aractech

Global Learning for Operational Leaders



DIGITAL INNOVATION AND TRANSFORMATION | DIT-052

Natural Language Processing and Large Language Models for Business

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Course content

Why Attend

Most of the information inside an organisation is unstructured text: emails, contracts, reports, customer feedback and policies. Natural language processing turns this text into insight and automation.

Large language models have made language technology accessible to every business function, enabling summarisation, classification, extraction, translation, drafting and conversational assistants at a scale that was not possible before.

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 Natural Language Processing and Large Language Models for Business.

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

• Build an implementation action plan suitable for your organization.

Target Audience

• Digital transformation and innovation managers

• Data scientists and analytics professionals

• Customer service and operations leaders

• Legal, compliance and document-heavy teams



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Course outline

Detailed course outline

Day-by-day outline for Natural Language Processing and Large Language Models for Business.

Day 1 - Foundations of Natural Language Processing

• 09:00-09:34 | What NLP Is: How computers process, understand and generate human language

• 09:34-10:08 | Classic NLP Tasks: Tokenisation, part-of-speech tagging, named entity recognition and sentiment analysis

• 10:08-10:42 | Representing Text: Bag-of-words, TF-IDF and the move to word and sentence embeddings

• 10:42-11:00 | Challenges of Arabic NLP: Morphology, dialects, script and the current state of Arabic language models

• 11:00-11:30 | Coffee break

• 11:30-11:46 | Challenges of Arabic NLP: Morphology, dialects, script and the current state of Arabic language models (continued)

• 11:46-12:20 | Business Value of Text Analytics: Customer feedback, complaint analysis, contract review and knowledge discovery

• 12:20-12:53 | Measuring NLP Quality: Precision, recall and human evaluation for language tasks

• 12:53-14:00 | Exercise: Identify the unstructured text sources and pain points in participants' organisations



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Day 2 - How Large Language Models Work

• 09:00-09:34 | From Transformers to LLMs: Attention, pre-training on large text collections and scaling laws

• 09:34-10:08 | Instruction Tuning and Alignment: How models are trained to follow instructions and behave safely

• 10:08-10:42 | Capabilities and Limits: Reasoning, knowledge cut-offs, hallucination and context windows

• 10:42-11:00 | The Model Landscape: Commercial APIs, open-weight models and regional Arabic models compared

• 11:00-11:30 | Coffee break

• 11:30-11:46 | The Model Landscape: Commercial APIs, open-weight models and regional Arabic models compared (continued)

• 11:46-12:20 | Cost and Performance Trade-offs: Model size, latency, token pricing and hosting options

• 12:20-12:53 | Multimodal Models: Combining text with images, audio and documents

• 12:53-14:00 | Demonstration: Comparing several models on the same business tasks

Day 3 - Prompting and Practical Language Applications

• 09:00-10:00 | Prompt Design Principles: Clear instructions, context, examples and output formats

• 10:00-10:30 | Summarisation: Producing reliable executive summaries of long reports and meetings

• 10:30-11:00 | Information Extraction: Pulling dates, amounts, parties and obligations from documents

• 11:00-11:30 | Coffee break

• 11:30-12:00 | Classification and Routing: Categorising emails, tickets and complaints automatically

• 12:00-12:30 | Drafting and Rewriting: Generating letters, reports and responses in a consistent tone

• 12:30-13:00 | Translation and Localisation: Using LLMs for Arabic-English translation and review

• 13:00-14:00 | Hands-on Lab: Build prompt templates for three real business tasks



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Day 4 - Customising and Evaluating Language Models

- 09:00-09:34 | Retrieval-Augmented Generation: Grounding answers in the organisation's own documents
- 09:34-10:08 | Fine-Tuning Explained: When to fine-tune, what data is needed and expected benefits
- 10:08-10:42 | Function Calling and Tools: Letting language models query systems and take actions
- 10:42-11:00 | Evaluation Frameworks: Test sets, scoring rubrics, automated and human evaluation
- 11:00-11:30 | Coffee break
- 11:30-11:46 | Evaluation Frameworks: Test sets, scoring rubrics, automated and human evaluation (continued)
- 11:46-12:20 | Detecting and Reducing Hallucinations: Verification, citations and guardrails
- 12:20-12:53 | Bias, Toxicity and Safety Testing: Ensuring outputs are fair and appropriate
- 12:53-14:00 | Lab: Evaluate an LLM solution against a test set and improve its results

Day 5 - Deploying Language AI Responsibly

- 09:00-09:34 | Architecture Options: Public API, private cloud and on-premise deployment
- 09:34-10:08 | Data Security and Privacy: Protecting confidential data and meeting data residency rules
- 10:08-10:42 | Governance and Acceptable Use: Policies, approvals and human review requirements
- 10:42-11:00 | Measuring ROI: Time saved, quality improvement and cost per transaction
- 11:00-11:30 | Coffee break
- 11:30-11:46 | Measuring ROI: Time saved, quality improvement and cost per transaction (continued)
- 11:46-12:20 | Change Management: Training staff and redesigning workflows around language AI
- 12:20-12:53 | Scaling from Pilot to Production: Monitoring, cost control and continuous improvement
- 12:53-14:00 | Capstone: Participants present a language AI use case with design, risks and business case



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Seminar dates

Available seminar dates

Live dates and pricing for Natural Language Processing and Large Language Models for Business generated from the course details page.

Date	Location	Format	Fee
4 - 8 January 2027	Dubai	Classroom	**€2,745**
11 - 15 January 2027	Barcelona	Classroom	**€2,175**
18 - 22 January 2027	Cape Town	Classroom	**€1,895**
25 - 29 January 2027	Dusseldorf	Classroom	**€3,400**
1 - 5 February 2027	Dubai	Classroom	**€2,745**
8 - 12 February 2027	Kuala lumpur	Classroom	**€2,425**
15 - 19 February 2027	London	Classroom	**€2,815**
22 - 26 February 2027	Berlin	Classroom	**€3,400**
1 - 5 March 2027	Istanbul	Classroom	**€2,250**
8 - 12 March 2027	Cape Town	Classroom	**€1,895**



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Date	Location	Format	Fee
15 - 19 March 2027	Paris	Classroom	**€2,210**
22 - 26 March 2027	Dubai	Classroom	**€2,745**
5 - 9 April 2027	Amsterdam	Classroom	**€2,415**
12 - 16 April 2027	Dubai	Classroom	**€2,745**
19 - 23 April 2027	Stockholm	Classroom	**€3,400**
26 - 30 April 2027	Cape Town	Classroom	**€1,895**
3 - 7 May 2027	Malmo	Classroom	**€3,400**
10 - 14 May 2027	Dubai	Classroom	**€2,745**
17 - 21 May 2027	Barcelona	Classroom	**€2,175**
24 - 28 May 2027	Cape Town	Classroom	**€1,895**



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Date	Location	Format	Fee
7 - 11 June 2027	Frankfurt	Classroom	**€2,215**
14 - 18 June 2027	Dubai	Classroom	**€2,745**
21 - 25 June 2027	Kuala lumpur	Classroom	**€2,425**
5 - 9 July 2027	London	Classroom	**€2,815**
12 - 16 July 2027	Copenhagen	Classroom	**€3,400**
19 - 23 July 2027	Dubai	Classroom	**€2,745**
26 - 30 July 2027	Cape Town	Classroom	**€1,895**
2 - 6 August 2027	Paris	Classroom	**€2,210**
9 - 13 August 2027	Dubai	Classroom	**€2,745**
16 - 20 August 2027	Amsterdam	Classroom	**€2,415**



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Date	Location	Format	Fee
23 - 27 August 2027	Dubai	Classroom	**€2,745**
6 - 10 September 2027	Oslo	Classroom	**€4,200**
13 - 17 September 2027	Cape Town	Classroom	**€1,895**
20 - 24 September 2027	Istanbul	Classroom	**€2,250**
4 - 8 October 2027	Dubai	Classroom	**€2,745**
11 - 15 October 2027	Dublin	Classroom	**€3,360**
18 - 22 October 2027	Cape Town	Classroom	**€1,895**
25 - 29 October 2027	Frankfurt	Classroom	**€2,215**
1 - 5 November 2027	Dubai	Classroom	**€2,745**
8 - 12 November 2027	Kuala lumpur	Classroom	**€2,425**



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Date	Location	Format	Fee
15 - 19 November 2027	London	Classroom	**€2,815**
22 - 26 November 2027	Manchester	Classroom	**€3,360**
6 - 10 December 2027	Dubai	Classroom	**€2,745**
13 - 17 December 2027	Cape Town	Classroom	**€1,895**
20 - 24 December 2027	Paris	Classroom	**€2,210**
27 - 31 December 2027	Dubai	Classroom	**€2,745**
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**



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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**



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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**



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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**



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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**



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27 - 31 December 2027	Online / Live	Online / Live	**€1,515**