

Lot 3: AI/ML Engineering Services

This lot covers the provision of specialist artificial intelligence (AI) and machine learning (ML) engineering services to support the design, development, optimisation, and ongoing operation of Oak National Academy's data-driven and AI-enabled digital products. Suppliers appointed to this lot will contribute to the creation, deployment, and maintenance of AI/ML models and associated infrastructure across Oak's digital estate, including the main platform, content creation tooling, and internal decision-support systems.

Suppliers appointed to this lot will contribute to **accelerating safe, effective, and scalable use of AI across Oak**, by building shared infrastructure, standards, and tooling. They will help build foundations to ensure that every team at Oak has the foundations to use LLMs responsibly and efficiently.

Scope of Services

The scope of this lot includes, but is not limited to:

- **AI/ML Model Development** - design, training, evaluation, and optimisation of machine learning models aligned to Oak's educational and operational needs.
- **Retrieval-Augmented Generation (RAG) Enhancement** - improvement of RAG pipelines, including context chunking, prompt construction, and the implementation of strategies to increase retrieval relevance, reduce noise, and improve overall model accuracy.
- **Embedding Optimisation** - development and optimisation of embedding-based systems through semantic search techniques, clustering, filtering logic, and dimensionality-reduction approaches to improve retrieval performance and scalability.
- **ML Operations (MLOps)** - implementation, automation, and maintenance of model deployment processes, monitoring, retraining workflows, and performance validation within modern CI/CD and cloud environments.
- **AI Safety, Ethics, and Compliance** - ensuring solutions adhere to appropriate standards for fairness, transparency, user safety, data protection, and public-sector ethics guidance.
- **Performance Optimisation** - continuous improvement of model performance, inference speed, reliability, and cost-efficiency across high-traffic and high-impact user journeys.
- **Collaborative Delivery within Multidisciplinary Teams** - working closely with product teams, engineers, researchers, designers, and content specialists to ensure solutions are accurate, maintainable, and aligned with strategic outcomes.
- **Documentation and Knowledge Transfer** - production of technical documentation, operational guides, and handover artefacts to support long-term maintainability by Oak or other suppliers.

To submit to be on this lot please complete the conditions of participation via this link:

https://docs.google.com/forms/d/e/1FAIpQLSfU7x65dNAr4WrQM8way6ZtWY7nWr_fBEqv6L6hlsmWT_vliKg/viewform?usp=header