaning, analysis, and visualisations

03

PowerPoint

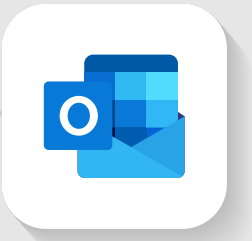
Creating engaging, AI-supported presentations

04

OneDrive

Seamless file organisation and collaboration

05



Outlook

Time management, email drafting, and scheduling

Program Curriculum: A Deep Dive into Accelerated Doctoral Research

6 Live Sessions to Master Every Stage of Your Doctoral Research

Session 1

Session 1:
Copilot Launchpad – Introduction to AI-Powered Research

Learning Objective: Familiarise learners with Copilot's core functionalities, understand its practical relevance in a DBA research context and establish a framework for ethical AI use.

- **Welcome & Program Overview:**
  - Introduction to the overarching goals of the program.
  - Overview of Copilot's capabilities and how it is revolutionising academic research.

- **The Evolving Landscape of Academic Research:**
  - Role of AI in modern research: balancing productivity with ethical concerns.
  - Key considerations for integrating AI assistance with critical thinking and originality.

- **Generative AI Foundations:**
  - Fundamental concepts of Large Language Models (LLMs).
  - How Copilot integrates with Word, Excel, PowerPoint, and OneDrive to support doctoral-level research.

- **Ethical Considerations in AI-Assisted Research:**
  - Understanding plagiarism, authorship, and the need for originality.
  - Data privacy, confidentiality, and security in Microsoft 365.
  - Ensuring transparency and proper attribution for AI-generated content.

- **Copilot Pro Setup & Configuration:**
  - A step-by-step guide to activating Copilot Pro.
  - Best-practice settings specific to DBA research tasks:
    - **Word:** Drafting research proposals, literature reviews, and dissertation chapters.
    - **Excel:** Data analysis and management for research.
    - **PowerPoint:** Structuring research presentations.
  - Quick orientation to Copilot Chat for brainstorming and instant AI assistance.

- **Q&A and Expectations:**
  - Address participant questions and clarify program objectives.
  - Drafting personal ethical guidelines: learners create an "AI Usage Charter."

Session 2

Session 2:
Finding Your Focus – AI-Assisted Research Topic Selection and Refinement

Learning Objective: Equip learners with the skills and AI tools to identify, explore, and refine potential research topics for their DBA thesis.

- **The Importance of a Strong Research Topic:**
  - Discuss the characteristics of a good DBA research topic (relevance, feasibility, originality, impact).
    Emphasise the long-term implications of topic selection for the entire doctoral journey.

  - **Identifying Potential Research Areas with Copilot Chat:**
    Brainstorming Broad Interests: Use Copilot Chat to explore potential research areas based on your background, interests, and industry trends.
    Exploring Industry Trends: Leverage Copilot Chat to identify emerging trends, challenges, and opportunities in specific business sectors.
    Analysing Current Events: Use Copilot Chat to find recent news articles, reports, and case studies that could spark research ideas.

- **Refining Your Research Topic with Copilot:**
  - **Narrowing the Scope:** Use Copilot Chat to progressively narrow down broad research areas into manageable and focused topics.
  - **Assessing Feasibility:** Use Copilot to evaluate the feasibility of potential research topics regarding data availability, time commitment, and resources.
  - **Identifying Knowledge Gaps:** Use Copilot in Word to analyse existing literature and identify potential gaps that your research could address.

- **Developing Preliminary Research Questions:**
  - Use Copilot Chat to formulate initial research questions related to your chosen topic.
    Discuss the criteria for well-formulated research questions (clear, focused, researchable).

- **Hands-on Activity:**
  - Learners will use Copilot Chat and Word to brainstorm potential research topics, refine their focus, and develop 2–3 preliminary research questions.

Session 3

Session 3:
Supercharging Your Literature Review with Copilot

Learning Objective: Equip learners to conduct comprehensive literature reviews efficiently and ethically using Copilot in OneDrive, Word, and Copilot Chat.

- **Recap of Ethical AI Use:**
  - Reinforce personal ethical guidelines from Session 1, focusing on proper citation and avoiding plagiarism.

- **Copilot Chat for Advanced Literature Search:**
  - **Mastering Search Operators:** Go beyond basic searches with advanced operators and filters.
  - **Identifying Key Journals and Authors:** Use Copilot Chat to identify influential sources in your field quickly.
  - **Uncovering Hidden Gems:** Explore databases and grey literature with Copilot's assistance.
  - **Citation Chasing:** Use Copilot to trace citations and find related works efficiently.

- **Leveraging OneDrive for Research Organisation:**
  - **Best Practices for Folder Structure:** Create a logical system for storing articles, notes, and other research materials.
  - **Summarising Documents:** Use Copilot in OneDrive to quickly grasp the main points of lengthy PDFs and articles.
  - **Comparing and Contrasting Sources:** Use Copilot to identify conflicting viewpoints and synthesise information.

- **Utilising Copilot in Word for Literature Review:**
  - **Generating Literature Review Outlines:** Structure your review logically, dividing it into themes or chronological order.
  - **Developing Annotated Bibliographies:** Use Copilot to expand or summarise annotations, focusing on key findings and relevance to your research.
  - **Identifying Knowledge Gaps:** Use Copilot to pinpoint areas for further research.

- **Best Practices for Maintaining Academic Integrity:**
  - **Verifying Citations:** Cross-reference Copilot-generated citations with sources.
  - **Paraphrasing and Summarising Ethically:** Use Copilot to rephrase ideas in your own words while maintaining proper attribution.

Session 4

Session 4:
Developing a Strong Thesis and Research Plan with Copilot

Learning Objective: Guide learners through formulating a clear, arguable thesis statement, developing a robust research plan, and building a preliminary thesis outline using Copilot.

- **Crafting a Compelling Thesis Statement:**
  - **Articulating Your Central Argument:** Use Copilot to refine your thesis statement, ensuring it is clear, concise, and debatable.
  - **Balancing Originality and Scope:** Ensure your thesis contributes new knowledge while remaining within the scope of a DBA project.

- **Developing a Research Plan:**
  - **Defining Methodology:** Use Copilot Chat to explore appropriate research methodologies for your topic and research questions.
  - **Identifying Data Sources:** Use Copilot to help identify potential data sources for your research.
  - **Creating a Timeline:** Develop a realistic timeline for completing each research stage.

- **Building a Preliminary Thesis Outline:**
  - **Structuring Chapters:** Develop a logical structure for your thesis (Introduction, Literature Review, Methodology, Findings, Discussion, Conclusion).
  - **Generating Subheadings:** Use Copilot in Word to create informative subheadings for each chapter.
  - **Developing Bullet Points:** Outline the key points and arguments you will make in each section.

- **Hands-on Activity:**
  - Learners will use Copilot Chat and Word to refine their thesis statement, develop a research plan, and create a detailed thesis outline.

Session 5

Session 5:
Mastering Data Analysis with Copilot in Excel

Learning Objective: Empower learners to use Copilot in Excel for cleaning, preparing, and analysing research data, with a focus on descriptive statistics and basic visualisations.

- **Ethical Data Handling:**
  - Reinforce the importance of data privacy and confidentiality.
  - Review relevant IRB (Institutional Review Board) guidelines (if applicable).

- **Introduction to Copilot in Excel:**
  - Understand how Copilot interacts with spreadsheet data.
  - Learn basic commands and prompts for data manipulation.

- **Data Cleaning and Preparation:**
  - **Identifying and Correcting Errors:** Use Copilot to spot inconsistencies, duplicates, and outliers.
  - **Handling Missing Data:** Explore strategies for missing values (e.g., imputation, deletion).
  - **Transforming Data:** Reshape data for analysis (e.g., transposing, merging datasets).

- **Descriptive Statistics and Data Exploration:**
  - **Calculating Key Measures:** Use Copilot to generate formulas for mean, median, mode, standard deviation, range, etc.
  - **Understanding Distributions:** Create histograms and box plots to visualise data distributions.
  - **Identifying Patterns and Trends:** Use Copilot to help spot relationships between variables.

- **Basic Data Visualisation:**
  - Create bar charts, scatter plots, and other basic visualisations to explore data. Use Copilot's suggestions to choose appropriate chart types.

Session 6

Session 6:
Advanced Data Exploration, Thesis Refinement, and Preparing for Initial Presentations

Learning Objective: Introduce learners to more advanced data exploration techniques in Excel, refine their thesis framework based on initial findings, and prepare for early-stage research presentations using Copilot.

- **Advanced-Data Exploration in Excel:**
  - **Pivot Tables for Deeper Insights:** Create and manipulate pivot tables to uncover hidden patterns and relationships in data.
  - **Introduction to Correlation:** Explore the concept of correlation and use Copilot to calculate correlation coefficients.
  - **Regression Analysis (Brief Overview):** Introduce the concept of regression analysis and demonstrate how Copilot can assist with basic regressions (emphasising that this is an introductory look).

- **Connecting Data Analysis to Your Thesis:**
  - Discuss how to interpret data findings in the context of your research questions. Use Copilot in Word to draft sections of your methodology and findings chapters, incorporating data analysis results.
  - Refine your thesis statement and chapter outlines based on your data analysis.

- **Preparing for Initial Research Presentations:**
  - **Structuring a Research Proposal Presentation:** Outline the key elements of a compelling proposal presentation (research problem, literature review, methodology, preliminary findings).
  - **Creating Engaging Slides with Copilot in PowerPoint:** Use Copilot to generate slide layouts, talking points, and design suggestions.
  - **Incorporating Data Visualisations:** Embed Excel charts and graphs into your presentation effectively.

Earn an upGrad Certificate of Completion

Demonstrate Your Expertise in AI-Assisted Doctoral Research