GENERATION APPRENTICESHIP

Engineering | www.apprenticeship.ie

EQUIPMENT SYSTEMS ENGINEER(MEng)

UNIVERSITY OF LIMERICK
OLLSCOIL LUIMNIGH

The Irish Manufacturing Sector is in transition from Industry 3.0 to Industry 4.0/5.0. To be successful, we must master the task of efficiently integrating complex cyber technologies into physical manufacturing equipment. With this in mind, University of Limerick, in conjunction with the ESE Academy have developed a suite of modules for manufacturing sector employees, which form the Masters level Equipment Systems Engineering (ESE) apprenticeship.

For Professionals who wish to:

- Procure, design, manufacture, commission, support or optimise Industry 4.0./5.0 equipment for the high-tech manufacturing sector in Ireland.
- Collaborate with others to broaden their overall access to emerging research, technologies and best working practice to meet the challenges of Industry 4.0/5.0.
- Improve their problem-solving techniques in the high-tech manufacturing equipment domain.
- Be recognised as technical leaders in a topic relevant to Equipment Systems Engineering.
- Possess the skills to implement Industry 4.0/5.0 technologies in manufacturing.

NFQ Level	Level 9 Major Award
Qualification upon completion	Masters in Engineering (MEng)
Duration	2 years
Industry Lead	The ESE Academy
Education Provider	University of Limerick
Delivery	• 1 day per semester on campus • Weekly online lectures • A dedicated Masters thesis supervisor • Participation in a Community of Practice • Support from an Industry Mentor within the company • Completion of a company project
Applications by	July for a September start

Benefits to the Employer

- Developed by industry for industry
- Improves staff retention and productivity
- Addresses and tackles skills shortage
- Government subsidised qualifications

Benefits to the Apprentice

- Gain a Masters while working
- Develop career enhancing skills
- Learn best-practice from other organisations
- Excellent career progression prospects

Course Content

Year 1		
Autumn	**Spring**	**Summer**
Manufacturing Equipment Cyber Technologies	Cyber-Physical Equipment Procurement	Equipment Systems Engineering Project Review (Project Charter)
Automated System Design	Cyber-Physical Manufacturing Solutions	Apprenticeship Personal and Professional Portfolio 1
Year 2		
Autumn	**Spring**	**Summer**
Equipment Systems Engineering Research 1 (Project scoping)	Equipment Systems Engineering Research 2 (Project execution)	Equipment Systems Engineering Research 3 (Project submission)
		Apprenticeship Personal and Professional Portfolio 2

By participating on the Equipment Systems Engineering (ESE) apprenticeship program you will be provided with:

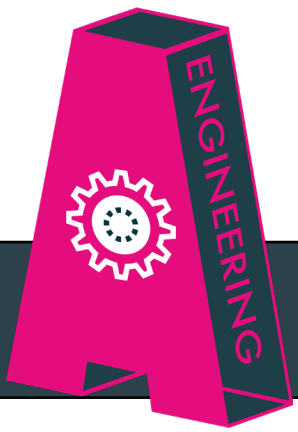
- An overview of relevant commercially available cyber technologies.
- Access to a learning platform with key learning assets from leading cyber technology providers.
- The tools and techniques to manage your equipment procurement processes which ensure that you are implementing appropriate cyber technologies in accordance with current best practice.
- The latest cyber-physical manufacturing equipment solutions, which are currently in development, to solve real-world challenges.
- The opportunity to have your work peer reviewed and published, using a Creative Commons (CC) licensing model, for the benefit of the manufacturing ecosystem.

Entry Criteria

- Employers must be willing to complete an approval process by UL & SOLAS, and commit to support the apprentice throughout the programme.
- Support from an industry mentor within the company throughout the apprenticeship.
- Apprentices should hold a NFQ level 8 at minimum level 2.2 in a relevant area. Applicants who have completed a level 8 apprenticeship in a related field are also eligible to apply.
- Applicants with a lower qualification may also be considered provided they can prove to have considerable industrial experience as well as evidence of the ability to study at Masters Level.

Funding

Fees for Executive Apprenticeships are highly subsidised for approved applicants and represent 80-90% saving on programmes fees.



Further Information or to apply to the programme: email apprenticeships@ul.ie.
Tel: Philomena Kelly 061-237770

www.ul.ie/apprenticeships | www.ese.ie

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ESE ACADEMY

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SOLAS learning works