SUPPORTS

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See.

Core "Manufacturing" Research Talent

Chair in Digital Engineering



- HEA Senior Academic Leadership Initiative
- Support improved gender balance at senior academic levels
- > 1 of only 10 funded nationally in 2022
- Based on Digital engineering, Mechatronics and AI
- Recruiting currently



Chair in Advanced Manufacturing



- Chair in Smart Manufacturing funded through UL Bernal
 Project
- Competition Opening in 2023
- Strong drive to attract female and male applicants

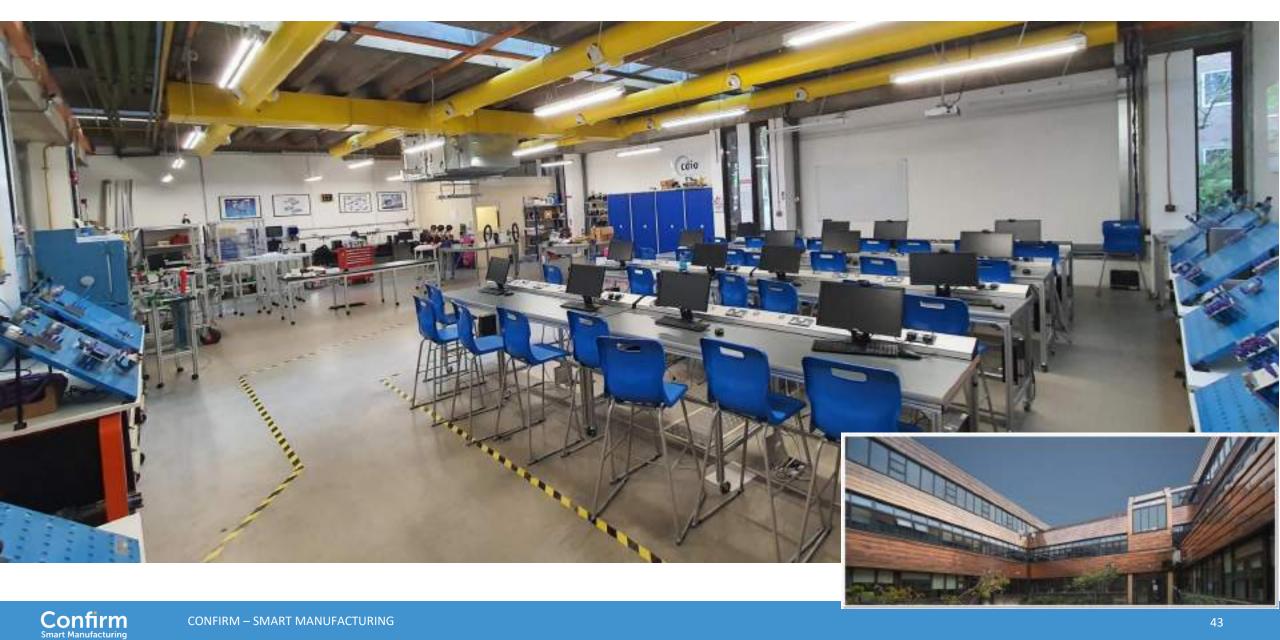
2 X Lectureships in Mechatronics





- 2 X Lectureships in Mechatronics
- Recruiting early 2023

MEng Mechatronics Labs, Schrodinger building, UL



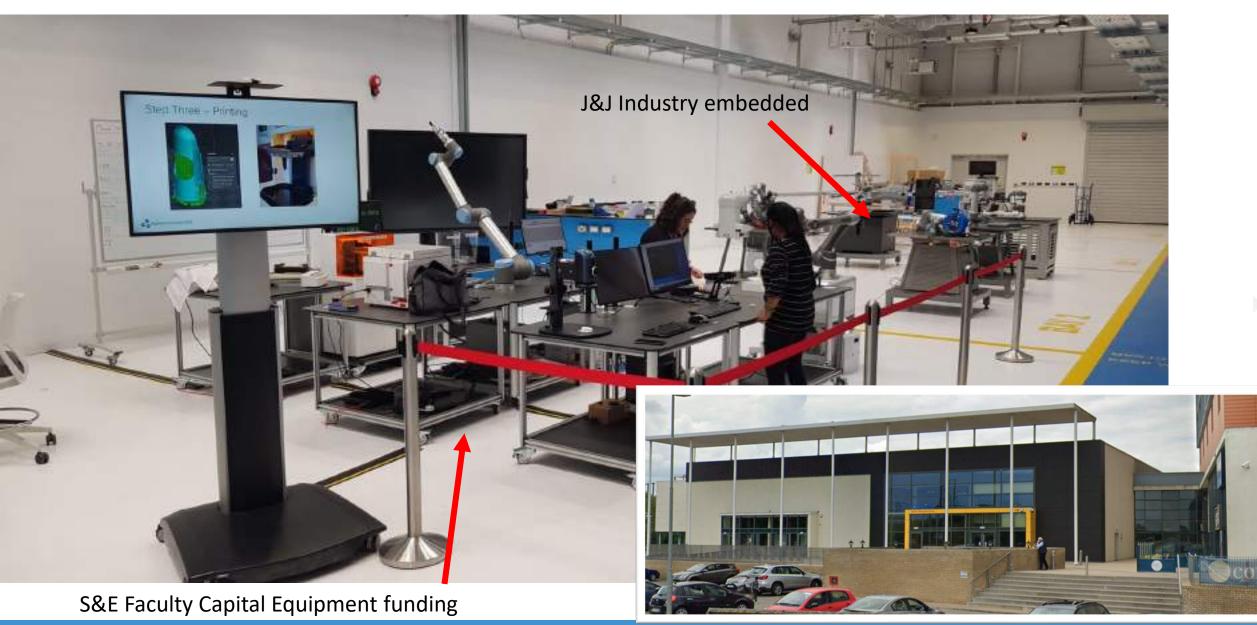
CONFIRM – SMART MANUFACTURING

UL@Work Mechatronics Labs, IBC Block, UL (Under Construction)





Confirm Centre - Industry 4.0 Research Labs, UL Digital District



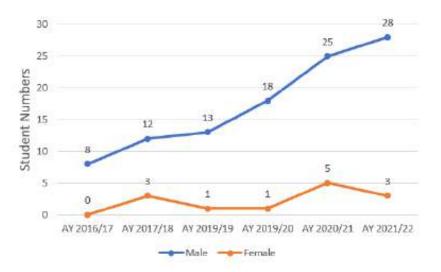
Confirm Smart Manufacturing

CONFIRM – SMART MANUFACTURING



- Industry Experts closely involved in delivery of course
- State of the Art course
- Dedicated Lab with industry standard hardware and software modelling Industry 4.0 manufacturing systems
- Practical student work dealing with real life situations and issues
- Broad Range of knowledge and skills

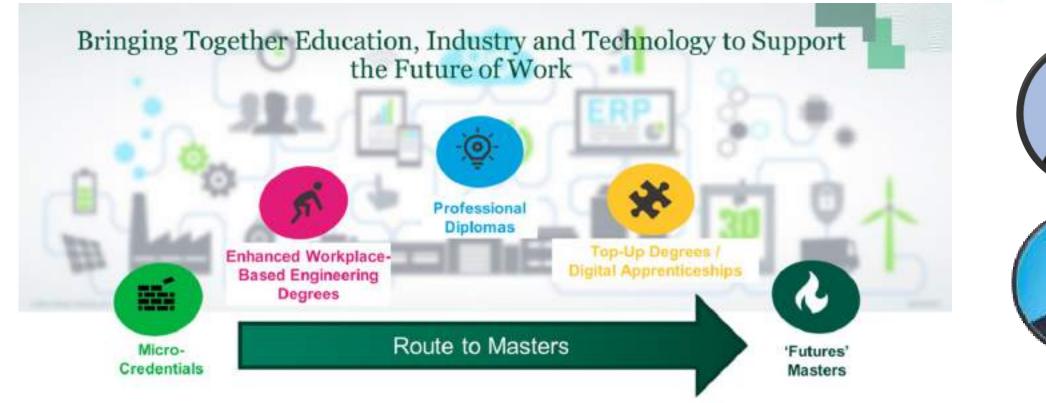






UL@Work





Industry co-Designed Micro Credentials and Professional Diplomas can

be stacked to realise an accredited Masters in Digital Futures





Confirm

Smart Manufacturing





A Trans-National Smart Manufacturing Education Hub

General Information Erasmus Plus KA203 Grant 2020-1-UK01-KA203-079283





E R A S M U S 🕻 🕽

CREATING OPPORTUNITIES FOR THE UK ACROSS EUROPE









Industry Consultations & Stakeholders





Johnson Johnson







abbvie

stryker



KOSTAL





Confirm **Smart Manufacturing**

Thank You

HOST INSTITUTION



PARTNER INSTITUTIONS





Olisoil Teleneolafochta na Mamhan TUS Midlands Midwest





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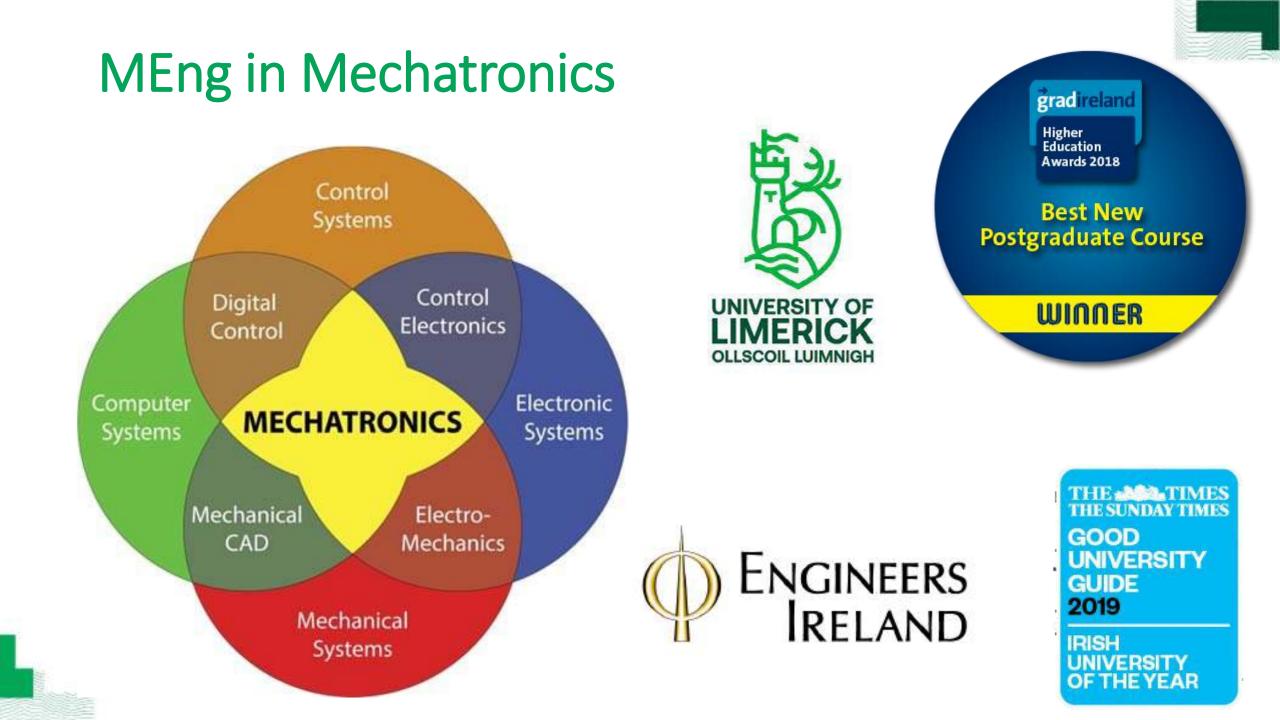
CONFIRM – SMART MANUFACTURING

Mechatronics MEng @UL

Dr Eoin Hinchy Eoin.Hinchy@ul.ie Lecturer in Digital Manufacturing and Automation

Course Director PDip & MEng Equipment Systems Engineering





- Taught Programme over three consecutive semesters
- 90 ECTS
- Designed for Industry 4.0
- Global / Multicultural management part of the core study
- Input from industry professionals on course design and delivery
- Core and Options
 - Software
 - Hardware







- Industry Experts closely involved in delivery of course
- State of the Art course
- Dedicated Lab with industry standard hardware and software modelling Industry 4.0 manufacturing systems
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30

25

20

15

Student Numbers



	Autumn	Spring	Summer
Core	Low Cost Automation Systems	Mechatronics Project 1	Mechatronics Project 2
	Automated System Design	Digital Control	
	Project Management in Practice	Global Business Strategy	
		Machine Vision	
Path A	Automation	Automation	
	Advanced and Emerging Manufacturing Technology	3D CAD Modelling and Machine Design	
	Automation and Control	System Integration	
Path B	Information Technology	Information Technology	
	Computer Networks 1	Web-Based Applications	
	C++ Programming	Real-Time Systems	



Topics Covered

- Robot Force/Torque Sensor End Effector (e.g., Gripper)
- 3D CAD & 3D Printing
- Smart Manufacturing
- PLC Programming
- Arduinos
- Sensors
- Motors
- Pneumatics
- Control Systems
- Conveyors
- Robots / Cobots
- ISA88, ISA95

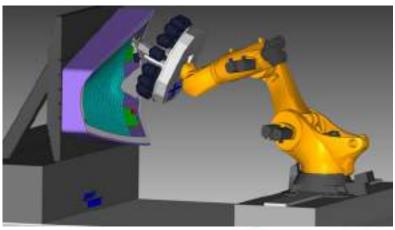






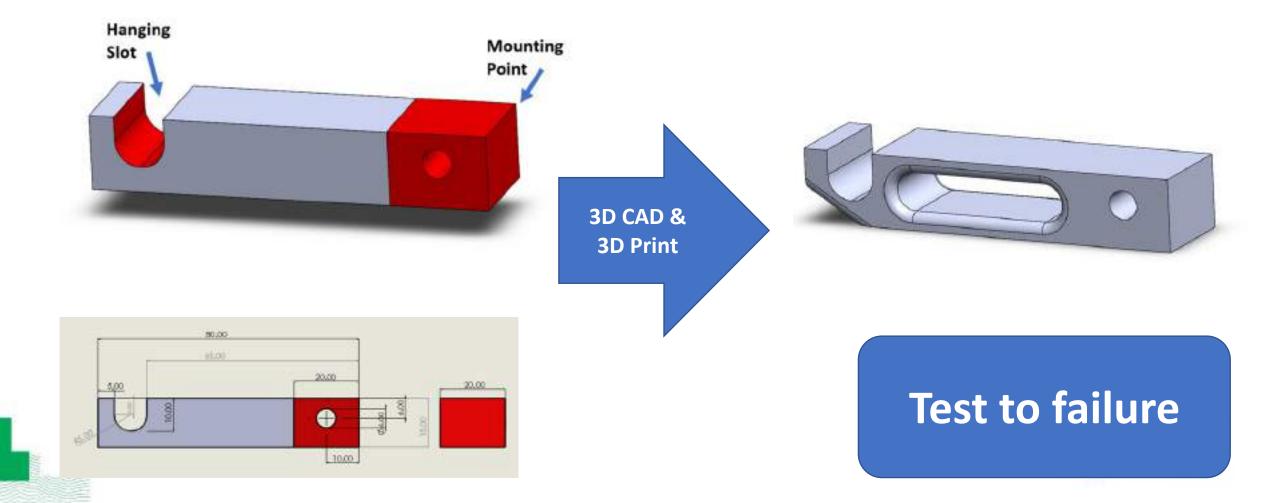








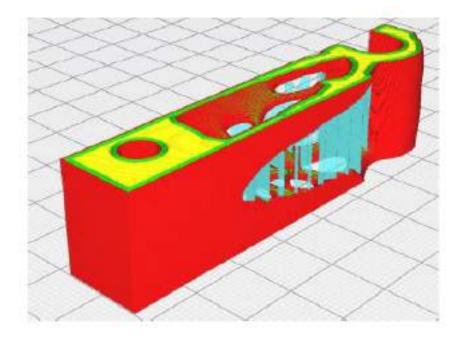
DM6021 Advanced and Emerging Manufacturing Technology





DM6021 Advanced and Emerging Manufacturing Technology









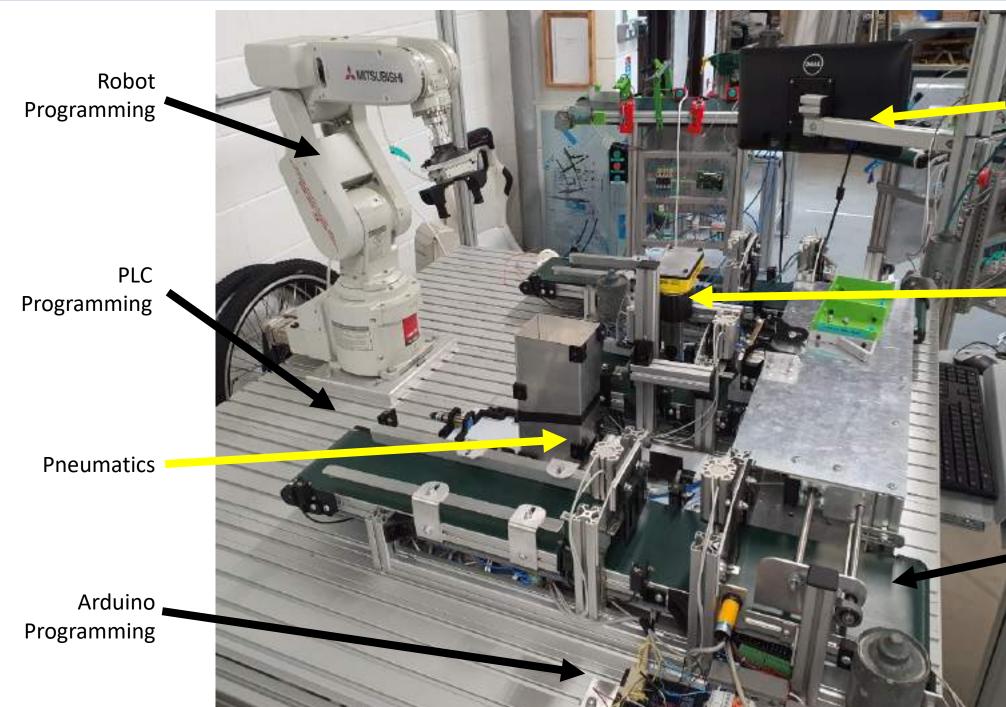
DM6021 Advanced and Emerging Manufacturing Technology



Mechatronics Lab Space



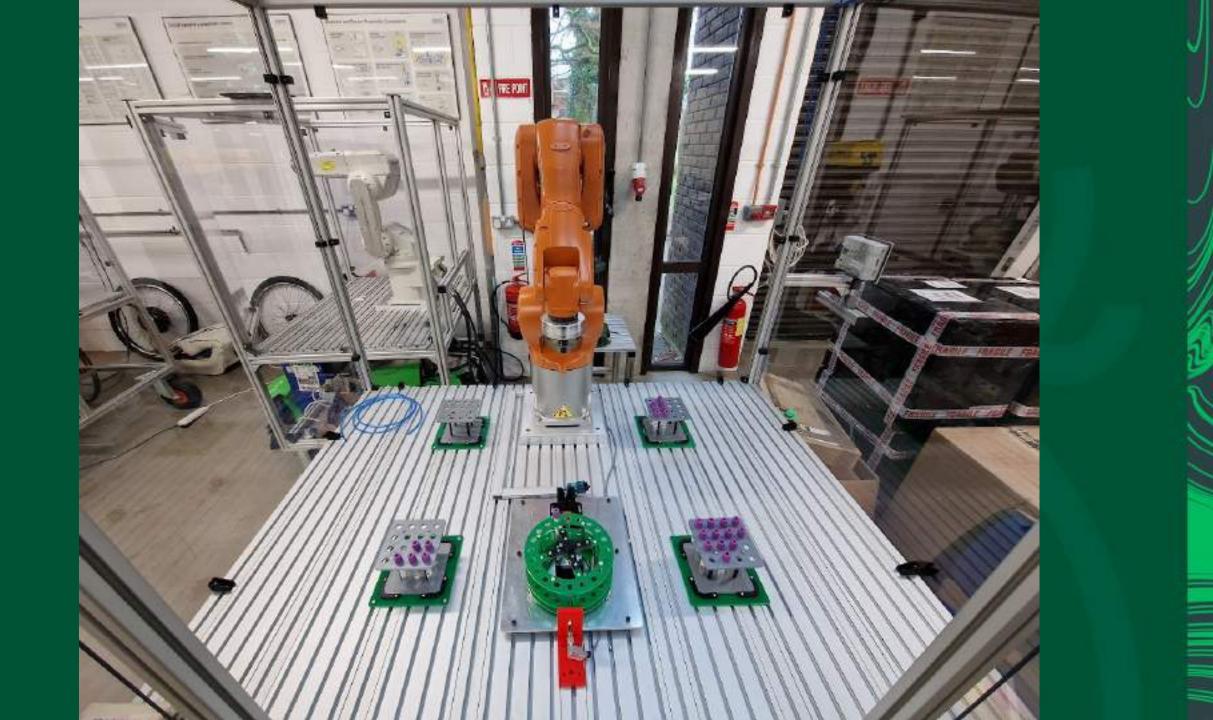




AB Factorytalk HMI Programming

> Cognex Machine Vision

Communication between controllers





2022 Graduate profiles



AHEAD OF WHAT'S POSSIBLE™











Johnson Johnson



