

aractech
Global Learning for Operational Leaders

DIGITAL INNOVATION AND TRANSFORMATION | DIT-053

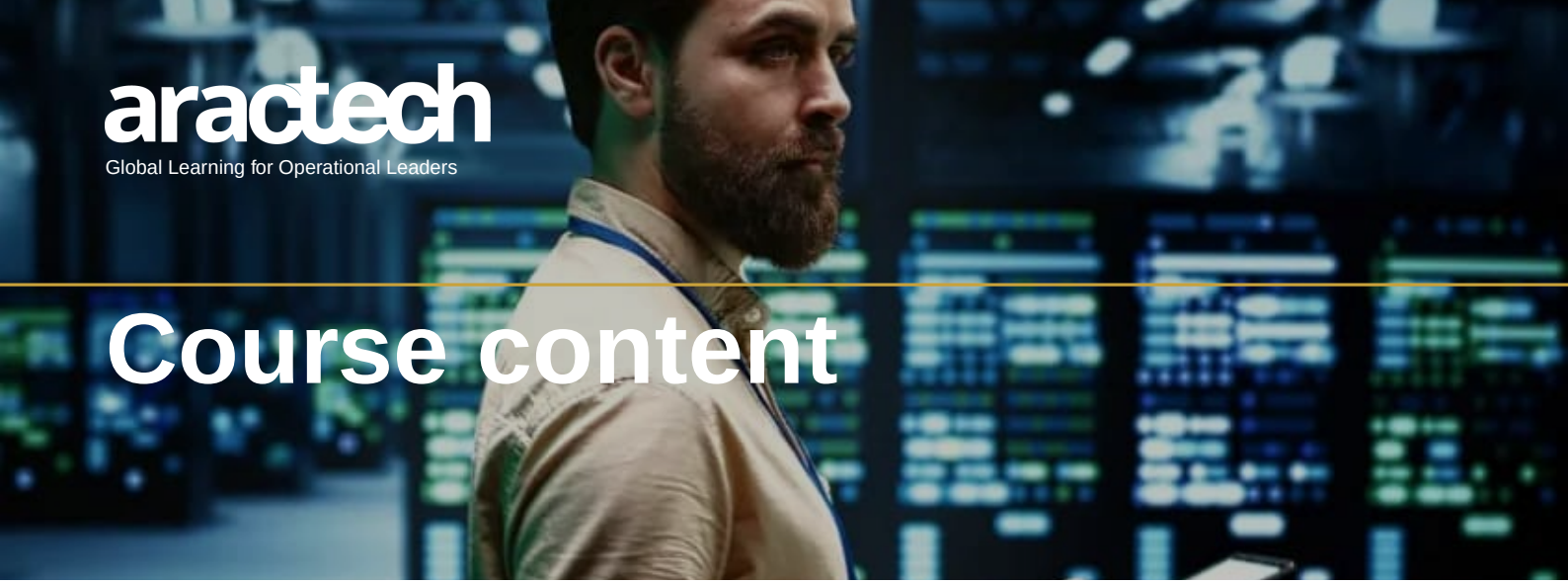
Retrieval-Augmented Generation (RAG) and Enterprise Knowledge Assistants

Contact

+31 85 7444446
info@aractech.com
https://aractech.com

Address

Waarderweg 50, 2031 BP Haarlem - Netherlands.



aractech
Global Learning for Operational Leaders

Course content

Why Attend

Generative AI assistants are only useful in a business setting when their answers are accurate, current and based on the organisation's own policies, procedures and data. General-purpose chatbots cannot provide this on their own.

Retrieval-Augmented Generation (RAG) solves this problem by connecting large language models to trusted knowledge sources, so that every answer is grounded in approved documents and can be traced back to its source.

Course Methodology

• This training course will utilise a variety of proven adult learning techniques to ensure maximum understanding, comprehension and retention of the information presented. This includes an interactive mixture of lecture-led learning, case studies, practical exercises and group discussions.

Course Objectives

• Understand core principles and best practices covered in Retrieval-Augmented Generation (RAG) and Enterprise Knowledge Assistants.

• Apply practical techniques to day-to-day operational challenges.

• Build an implementation action plan suitable for your organization.

Target Audience

• IT architects and solution designers

• AI engineers and developers

• Knowledge management and digital workplace leaders

• Data and analytics professionals



aractech
Global Learning for Operational Leaders

Course outline

Detailed course outline

Day-by-day outline for Retrieval-Augmented Generation (RAG) and Enterprise Knowledge Assistants.

Day 1 - Why Enterprises Need Retrieval-Augmented Generation

• 09:00-09:30 | Limits of Standalone LLMs: Knowledge cut-offs, hallucinations and lack of access to private data

• 09:30-10:00 | What RAG Is: Combining search with generation to produce grounded, cited answers

• 10:00-10:30 | Enterprise Use Cases: Policy assistants, HR and IT help desks, technical manuals, legal research and customer support

• 10:30-11:00 | RAG Versus Fine-Tuning: Choosing the right approach for knowledge, style and behaviour

• 11:00-11:30 | Coffee break

• 11:30-12:00 | Reference Architecture: Ingestion, indexing, retrieval, generation and feedback layers

• 12:00-13:00 | Build Versus Buy: Platform options, cloud services and open-source frameworks

• 13:00-14:00 | Exercise: Select and scope a knowledge assistant use case for participants' organisations

Day 2 - Document Preparation and Indexing

• 09:00-09:30 | Knowledge Source Inventory: Identifying authoritative documents, owners and update cycles

• 09:30-10:00 | Document Ingestion: Handling PDFs, Word files, web pages, scanned documents and tables

• 10:00-10:30 | Chunking Strategies: Fixed-size, semantic and structure-aware chunking and their impact on answers

• 10:30-11:00 | Metadata Enrichment: Adding titles, dates, departments and access labels to improve filtering

• 11:00-11:30 | Coffee break

• 11:30-12:00 | Embeddings Explained: How text is converted into vectors and how to choose an embedding model

• 12:00-13:00 | Vector Databases: Comparing options and designing indexes for scale

• 13:00-14:00 | Lab: Ingest and index a set of policy documents



Global Learning for Operational Leaders

Course outline

Detailed course outline

Day-by-day outline for Retrieval-Augmented Generation (RAG) and Enterprise Knowledge Assistants.

Day 3 - Retrieval Quality and Answer Generation

- 09:00-09:34 | Semantic, Keyword and Hybrid Search: Combining methods for the best recall
- 09:34-10:08 | Re-ranking and Query Rewriting: Improving the relevance of retrieved passages
- 10:08-10:42 | Prompt Assembly: Instructing the model to answer only from sources and cite them
- 10:42-11:00 | Handling Arabic and Multilingual Content: Cross-language retrieval and answer generation
- 11:00-11:30 | Coffee break
- 11:30-11:46 | Handling Arabic and Multilingual Content: Cross-language retrieval and answer generation (continued)
- 11:46-12:20 | Conversation Memory: Supporting follow-up questions without losing accuracy
- 12:20-12:53 | Advanced Patterns: Agentic RAG, multi-step retrieval and knowledge graphs
- 12:53-14:00 | Lab: Build a working question-answering assistant over the indexed documents

Day 4 - Evaluating and Improving RAG Systems

- 09:00-09:30 | What Good Looks Like: Accuracy, relevance, faithfulness, completeness and citation quality
- 09:30-10:30 | Building a Test Set: Creating realistic questions and reference answers with subject experts
- 10:30-11:00 | Automated Evaluation: Using metrics and LLM-as-judge techniques responsibly
- 11:00-11:30 | Coffee break
- 11:30-12:00 | Diagnosing Failures: Separating retrieval errors from generation errors
- 12:00-12:30 | Continuous Improvement: User feedback, content gaps and iterative tuning
- 12:30-13:00 | Performance and Cost: Latency, caching and token cost optimisation
- 13:00-14:00 | Lab: Evaluate the assistant, identify weaknesses and improve the results



Global Learning for Operational Leaders

Course outline

Detailed course outline

Day-by-day outline for Retrieval-Augmented Generation (RAG) and Enterprise Knowledge Assistants.

Day 5 - Security, Governance and Scaling

• 09:00-09:30 | Access Control: Ensuring users only see answers based on documents they are allowed to read

• 09:30-10:00 | Data Protection: Handling personal and confidential information and meeting residency requirements

• 10:00-11:00 | Prompt Injection and Misuse: Threats to RAG systems and practical defences

• 11:00-11:30 | Coffee break

• 11:30-12:00 | Content Governance: Keeping knowledge sources current, approved and owned

• 12:00-12:30 | Monitoring in Production: Usage analytics, answer quality tracking and incident handling

• 12:30-13:00 | Adoption and Change: Launching the assistant, training users and measuring value

• 13:00-14:00 | Capstone: Participants present a complete design and rollout plan for an enterprise knowledge assistant



Global Learning for Operational Leaders

Seminar dates

Available seminar dates

Live dates and pricing for Retrieval-Augmented Generation (RAG) and Enterprise Knowledge Assistants generated from the course details page.

Date	Location	Format	Fee
4 - 8 January 2027	Malmo	Classroom	**€3,400**
11 - 15 January 2027	Dubai	Classroom	**€2,745**
18 - 22 January 2027	Cape Town	Classroom	**€1,895**
25 - 29 January 2027	Paris	Classroom	**€2,210**
1 - 5 February 2027	Dubai	Classroom	**€2,745**
8 - 12 February 2027	Amsterdam	Classroom	**€2,415**
15 - 19 February 2027	Copenhagen	Classroom	**€3,400**
22 - 26 February 2027	London	Classroom	**€2,815**
1 - 5 March 2027	Cape Town	Classroom	**€1,895**
8 - 12 March 2027	Istanbul	Classroom	**€2,250**



Global Learning for Operational Leaders

Seminar dates

Available seminar dates

Live dates and pricing for Retrieval-Augmented Generation (RAG) and Enterprise Knowledge Assistants generated from the course details page.

Date	Location	Format	Fee
15 - 19 March 2027	Dubai	Classroom	**€2,745**
22 - 26 March 2027	Barcelona	Classroom	**€2,175**
5 - 9 April 2027	Cape Town	Classroom	**€1,895**
12 - 16 April 2027	Frankfurt	Classroom	**€2,215**
19 - 23 April 2027	Dubai	Classroom	**€2,745**
26 - 30 April 2027	Kuala lumpur	Classroom	**€2,425**
3 - 7 May 2027	London	Classroom	**€2,815**
10 - 14 May 2027	Oslo	Classroom	**€4,200**
17 - 21 May 2027	Dublin	Classroom	**€3,360**
24 - 28 May 2027	Cape Town	Classroom	**€1,895**



aractech
Global Learning for Operational Leaders

Seminar dates

Available seminar dates

Live dates and pricing for Retrieval-Augmented Generation (RAG) and Enterprise Knowledge Assistants generated from the course details page.

Date	Location	Format	Fee
7 - 11 June 2027	Paris	Classroom	**€2,210**
14 - 18 June 2027	Dubai	Classroom	**€2,745**
21 - 25 June 2027	Amsterdam	Classroom	**€2,415**
5 - 9 July 2027	Dubai	Classroom	**€2,745**
12 - 16 July 2027	Manchester	Classroom	**€3,360**
19 - 23 July 2027	Cape Town	Classroom	**€1,895**
26 - 30 July 2027	Liverpool	Classroom	**€3,360**
2 - 6 August 2027	Dubai	Classroom	**€2,745**
9 - 13 August 2027	Barcelona	Classroom	**€2,175**
16 - 20 August 2027	Cape Town	Classroom	**€1,895**



aractech
Global Learning for Operational Leaders

Seminar dates

Available seminar dates

Live dates and pricing for Retrieval-Augmented Generation (RAG) and Enterprise Knowledge Assistants generated from the course details page.

Date	Location	Format	Fee
23 - 27 August 2027	Frankfurt	Classroom	**€2,215**
6 - 10 September 2027	Dubai	Classroom	**€2,745**
13 - 17 September 2027	Kuala lumpur	Classroom	**€2,425**
20 - 24 September 2027	London	Classroom	**€2,815**
4 - 8 October 2027	Istanbul	Classroom	**€2,250**
11 - 15 October 2027	Dubai	Classroom	**€2,745**
18 - 22 October 2027	Cape Town	Classroom	**€1,895**
25 - 29 October 2027	Brussels	Classroom	**€3,400**
1 - 5 November 2027	Dubai	Classroom	**€2,745**
8 - 12 November 2027	Amsterdam	Classroom	**€2,415**



aractech
Global Learning for Operational Leaders

Seminar dates

Available seminar dates

Live dates and pricing for Retrieval-Augmented Generation (RAG) and Enterprise Knowledge Assistants generated from the course details page.

Date	Location	Format	Fee
15 - 19 November 2027	Dubai	Classroom	**€2,745**
22 - 26 November 2027	Eindhoven	Classroom	**€3,400**
6 - 10 December 2027	Cape Town	Classroom	**€1,895**
13 - 17 December 2027	Istanbul	Classroom	**€2,250**
20 - 24 December 2027	Dubai	Classroom	**€2,745**
27 - 31 December 2027	Barcelona	Classroom	**€2,175**
4 - 8 January 2027	Online / Live	Online / Live	**€1,515**
11 - 15 January 2027	Online / Live	Online / Live	**€1,515**
18 - 22 January 2027	Online / Live	Online / Live	**€1,515**
25 - 29 January 2027	Online / Live	Online / Live	**€1,515**



aractech
Global Learning for Operational Leaders

Seminar dates

Available seminar dates

Live dates and pricing for Retrieval-Augmented Generation (RAG) and Enterprise Knowledge Assistants generated from the course details page.

Date	Location	Format	Fee
1 - 5 February 2027	Online / Live	Online / Live	**€1,515**
8 - 12 February 2027	Online / Live	Online / Live	**€1,515**
15 - 19 February 2027	Online / Live	Online / Live	**€1,515**
22 - 26 February 2027	Online / Live	Online / Live	**€1,515**
1 - 5 March 2027	Online / Live	Online / Live	**€1,515**
8 - 12 March 2027	Online / Live	Online / Live	**€1,515**
15 - 19 March 2027	Online / Live	Online / Live	**€1,515**
22 - 26 March 2027	Online / Live	Online / Live	**€1,515**
5 - 9 April 2027	Online / Live	Online / Live	**€1,515**
12 - 16 April 2027	Online / Live	Online / Live	**€1,515**



aractech
Global Learning for Operational Leaders

Seminar dates

Available seminar dates

Live dates and pricing for Retrieval-Augmented Generation (RAG) and Enterprise Knowledge Assistants generated from the course details page.

Date	Location	Format	Fee
19 - 23 April 2027	Online / Live	Online / Live	**€1,515**
26 - 30 April 2027	Online / Live	Online / Live	**€1,515**
3 - 7 May 2027	Online / Live	Online / Live	**€1,515**
10 - 14 May 2027	Online / Live	Online / Live	**€1,515**
17 - 21 May 2027	Online / Live	Online / Live	**€1,515**
24 - 28 May 2027	Online / Live	Online / Live	**€1,515**
7 - 11 June 2027	Online / Live	Online / Live	**€1,515**
14 - 18 June 2027	Online / Live	Online / Live	**€1,515**
21 - 25 June 2027	Online / Live	Online / Live	**€1,515**
5 - 9 July 2027	Online / Live	Online / Live	**€1,515**



aractech
Global Learning for Operational Leaders

Seminar dates

Available seminar dates

Live dates and pricing for Retrieval-Augmented Generation (RAG) and Enterprise Knowledge Assistants generated from the course details page.

Date	Location	Format	Fee
12 - 16 July 2027	Online / Live	Online / Live	**€1,515**
19 - 23 July 2027	Online / Live	Online / Live	**€1,515**
26 - 30 July 2027	Online / Live	Online / Live	**€1,515**
2 - 6 August 2027	Online / Live	Online / Live	**€1,515**
9 - 13 August 2027	Online / Live	Online / Live	**€1,515**
16 - 20 August 2027	Online / Live	Online / Live	**€1,515**
23 - 27 August 2027	Online / Live	Online / Live	**€1,515**
6 - 10 September 2027	Online / Live	Online / Live	**€1,515**
13 - 17 September 2027	Online / Live	Online / Live	**€1,515**
20 - 24 September 2027	Online / Live	Online / Live	**€1,515**



aractech
Global Learning for Operational Leaders

Seminar dates

Available seminar dates

Live dates and pricing for Retrieval-Augmented Generation (RAG) and Enterprise Knowledge Assistants generated from the course details page.

Date	Location	Format	Fee
4 - 8 October 2027	Online / Live	Online / Live	**€1,515**
11 - 15 October 2027	Online / Live	Online / Live	**€1,515**
18 - 22 October 2027	Online / Live	Online / Live	**€1,515**
25 - 29 October 2027	Online / Live	Online / Live	**€1,515**
1 - 5 November 2027	Online / Live	Online / Live	**€1,515**
8 - 12 November 2027	Online / Live	Online / Live	**€1,515**
15 - 19 November 2027	Online / Live	Online / Live	**€1,515**
22 - 26 November 2027	Online / Live	Online / Live	**€1,515**
6 - 10 December 2027	Online / Live	Online / Live	**€1,515**
13 - 17 December 2027	Online / Live	Online / Live	**€1,515**



Global Learning for Operational Leaders

Seminar dates

Available seminar dates

Live dates and pricing for Retrieval-Augmented Generation (RAG) and Enterprise Knowledge Assistants generated from the course details page.

Date	Location	Format	Fee
20 - 24 December 2027	Online / Live	Online / Live	**€1,515**
27 - 31 December 2027	Online / Live	Online / Live	**€1,515**