

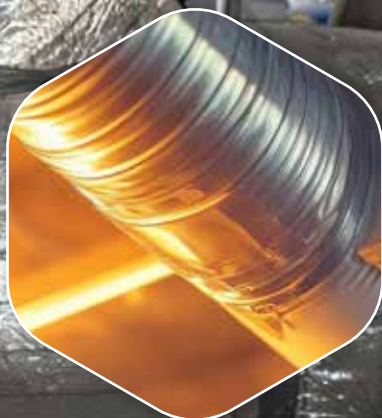


TIA SOUTHERN AFRICA
T H E R M A L I N S U L A T I O N A C A D E M Y

PROSPECTUS

2026/2027

**Building Skills for
a Sustainable,
Energy-Efficient Future**





Developing Skilled Thermal Insulation Professionals specifically for industrial installations of **pipes, boilers and vessels**.



Welcome to the **THERMAL INSULATION ACADEMY OF SOUTHERN AFRICA**

Welcome to the **Thermal Insulation Academy of Southern Africa (TIA)**, a leading provider of industry-focused training for the thermal insulation sector. Our Academy is committed to developing competent insulation professionals who meet the highest standards of safety, quality and technical excellence.

Our programmes combine **theoretical learning, practical hands-on workshop training and structured workplace experience** to equip learners with the knowledge, skills and confidence required to succeed in the building, construction and industrial sectors.

Developed in alignment with South African National Standards (SANS), the National Building Regulations, recognised industry best practice, and Occupational Qualifications, our training prepares learners to meet the evolving needs of industry while contributing to improved energy efficiency and sustainable development.

Why Choose TIA?

- Industry-recognised training programmes
- Practical, hands-on workshop experience
- Experienced industry facilitators
- Modern training facilities and equipment
- Small class sizes for personalised learning
- National training delivery
- Corporate and in-house training solutions
- Structured workplace learning
- Industry-recognised certification
- Ongoing technical support and industry guidance

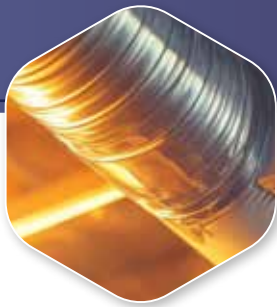


What You Will Learn

Upon successful completion of the programme, learners will be able to:

- Plan and carry out insulation installation activities in industrial environments.
- Interpret insulation drawings, specifications and work instructions.
- Select and apply the correct insulation materials and finishing systems.
- Install thermal insulation on pipes, vessels, tanks, boilers and associated equipment.
- Apply protective cladding, vapour barriers and finishing systems.
- Conduct quality inspections and complete installation documentation.
- Work safely and effectively as part of a multidisciplinary team.
- Contribute to improved energy efficiency and sustainable industrial operations.

Qualified learners will be capable of preparing insulation materials and finishes, installing insulation systems on a variety of industrial equipment, applying thermal insulation plaster and coatings, conducting handover procedures, and performing quality checks in accordance with recognised industry standards.



Entry Requirements

Applicants should meet one of the following minimum requirements:

OPTION 1

- National Qualifications Framework (NQF) Level 2 with Mathematical Literacy.

OPTION 2

- A minimum of five (5) years' relevant experience in thermal insulation installation.

Recognition of Prior Learning

(RPL) is available for experienced candidates who do not meet the formal entry requirements.



Programme Duration

Each Skills Programme is delivered over **10 working days per learning section**, excluding the required workplace application and practical experience component.



Benefits of Completing the Skills Programmes

Successful learners will receive:

- Certificate of Competence.
- Statement of Results.
- Skills Compliance Card, indicating competency level.
- One (1) year complimentary membership of the Thermal Insulation Products & Systems Association South Africa (TIPSASA).
- Industry-recognised practical skills and workplace experience.
- Enhanced career opportunities within the thermal insulation industry.

The Learner Journey:

1.



Knowledge

Gain the essential theory and understanding of insulation principles, materials, systems, safety and industry best practice.

2.



Practical Training

Develop hands-on skills in our modern workshops with experienced facilitators using industry-standard tools and equipment.

3.



Workplace Experience

Apply your skills in real industrial environments through structured on-the-job training.

Structured on-the-job training:

Learners receive structured on-the-job workplace training which contributes credits towards the Occupational Skills Programme while developing practical workplace competence.

4.



Portfolio of Evidence

Compile evidence of your knowledge, skills and workplace activities in your Portfolio of Evidence (PoE) and Logbook.

5.



Internal Assessment

Your competence is assessed by a qualified internal assessor throughout your training and workplace experience.

6.



Final Integrated Summative Assessment (FISA)

An external assessor evaluates your overall competence against national standards.

7.



Certificate of Competence

Achieve your Occupational Skills Programme and be recognised as a competent insulation professional.

OUR SKILLS TRAINING PROGRAMMES

The Thermal Insulation Academy of Southern Africa offers industry-aligned Skills Programmes designed to develop competent insulation professionals through a combination of classroom learning, practical workshop training and structured workplace experience. Each programme contributes towards an Occupational Qualification and equips learners with the knowledge and practical skills required to perform safely and effectively in industrial environments.

SP1

Insulation Installer on Piping Systems

This programme provides learners with the essential knowledge and practical skills required to install thermal insulation systems on industrial piping. Training covers insulation materials, vapour barriers, protective cladding, interpretation of piping drawings, quality control and safe working practices.



NQF LEVEL: 2
CREDITS: 55



KEY LEARNING AREAS

- Industrial pipe insulation systems
- Workplace health and safety
- Pipe insulation materials and cladding
- Reading drawings and specifications
- Installation techniques for straight pipes, bends, valves and flanges
- Quality inspection and documentation



PRACTICAL TRAINING INCLUDES

- Measuring, cutting and fitting insulation
- Installation of vapour barriers and cladding
- Inspection and quality assurance
- Workplace application under supervision





INSULATION INSTALLER ON PIPING SYSTEMS – SP 1

KNOWLEDGE/THEORY MODULES

Module Number	Module Title	Credit
900799-000-00-00-KM-01	Introduction to industrial pipe insulation and piping systems, L2	3
900799-000-00-00-KM-02	Workplace Safety, Health, Environment, Risk and Legislative Practices for Pipe Insulation, L2	5
900799-000-00-00-KM-03	Apply pipe insulation materials, vapour barriers, cladding and prefabricated systems, L2	5
900799-000-00-00-KM-04	Interpretation of piping drawings, insulation schedules and specifications, L2	4
900799-000-00-00-KM-05	Quality control, energy efficiency and documentation for pipe insulation, L2	3

PRACTICAL SKILLS MODULES

900799-000-00-00-PM-01	Prepare pipework surfaces, work areas, tools and materials for insulation installation, L2	5
900799-000-00-00-PM-02	Measure, cut, fit and secure insulation on straight pipes, bends and elbows, L2	6
900799-000-00-00-PM-03	Install insulation on valves, flanges, joints, supports and cluster pipe components, L2	5
900799-000-00-00-PM-04	Apply vapour barriers, sealing and protective cladding on piping systems, L2	5
900799-000-00-00-PM-05	Inspect pipe insulation work and complete installation records, L2	3

WORKPLACE SKILLS MODULES

900799-000-00-00-WM-01	Participate in pipe insulation site preparation and material handling processes, L2	3
900799-000-00-00-WM-02	Install and finish insulation and cladding on piping systems including maintenance in an industrial workplace, L2	5
900799-000-00-00-WM-03	Participating in inspection, defect correction and handover of pipe insulation work, L2	3

All training is done face-to-face. (in person)

All practical skills are done on site

Learners will receive on the job training, and this will count for Credits towards the qualification

SP2

Insulation Installer on Plant Boiler Systems

This programme develops the skills required to install and maintain insulation systems on industrial boilers and associated plant equipment. Learners gain experience in hot insulation systems, lagging, cladding and energy-efficient insulation practices.



NQF LEVEL: 2
CREDITS: 60



KEY LEARNING AREAS

- Boiler insulation principles
- Workplace safety and environmental practices
- Hot insulation materials and finishing systems
- Reading boiler drawings and specifications
- Quality control and energy efficiency



PRACTICAL TRAINING INCLUDES

- Preparation of boiler surfaces
- Installation of insulation systems
- Application of lagging and protective cladding
- Inspection, maintenance and repairs





INSULATION INSTALLER ON PLANT BOILER SYSTEM – SP 2

KNOWLEDGE/THEORY MODULES

Module Number	Module Title	Credit
900796-000-00-00-KM-01	Introduction to boiler systems and industrial insulation applications, L2	4
900796-000-00-00-KM-02	Workplace safety, health, risk, environment and specifications for boiler insulation, L2	4
900796-000-00-00-KM-03	Boiler insulation materials, hot insulation systems, lagging and cladding, L2	6
900796-000-00-00-KM-04	Interpretation of boiler insulation drawings, work instructions and specifications, L2	4
900796-000-00-00-KM-05	Quality control and energy efficiency in boiler insulation work, L2	3

PRACTICAL SKILLS MODULES

900796-000-00-00-PM-01	Prepare boiler work areas, access equipment, tools and materials for insulation work, L2	5
900796-000-00-00-PM-02	Prepare boiler insulation materials, finishes, fasteners and protective coverings, L2	5
900796-000-00-00-PM-03	Install insulation on boiler surfaces and associated hot plant components, L2	8
900796-000-00-00-PM-04	Apply lagging, cladding, sealing and finishing systems on boiler insulation, L2	5
900796-000-00-00-PM-05	Inspect boiler insulation work and complete installation records, L2	4

WORKPLACE SKILLS MODULES

900796-000-00-00-WM-01	Participate in boiler insulation site preparation and hazard control processes	3
900796-000-00-00-WM-02	Install and finish insulation on plant boiler systems in an industrial workplace, L2	3
900796-000-00-00-WM-03	Participate in boiler insulation inspection, defect correction and handover processes, L2	3
900796-000-00-00-WM-04	Repair and replace damaged insulation systems, L2	3

All training is done face-to-face. (in person)

All practical skills are done on site

Learners will receive on the job training, and this will count for Credits towards the qualification

SP3

Insulation Installation Supervision

Designed for experienced insulation personnel progressing into supervisory roles, this programme develops leadership, planning and quality management skills required to supervise insulation projects safely and efficiently.



NQF LEVEL: 4
CREDITS: 55



KEY LEARNING AREAS

- Site planning and coordination
- Team leadership
- Resource allocation
- Health and safety compliance
- Quality management
- Reporting and documentation



PRACTICAL TRAINING INCLUDES

- Supervising installation teams
- Monitoring project progress
- Conducting quality inspections
- Managing corrective actions
- Completing supervision documentation

INSULATION INSTALLER ON SUPERVISION PROCESS – SP 3

KNOWLEDGE/THEORY MODULES

Module Number	Module Title	Credit
900798-000-00-00-KM-01	Introduction to insulation supervision and site coordination, L4	3
900798-000-00-00-KM-02	Workplace safety, health, environment and legislative compliance for insulation supervision, L4	5
900798-000-00-00-KM-03	Insulation methods, materials, tools and advanced installation systems, L4	5
900798-000-00-00-KM-04	Planning, resource coordination and team allocation for insulation work, L4	5
900798-000-00-00-KM-05	Quality control, inspection, reporting and documentation for insulation supervision, L4	5

PRACTICAL SKILLS MODULES

900798-000-00-00-PM-01	Plan and coordinate insulation installation activities across teams, L4	5
900798-000-00-00-PM-02	Allocate labour, materials, tools, equipment and access requirements, L4	4
900798-000-00-00-PM-03	Supervise and monitor insulation installation work on site, L4	6
900798-000-00-00-PM-04	Inspect workmanship, verify progress and manage corrective actions, L4	5
900798-000-00-00-PM-05	Complete supervision reports, compliance records and team performance documentation, L4	4

WORKPLACE SKILLS MODULES

900798-000-00-00-WM-01	Participate in insulation site supervision and team coordination processes, L4	4
900798-000-00-00-WM-02	Participate in quality inspection, reporting and corrective action processes, L4	4

All training is done face-to-face. (in person)

All practical skills are done on site

Learners will receive on the job training, and this will count for Credits towards the qualification



SP4

Insulation Installer on Vessels, Tanks, HP/IP Heaters and Turbines

This specialised programme prepares learners to install insulation systems on complex industrial equipment, including vessels, storage tanks, heat exchangers and turbines. Emphasis is placed on precision installation, quality assurance and energy efficiency.



NQF LEVEL: 2
CREDITS: 58



KEY LEARNING AREAS

- Industrial equipment insulation
- Advanced insulation materials
- Equipment drawings and specifications
- Protective cladding systems
- Quality assurance and inspection



PRACTICAL TRAINING INCLUDES

- Surface preparation
- Installation on curved and irregular equipment
- Application of vapour barriers and cladding
- Quality inspections and documentation
- Workplace installation experience





INSULATION INSTALLER ON VESSELS, TANKS AND HP/IP HEATERS AND TURBINE – SP 4

KNOWLEDGE/THEORY MODULES

Module Number	Module Title	Credit
900797-000-00-00-KM-01	Introduction to insulation of vessels, tanks, HP/IP heaters and turbines, L2	4
900797-000-00-00-KM-02	Safety, health, environment and legislative practices for industrial assets, L2	6
900797-000-00-00-KM-03	Advanced industrial insulation materials, prefabricated kits and protective systems, L2	5
900797-000-00-00-KM-04	Interpretation of equipment drawings, insulation specifications and installation requirements, L2	4
900797-000-00-00-KM-05	Quality assurance, defect reporting and energy efficiency for insulation systems, L2	4

PRACTICAL SKILLS MODULES

900797-000-00-00-PM-01	Prepare surfaces, tools, access equipment and materials for equipment insulation, L2	5
900797-000-00-00-PM-02	Measure, cut, shape and fit insulation on flat, curved and irregular equipment surfaces, L2	6
900797-000-00-00-PM-03	Install advanced and prefabricated insulation systems on vessels, tanks, heaters and turbines, L2	6
900797-000-00-00-PM-04	Apply protective cladding, vapour barriers and thermal continuity solutions, L4	5
900797-000-00-00-PM-05	Verify quality and document completed equipment insulation work, L4	4

WORKPLACE SKILLS MODULES

900797-000-00-00-WM-01	Participate in site preparation for insulation on industrial equipment, L2	2
900797-000-00-00-WM-02	Install and finish insulation on vessels, tanks, HP/IP heaters and turbines in the workplace, L2	5
900797-000-00-00-WM-03	Participate in quality inspection, defect correction and documentation processes, L2	2

All training is done face-to-face. (in person)

All practical skills are done on site

Learners will receive on the job training, and this will count for Credits towards the qualification

Workplace Learning

A key component of every Skills Programme is structured workplace experience. Learners receive supervised on-the-job training, enabling them to apply the knowledge and practical skills gained during training in a real industrial environment.

This workplace learning forms part of the Occupational Qualification and contributes credits towards successful completion of the programme. Learners maintain a Workplace Logbook and compile a Portfolio of Evidence (PoE) to demonstrate competence.

Every Skills Programme Includes

- Knowledge Modules
- Practical Workshop Training
- Workplace Experience
- Portfolio of Evidence (PoE)
- Internal Assessments
- Workplace Logbook
- Preparation for Final Integrated Summative Assessment (FISA)
- Industry-recognised certification upon successful completion

Course Fees

Available on request



Terms & Conditions

1. INCLUSIONS

- Training Manual
- Practical Workbook
- Course Notes
- Assessments
- Lunch
- Tea & Coffee
- Certificate

2. EXCLUSIONS

- Accommodation
- Translator (if foreign national)

Please note: Should any of the exclusions be required it can be arranged at additional costs.

3. BENEFITS OF QUALIFICATION

- One (1) year free membership of the Thermal Insulation Products & Systems Association SA (TIPSASA)
- Issuing of Skills Compliance Card indicating level of proficiency
- Attaining the Competence Certificate

4. PAYMENTS

Payment is strictly payable in advance, and booking will only be secured once the full payment and purchase order has been received. Proof of payment must be emailed to des@tipsasa.co.za

5. SPECIAL "TAILOR-MADE" COURSES PER CLIENT REQUIREMENTS

Courses can be structured to fit special requirements, provided it does not interfere with scheduled courses.

Prior arrangements are required with management, and prices will be amended accordingly.

Contact Us

TIPSASA TEL: +27 (12) 663 5200 X 230

Training bookings: info@tipsasa.co.za

Finance: des@tipsasa.co.za



National Training Centres

- Alberton
- Midrand
- Secunda





TIA SOUTHERN AFRICA

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