



Springboard Programme



90% FUNDED FOR EMPLOYED, FULL FUNDING
FOR OTHER ELIGIBLE APPLICANTS*
PART-TIME EVENING PROGRAMME



POSTGRADUATE
ONLINE & ON-CAMPUS
NFQ - LEVEL 9 (30 ECTS)

For Springboard eligibility criteria, please visit: WWW.SPRINGBOARDCOURSES.IE

Embedded Systems Engineering (Specialist Diploma)

**Specialist Diploma (postgraduate level 9)
in Embedded Systems Engineering
(one year part-time)**

The rapid growth of applications in the Embedded systems and devices area requires skilled engineers who have the necessary specific hardware and software expertise. The Specialist Diploma in Embedded Systems Engineering is a one year part-time postgraduate level programme (two semesters) designed for technology professionals who wish to upskill to meet an emerging skills gap in the Embedded Systems area .

It is an intensive blended-learning programme, suitable for those working fulltime, with an on-campus requirement of one evening per week.

Programme Objective:

To equip the student with the essential knowledge and skills required to design real-time, high performance compact-code embedded systems. This includes analysis of embedded processors and architectures, methods and techniques for programming real time systems.

Who will benefit :

Technology professionals seeking to upskill part-time in contemporary and emerging best practices in the operation and design of Embedded-based systems and devices.

Programme Structure:

The programme comprises of 4 taught modules and an Industry-based project.

SPRING SEMESTER (Jan-May)

Operating Systems

Digital (Embedded) Systems

AUTUMN SEMESTER (Sept -Dec)

Real Time System Design

Software Engineering

Industry-based Project

Start Date: 3rd week in Jan.

Finish Date: Mid Dec. (approx., to be confirmed in Autumn based on final project completion date).

Blended-Learning Delivery:

Programme delivery is via weekly on-campus evening tutorials throughout each semester extensively supported by use of the University SULIS Learning Management System (LMS).

Estimated time requirement: 6-10 hours/week per module (including 1 on-campus evening per week).

Module Details:

Operating Systems: multitasking operating systems in single processor systems using a Unix or WIN-32 operating system; lab work will teach the student to develop concurrent program solutions.

Digital (Embedded) Systems: concepts and design issues for interfacing digital hardware to a microprocessor.

Real Time System Design: real-time system design concepts, techniques and methodologies at application level and system level and the interaction of hardware and micro-kernel services on real time applications.

Software Engineering: understanding and applying approaches to software development in the Embedded Systems environment.

Entry Requirements:

Level 8 honours primary degree, at minimum second class honours, in a relevant engineering/computing/mathematics or technology discipline; and relevant programming experience in C or C++ or related languages .

Applicants who do not meet the academic entry requirements but who have significant relevant experience in the technology sector (minimum 5 years) and are encouraged to apply under the University Recognition of Prior Learning (RPL) policy. Applicants must also satisfy the English Language Requirements of the University.

Fees:

*The programme is 90% funded for the Employed; fees are fully funded for Returners and those in receipt of payment from the Department of Employment Affairs and Social Protection (DEASP). See springboardcourses.ie website for full details regarding eligibility.

Academic Contact: Email: Thomas.Newe@ul.ie

Entry, administrative and admissions queries:

Email: springboard@ul.ie

Application Closing Date: early December, for a January start. Applicants are advised to apply early as places on the programme are limited.

HOW TO APPLY -

STAGE 1: On www.springboardcourses.ie please select University of Limerick in the 'Providers' section, hit 'Search' and on the next page select **More Details** on your chosen course, and determine eligibility by taking the **Self Checker Quiz**

STAGE 2: If you are eligible, click **Apply Now**, where you selected the course on the previous page www.springboardcourses.ie go to the programme, click on **Apply Now**.

This programme is subject to University of Limerick Academic Council approval and implementation

No guarantee is given that the programme, syllabus, fees or regulations may not be altered, cancelled or otherwise amended at any time.



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