Certificate in

Industrial Instrumentation Calibration

ess

Leaders in Asset Management & Maintenance Reliability through People

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Certificate in Industrial Instrumentation Calibration

The Certificate in Industrial Instrumentation Calibration (CIIC) is designed to develop learners understanding of the principles of instrument calibration, calibration terminology, calibration system documentation, and relevant procedures, and to develop the skills to calibrate industrial process instruments and control elements, and measure, record and evaluate data.

GRIFFITH COLLEGE

TYPE:
Certificate

MODE:
Part-time

VALIDATED BY:
QQI

NFQ LEVEL:
6

ESS provide Asset Optimisation and Compliance through People. We work with people to implement and carry out maintenance and asset management and to optimise performance. We believe that it is people that make things work and that improvements and sustainability are driven by supporting, training and educating people.

Our Values

- **Respect**
- **Accountability**
- **Act like an owner**
- **Innovating & learning**
- **Challenge & Support**

Course Overview:

The Certificate in Industrial Instrumentation Calibration (CIIC) is designed to develop learners understanding of the principles of industrial process instrument calibration, calibration terminology, calibration system documentation, and relevant procedures, and to develop the skills to calibrate instruments and control elements, and measure, record and evaluate data.

The QQI-accredited Certificate in Industrial Instrumentation Calibration is a part-time programme, typically, delivered over 4 – 6 weeks.

This award of 5 ECTS credits is designed to meet the industry skills shortage in the areas of industrial instrumentation calibration and thus provides an opportunity for companies to support their employees whilst they upskill or allow people to reskill and cross-skill from non-related disciplines.

Why Choose Certificate in Industrial Instrumentation Calibration?

- The programme is available on a part-time basis and teaches the in-demand skill of calibrating process control instruments.
- Learners are introduced to industrial instrumentation calibration knowledge and skills to support their working in industry or enhance employment opportunities.
- The Certificate in Industrial Instrumentation Calibration programme is designed to equip those working in industry and services with the theoretical knowledge and practical skills to check, verify and calibrate process control instruments and the associated calibration techniques and analysis.
- The practical nature of the coursework lends to preparation for work in industry.
- Learners are provided access to academic resources and personal supports through ESS's partnership with Griffith College.
- This programme may also facilitate learners applying for progression to third-level programmes in NFQ Level 6 (plus) engineering programmes within third-level colleges.

Entry Requirements

Entry requirements (if under 23 years) are a minimum of grade O6 / H7 in the Leaving Certificate, or equivalent, in 5 subjects. The subjects must include mathematics and English, Irish or another language.

Mature learners, i.e., applicants over the age of 23, may also apply based on work experience and / or life experience by demonstrating that they have reached the standards of knowledge, skills, and competence.

The English language entry requirements for the programme are CEF B2+ or equivalent. Candidates with English language levels below CEF B2+ must first reach this minimum standard before enrolling on the academic programme.

Ideally, applicants have some prior technical experience or knowledge and/or exposure to an industrial environment.

Course Highlights

- Learners recognise the safety standards associated with working with instrument systems and demonstrate how to use calibration test equipment correctly.
- Learners select and apply routine mathematical methods and calculation for instrument systems.
- This Certificate programme deals with specific instrumentation, calibration documentation and calibration skills and competencies required by a technician in industry.
- Graduates are ready to apply their learning directly in their employment and can use all the theory and practical skills gained in their studies.

5 ECTS

Certificate in Industrial Instrumentation Calibration

The objectives of this certificate programme are to:

1. Support learners seeking to expand their skill and qualification to facilitate them to work in manufacturing or service industry.
2. Facilitate those currently working within the sector seeking to develop their technical skills and improve performance or seek career advancement by developing their skills and gaining an approved qualification in instrumentation calibration.
3. Enable those who are seeking employment or career mobility and are looking to expand their skills and qualifications to make them industry relevant, ready, and attractive.

Minimum intended programme learning outcomes

On successful completion of this programme, learners are able to:

1. Explain the principles of operation of industrial measurement instruments.
2. Describe the principles of calibration and the associated standard instruments and data sheets/job plans.
3. Perform appropriate calibration techniques on measurement instruments using standard safety and operational procedures.
4. Calibrate measurements and report on the indicated errors and required corrective instrument adjustments.
5. Measure, record and evaluate appropriate calibration data clearly and concisely.
6. Demonstrate an ability to enhance their skills through formal education and training, independent inquiry, and professional.

Course Content

This practical programme will equip learners with the skills to check and verify industrial process control systems

Safe work practices in process environments

Principles of calibration

- Standards
- Traceability
- Intervals

Pressure measurement

- Principals and methods
- Control elements

Level measurement

- Principals and methods
- Control elements

Flow measurement

- Principals and methods
- Control elements

Temperature measurement

- Principals and methods
- Control elements

Good practices in calibration system documentation and records

Progression

Certificate in Industrial Manufacturing and Maintenance Skills.

Higher National Certificate in Manufacturing Engineering, Griffith College

NFQ Level 6 (plus) engineering programmes within third-level colleges in Ireland

Learn More

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