

# SIAS Level 3

## Extended Diploma in Process Industry Manufacturing

SIAS

### Welcome to SIAS

SIAS is an Awarding Organisation regulated in England by the Office of Qualifications and Examinations Regulation (Ofqual) and in Northern Ireland by the Council for Curriculum, Examination and Assessment Regulation (CCEA Regulation).

We exist to drive positive change, and across STEM industries globally, we empower learners to achieve their full potential.

As the leading Awarding Organisation for the technical science, manufacturing, engineering and low carbon sectors, we are disrupting through innovative and collaborative approaches.

Our mission is to deliver transformational experiences and solutions that support the skills agenda.



### Key Facts

<b>Qualification Title</b>	SIAS Level 3 Extended Diploma in Process Industry Manufacturing
<b>Qualification Number</b>	610/5849/X
<b>Credit Value</b>	93
<b>Guided Learning Hours (GLH)</b>	615
<b>Total Qualification Time (TQT)</b>	930
<b>Assessment Methods</b>	Multiple choice question examinations (Units 1 to 4) Short answer question examinations (Units 5 and 6) Workbooks (Units 7 to 9) Centre devised assessments (Units 10 to 16)
<b>Operational Start Date</b>	1 June 2025
<b>Regulation</b>	This qualification is regulated by Ofqual

### Qualification Objective

The SIAS Level 3 Extended Diploma in Process Industry Manufacturing provides an industry specific pathway to becoming a skilled Process Industry Manufacturing Technician, developing the full range of knowledge, skills, and behaviours set out in the Process Industry Manufacturing Technician occupational standard. Learners completing the qualification will be competent to operate and maintain large-scale, continuous manufacturing processes involving high-hazard substances, ensuring products meet quality specifications, schedules, and strict safety, environmental, and regulatory requirements. Following completion of the qualification, the learner will be able to carry out the role of a technician within the sector, working as part of the wider team and collaborating with internal teams and external stakeholders as required of the role.

### Entry Requirements

This qualification is available for learners aged 16+.

There are no formal entry requirements for the SIAS Level 3 Extended Diploma in Process Industry Manufacturing. However, learners should have a basic understanding of English and mathematics. Centres should also ensure learners are able to complete this qualification, for example, through completing an initial assessment to ensure they can work at the appropriate level.

## Qualification Structure

To achieve the SIAS Level 3 Extended Diploma in Process Industry Manufacturing must achieve the following:

- All mandatory units listed in the table below.

Ofqual Unit Reference	Unit Title	Level	Credit	GLH	TLT
H/651/3112	Unit 1: Principles of Health, Safety and the Environment in Process Industry Manufacturing	2	7	50	70
J/651/3113	Unit 2: Work Effectively both Individually and as Part of a Team	2	3	20	30
K/651/3114	Unit 3: Fundamentals of Scientific and Mathematical Principles in Process Industry Manufacturing	2	9	65	90
L/651/3115	Unit 4: Fundamentals of Process Industry Manufacturing Operations	2	11	70	110
A/651/6450	Unit 5: Working in Accordance with Health, Safety and Environmental Best Practices in Process Manufacturing	3	6	40	60
D/651/6451	Unit 6: Applied Chemical, Mathematical and Physical Principles in Process Manufacturing	3	9	60	90
F/651/6452	Unit 7: The Principles and Processes of Separation in the Process Industry	3	4	30	40
H/651/6453	Unit 8: Water Utilisation and Purification in Process Industry Manufacturing	3	3	25	30
J/651/6454	Unit 9: Heat Transfer and Fluid Flow in Process Industry Manufacturing	3	4	30	40
K/651/6455	Unit 10: Fault Diagnosis and Continuous Improvement Techniques in Process Industry Operations	3	4	25	40
L/651/6456	Unit 11: Maintaining Quality and Control in Process Manufacturing	3	4	25	40
R/651/6458	Unit 12: Information Technology and Data Security in Process Industry Operations	3	2	15	20
L/651/6465	Unit 13: Plant Equipment Operations in Process Manufacturing	3	9	50	90
M/651/6466	Unit 14: Plant Maintenance and Decommissioning in Process Manufacturing	3	10	60	100
R/651/6467	Unit 15: Applying Operational Practices in Process Industry Manufacturing	3	5	30	50
T/651/6468	Unit 16: Professional Communications and Development in the Process Manufacturing Industry	3	3	20	30
<b>TOTAL</b>			<b>93</b>	<b>615</b>	<b>930</b>

## Grading

This qualification is graded as a pass/fail.

## Assessment Method(s)

Unit Title	Assessment Method	Set by	Marked by
Unit 1: Principles of Health, Safety and the Environment in Process Industry Manufacturing	Externally set and marked multiple-choice question examination	SIAS	SIAS
Unit 2: Work Effectively both Individually and as Part of a Team	Externally set and marked multiple-choice question examination	SIAS	SIAS
Unit 3: Fundamentals of Scientific and Mathematical Principles in Process Industry Manufacturing	Externally set and marked multiple-choice question examination	SIAS	SIAS
Unit 4: Fundamentals of Process Industry Manufacturing Operations	Externally set and marked multiple-choice question examination	SIAS	SIAS
Unit 5: Working in Accordance with Health, Safety and Environmental Best Practices in Process Manufacturing	Externally set and marked short answer question examination	SIAS	SIAS
Unit 6: Applied Chemical, Mathematical and Physical Principles in Process Manufacturing	Externally set and marked short answer question examination	SIAS	SIAS
Unit 7: The Principles and Processes of Separation in the Process Industry	Externally set and internally marked workbook	SIAS	Centre
Unit 8: Water Utilisation and Purification in Process Industry Manufacturing	Externally set and internally marked workbook	SIAS	Centre
Unit 9: Heat Transfer and Fluid Flow in Process Industry Manufacturing	Externally set and internally marked workbook	SIAS	Centre
Unit 10: Fault Diagnosis and Continuous Improvement Techniques in Process Industry Operations	Centre devised	Centre	Centre
Unit 11: Maintaining Quality and Control in Process Manufacturing	Centre devised	Centre	Centre
Unit 12: Information Technology and Data Security in Process Industry Operations	Centre devised	Centre	Centre
Unit 13: Plant Equipment Operations in Process Manufacturing	Centre devised via a portfolio of evidence	Centre	Centre
Unit 14: Plant Maintenance and Decommissioning in Process Manufacturing	Centre devised via a portfolio of evidence	Centre	Centre
Unit 15: Applying Operational Practices in Process Industry Manufacturing	Centre devised via a portfolio of evidence	Centre	Centre
Unit 16: Professional Communications and Development in the Process Manufacturing Industry	Centre devised via a portfolio of evidence	Centre	Centre

## Centre and Qualification Approval

To deliver this qualification, the centre must be recognised by SIAS and must apply for approval for each qualification they intend to offer.

For details of our centre recognition and qualification approval process, visit our website or contact us at [info@siasuk.com](mailto:info@siasuk.com).

### Further Information

For information about SIAS and general enquiries please see our website: [www.siasuk.com](http://www.siasuk.com) or contact:

Telephone: 01925 515211

Email: [info@siasuk.com](mailto:info@siasuk.com)