

Welcome to the voxeljet Academy

Active User and Maintenance Training

Stefan Kloß
voxeljet Academy

07/11/2018

✓ VOXELJET ACADEMY

▪ voxeljet Academy	Page 4
▪ The Key Player of Additive Manufacturing	Page 5
▪ Human Factors	Page 6
▪ Qualifications	Page 8
▪ Training Concept	Page 9
▪ Training Structure	Page 10
▪ Training Matrix	Page 11
▪ Module 1: BASICS	Page 12
▪ Module 2: PROCESS EXPERT.....	Page 13
▪ Module 3: TECH INSIGHT.....	Page 14
▪ Module 4: TECH EXPERT.....	Page 15

✓ VOXELJET ACADEMY

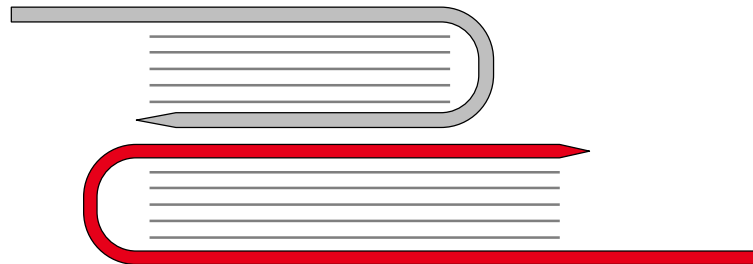
▪ Confucius says	Page 16
▪ voxeljet says	Page 17
▪ Learning Pyramid	Page 18
▪ Learning Strategy	Page 19
▪ Goal of the Training	Page 20
▪ Training Costs	Page 21
▪ Welcome to the voxeljet Academy	Page 22

INTRODUCTION

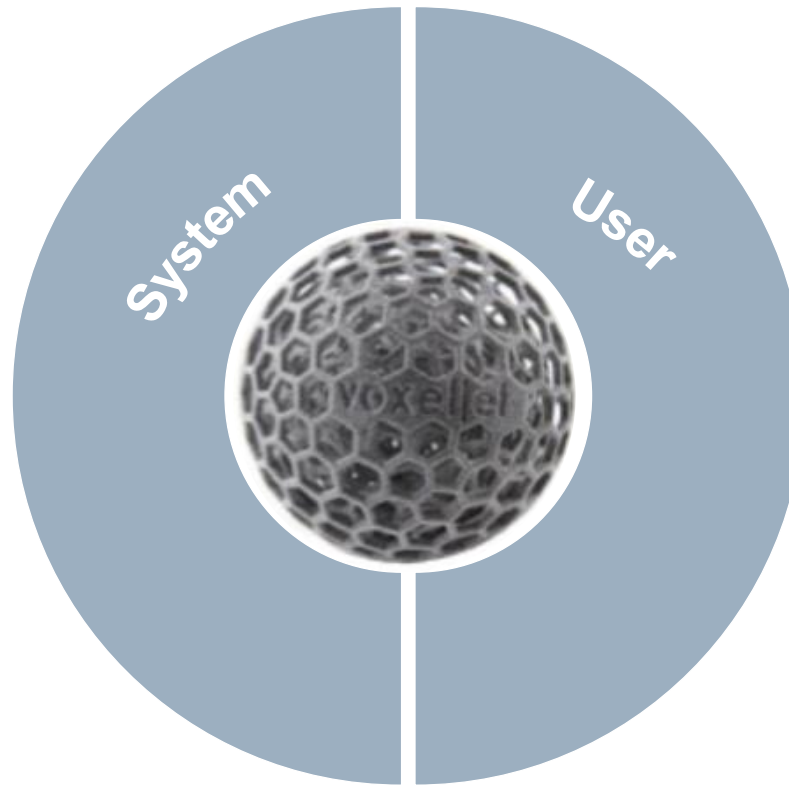


As a leading manufacturer of industrial 3D printing systems, voxeljet has a unique level of technological expertise. We are happy to pass this knowledge onto our customers around the world. This competence provides our customers a key advantage when working with their 3D printing systems, printed molds and models.

Here at voxeljet, we understand that engineers and machine operators play a crucial role. This is why we share our knowledge using the latest training methods, based on theoretical and practical experience. With the voxeljet training program, you will gain the expertise required to reach your goals in terms of productivity, process optimization and part quality.



The Key Player of Additive Manufacturing

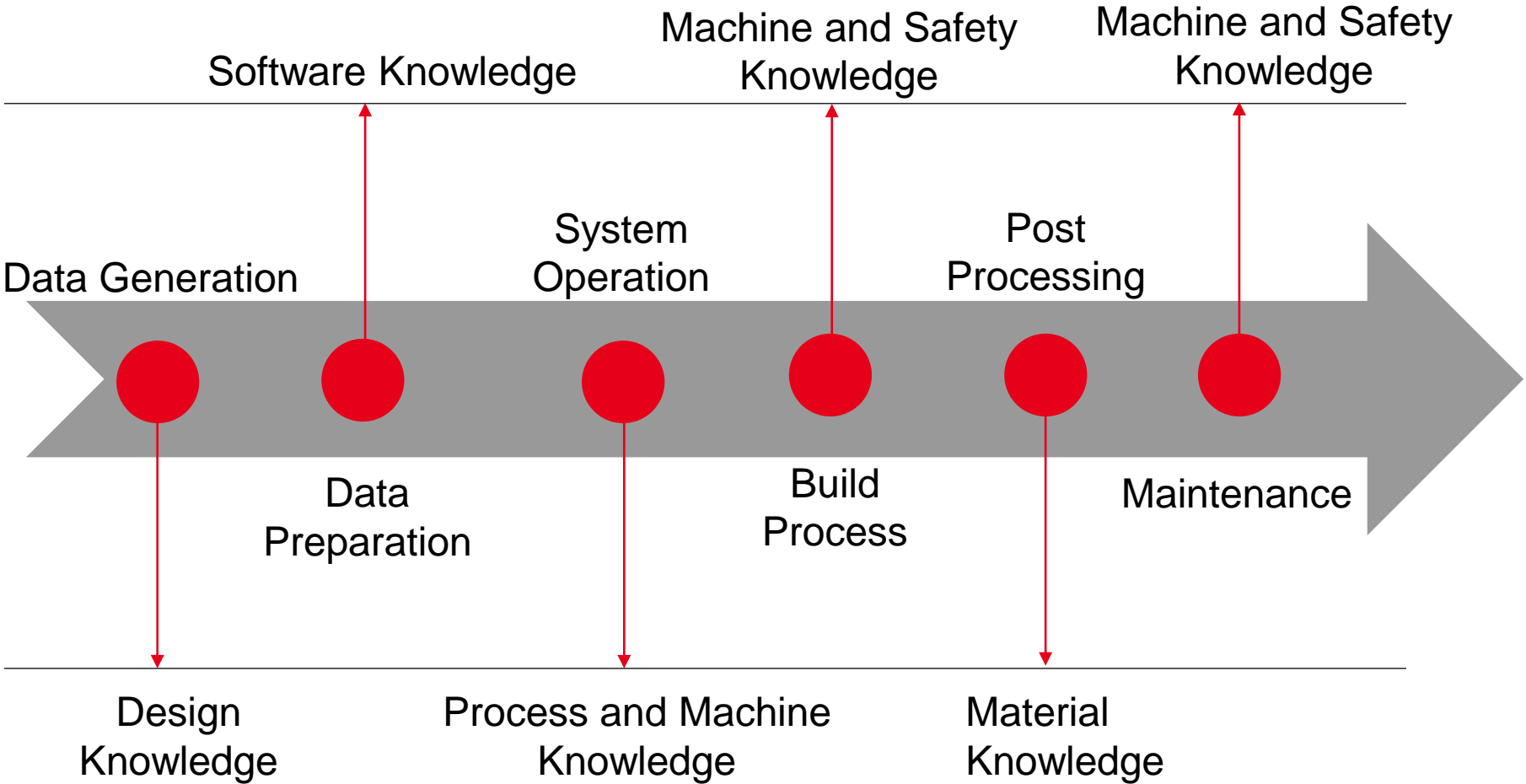


TRAINING IS A METHOD OF ENHANCING HUMAN PERFORMANCE



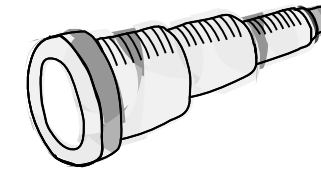
ENHANCING HUMAN PERFORMANCE INCREASES OPERATING TIME



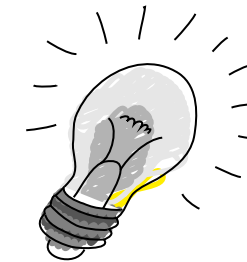


voxeljet has a unique training concept to pass on the knowledge

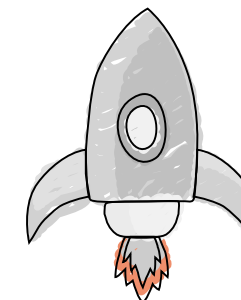
Learn all about the voxeljet 3D Printing System



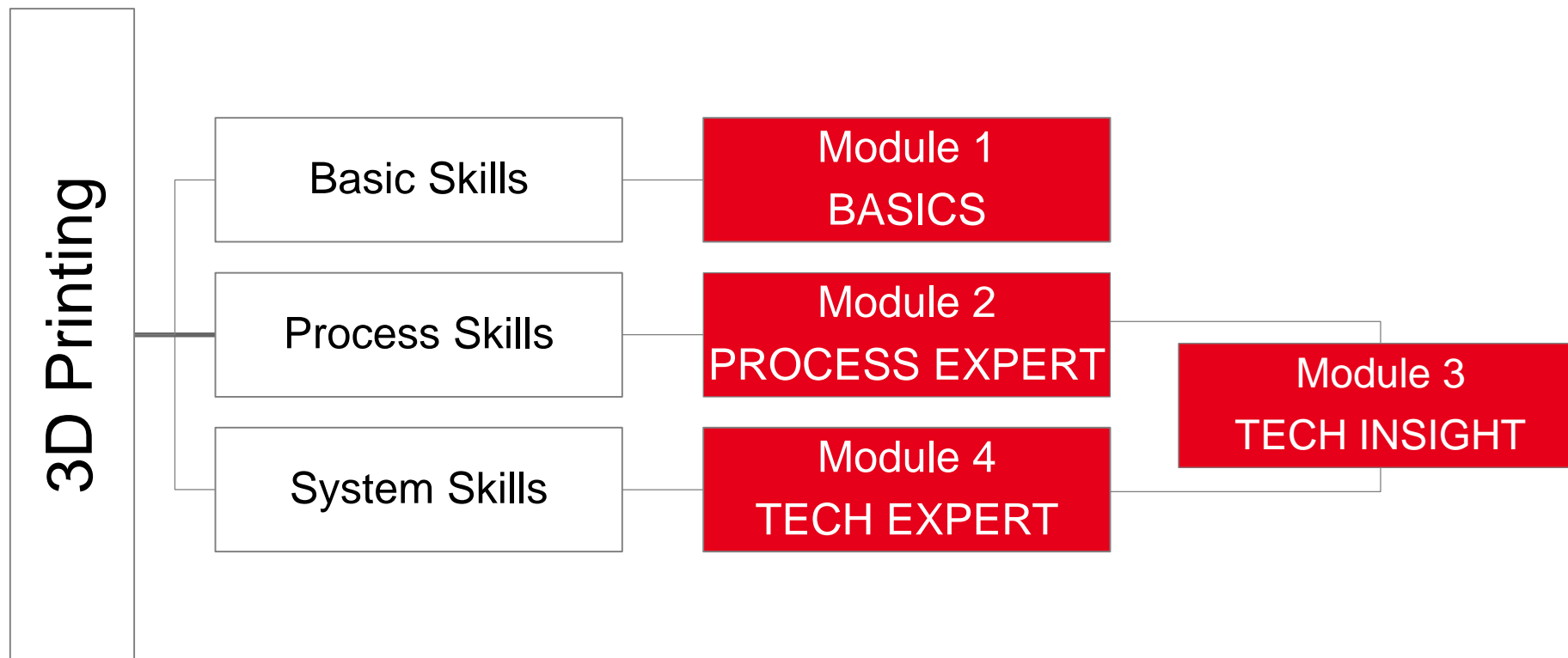
Identify your Application and Change your Mindset



Learn all about the voxeljet 3D Printing System



voxeljet's training scheme offers a modular structure:



Training Matrix



		3D Printing Process Chain															
		Operations Planning			System Basics, System Operation & Build Process	Post Processing		Components, Maintenance and Troubleshooting								Auxiliary Devices	Firmware
		Data Creation	Data Preparation	Job Preparation		Material Management	Applications	Printing Devices	Recoater System	Cleaning Station	Capping Station	Fluid System	Print Head Monitoring	System Monitoring	Axes System	VRS, VSC, VUP, HCU, Job Box	
System Skills	VX200			Rapix3D	System Training VX200			Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure	Module 4 Tech Expert	ProPrint
	VX200 HSS				System Training VX200 HSS			Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure		ProPrint
	VX500				System Training VX500			Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure		Rapix3D
	VX1000				System Training VX1000			Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure		ATLAS
	VX2000				System Training VX2000			Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure		ATLAS
	VX4000				System Training VX4000			Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure	Function & Structure		ATLAS
Process Skills	PPB & PPC	Process Training PPB & PPC						PPB_C								Module 2 Process Expert	
	PPC ²	Process Training PPC ²						PPC ²									
	HSS	Process Training HSS						HSS									
	PDB	Process Training PDB						PDB									
	ODB	Process Training ODB						ODB									
	IOB	Process Training IOB						IOB									
	CDB	Process Training CDB						CDB									
Basic Skills	voxeljet Technology	Basic Design Rules			Material, Print Head & Process			Module 1 Basics									
	Additive Minds				Additiv Manufacturing												
Training Options																	
Active User Training			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Active Maintenance Training								X	X	X	X	X	X	X	X	X	
Active Engineer Training		X	X	X	X	X	X										

BENEFIT

- Acquire specific knowledge of the 3D printing system
- Learn more about the print-head technology
- Understand production concepts and contexts
- Get to know production strategies and the possibilities for 3D printed designs
- Get further insight into aspects relating to health, safety and the environment

CONTENT

- voxeljet technology: material and print head
- Process chain of additive manufacturing
- Applications of additive manufacturing
- Basic design rules
- Foundry technology

TARGET GROUP

Engineers, designers and (future) system operators

QUALIFICATION

N/A

TYPE OF TRAINING

Theory

DATES AND PRICES

On demand

TRAINING OPTION

Active User Training

Active Engineer Training

CONTACT PERSON

Stefan Kloß

BENEFIT

- Understand the fundamentals of consumables
- Get to know the chemical composition of consumables
- Gain a comprehensive awareness of material management
- Understand and apply quality assessments for components
- Develop routines for process optimization

CONTENT

- Materials and resources
- Safety aspects and environmental protection
- Personal protective equipment
- Material consumption
- Quality management for molds and components
- Process Optimization

TARGET GROUP

Engineers, designers and (future) system operators

QUALIFICATION

N/A

TYPE OF TRAINING

Theory

DATES AND PRICES

On demand

TRAINING OPTION

Active User Training

CONTACT PERSON

Stefan Kloß

BENEFIT

- Develop a fundamental knowledge of 3D printing systems and a general understanding of processes
- Get to know and understand fundamental safety aspects
- Acquire know-how in operating the system
- Understand and apply component post-processing
- Understand safety when dealing with personal protective equipment

CONTENT

- System Basics
- Data creation
- Data preparation
- Work preparation with Rapix3D
- Job preparation
- System operation
- Unpacking and finishing the parts
- Post processing

TARGET GROUP

Engineers, designers and (future) system operators

QUALIFICATION

Module 2

TYPE OF TRAINING

Theory and practice

DATES AND PRICES

On demand

TRAINING OPTION

Active User Training

CONTACT PERSON

Stefan Kloß

BENEFIT

- Acquire an understanding of system component structures
- Understand and clarify the functions of system components
- Gain an awareness of maintenance work
- Develop strategies for resolving problems
- Gain a more in-depth knowledge of the system based on case studies

CONTENT

- System Components
 - Print head
 - Recoater system
 - Cleaning & capping station
 - Fluid system
 - Print head monitoring
 - System monitoring
 - Axes system
- Maintenance and troubleshooting

TARGET GROUP

Engineers, designers and (future) system operators

QUALIFICATION

Module 3

TYPE OF TRAINING

Theory and practice

DATES AND PRICES

On demand

TRAINING OPTION

Active User Training

Active Maintenance Training

CONTACT PERSON

Stefan Kloß

What I **hear**, I *forget*.
What I **see**, I *remember*.
What I **do**, I *understand*.

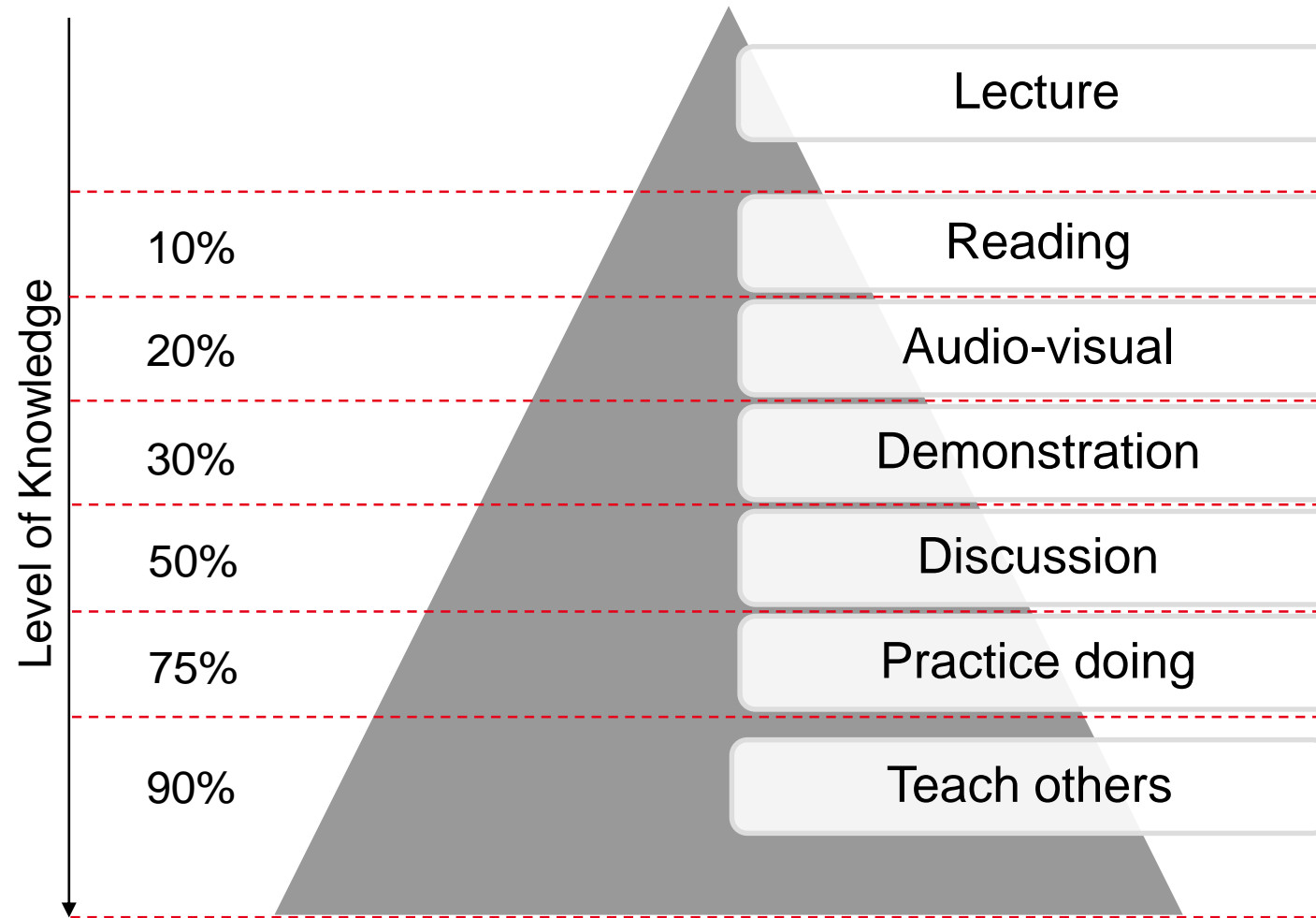
*When I only **hear**, I forget.*

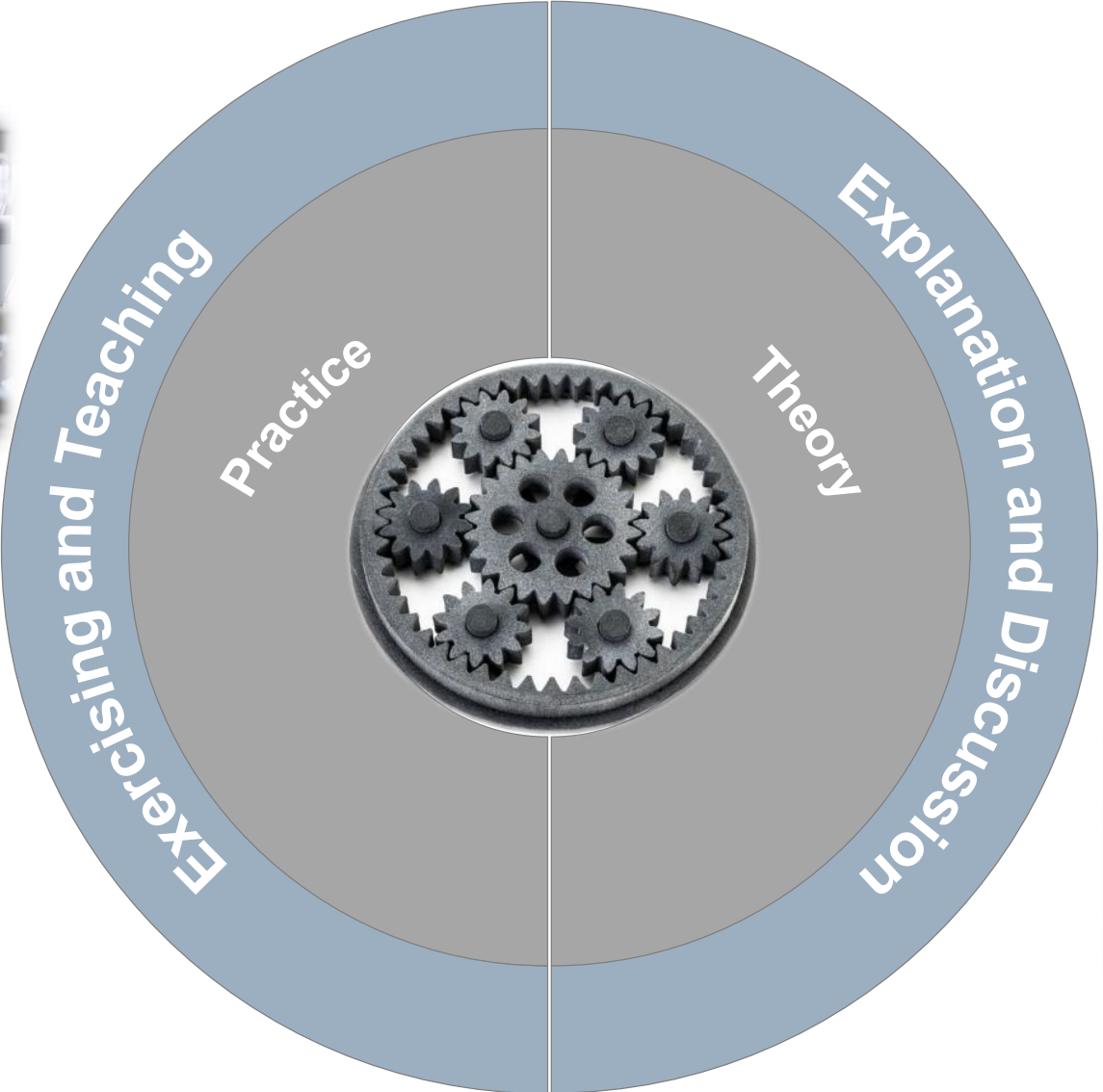
*When I hear and **see**, I remember a little.*

*When I hear, see, **ask questions** and **discuss** with someone, I begin to understand.*

*When I hear, see, **ask** questions, discuss, and **do**, I acquire knowledge and skills.*

*When I **teach**, I master what I have learned.*





YOUR BENEFITS

- Long-lasting transfer of knowledge through a structured training concept
- Gain first-hand knowledge from our experts
- Improve your employees' professional capabilities
- Acquire a comprehensive understanding of processes and workflow through the training programme
- Unleash the full potential of your 3D printing system
- Learn how to operate and maintain your 3D printing system accurately and efficiently
- Gather the necessary knowledge for high quality parts



Welcome to the voxeljet Academy



I'm happy to pass on the 3D printing knowledge to you. Professional competence gives you the decisive advantage when working with your 3D printing system and printed forms and models.

Stefan Kloß
voxeljet Academy

Fon +49 821 74 83 – 565

stefan.kloss@voxeljet.de

<https://www.voxeljet.com/3d-printing-systems/voxeljet-training/>

voxeljet AG

Paul-Lenz-Straße 1 | 86316 Friedberg | Germany

