



# Smart Production Systems & Robotics

RUB Summer School 2020

August 10th – August 21st 2020



## Smart Production Systems & Robotics

Do you want to be a part of the next industrial revolution? The phenomenon we call “Industry 4.0” consists of a multi-layered change in production, management and design, triggered by digitalization.

The Ruhr University’s Learning Factory gives you the opportunity to learn about Smart Production Systems first-hand; interactive role-plays and Best-Practice examples show how production systems and robotics will influence the future of manufacturing. How can we achieve a more sustainable value-chain and how does smart production help boosting profit margins and safer environments for the workers? You will find out in our Summer School “Smart Production Systems & Robotics”.

**WEEK 1**

**SMART PRODUCTION SYSTEMS**

**RUB Tour and Intercultural Training**

**Introduction to Smart Production Systems**

**Industry 4.0 and Effects on Production**

**Workshop Learning Factory: Sustainable Workflow in  
Production**

**The Integration of VR Technology in SPS**

**Simulation Modelings of SPS**

**Visit to a Manufacturer: SPS in Action**

**Student Projects**

## **WEEK 2**

### **INTRODUCTION TO ROBOTICS**

**Introduction to Robotics**

**Workshop: Programing and Testing Robots in SPS Environment**

**Case Study: Production Line (2 days)**

**Presentation of Student Projects**

**Certificates & Goodbye**

6

## Leisure Activities

Apart from studying we want you to meet students of Ruhr University Bochum and to get to know the area, which has transformed its many deserted coal mines into service centers, art projects and for example climbing gyms.

The name of Bochum's pub district "Bermuda Dreieck" indicates that every night people get lost in all those bars along the way. Maybe you want to try one of the famous "Currywurst" that Bochum is known for in the whole world? Come and get to know your fellow students at a barbecue in one of our many parks.

We would be happy to welcome you to our area and discover its culture!

## Meet the Experts

Ruhr University Bochum works closely with companies of the area on their innovation management. Meet experts from a corporate background and hear everything about innovation management in practice.

### **Start-Up: Meet the Founders**

The Start-Up scene at our university is very diverse and we would like you to meet founders who can tell you all about their business ideas and strategy.

### **Learning Factory**

Our Learning Factory will teach you innovation like VR and robotics in a workshop-setting. See how innovation effects production systems up close.



# RUB Summer Schools

Study – Connect – Enjoy