



# Siemens Curriculum Models

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Connected Curriculum Lead

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1. Connected Curriculum – University Targeted Offer
2. Siemens Apprenticeship Models
3. Level 6 Degree Top Up Opportunity





**Digitalisation**  
changes  
**everything**



2005



Source: The Washington Post Online



2013





2016



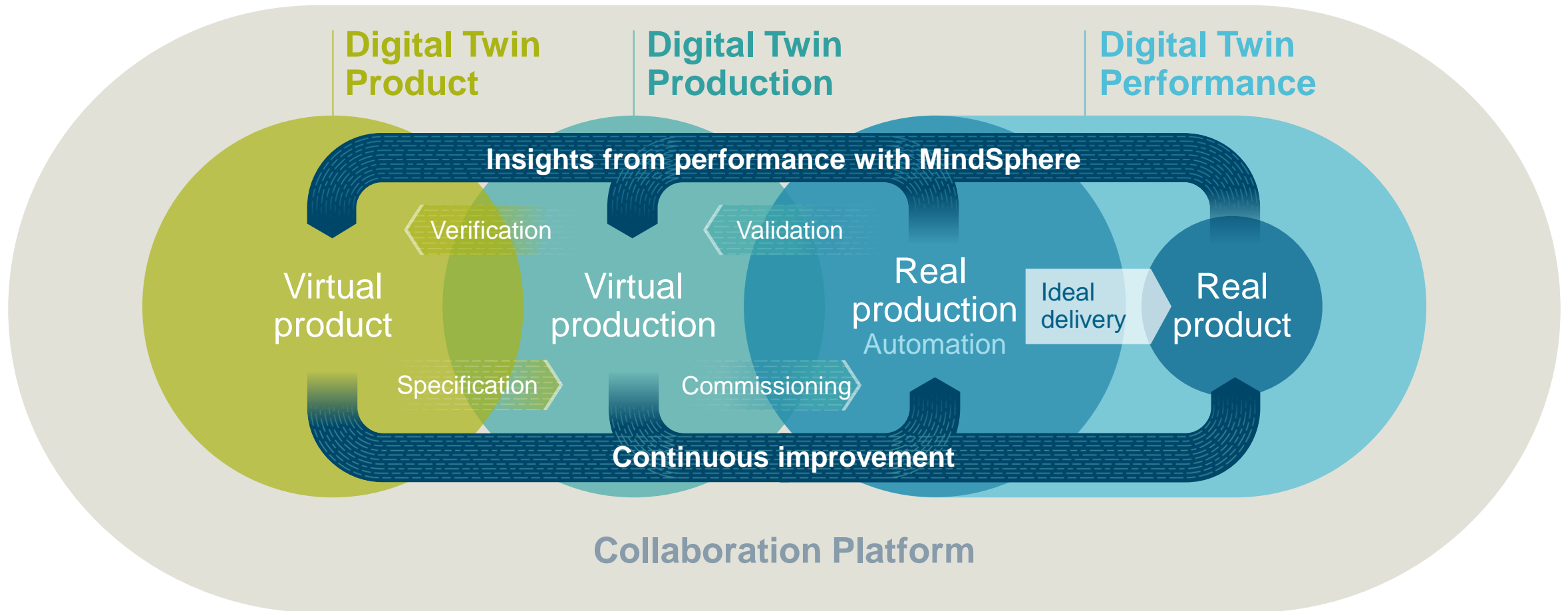
BARBARA KINNEY/HILLARY FOR AMERICA

Source: Barbara Kinney





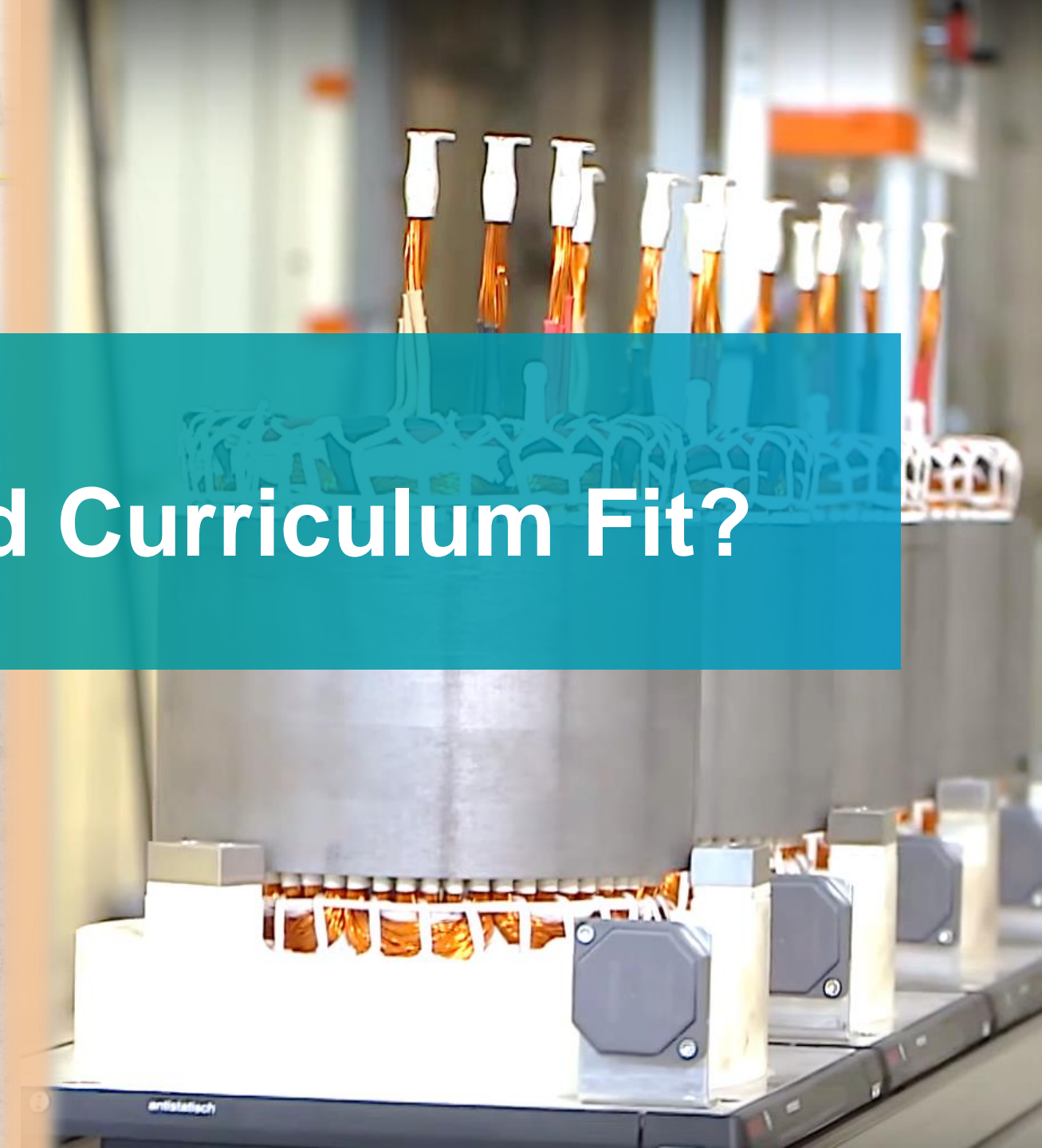
# Siemens Digital Enterprise and the Digital Twin





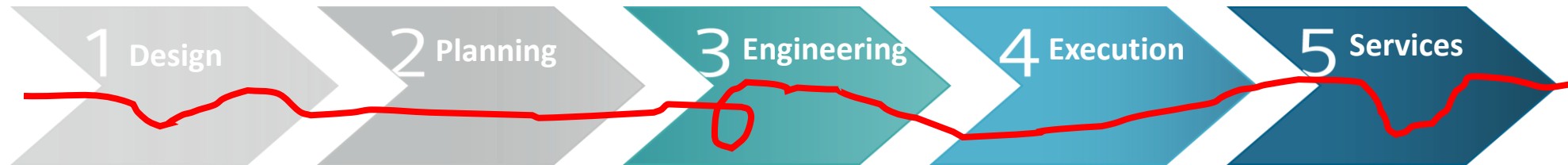


# How Does Connected Curriculum Fit?

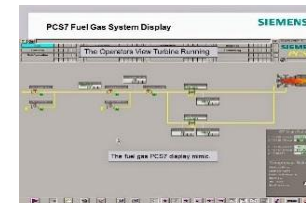
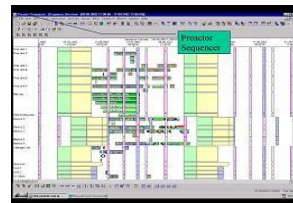
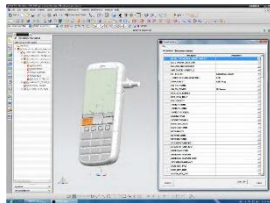




## Connected Curriculum: Bringing the 'red thread' of Industry 4 technologies into academia



Software



Hardware









# Connected Curriculum = H/W + S/W + Simulation + Content



## Hardware

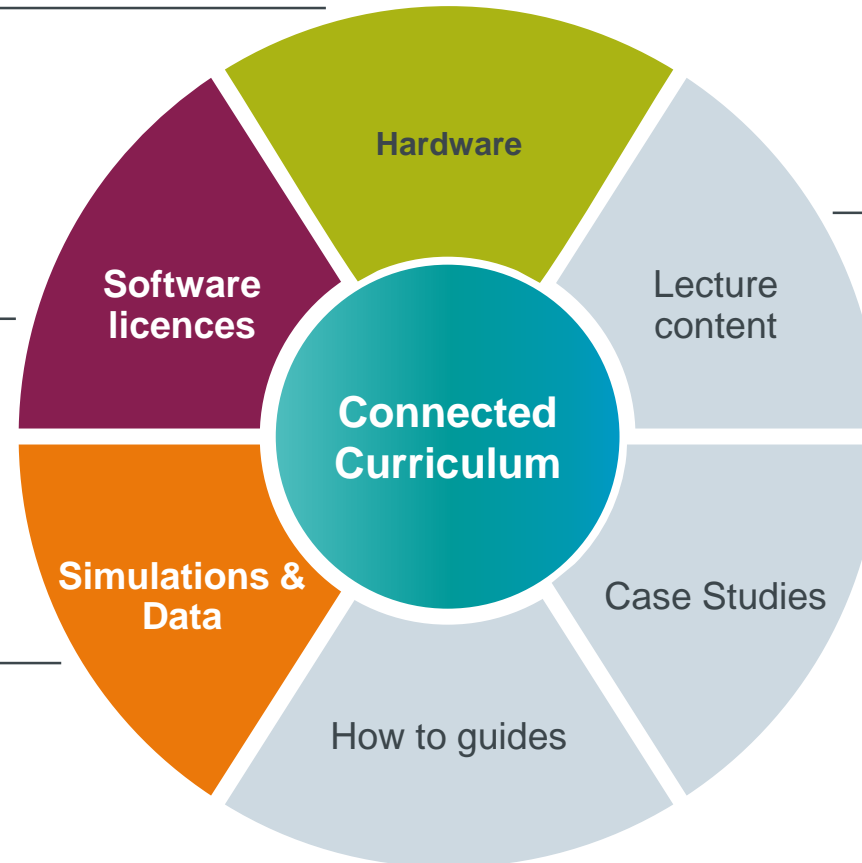
To help students physically engage with the technology (existing and through Festo partnership)

## Software Licences

Bundled Academic licences for a stack of 14 Software, including MindSphere

## Simulation & Data

To enable academics to develop their own approach using real industrial data and pre-made simulation



## Training Slides & Videos

Over 2,000 existing pieces of content for supporting lectures

## Case Studies

Real world industrial case studies

## How to Guides

Support getting to grips with software, both videos and documents





# Manufacturing Systems Design - Tecnomatix

## Industrial Use Case

- The Production Digital Twin

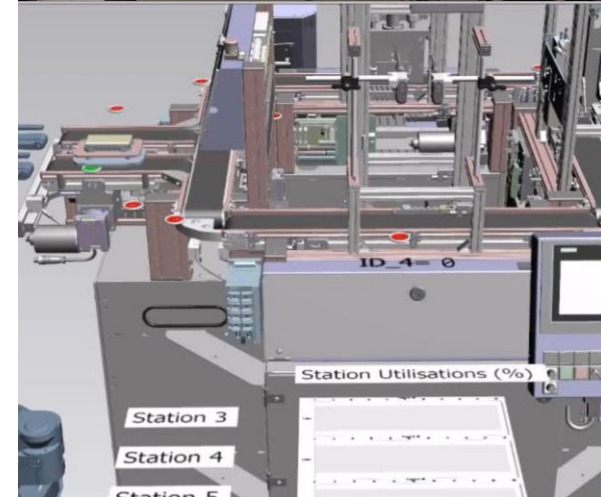
Festo Cyber  
Physical  
Industry 4  
Equipment



## Example Learning Outcomes

- Production Modelling
- Utilisation Calculations
- Optimisation Algorithms

Tecnomatix  
Plant  
Simulation  
Model



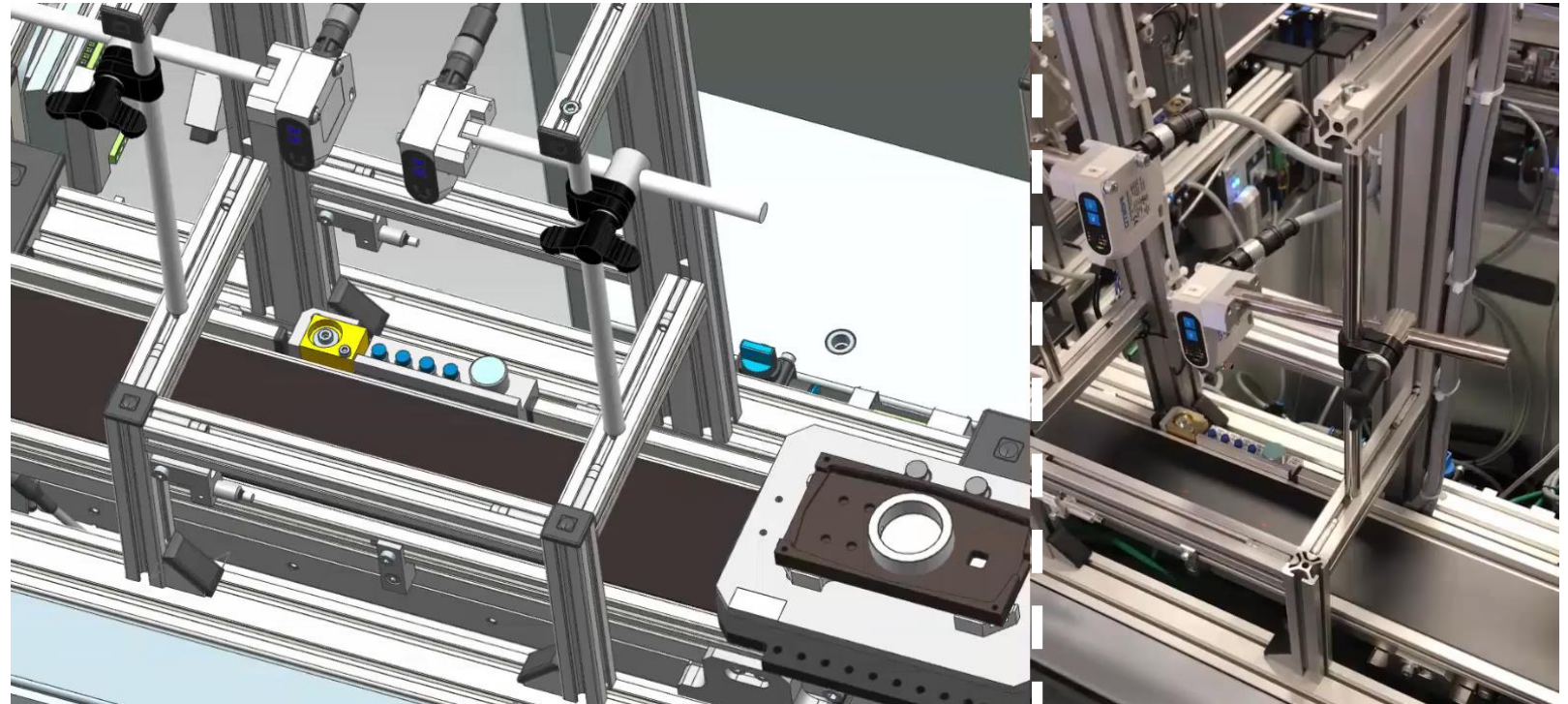


## Industrial Use Case

- HW and SW Validated
- Parallel Development
- Faster Commissioning

## Example Learning Outcomes

- PLC Programming
- Machine Prototyping
- Virtual Commissioning

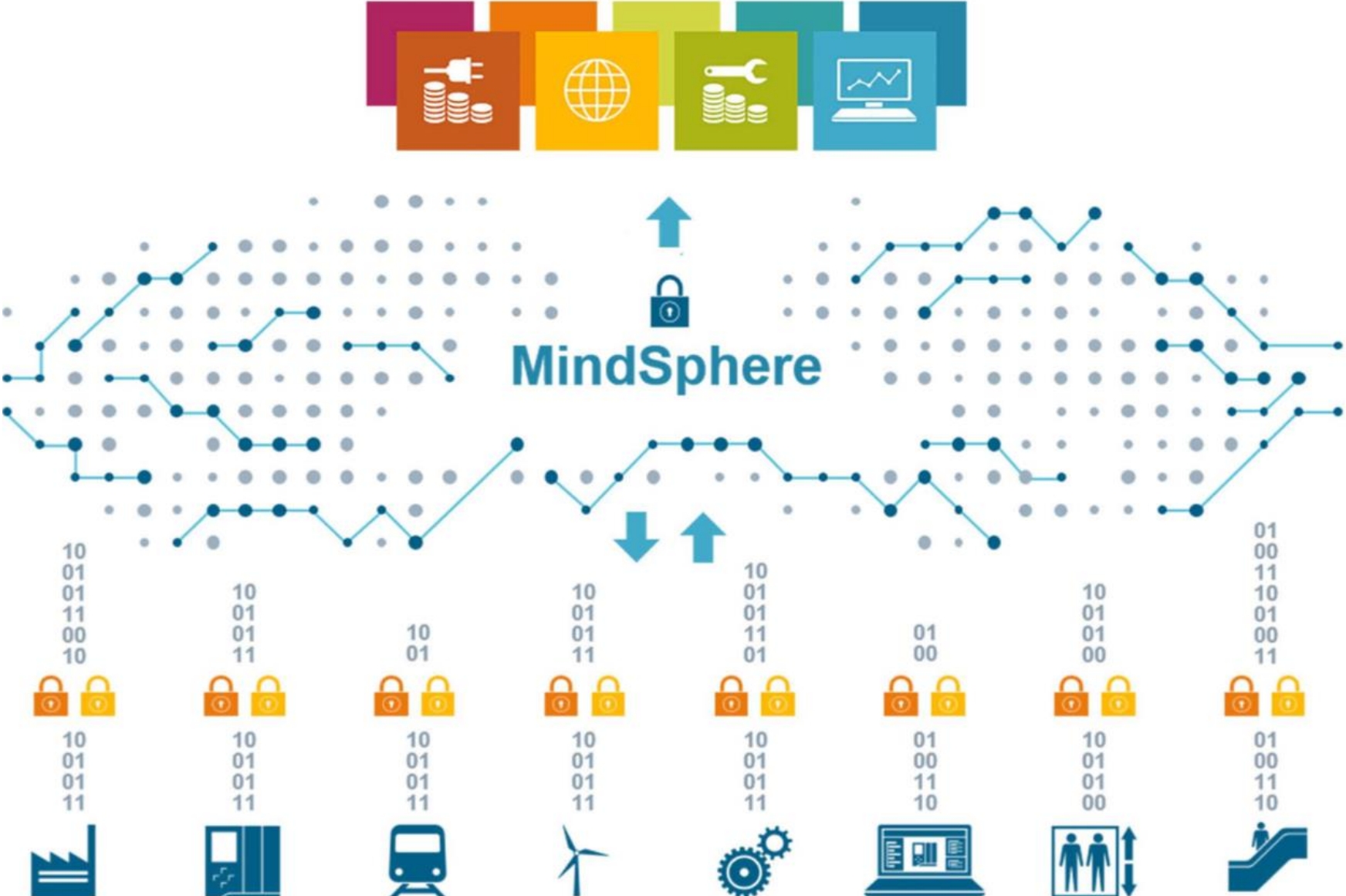


# TeamCenter





# MindSphere







# Siemens Apprenticeship Models

- Siemens Apprenticeships
  - High Quality, Significant Investment – Previously L3 + HNC
- Ambition to achieve Degree Apprenticeship in same timeframe
  - Recruit candidates with good Level 3 quals
  - An FE + Siemens + University solution proposed
- This DA is comprised of:-
  - L2 PEO – Full Time
  - FE HNC+D – Part Time
  - Uni L6 Top Up – Part Time

# Siemens 4-Year Degree Apprenticeship Model



		40 credits (90 Hours)	40 credits	40 credits (90 Hours - 4 X 1 week blocks)			
Level 6	Year 4	S7 Prog Test at Siemens	WBL Project	20 Credits Module 1	20 Credits Module 2	120 Credits	
		S7 Prog 3 at Siemens		University Delivery			
		S7 Prog 2 at Siemens					
		SIEMENS					
Level 5	Year 3	HND 9-9pm at FE College			80 Credits	240 Credits	
	Year 2	HNC/D 9-9pm at FE College			80 Credits		
Level 4	Year 1	PEO 2 + HNC Full Time at FE College			80 Credits	360 Credits	

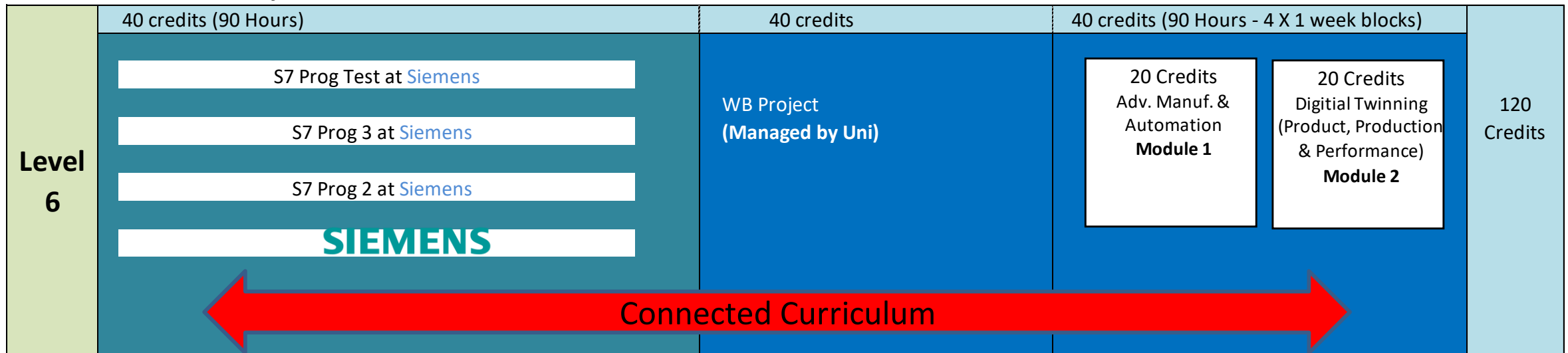


# Level 6 Top Up



- L6 Top Up degree uniquely contains Siemens-certificated PLC Training
- Siemens industrial-standard PLC training very difficult for FE providers to deliver
  - Niche skills, expensive kit, staff hard to find & even harder to retain!
- PLC Training delivered at Siemens headquarters and accredited into degree

## Level 6 Industry 4.0 & Automation



# FE Partnership Opportunity



- L6 Top Up now offered separately to direct candidates
- Seeking FE partners who want to create a progression pathway
  - Candidates must be employed with a HNC/D to access L6 Top Up
  - Candidates should need Siemens accredited PLC training
- Partners can profile relationship in their general marketing literature
- If interested, contact [steven.jones.ext@siemens.com](mailto:steven.jones.ext@siemens.com) – 07977 490055



**Any Questions?**