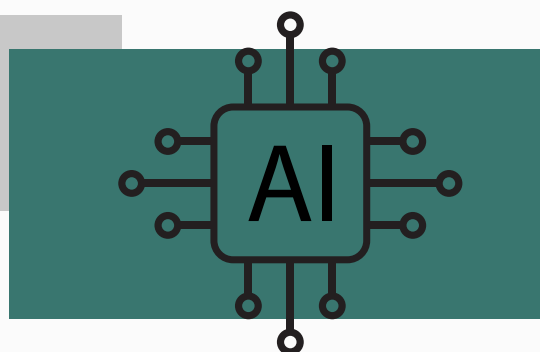# Calling on All Civil Servants to Embrace AI Skilling and Ethical Engagement for Public Service

The Royal Civil Service Commission (RCSC) and GovTech Agency strongly recommend and encourage all civil servants to actively skill yourselves in Artificial Intelligence (AI). This strategic initiative is crucial for building a future-ready civil service that can effectively, ethically, and sustainably adopt AI across the Royal Government of Bhutan (RGoB).

Our recent AI Skills Assessment revealed that while 67.7% of civil servants are already engaging with AI tools, particularly generative AI like ChatGPT, there is a significant demand for structured training, with 98.1% expressing strong interest in participating in AI training programs. This enthusiasm, coupled with a strong belief that AI can improve government efficiency (78.8% of respondents agree or strongly agree), presents a timely opportunity to enhance public service delivery.

67.7%
CS USES AI TOOLS

98.1%
CS EXPRESSED STRONG INTEREST IN AI TRAINING

AI

A Crucial First Step: Understanding Ethical AI

Before diving into exploring various AI tools and advanced concepts, it is imperative that you first refer to the Generative AI Guideline developed by the RCSC and GovTech Agency. This guideline serves as a foundational framework for responsible AI integration within the RGoB. Our assessment highlighted a significant knowledge gap, with **73.3%** of civil servants unaware of this crucial guideline, and even among those aware, only 18.6% have read it in detail.

Understanding these guidelines is essential for comprehending the ethical explanations surrounding AI use, including principles of transparency, accountability, fairness, data privacy, and responsible usage. This will help mitigate risks such as misinformation, bias, plagiarism, and security vulnerabilities associated with AI adoption. We strongly recommend prioritizing AI ethics and responsible use training as a core component of your learning journey.

Free courses like **"Responsible AI"** from Google AI and **"Practical Data Ethics"** from fast.ai are excellent starting points for all audiences.

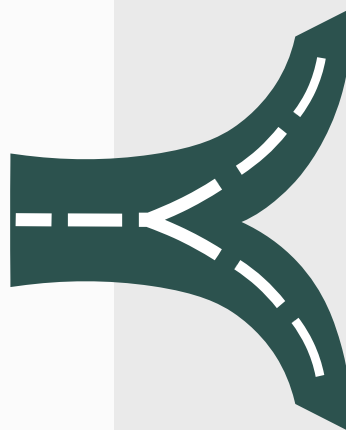# Embrace Self-Learning and Explore Diverse AI Tools

We encourage you to actively explore the different AI tools available and learn from a variety of resources, including platforms like YouTube. However, for your work, we recommend using Google's Gemini and Notebook LM since we have a professional subscription for Google Workspace. Log in using your official email address to use them. While it is alright to use other tools like ChatGPT, be mindful about data privacy and security (You may refer to this link to learn more about it: https://shorturl.at/wy7k2.

The "AI for Good" platform, a United Nations Initiative, offers free educational content through YouTube videos, live webinars, and online seminars focusing on ethical and impactful AI applications in public service. Additionally, registering for the AI for Good Neural Network provides access to past and upcoming webinars, interactive sessions with global AI leaders, and exclusive reading materials.

You should also explore the AI Skills Coalition platform, which offers over 70 AI-related training courses. Utilize the "Public Policy and Government" audience filter to access resources specifically curated for public sector professionals, expanding your AI knowledge in domains like governance, data policy, and ethics. In addition, AI Singapore offers a number of free online courses to equip working adults with basic to intermediate skill levels. You just need to register and start learning.

Structured Training Pathways for Every Civil Servant

To guide your AI skilling journey, we present two distinct pathways designed to cater to diverse backgrounds and professional aspirations, aligning with the RCSC's standard training categorization of Beginner, Intermediate, and Advanced levels.

Pathway 1: From Basic User to AI Super User (No Coding or Technical Background Required)

Pathway 2: The AI Developer Pathway (For Technical Careers and AI Specialists)

Pathway 1: From Basic User to AI Super User (No Coding or Technical Background Required)

This pathway is ideal for all civil servants, regardless of their professional background or technical expertise. It focuses on equipping you with the knowledge and practical skills to effectively leverage AI tools in your daily administrative tasks and public service delivery.

Please note that the recommended courses below are free online courses for you to get started. Not only are they not exhaustive, they may not be the best ones available at the time of your reading since the AI landscape changes very fast. If you have paid subscriptions to Udemy or Coursera etc., you may have access to better courses.

◆ Level 1: AI Explorer

Building awareness and confidence with AI basics.

Focus: Gaining a foundational understanding of AI concepts, data literacy, and an introduction to generative AI tools like ChatGPT and Copilot. You will learn to navigate AI in daily administrative tasks.

Recommended Courses (No technical background required):
- Introduction to Generative AI (by Google)
- Google AI Essentials (Coursera)
- AI for Everyone by AI Singapore
- Elements of AI (University of Helsinki & MinnaLearn)
- DeepLearning.AI's AI For Everyone (Andrew Ng), focusing on business applications of AI
- How to Research and Write Using Generative AI Tools (LinkedIn Learning), practical for leveraging AI for research, writing, and content creation
- IBM – AI Foundations for Everyone
- Generative AI Learning Path (Google Cloud)
- Career Essentials in Generative AI (Microsoft & LinkedIn)

◆ Level 2: AI Practitioner

Applying AI tools effectively in daily civil service tasks.
Focus: Developing hands-on experience with AI tools, understanding responsible AI use, and applying AI in public service delivery and department-specific contexts. This includes mastering prompt engineering techniques for effective interaction with generative AI.

Recommended Courses:
- ▶ ChatGPT Prompt Engineering for Developers (DeepLearning.AI & OpenAI), crucial for maximizing the utility of generative AI
- ▶ AI for Industry - Foundations of AI by AI Singapore
- ▶ Science and Implications of Generative AI (Harvard Kennedy School), ideal for leadership and strategy in a non-technical context
- ▶ Responsible AI (Google AI) Practical Data Ethics (fast.ai)

◆ Level 3: AI Super User

Mastering AI for productivity, innovation, and guiding others.
Focus: Leading the integration of AI tools, driving innovation, and providing guidance to peers. This level emphasizes strategic thinking around AI adoption, advanced applications, and fostering a culture of AI literacy.

Recommended Courses:
Continued advanced application of tools from Level 2, focusing on strategic implementation and leadership, leveraging tailored practical case studies in public sector settings.

Pathway 2: The AI Developer Pathway (For Technical Careers and AI Specialists)

For those civil servants interested in pursuing a technical career path in AI or becoming expert AI developers, this pathway provides a structured progression from foundational programming and machine learning to advanced AI development and deployment.

✦ LEVEL 1: AI CODER

Foundations of programming, data, and basic machine learning concepts.

Focus: Acquiring foundational programming skills (e.g., Python) and a basic understanding of machine learning principles and data science concepts.

Recommended Courses:

- AI for Beginners (Microsoft) (basic Python helpful)
- Python for Data Science (Kaggle), focusing on Pandas, Matplotlib, and data cleaning
- Google – Machine Learning Crash Course, covering ML fundamentals, TensorFlow, and neural networks
- Intro to Machine Learning (Kaggle), focusing on ML models, validation, and decision trees

✦ LEVEL 2: AI BUILDER

Designing and training AI models, applying ML to real-world problems.

Focus: Delving deeper into core AI concepts, algorithms, and practical implementation using programming languages and relevant frameworks.

Recommended Courses:

- Harvard University – CS50's Introduction to AI with Python
- Intro to Artificial Intelligence (Udacity), covering foundational AI concepts, search algorithms, and machine learning basics (basic Python & math recommended)
- Stanford – Machine Learning (Andrew Ng) (free to audit, certificate paid)
- Intermediate Machine Learning (Kaggle), focusing on feature engineering, XGBoost, and pipelines
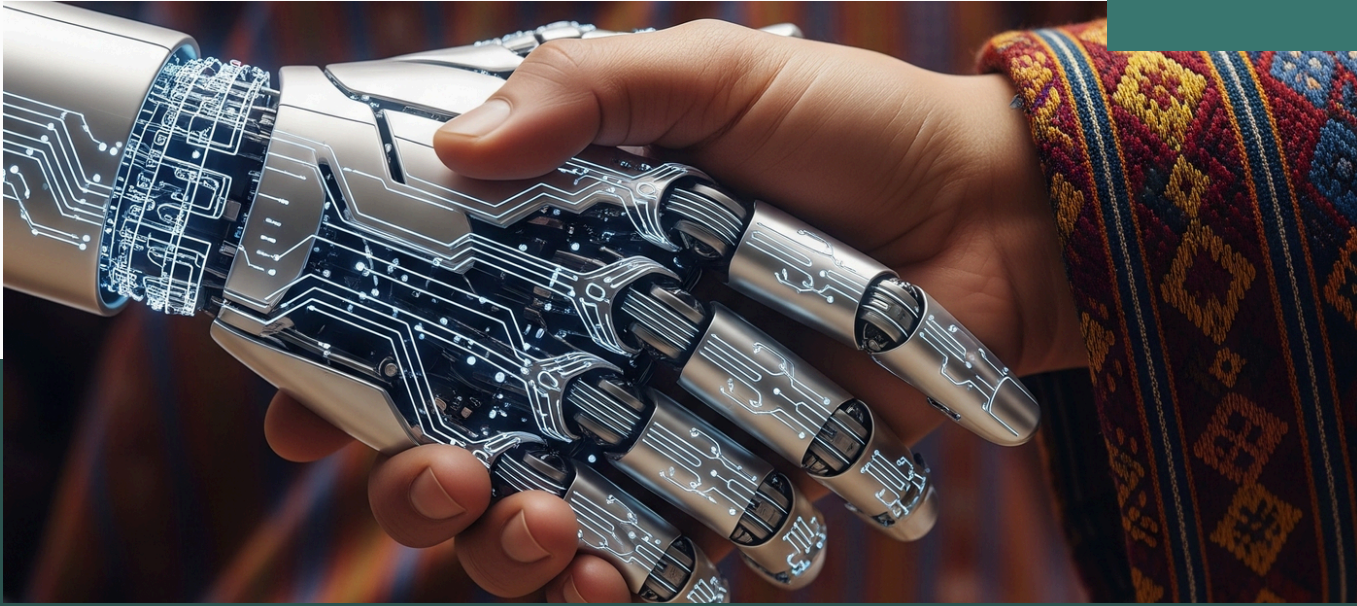
✦ LEVEL 3: AI ARCHITECT

Advanced AI development, deployment, optimization, and governance.

Focus: Mastering advanced topics in AI, including deep learning, neural networks, and developing and deploying complex AI solutions. This level also covers leadership in AI strategy and governance.

Recommended Courses:

- Practical Deep Learning for Coders (fast.ai), a hands-on approach to deep learning with PyTorch, covering CNNs, NLP, GANs, and deployment
- Deep Learning (TensorFlow) (Kaggle), focusing on CNNs and image classification
- AI Engineer Path (Microsoft Certified: AI Engineer Associate), focusing on building AI solutions on Azure, with free training available

We urge you to take advantage of these recommendations and embark on your AI skilling journey. Practical and applied learning formats are strongly preferred by civil servants, with 98.1% favoring interactive workshops, real-world simulations, and applied case studies in public sector settings. GovTech and RCSC are committed to developing tailored training modules for each level, ensuring clarity in learning outcomes and competencies, and will periodically update content to reflect the latest AI trends and ethical considerations.

By embracing continuous learning in AI, you will not only enhance your individual capabilities but also contribute significantly to Bhutan's AI-driven transformation in public service delivery.

To encourage self-paced learning and personal development in AI, a performance indicator "Completed Foundational Level Training in AI" is included as an Individual Learning KPI in your MaX dashboard.