

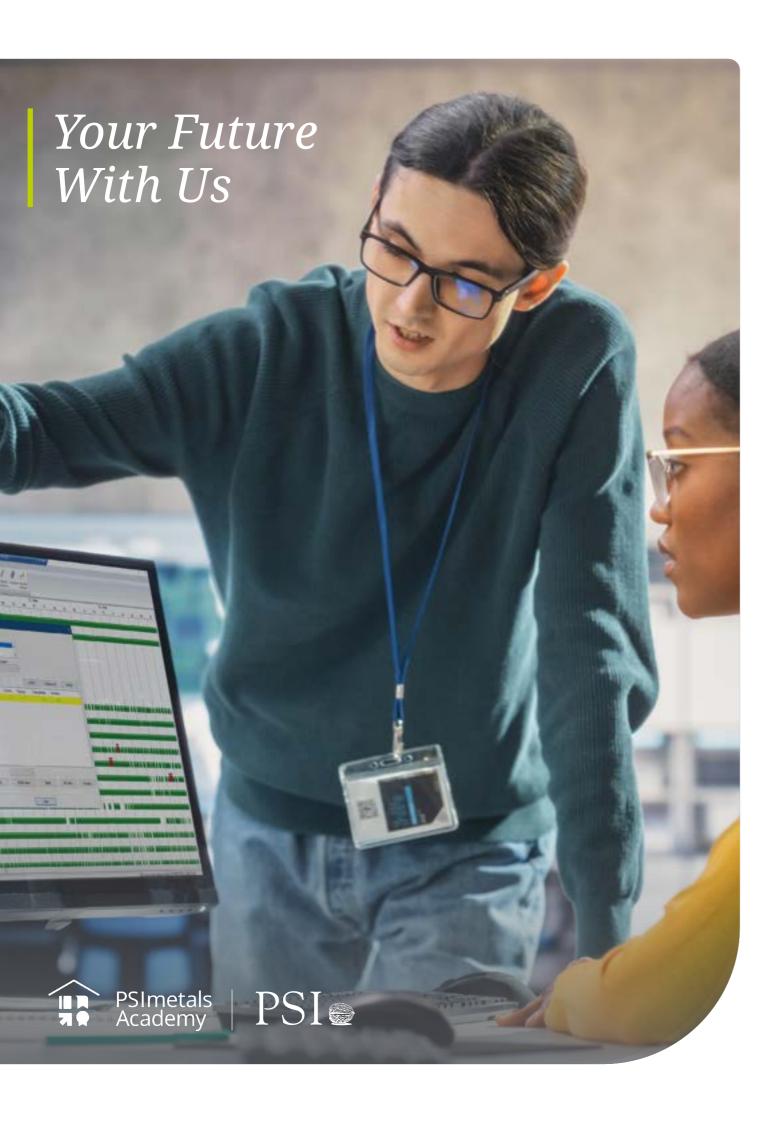
# Your Certification with PSImetals Academy

**Training Portfolio** 









## Welcome to our Training Portfolio

In our training portfolio, you will discover a comprehensive selection of courses designed to prepare you to be a key player in the digital transformation of the metals industry.

Whether you are a meltshop or yard manager at the early or advanced stage in your career in the metals industry, our courses are carefully designed to equip you with the expertise necessary to support producers in implementing successful digital projects. A successful training in our Academy further positions you as a competent and trustworthy partner in our network.

We are pleased that you are taking this journey with us.

P. Buker

**Roger Becker**PSImetals Certification
Program Manager







## Testimonials of PSImetals Academy certification



#### Stelica Mihai

MES Domain Manager Train 2 & Rodange

"After the Order Dressing Associate Course, became clear to me that we need to use PSImetals Order Dressing for ArcelorMittal Belval Mill 2.

PSImetals Order Dressing is a flexible and highly-configurable tool. When I am going into the specification phase for order dressing, I am much better prepared to discuss with our business users and SAP team."



#### **Anke Kagelmacher**

MES Project Manager ArcelorMittal Hamburg

"I have been very much working with supply chain and also have good knowledge about production and quality. Order Dressing is a missing piece. The Order Dressing Associate Course has given me a very good overview about the tool. Due to the diverse configuration options, it offers an extremely wide range of default options / adjustments without code development. I found that very impressive and see great potential for use here."

## PSImetals Academy Certification

- **04** PSImetals Academy Certification Principles
- 06 How to Become Certified

## **Select Your Role**

- 08 Roles & Webinar Overview
- 12 Detailed Role Information
  - 12 Melt Shop Manager
  - 13 Production & Quality Manager
  - 14 Quality Manager PLA\*
  - 15 Yard Manager
  - l6 Production Planner
  - 17 Production Scheduler
  - 18 Solution Engineer







## **PSImetals Academy Certification Principles**

With this PSImetals certification package, you can become **PSImetals expert!** 



#### What you will learn:

- The functions of PSImetals and how they work in a metals factory
- How to implement and configure PSImetals software
- How to translate the customer requirements into PSImetals software
- How to support commissioning and go-live

After an initial screening, you will begin with an introductory session on Process Industries and Metals. In the next step, after selecting a learning path, you attend two Associate-level courses and receive your first certificates upon passing the corresponding exams. Each course awards one certificate.

With the Associate certificate in hand, you become eligible to attend the Professional level. This level combines on-the-job experience, such as working on a PSImetals project team, with practical on-site training to deepen your expertise.



Knowledge Level



We support in selecting the right candidates for certification. If necessary, we interview candidates and make recommendations based on their qualifications.

#### The basic requirements are:

- General understanding of business processes in the steel or aluminum industry
- Experience in the field of Production Management Software (PMS)
- Reasonable English skills

## **PSImetals Overview Webinar**

Your certification program starts with a 1-day webinar as a general introduction to the world of PSImetals. The overview session will introduce the different modules of PSImetals and their components.

#### Webinar details:

- Duration: 1 training day
- · Language: English
- Max. participants: 8

- Exam: No
- Format: Online

## **Associate Level**

For Associate Certification, you are required to complete **two courses**, and pass the exam for each course.

#### **Course details:**

- Type: On-site (recommended) or remote
- Duration: 3 to 5 training days
- Language: English
- Max. participants: 8 (minimum 4)
- · Method: Theoretical overview, hands-on training within Metals Virtual Factory (MVF)
- Exam: Yes

#### **GUI Introduction (Non-planning Course)**\*2

E-learning course that you have to complete in advance to be prepared for the Associate course.

#### **Course details:**

- Type: E-learning
- Duration: 2-3 hours
- · Language: English

- · Method: Theoretical overview
- Quiz: Yes
- \*¹ typically refers to training at a PSI location, not at the customer's location.
  \*² The GUI Introduction e-learning is relevant only for the Office GUI used in Production, Quality and Order Dressing. Planning tools utilize different GUI's.

### **Professional Level**

To obtain a Professional Certificate, you need an Associate Certificate of a course, its project experience in the associated field and the completion of the same course at Professional Level.

#### **Course details:**

- Type: On-site (recommended) or remote
- Duration: 4 to 8 training days
- Language: English
- Max. participants: 8 (minimum 4)
- · Method: Theoretical overview, hands-on training with MVF
- Exam: Yes

Congrats! With 2 associate certificates, a professional certificate and project work in your hands, you are now a certified PSImetal expert!











## **How to Become Certified**

To begin this process, choose a role that corresponds with your desired career path.



Who do you want to become

Melt Shop Manager

Production & Quality Manager

Quality Manager PLA

Yard Manager

**Production Planner** 

**Production Scheduler** 

Solution Engineer\*

2

#### You select the courses to reach your goals

Select two Associate-level courses and one Professional-level course to achieve the goal of the chosen future role.

2 x Associate Courses + 1 x Professional Course

\*Exception for **Solution Engineer**: Select 4 x Associate-level courses for completion

#### **4 x Associate Courses**

During the learning phase, you will get access to our sandbox system **Metals Virtual Factory (MVF)**. This cloud-based solution provides a virtual representation of a typical production environment, and allows you to further gain experience with PSImetals thereby deepening the content learned so far.

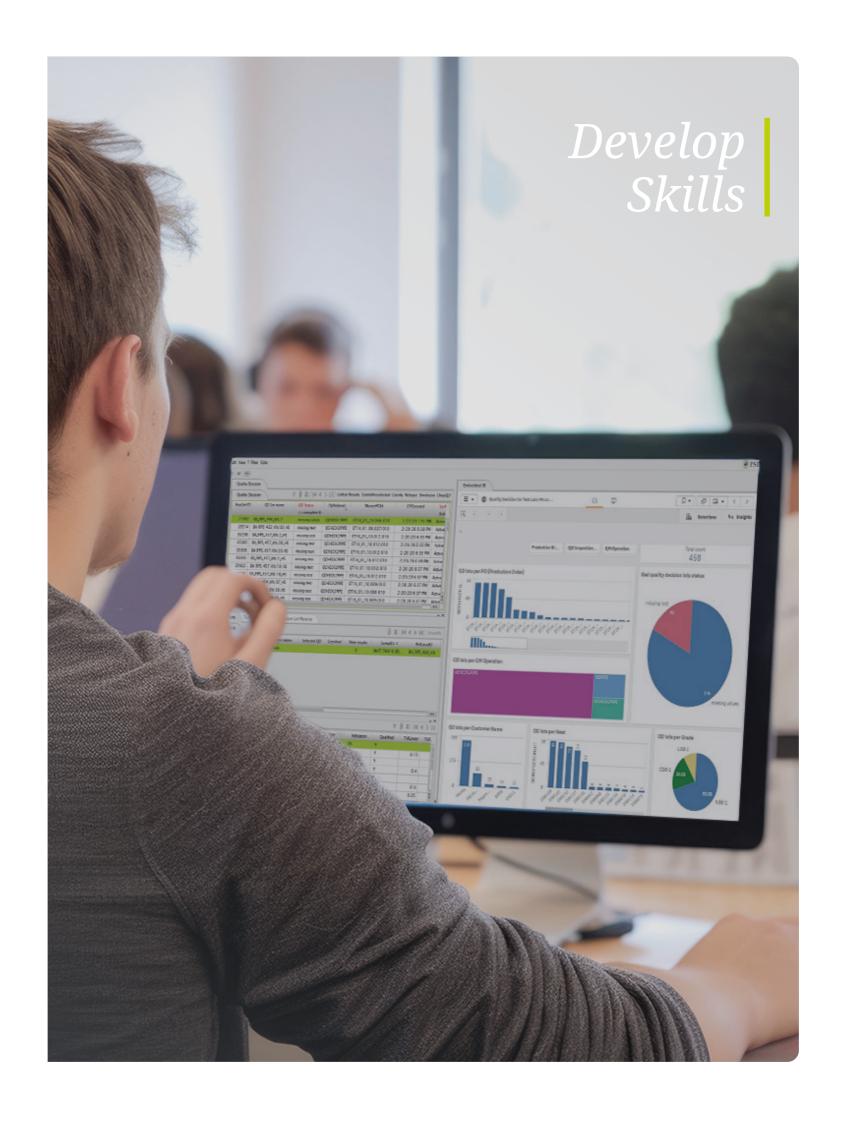
3

#### Certificate

Congratulations! You reached their goal. Now, you have the license to run the business successfully.







## **All Programs Offered for Certification**

| Certification        | Course                     |                                    |              |
|----------------------|----------------------------|------------------------------------|--------------|
| Melt Shop Manager    | Associate Course 1         | Melt Shop Operator                 | •            |
|                      | Associate Course 2         | Free to choose from Associate      | <b>\( \)</b> |
|                      | <b>Professional Course</b> | Melt Shop Configurator             | •            |
| Production & Quality | Associate Course 1         | Production & Quality Operator      |              |
| Manager              | Associate Course 2         | Free to choose from Associate      | •            |
|                      | Professional Course        | Production & Quality Configurator  | •            |
| Quality Manager PLA  | Associate Course 1         | Quality Planner                    | •            |
|                      | Associate Course 2         | Free to choose from Associate      | <b>*</b>     |
|                      | <b>Professional Course</b> | Order Dressing Configurator        | •            |
| Yard Manager         | Associate Course 1         | Yard Operator                      |              |
|                      | Associate Course 2         | Free to choose from Associate      | •            |
|                      | Professional Course        | Transport & Yard Configurator      | •            |
| Production Planner   | Associate Course 1         | Production Planning Operator       | •            |
|                      | Associate Course 2         | Free to choose from Associate      | <b>\( \)</b> |
|                      | <b>Professional Course</b> | Production Planning Configurator   | •            |
| Production Scheduler | Associate Course 1         | Production Scheduling Operator     |              |
|                      | Associate Course 2         | Free to choose from Associate      | •            |
|                      | Professional Course        | Production Scheduling Configurator | •            |
| Solution Engineer    | Associate Course 1         | Business Logic Configuration       |              |
| <b>3</b>             | Associate Course 2         | UI/UX Design                       |              |
|                      | Associate Course 3         | Communication & Interfaces         |              |
|                      | Associate Course 4         | Your Choice                        | <b>*</b>     |

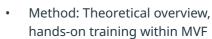


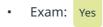
Additional cource of your choice (Associate course)

#### **Associate Course Overview**

| Course  | Exam     | Duratio | on  |
|---|----------|---------|---|
| Melt Shop Operator  | <b>~</b> | 3 days  | Training covers heat production order generation, raw material calculation and preparation, execution, including quality decisions, and post-production processes, ensuring thorough understanding of these crucial manufacturing stages.                 |
| Production &<br>Quality Operator                                    | <b>~</b> | 5 days  | Offers training in line preparation, staging, execution, post-<br>production, and shipping, alongside specialized knowledge to<br>analyze process data, identify improvement opportunities,<br>and optimize manufacturing efficiency and quality control. |
| Quality Planner   | <b>~</b> | 4 days  | You learn how to specify sales order quality, plan test requirements, execute quality assessments after production and create charts to visualize data, ensure process optimization and compliance.   |
| Yard Operator   | <b>~</b> | 5 days  | This course exposes you to material receipt, material pre-staging and staging, goods issue by shipping & special knowledge to manage exceptional situations in the coil yard.   |
| Production<br>Planner   | <b>~</b> | 4 days  | Training covers sales & operations planning, order and forecas management, flow and order planning for production, ensurin the achievement of an optimal production plan.   |
| Production<br>Scheduler   | <b>~</b> | 5 days  | You learn about order scheduling, piece-by-piece scheduling fo casters, rolling mills, and finishing lines in order to optimize production, minimize fluctuations, and ensure on-time deliveries.   |
| Business Logic<br>Configuration                                     | <b>~</b> | 5 days  | This covers the fundamentals of PLSQL within PSImetals, allowing for custom logic development. It includes key features like inter-process communication, parameters, logging, and the Rule Engine's role in optimizing quality and logistics processes.  |
| UI/UX Design  | <b>~</b> | 5 days  | Engages you by configuring screens to meet business needs, customizing Java GUI interfaces, and creating action buttons wit PSImetals tools. Manage access using PSIauth for user permissions.  |
| Communication & Interfaces  | <b>~</b> | 5 days  | Enhance PSImetals standard telegrams with custom parameters or create your own, and understand data transfer and action triggers. Learn to set up report printing in various formats.   |
| <ul><li>Type: On-site or rer</li><li>Duration: 3 to 5 tra</li></ul> |          | 5       | Max. participants: 8     (minimum 4)      Method: Theoretical everyions   |









Language: English





#### **Roles & Webinar Overview**

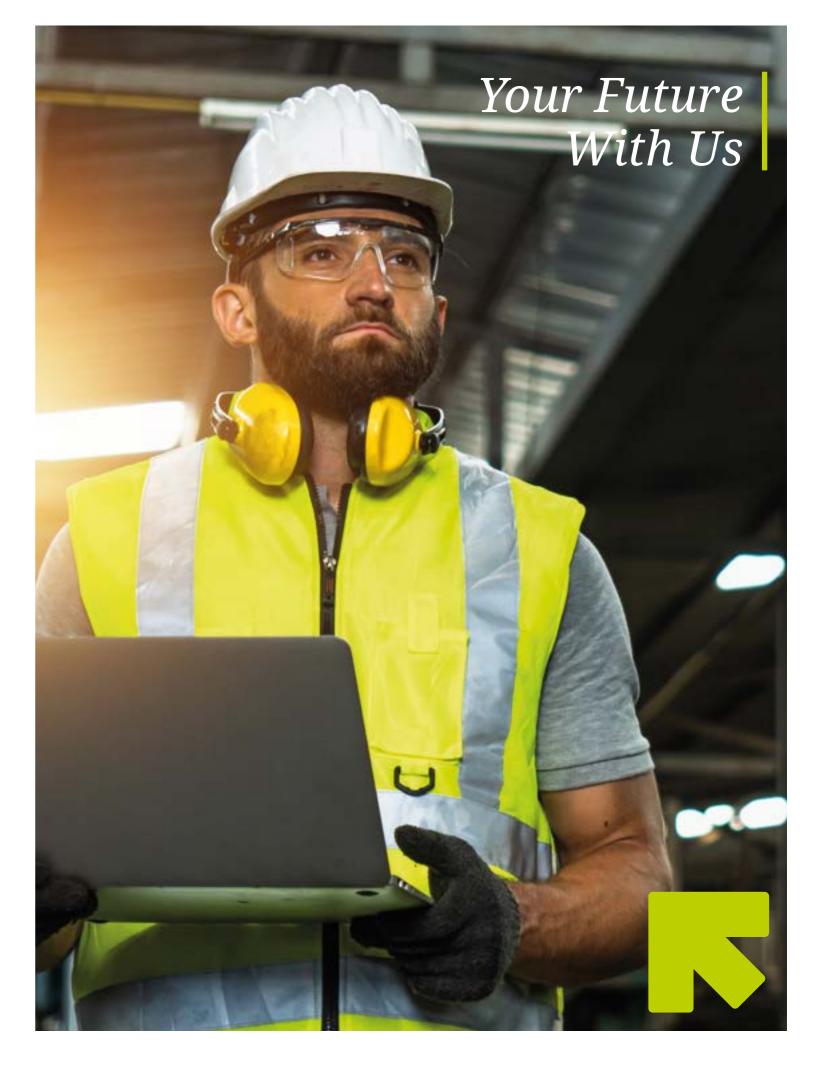
#### **Professional Course Overview**

| Course                                | Exam     | Duration |   |
|---------------------------------------|----------|----------|---|
| Melt Shop<br>Configurator             | <b>~</b> | 5 days   | <ul> <li>Advanced configuration of treatment practices</li> <li>Consolidation of deviation management</li> <li>Scrap and alloy calculation module</li> <li>Details of templates for L2 standard interfaces</li> </ul>   |
| Production &<br>Quality Configurator  | <b>~</b> | 4 days   | <ul> <li>Configuration of production tracking master data</li> <li>Production order balancing</li> <li>Advanced process data acquisition</li> <li>Material events and genealogy</li> <li>Advanced quality management including configuration and use of quality indicators</li> </ul>                                   |
| Order Dressing<br>Configurator        | <b>~</b> | 5 days   | <ul> <li>Advanced configuration of the Business Knowledge Base<br/>(Products, material transformations, derivation tables)</li> <li>Advanced technical elaboration including production order<br/>combination</li> <li>Interfaces to SAP and Production Order Lifecycle (POL)</li> </ul>                                |
| Transport & Yard<br>Configurator      | <b>~</b> | 4 days   | <ul> <li>Advanced Yard control, destination finding and route finding configuration</li> <li>Coordinate tracking with Crane Tracking System (CTS) interface</li> <li>Advanced transport management</li> </ul>   |
| Production Planning<br>Configurator   | <b>*</b> | 8 days   | <ul> <li>Configuration for possible use cases</li> <li>Design of product families and production network</li> <li>Design for scenario planning &amp; scenario comparisons</li> <li>User interface configuration</li> <li>Solver configuration &amp; tuning</li> <li>Input &amp; output data interface design</li> </ul> |
| Production Scheduling<br>Configurator | 9 🗸      | 8 days   | <ul> <li>Process design and possible use cases</li> <li>User interface configuration</li> <li>Solver configuration &amp; tuning</li> <li>Input &amp; output data interface design</li> </ul>  |

#### **Course Details**

- Type: On-site or remote
- Duration: 4 to 8 training days
- Language: English
- Exam: Yes

- Max. participants: 8 (minimum 4)
- Method: Theoretical overview, hands-on training within MVF







## **Melt Shop Manager**

#### **Program Overview**

You begin the Melt Shop Manager program by learning the terminology, concepts, and screens that make up the core of the Steel Making Plant (SMP), component of PSImetals Production & Quality Liquid. Under the Associates Course, you will also learn the concepts behind schedule execution management and online heat scheduling, understanding how to manage schedules of heats and plan for production at the caster. In the case of online heat scheduling, you will be able to visualize the production at the melt shop and react effectively to changes within the mill. You will also learn how to monitor a heat production throughout the melt shop, as well as be able to add or adjust data related to each individual station. This includes, but is not limited to, station process parameters, chemistry readings, raw material additions, alloy calculations and consumptions, ladle assignments, and temperature measurements. This course culminates in the final step of casting production and heat closure.

In the Professional Course, you will dive deeper into the configuration of the heat treatment practices as well as the configuration of the melt shop master data. Additionally, you will learn the concepts behind raw materials, stock management, and equipment tracking for the melt shop. You will also learn how to configure the melt shop monitor and PSI's Alloy Calculation Module. A deeper dive into the factory model and PLSQL functions/procedures will be provided, which is ideal as the Professional Course will involve some light configuration that requires knowledge of PLSQL.



**Degree:** Certification



Module for completion

1 x Professional Course 2 x Associate Courses

#### **Program Structure**

Associate Course 1: Melt Shop Operator

Associate Course 2: Your choice

Professional Course: Melt Shop Configurator

Language of instruction: English

Access: PSImetals MVF\*

#### Certification

## **Production & Quality Manager**

#### **Program Overview**

You begin the Production & Quality Manager program by learning the core terminology, screens and concepts that are the basis of the Production Execution System (PES). In the Associate course, you learn what makes up a production order and how materials are allocated, scheduled, produced and shipped according to customer requirements. In the case of quality deviations, you learn how to react appropriately to identify and deal with unplanned production results.

In the Professional course, you dive deeper into the configuration settings of the PES that can influence the functionality of different standard functions and material flows. More details are given related to PLSQL functions and procedure as well as database tables which makes this course ideal for those who already have basic knowledge of PLSQL and database tables.



**Degree:** Certification



Module for completion

1 x Professional Course 2 x Associate Courses

#### **Program Structure**

Associate Course 1: **Production & Quality Operator** 

Associate Course 2: Your choice

Professional Course: Production & Quality Configurator

**Language of instruction:** English

**Access:** PSImetals MVF







The cloud-based PSImetals MVF offers an ideal platform whether you're looking to

## **Quality Manager (PLA)**

#### **Program Overview**

Quality Manager certification is intended for metals industry professionals who are engaged in analyzing customer inquiries for technical feasibility to produce, and decide the production processes from start to finish with the material requirements and their associated dimensions. Prescribing necessary quality assurance activities such as mechanical tests, inspections and parameters for sampling are also part of the activities of these professionals.



**Degree:** Certification



Module for completion

2 x Associate Courses

+ 1 x Professional Course

#### **Program Structure**

Associate Course 1: Quality Planner
Associate Course 2: Your choice

Professional Course: Order Dressing Configurator

Language of instruction: English

(8

Software Access: PSImetals MVF

#### Certification

## **Yard Manager**

#### **Program Overview**

The Yard Operator Associate course starts with a brief overview of the most important production terms. Subsequently, the you proceed to follow the journey of the material across the entire plant: from being announced and received into the stock, through storage and staging, all the way to being shipped to a customer. During the course, a special emphasis is put on managing storage spaces, as well as orchestrating material movements around the plant; be it via simple transport orders, or by the means of destination finding. Lastly, the course incorporates activities aimed at helping you troubleshoot.



**Degree:** Certification



Module for completion

2 x Associate Courses

- 1 x Professional Course

#### **Program Structure**

Associate Course 1: Yard Operator
Associate Course 2: Your choice

Professional Course: Transport & Yard Configurator

Language of instruction: English

(8)

Access: PSImetals MVF







## **Production Planner**

#### **Program Overview**

Production Planner certification is intended for metals industry professionals who are engaged in planning activities. These activities may generate a plan used to establish promise dates for customer inquiries or may create a plan to drive the scheduling of production orders.

**Degree:** Certification



Module for completion

2 x Associate Courses



1 x Professional Course

#### **Program Structure**

Associate Course 1: Production Planning Operator

Associate Course 2: Your choice

Professional Course: Production Planning Configurator

(anguage of instruction: English

(R) Access: PSImetals MVF

#### Certification

## **Production Scheduler**

#### **Program Overview**

Production Scheduler certification is intended for metals industry professionals who are engaged in scheduling of production activities. These activities may generate an overall schedule for each production order, from start to finish. You may also focus on scheduling orders for individual lines such as continuous casters, hot / cold rolling mills and coating lines.



**Degree:** Certification



Module for completion

2 x Associate Courses

- 1 x Professional Course

#### **Program Structure**

Associate Course 1: Production Planning Operator

Associate Course 2: Your choice

Professional Course: Production Planning Configurator

**Language of instruction:** English

(1) Access: PSImetals MVF





## **Solution Engineer**

### **Program Overview**

The solution engineer role is designed for those that intend to focus more on the technical configuration, support the implementation of various PSImetals components rather than on business processes. The courses explore the framework of the PSImetals system including database structure and PLSQL code, different ways to configure various user interfaces as well as define and configure communication between PSImetals and third party systems. You of this course should have a good understanding of database structures and PLSQL programming.

This role is achieved by taking all three Associate courses related to design, configuration and communication as well as one Associate course relating to business processes of your choice (e.g. meltshop operator, production & quality operator, etc).



**Degree:** Certification



Module for completion

#### **4 x Associate Courses**

#### **Program Structure**

Associate Course 1: Business Logic Configuration

Associate Course 2: UI/UX Design

Associate Course 3: Communication & Interfaces

Associate Course 4: Your Choice

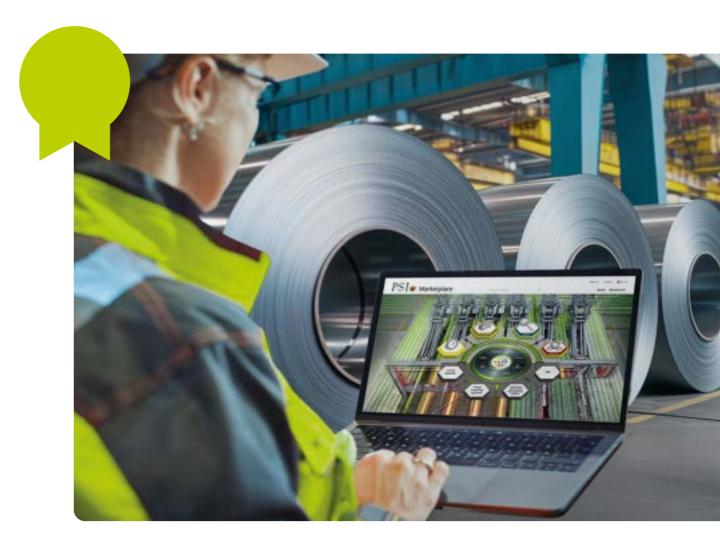


Language of instruction: English



**Access:** PSImetals MVF

## Your Future with PSImetals











## Let's start your PSImetals journey together

I hope this catalog gives you a clear insight into our Certification Program. Get deep expertise about PSImetals because a knowledge gap hurts your team and business.

Send us your questions!



**Roger Becker** PSImetals Certification Program Manager

Phone: +49 211 60219 - 0 E-Mail: rbecker@psi.de











## Intelligent Software





#### PSI Software SE

Dircksenstraße 42-44 10178 Berlin Germany

academy.met@psi.de www.psi.de

#### **Further Offices:**

Düsseldorf, Aachen (Germany)









#### Global Offices:

Peking, Shanghai (China) Brussels (Belgium) Graz, Traun (Austria) Maharashtra, Pune (India) Pittsburgh (USA) Rio de Janeiro (Brazil) Tokyo (Japan) Watford (Great Britain)



Let's get in touch!

Sources: Outside/Cover: Adobe Stock, PSI Software SE; Inside: PSI Software SE/Adobe Stock

