



Sign up for  
this course until  
June 15

## Artificial Intelligence in Production

### Expect these Contents

This course covers methods of AI for image processing in quality inspection with different use cases will be presented. Students learn how to train an AI algorithm for several applications to comprehend possible industrial scenarios. Algorithms of deep learning are explored to predict and prevent equipment failures, optimize maintenance schedules, and reduce downtime. Practical exercises and case studies provide students with an interactive experience in implementing predictive maintenance solutions using real-world datasets.

### Explore Artificial Intelligence for image processing and language models

- ▶ Gain knowledge about various AI domains, such as machine learning, natural language processing, and computer vision, enabling them to grasp the broader landscape of AI technologies and their applications
- ▶ Understand robots used in the industry for a variety of processes regarding robot-human interactions
- ▶ Receive an overview of the fundamental concepts and techniques involved in training and deploying language models

### Quick Facts

 **August 6 - August 19, 2023 (2 weeks)**

 **On campus**

 **3 ECTS (approx. 75 hours)**

 **1,990 €**

### Your Academic Staff

Your Short Course is mainly conducted by the ita Academy at RWTH University. This institute operates the Digital Capability Center (DCC), which is a research unit that specializes in the digitalization of textile production processes while implementing AI-based technologies.

### Interactive Teaching

- ▶ Master programming basics in Python
- ▶ Acquire practical skills in AI development and implementation
- ▶ Discover the DCC Aachen, a learning textile factory for digitalization and AI



RWTH International Academy gGmbH

Campus-Boulevard 30 | 52074 Aachen | Germany

ShortCourses@academy.rwth-aachen.de | [www.academy.rwth-aachen.de/short-courses](http://www.academy.rwth-aachen.de/short-courses)



INTERNATIONAL  
ACADEMY

RWTHAACHEN  
UNIVERSITY

# Summer & Winter Schools at RWTH Aachen University

## Broaden your horizon and spend your holidays abroad in Germany

Experience excellent academic content and have fun at the same time!

You develop practical ideas together with renowned professors and expand your skills with hands-on case studies. Enjoy a wide range of social events in an unforgettable time, full of cultural and fun activities. Every program includes accommodation, two meals per day, and personal support from local mentors.

### Highlights & Benefits

To support the academic content of each program, we include visits of companies and institutes, lab tours, and the chance to network with German companies and organizations.



Find all  
Short Courses  
on our [website](#)

### Excellent Academic Teaching

RWTH Aachen University is top-ranked and one of Europe's leading science and research institutions. You benefit from high-value academic content in excellent classes.

#### Lectures and Exercises

- ▶ Q&As
- ▶ discussions & debates
- ▶ interactive participation

support by our lecturers

#### Case Studies and Experiments

- ▶ simulation games
- ▶ competitions & group work
- ▶ lab work

learning by doing

### Supporting Program & Intercultural Experience

Our attractive supporting program provides an insight into the history and culture of Germany. Expand your network with international students, professors and industry partners, be part of a global community and meet friends from all over the world.

- ▶ city rally to explore Aachen
- ▶ trips to Maastricht, Cologne or Bonn
- ▶ hiking tour to the Border Triangle
- ▶ intercultural meet-ups, barbeque with mentors
- ▶ karaoke or game night
- ▶ honoring events: welcome and certificate ceremony

### Quick facts about our Courses



**Study format: Short Course**



**Teaching: on campus**



**Duration: 2-4 weeks**



**Workload: 50-125 Teaching Hours**



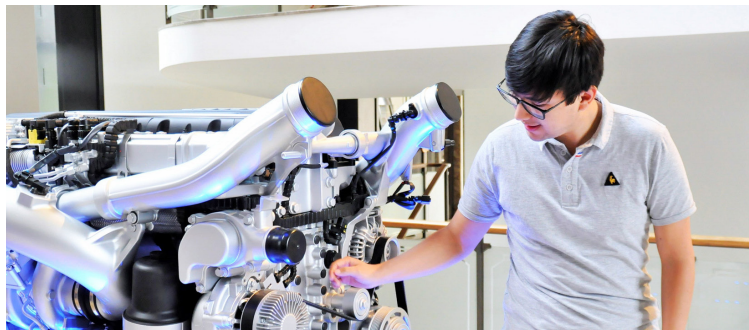
**Credit Points: 2-5 ECTS**



**Qualification: RWTH Certificate**



**Language: English**



#### Application Information

You are welcome to apply if you are:

- ▶ at least 18 years old
- ▶ proficient in the English language
- ▶ in your Bachelor's, Master's, in between or recently graduated

[course-specific requirements on program pages](#)



#### Contact

Cassandra Dürbeck  
Program Manager



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