



**GENERATION
APPRENTICESHIP**
www.apprenticeship.ie



MTU

Ollscoil Teicneolaíochta na Mumhan
Munster Technological University

SOFTWARE SOLUTIONS ARCHITECT LEVEL 9

Designed to address the widening skills gap in software design by applying abstract knowledge and proven methods to create extendible and maintainable software solutions.



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OVERVIEW

Software Solutions Architect Level 9 is designed to bridge the gap between academic theoretical knowledge and practical software design skills applied in the industry. Apprentices will become familiar with the latest software design and architecture concepts and ideally evaluate them in real-world scenarios. This apprenticeship aims to address the high demand for expert software developers in Ireland's industries. The program places significant emphasis on hands-on learning, adopting a practical approach where all modules are fully assessed using continuous assessment methods. There are no formal end-of-semester written examinations, ensuring that learners gain practical experience from the first module to the last. Apprentices will work closely with a mentor from their work placement.

The Apprenticeship is aimed at applicants who hold a level 8 or level 7 degree in areas related to Computer Science and IT.

ENTRY REQUIREMENT

Entry to this apprenticeship will require a minimum of a Level 8 Honors Degree in Computing, Computer Science, IT, or in a cognate discipline. The existing program is designed specifically for computing professionals working in the IT industry. Apprentice applicants with a Level 7 degree in Computing, Computer Science or in a cognate discipline are required to be precisely analyzed by MTU and the course coordinator may interview them. Following the interview the candidate may be requested to provide documentary evidence to support his/her claim. This is normally supplied in a learning portfolio outlining his/her case against each of the module areas of the stage immediately prior to that for which entry is sought.

MTU has a comprehensive policy and system addressing the Recognition of Prior Learning (RPL). The RPL team, based in the Extended Campus office, is available to assist potential apprentices in preparing their learning portfolios. In cases where applicants do not meet the educational requirements specified above, acceptance will be based on an interview process and communication with our RPL team to determine previous experiential learning (RPL), the apprentice's suitability to the subject area, and their commitment to achieving the minimum intended program.

If you have the above conditions, you may apply for an apprenticeship vacancy with a SOLAS approved employer.

SHOULD I CHOOSE THIS APPRENTICESHIP?

- Interest in Software Development and Software Architecture.
- Learn and Earn through the Apprenticeship model.
- Explore promising career opportunities in a diverse and thrilling industry.
- Gain the tools and knowledge necessary to acquire best practices in the field of Software Engineering and Architecture.
- Design infrastructure and environments that significantly impact people's, businesses', and industries' lives through sustainable and resilient software systems.



PROGRAMME STRUCTURE

Apprentices will receive progressive training, enabling them to apply the knowledge they acquire through hands-on experience in in-house projects at work.

Semester 1: 14 hours off-the-job (equivalent to 2 days) and the 3 days on-the-job

Semester 2: 14 hours off-the-job (equivalent to 2 days) and the 3 days on-the-job
On the job: June to August

Semester 3: 7 hours off-the-job (equivalent to 1 day) and the 4 days on-the-job

Semester 4: 7 hours off-the-job (equivalent to 1 day) and the 4 days on-the-job
On the job: June to August

- This 60-credit online programme is delivered over 24-months (4 semesters).
- Apprentices will benefit from direct industry and academic supervision.
- Off-the-Job training may differ semester to semester (see table below).
- Each Off-the-Job learning module has 2 contact hours and 5 self-study hours.
- The 2 contact hours of the Off-the-Job learning modules are offered in the evening, and they are all Online. Via Zoom and Canvas as the Content Management System (CMS).
- Employers should not reduce any payment due to the Off-the-Job required time.

Semester 1: September - December	Training	Credits	Time Required (On / Off)
Software Design & Architecture	Off-the-Job	5	Days: 3 On / 2 Off
Software Process Engineering	Off-the-Job	5	Days: 3 On / 2 Off
Software Work Experience 1	On-the-Job	10	Days: 3 On / 2 Off
Semester 2: January - May	Training	Credits	Time Required (On / Off)
Computing Research & Practice	Off-the-Job	5	Days: 3 On / 2 Off
Scalable Microservices	Off-the-Job	5	Days: 3 On / 2 Off
Software Work Experience 2	On-the-Job	10	Days: 3 On / 2 Off
Semester 3: September - December	Training	Credits	Time Required (On / Off)
Big Data Processing	Off-the-Job	5	Days: 4 On / 1 Off
Software Work Experience 3	On-the-Job	10	Days: 4 On / 1 Off
Semester 4: January - May	Training	Credits	Time Required (On / Off)
Computing Research Study	Off-the-Job	5	Days: 4 On / 1 Off

HOW DO I JOIN THE APPRENTICESHIP?

In order to start the apprenticeship, you will need to secure a registered employer working within the sector. You can do this by contacting employers working in this sector.

You can show your interest by applying through the MTU portal at:
www.mtu.ie/courses/crksadn9/

You may obtain more details from:
content.apprenticeship.ie/f/83224/x/6602273024/apprenticeshipcodeofpractice.pdf

For more detail, you can contact:
farshad.toosi@mtu.ie

WHAT IS THE CERTIFICATION?

QQI Level 9 Higher Certificate in Software Architecture and Design
Software Solutions Architect.

COST

Each apprentice is required to pay €750 per year, making the total cost of this apprenticeship €1500. Upon acceptance of their application, each apprentice must pay €500 to secure their place. This €500 will be deducted from the total payment.

WHERE WILL I GET WORK?

Successful apprentices are in high demand by any industry or company that are involved with software development. Opportunities for work are readily available in a variety of Irish, European, and international companies involved in software development and architecture.

MORE INFORMATION

If you require further information, please contact: farshad.toosi@mtu.ie





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CONTACT US

Dr Farshad Ghassemi Toosi
Department of Computer Science

Munster Technological University
Bishopstown | Cork | T12 P928 | Ireland

Email: farshad.toosi@mtu.ie

Website: <http://cs.cit.ie>

