

About the Course

This Professional Academy Diploma in Artificial Intelligence for Business course will allow you to explore the concepts, opportunities, and challenges presented by this technology. Artificial Intelligence is integrated into many of the services we use daily.

In this course, you will learn what Artificial Intelligence really is in practical terms, and what the implications are for businesses, employees, and society. You will learn about different technologies and applications across diverse industries, geographies, and functions. You will learn how to manage the people-process-technology balance to maximise the value of Artificial Intelligence in your organisation.

This course is designed for those who wish to learn how to communicate the opportunities and challenges presented by Artificial Intelligence in an informed and effective way. For those who wish to take on a leadership role driving implementation, or even just to understand how this technology will transform the nature of their work, this course will provide a guide for you in understanding both the theory and the real practical capabilities and implications of this technology.

Entry Requirements

There are no specific entry requirements or pre-qualifications. A general understanding of how organisations operate would be useful. The technical aspects of Artificial Intelligence and its concepts will be taught with the assumption of no prior knowledge. Learners should be curious about Artificial Intelligence and the opportunities and challenges the technology presents. The course is suitable for professionals working at all levels of an organisation, across all industries, geographies and functions.

Learning Outcomes

By the end of this course, learners will be able to:

- Explain the core concepts, terminology and role of Artificial Intelligence in Digital Transformation
- Examine the capabilities of the 3 common types of Artificial Intelligence and how they can be used to drive greater organisational efficiency and effectiveness
- Analyse how to link business and technical capabilities of an organisation to influence strategy and build competitive advantage
- Evaluate the People-Process-Technology balance implications in leveraging Artificial Intelligence
- Assess the ethical, social, legal and governance considerations of Artificial Intelligence along with the trends that will influence and shape future workforces

Course Structure

- **Live Online Part-time:** One evening per week; 6:30pm to 9:30pm for 12 weeks

Course Breakdown

| Module | Overview | Topics/Area Covered |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Introduction to Artificial Intelligence | Explore the history, myths, capabilities, and commoditisation of AI. | <ul style="list-style-type: none"> ● History of AI ● Myths and capabilities of AI ● Commoditisation of AI ● Review of key terminology |
| 2. Digital Transformation | Discover how organisations are achieving significantly greater performance through the digital transformation of their processes. Digital transformation has four domains - tech, data, process, and change management. | <ul style="list-style-type: none"> ● The domains of digital transformation ● Streamlining processes ● Change management and integration |
| 3. Process Automation Technology | Discover the opportunities, challenges, and implications of AI-powered process automation systems. Look at the application of robotic process automation (RPA) across industries, geographies, and functions. | <ul style="list-style-type: none"> ● Application of RPA ● Decreasing cost bases ● Increasing profitability ● Strategic implications |
| 4. Cognitive Insight Technology | Explore the opportunities, challenges, and implications of machine learning systems. Discover how machine learning is used in different industries, geographies, and functions. | <ul style="list-style-type: none"> ● Capabilities of machine learning systems ● Using machine learning ● Policy considerations ● Strategic threats, opportunities, and applications |
| 5. Cognitive Engagement Technology | Learn how natural language processing is used in different industries, geographies, and functions. | <ul style="list-style-type: none"> ● Natural language processing systems ● Opportunities and threats ● Policy considerations |
| 6. Industry Developments | With the use of case studies, learn about how Artificial Intelligence is implemented in organisations across different industries, geographies, and functions. Discover best practices from the applications of Artificial Intelligence in different contexts. | <ul style="list-style-type: none"> ● Artificial Intelligence across industries ● Challenges, Trends, and Implications ● Innovations in Ireland |

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| <p>7. Capability Strategy</p> | <p>Learn about the key capabilities that organisations need to build to harness the benefits of Artificial Intelligence, and develop a strategically focused, vision-led approach.</p> | <ul style="list-style-type: none"> ● Business capabilities ● Technical Capabilities ● Scaling business processes ● Building compliance by design ● Managing risk ● Governance implications ● Change management concerns |
| <p>8. Strategy and Implementation</p> | <p>Develop the knowledge and perspective required to implement Artificial Intelligence and build competitive advantage. Discover how to evaluate organisational capability in areas such as technical skills, technology know-how, integration with cloud projects, employee/vendor decisions, and PM responsibilities.</p> | <ul style="list-style-type: none"> ● AI Maturity ● Creating an AI journey ● Building competitive advantage ● Joining the dots |
| <p>9. The People-Process-Technology Balance</p> | <p>Learn about the importance of the People-Process-Technology balance in implementing Artificial Intelligence.</p> | <ul style="list-style-type: none"> ● The People - Process - Technology Framework ● Strategic Implications for Artificial Intelligence Implementation |
| <p>10. Societal and Legal Implications of Artificial Intelligence</p> | <p>Understand the societal and legal implications of Artificial Intelligence.</p> | <ul style="list-style-type: none"> ● Society and AI ● Legal Aspects ● Data protection implications - particularly GDPR ● Regulatory Frameworks both at an Irish State and EU level |
| <p>11. Ethical Dimensions of Artificial Intelligence</p> | <p>Examine the ethical dimensions of Artificial Intelligence.</p> | <ul style="list-style-type: none"> ● Bias and AI ● Morality and Responsibility in the AI era ● The importance of building strong governance capabilities |

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| <p>12. The Workforce of the Future</p> | <p>Discover how Artificial Intelligence will influence the development of human capital in the workforce of the future. Examine your own organisational challenges and opportunities.</p> | <ul style="list-style-type: none"> ● Human capital value in the age of AI ● Characteristics of the future workforce ● Implications for white-collar work ● Workforce empowerment ● Scaling employees and preventing job destruction ● Challenges and opportunities in your own professional context |
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Course Assessment

| Assessed Component | Weighting | Deadline |
|--------------------------------------|-----------|---------------------------------|
| Action Learning Log | N/A | Week 12 |
| Business Report (approx. 3000 words) | 100% | 2 weeks after course completion |

The Action Learning Log will demonstrate the continuity of reflection throughout the course, by completing a separate Action Learning Log worksheet for each of the main topics (average 250 words per worksheet). The full set of worksheets will be combined into an Action Learning Log, which will be submitted at the end of the course.

Please note that students will have to submit and successfully pass the Action Learning Log to pass the course, but the overall grade for the course will come from the final Business Report.

The Business Report will bring together all the concepts and insights that learners have amassed and developed to apply to their own professional context. This will demonstrate the depth of understanding of the opportunities, challenges and wider implications of Artificial Intelligence and how they can influence its implementation within an organisation.