Pearson BTEC and learn-tech

Pearson partners with world leading employers, sector bodies and industry experts to offer learning programmes, qualifications and resources that fulfil specific skillsets required by industry.

Pearson BTEC has worked in partnership with learn-tech, incorporating their specialist knowledge and experience of AI and Machine Learning. By working with industry expertise, we can ensure that learning remains up to date and relevant to the business sector.

Today's speakers

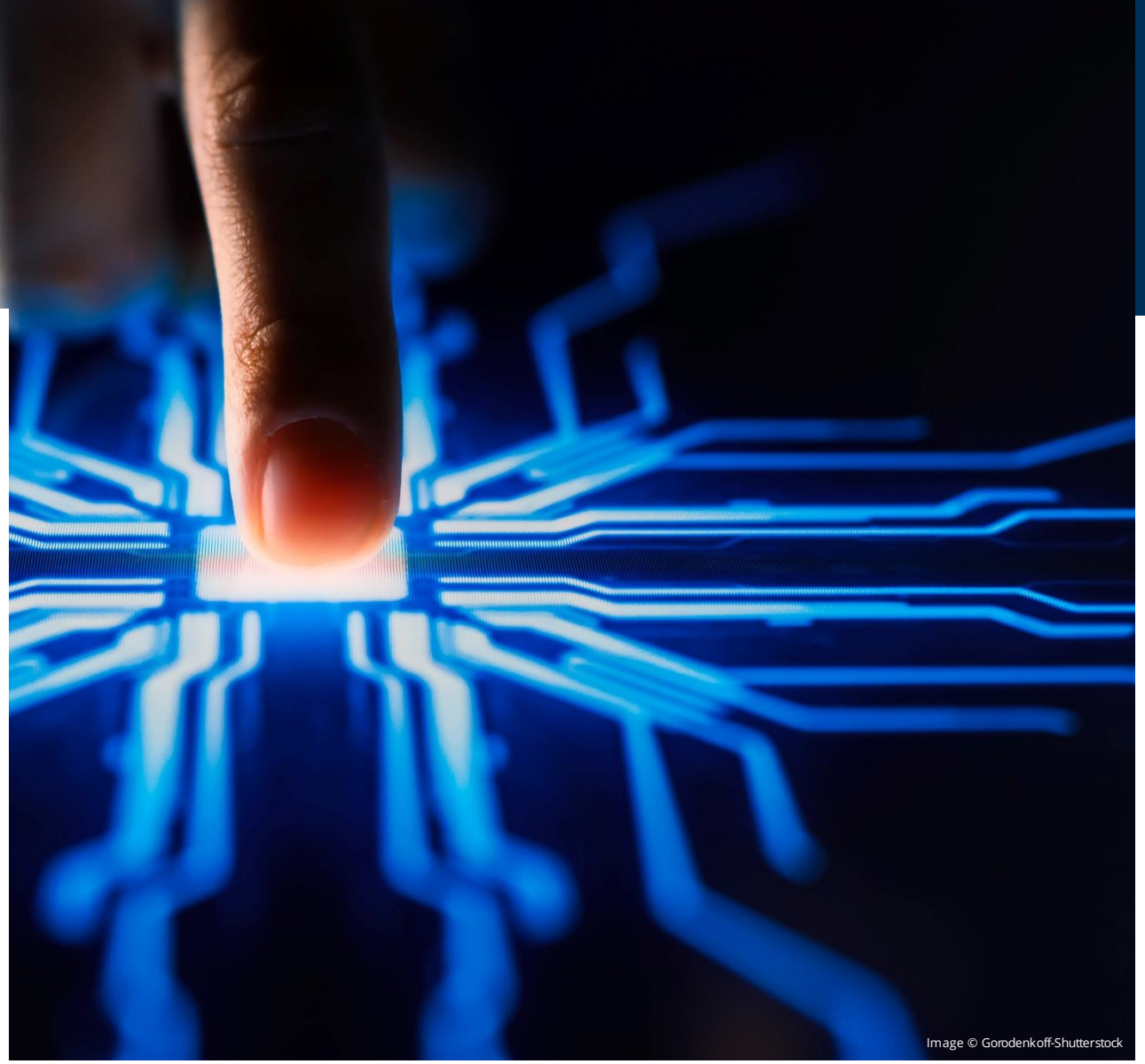
Mike Lloyd
learn-tech

Phil Myers
Pearson BTEC

Three Reasons to Teach AI

1. Anyone can learn AI
2. Work is increasingly driven by AI
3. High growth in rewarding AI jobs

Institutions that embrace AI should be able to recruit more students and help them get rewarding jobs.



Institutions must equip **students in every field** to be ‘AI bilingual’.

L. Rafael Reif, President of MIT

Why learn about AI?

Work is Increasingly Driven by AI

By 2030, AI will lead to an estimated $15.7 trillion, or 26% increase, in global GDP. *

That is greater than both China and India's current combined GDP.

"Any job losses from AI driven automation are likely to be offset by new jobs made possible by these new technologies." **

* Source: WEF, The Future of Jobs Report 2020 | ** Source: PwC's Global Artificial Intelligence Study

Skills Used in AI Are in Big Demand

The Potential Impact of Artificial Intelligence on UK employment and the Demand for Skills

Fast-growing skills clusters

Rank	Skill cluster group	Skill cluster	Rise in demand (2012-18 %)
1	Information technology	Scripting languages	283%
2	Healthcare	Obstetrics and Gynaecology (OBGYN)	244%
3	Information technology	Version control	236%
4	Information technology	Cloud solutions	183%

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1023590/impact-of-ai-on-jobs.pdf

Everyone Needs to Learn Some AI

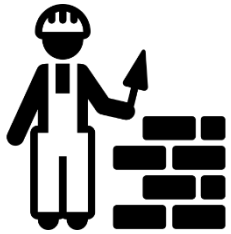
AI Skills Are Relevant Across a Range of Roles

Leaders

Tech savvy – appreciation of AI

Strategic & innovation mindset

Thought leadership



DS & Engineers

Problem framing

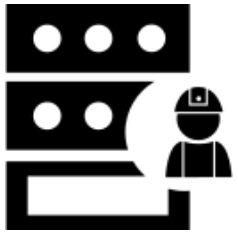
Statistics

Programming

Data processing

Model building

System design and implementation



Mangers

Defining opportunities for AI

Machine learning basics

Data story telling

Users

Appreciate what AI does and what it can do

Computational thinking

Consumers

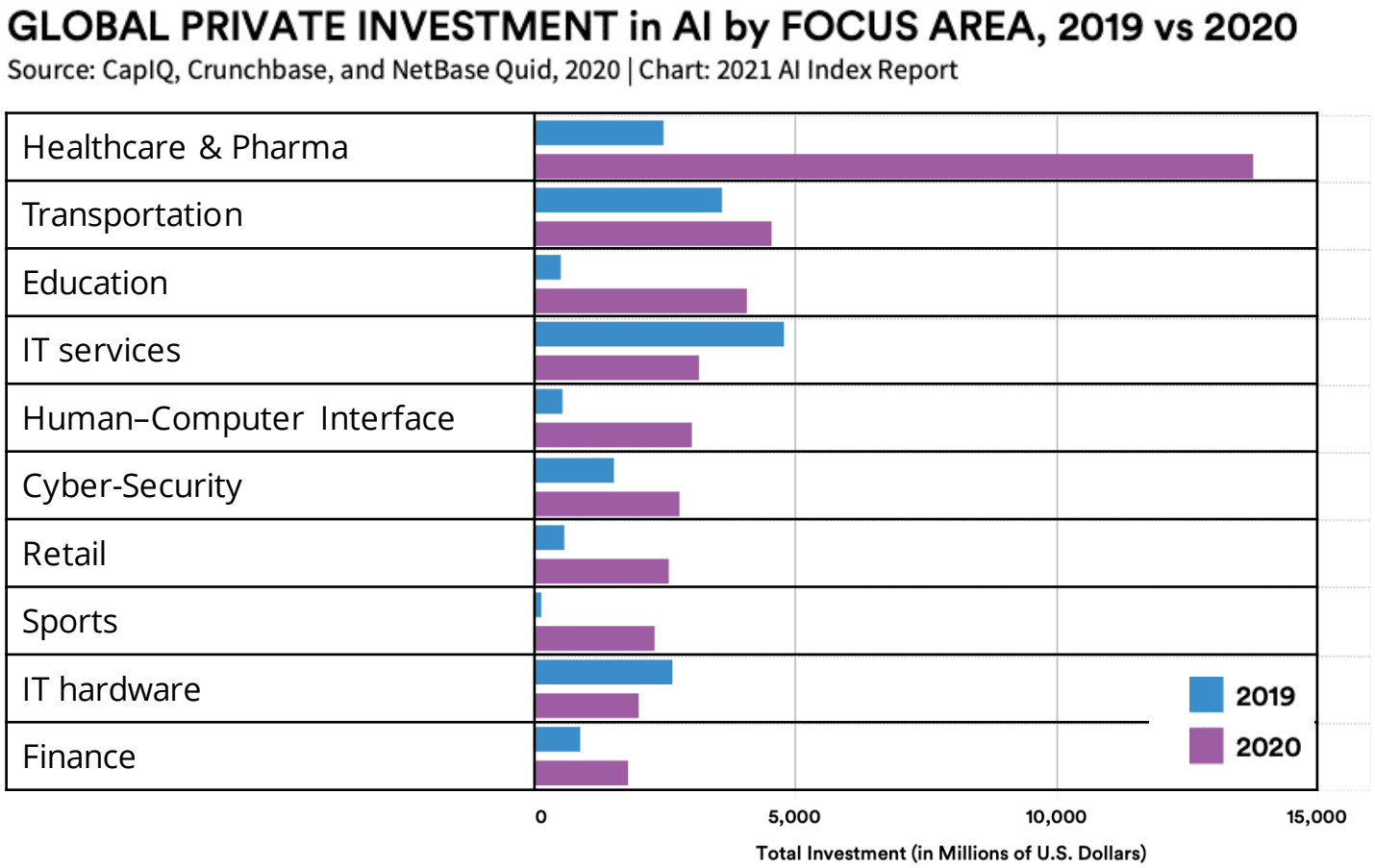
Informed scepticism

Understand privacy, rights, data protection and risks

Ethics and XAI

High Growth in Rewarding AI Jobs

AI skills open doors across multiple industries



Artificial Intelligence Index Report 2021

Source: Artificial Intelligence Index Report 2021

AI Learning for All

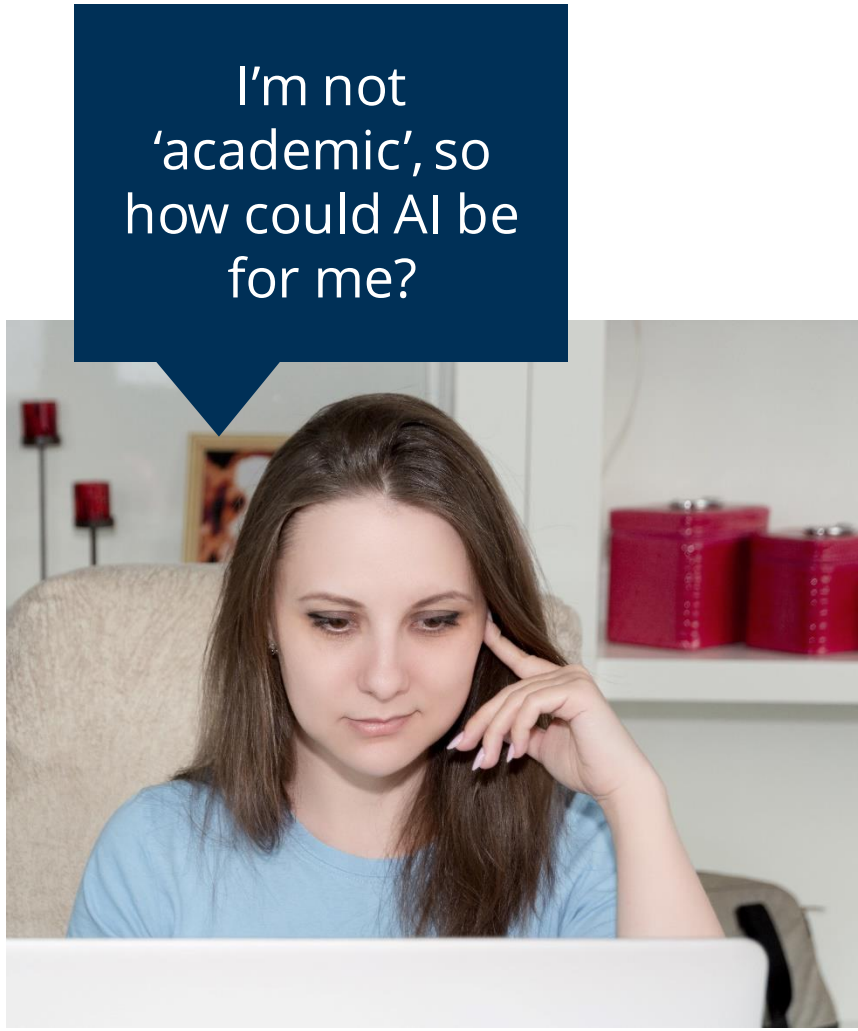
Do you enjoy understanding problems and developing possible solutions? If so, AI could be for you.

Pearson's AI courses assume no previous AI knowledge or skills.

Working with AI involves the following:

1. **Breaking down a complex problem** or system into smaller, more manageable parts
2. **Pattern recognition** - looking for similarities among and within problems
3. **Abstraction** - focusing on the important information only, ignoring irrelevant detail
4. **Algorithms** - developing a step-by-step solution to the problem, or the rules to follow to solve the problem

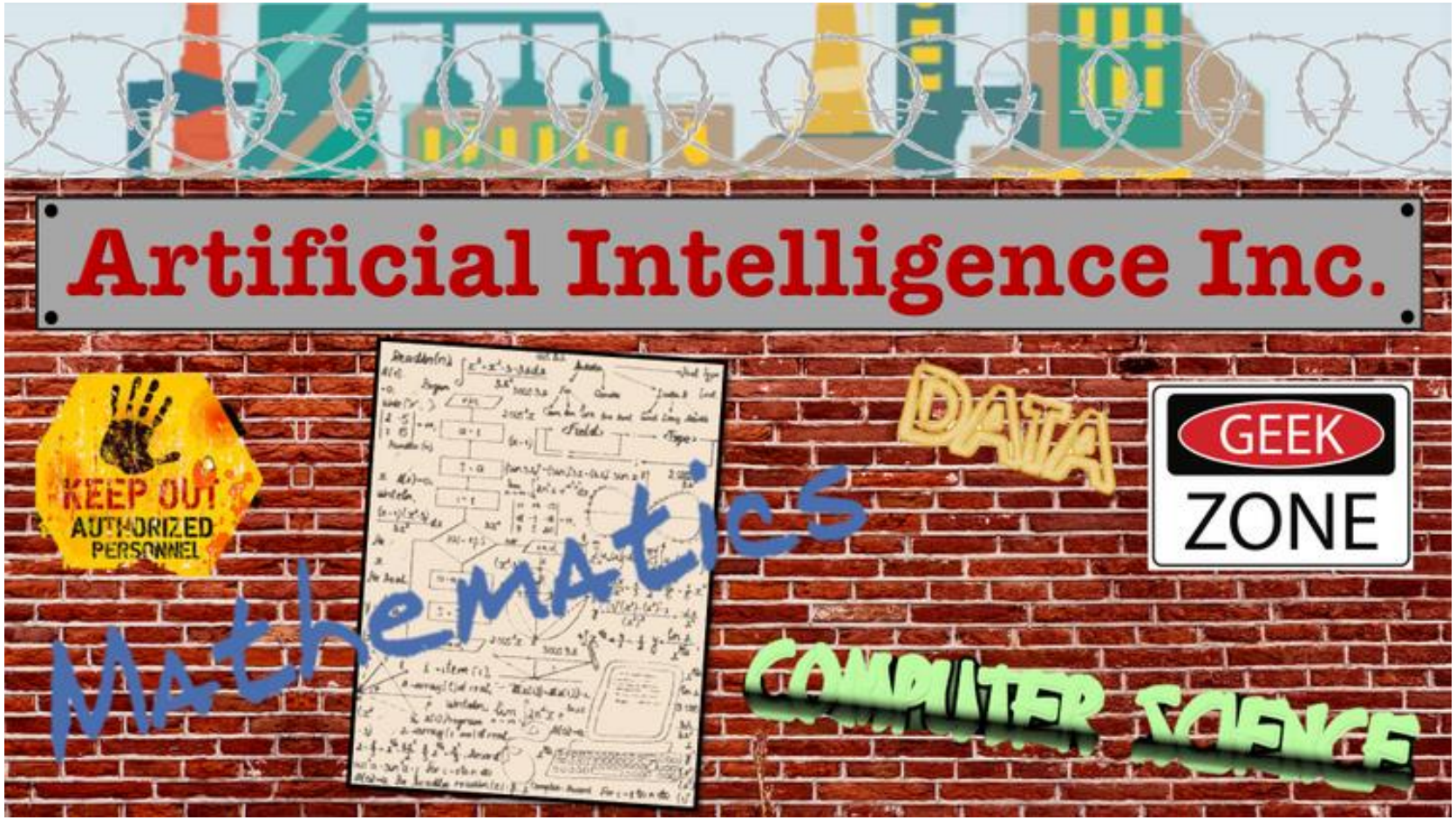
Together, these steps are called '**computational thinking**', and if think you can enjoy this kind of thinking, AI can be for you.



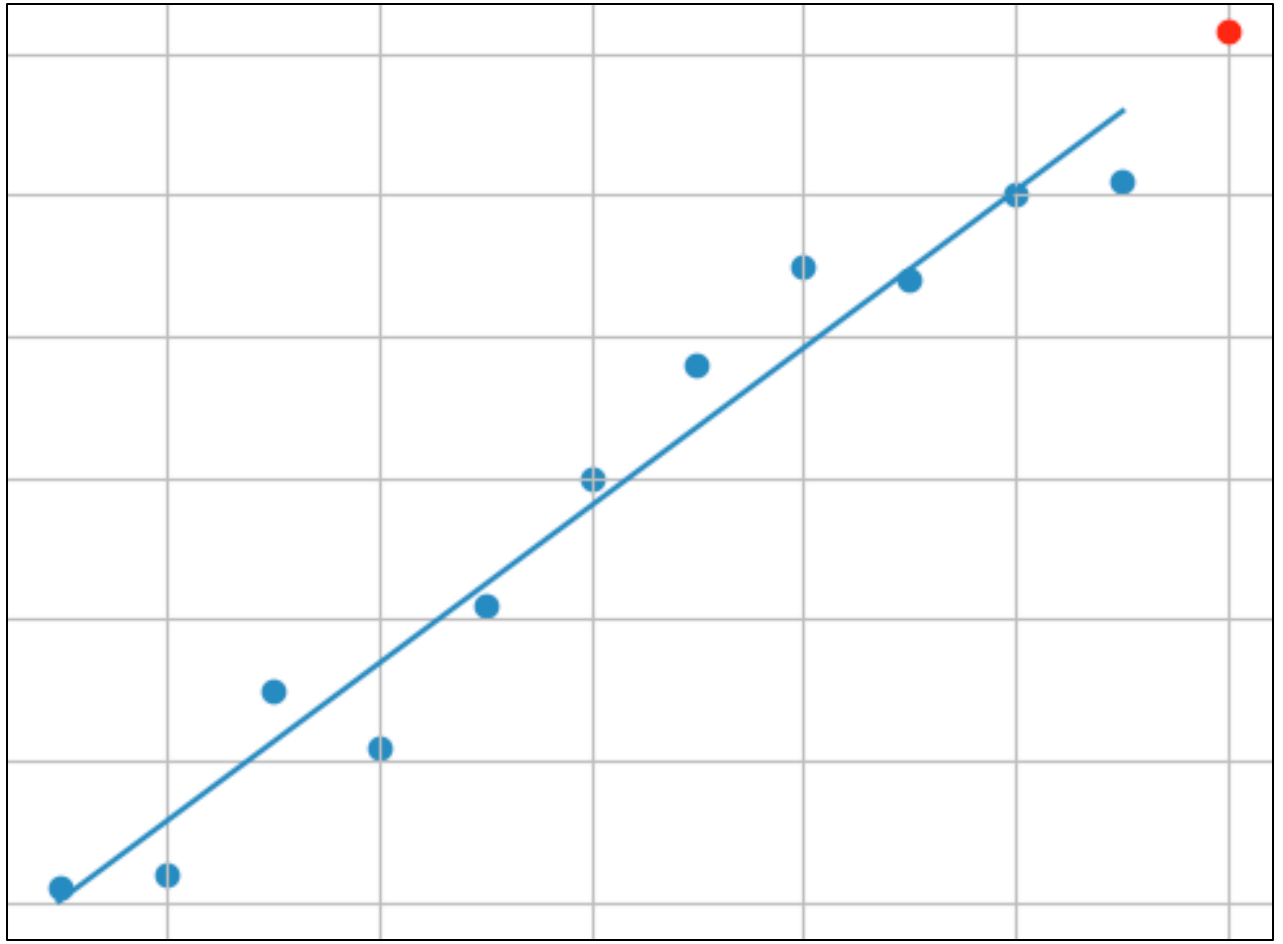
Yes, you can teach AI

Image © Gorodenkoff-Shutterstock

Perception


Artificial Intelligence Inc.
KEEP OUT
AUTHORIZED
PERSONNEL
DATA
GEEK
ZONE
Mathematics
COMPUTER SCIENCE

Reality



AI is Practical and Engaging

AI can be taught through practical examples and case studies

Pearson online courses and BTEC qualifications in AI and Digital Technologies

Work is Increasingly Driven by AI

Top 15 skills for 2025

1. Analytical thinking and innovation
2. Active learning and learning strategies
3. Complex problem-solving
4. Critical thinking and analysis
5. Creativity, originality and initiative
6. Leadership and social influence
7. Technology use, monitoring and control
8. Technology design and programming
9. Resilience, stress tolerance and flexibility
10. Reasoning, problem-solving and ideation
11. Emotional intelligence
12. Troubleshooting and user experience
13. Service orientation
14. Systems analysis and evaluation
15. Persuasion and negotiation

Can be gained through studying AI

Source: Future of Jobs Survey 2020, World Economic Forum.

Online Courses With BTEC Accreditation

Digital Technology Demystified

A broad oversight of a range of Digital Technologies, including AI, Robotics, the Internet of things, Cloud computing, Augmented Reality and Virtual Reality, Blockchain and cryptocurrency. The course is aimed at people who are looking for an introduction to emerging Digital Technologies and how they will impact and change business practices.

- 20 hours
- Online anytime

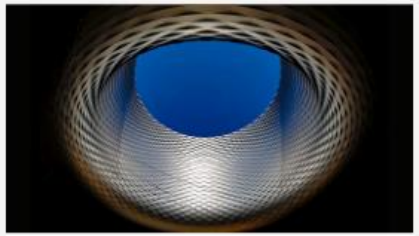
Digital World Overview

Introduction to Artificial Intelligence

This course provides an introduction to Artificial Intelligence and Machine Learning. The course is aimed at anyone with an interest in Artificial Intelligence looking for an understanding of how it will impact and change business practices.

- 20 hours
- Online anytime

Introduction to AI



Artificial Intelligence Demystified

This course looks at the technical application of Artificial Intelligence and Machine Learning. The course is aimed at people who are looking for an understanding of the technical side of AI, including programming, Machine Learning applications and how to work with data.

- 20 hours
- Online anytime

Technical Overview

Leveraging Artificial Intelligence in Financial Services

This course looks at the technical application of Artificial Intelligence and Machine Learning in the Financial Services Sector. The course is aimed at people who are looking for an understanding of the technical application of AI within the Financial Services Sector, including Machine Learning applications and how to work with financial data.

- 20 hours
- Online anytime

Specialism

Artificial Intelligence for Leaders

This course looks at how businesses implement Artificial Intelligence and Machine Learning. The course is aimed at business leaders who are looking at how to frame AI within their organisation and guide its implementation and use. The course will provide guidance for how to develop AI capacity across an organisation and what they need to do to start their AI journey.

- 20 hours
- Online anytime

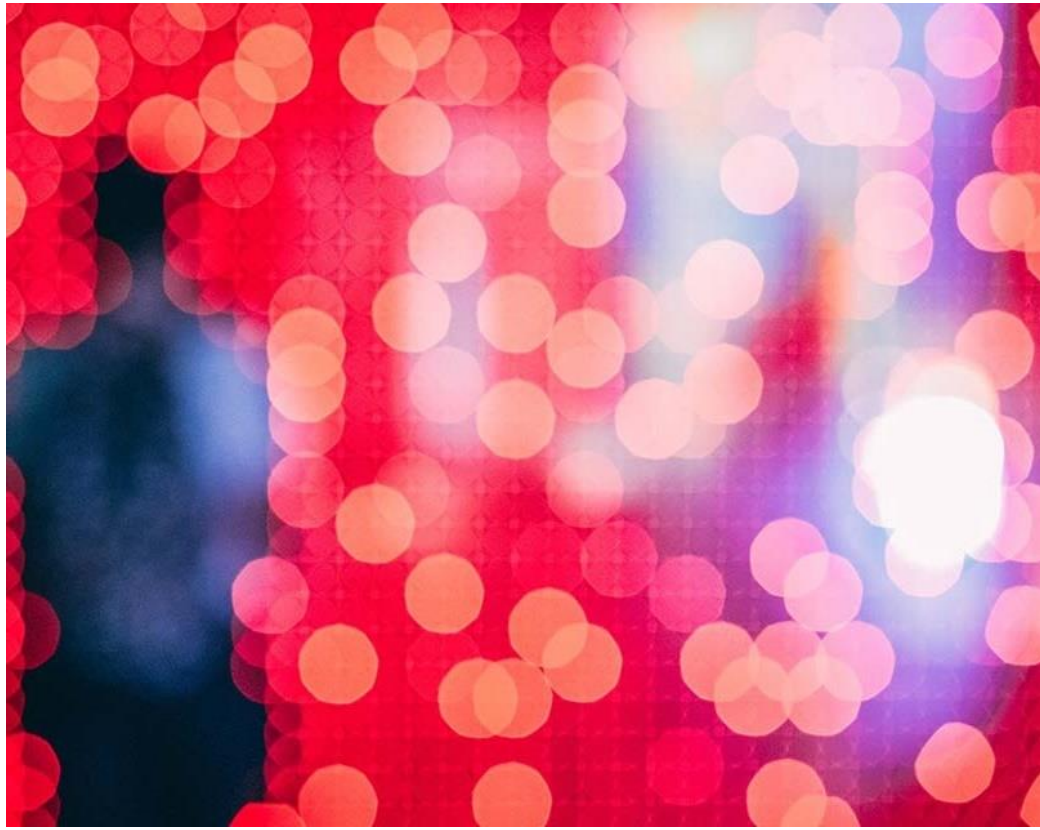
Leadership

Digital Technologies Demystified

Gain an understanding of advanced technology including AI, Blockchain, Robotics and Internet of Things.

Course content

- Understanding digital technologies - first steps.
- Dynamics in the technology world.
- Algorithms – e.g. page-ranking systems.
- New business models and technology value.
- Solutions process and framework.
- 20 hours.
- BTEC Level 3.



Introduction to Artificial Intelligence

Gain an understanding of the capabilities of AI, through examples of how it's being used by forward thinking organisations.

Course content

- Recognise different types of AI used in business.
- Understand the applications, benefits and limitations of AI in business.
- Be aware of the key machine learning processes that drive AI.
- Be able to describe the importance of data in AI.
- Explain the importance of trust, ethics and explainability in AI.
- 20 hours.
- BTEC Level 3.

Artificial Intelligence Demystified

Get started with an introduction to key features of AI and the underlying models and methods that makes it work.

Course content

- The difference between AI, Machine Learning, and Big Data.
- The questions you need to be asking to whom.
- Skills you and your colleagues will need to develop in order to get in front of the AI wave.
- 20 hours.
- BTEC Level 3.

Leveraging Artificial Intelligence in Financial Services

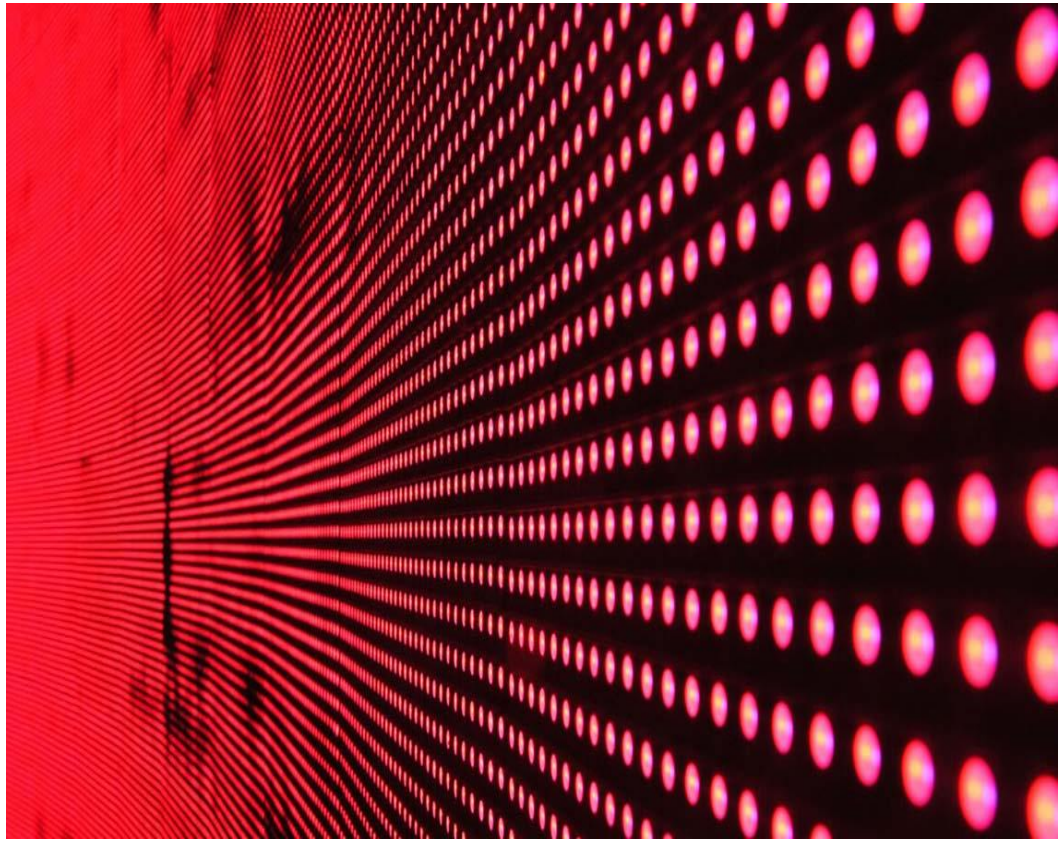
Understand the capabilities and limitations of AI and how it can be used in the Financial Services Sector.

Course content

- Identifying customer segments.
- AI across the customer lifecycle.
- Predicting values, optimal pricing, rates and market movements.
- Managing risk, security, and underwriting.
- Portfolio development and fund management.
- 20 hours.
- BTEC Level 3.

Artificial Intelligence for Leaders

- Understand the capabilities of AI, with examples of how it's being used by forward-thinking organisations, with examples from Google, Facebook, Amazon, Uber and Fidelity, amongst other organisations.
- It will explore what leaders need to do to start their AI journey and how they can get the most out of AI.
- 20 hours.
- BTEC Level 4.



Assessment

The qualification is comprised of units, each with its own Learning Outcomes.

Assessment Criteria allow for demonstration of learners' knowledge, understanding and skills in each area to achieve each Learning Outcome.

Learners complete an integrated assignment, which should be completed after each unit.

Supporting Progression

The qualifications and resources complement the curriculum and are designed for:

- Learners who may be progressing directly into employment in a range of sectors
- Learners looking to progress into HE level or advanced apprenticeship level courses across sectors.

Supporting Teacher Delivery

The qualifications are ideally suited to blended learning, due to a good mix of written, online and practical tasks.

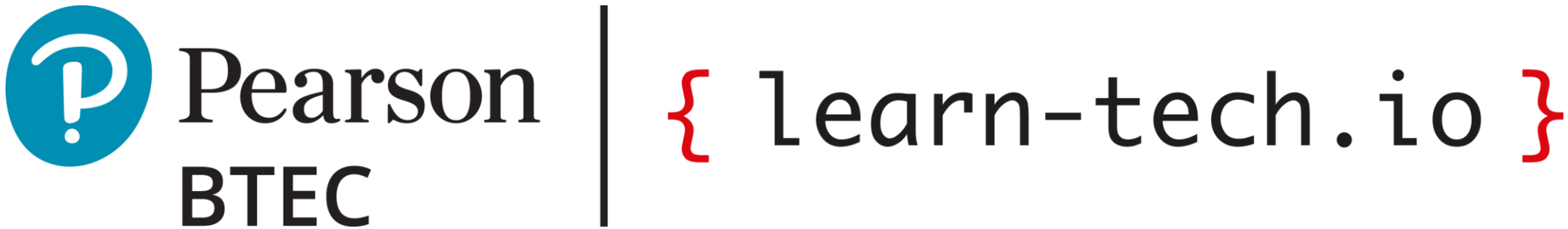
Resources developed to support units including online materials, assignment briefs and schemes of work.

Links with employers will help learners understand the importance of AI.

Supports progression to industry or HE/Level 4.

Your Questions

1. I'm an experienced teacher but I am not an AI specialist, can I teach this course?
2. What does the digital content look like on screen, could I see a demo?
3. If I am a registered centre for BTEC, how easy will it be to apply to offer this course, will I need a separate SV visit?
4. What AI courses could learners progress to after completion of this course?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