



## Certificate Course Supplier & Quality Management

Made in China is becoming more and more important for global acting companies. In 1990, China produced less than 3% of global manufacturing output by value; nowadays its share is nearly a quarter. The white heat of China's ascent formed supply chains which reach deep into South-East Asia.

Global players therefore continually extend their production sites in China. At the same time, the demand for engineers with highly developed technological know-how and the ability to meet the different on-site requirements is rapidly growing.

The HECTOR School, Technology Business School of the Karlsruhe Institute of Technology (KIT), provides the unique opportunity to equip the best engineers with state-of-the-art knowledge in supplier and quality management in only one week. For good reason, the KIT is known worldwide for its German Engineering expertise.

### Course Benefits & Take Away for Participants

The participants will

- understand the different quality principles;
- be able to apply the identified tools and methods of the Quality Management on new problems;
- be capable of analyzing and evaluating the applicability of the learned methods, processes and techniques for a certain problem;
- be able to analyze implemented automated manufacturing systems and describe their components;
- be able to name automation tasks in manufacturing plants and name the components which are necessary for the implementation of each automation task;
- be able to design and select components for a given use case of the categories: „Handling Technology“, „Industrial Robotics“, „Sensory“ and „Controls“;
- be capable to compare different concepts for multi-machine systems and select a suitable concept for a given use case.



### Overview Course Agenda

	Day 1	Day 2	Day 3	Day 4	Day 5
8 am - 1 pm	Lecture	Lecture	Lecture	Lecture	Lecture
Lunch Break					
2 - 5:30 pm	Lecture	Excursion	Lecture	Excursion	Conclusion & Farewell

- General QM Methods (QM in China | QM Methods | Case Study Quality Function Deployment (QFD) and Failure Mode and Effects Analysis (FMEA))
- Process Assessment (Process Capability incl. Case Study | Company Tour to a Private Chinese Company)
- Metrology (Production Measurement | Measurement Uncertainty)
- Supply & Quality Management in Global Production Networks
- Manufacturing and Assembly Technology
- Multi-Machine Systems
- Design and Planning of Automated Production Facilities
- Use Cases: Industry 4.0

On the left: Exemplary Schedule of a 5-day Certificate Course

## Agenda in Detail

Day 1:	Day 2:	Day 3:	Day 4:	Day 5:
<b>Quality Management</b> Concept of Quality   QM Methods   Case Study QFD   Case Study FMEA   Process Capability & Stability	<b>Quality Management</b> Production Measurement Technology   Production Measurement Technology Laboratory   Measurement Uncertainty & Capability of Measurement Processes  <b>Industry Excursion</b>  <b>Dinner</b>	<b>Supplier &amp; Quality Management</b> Supplier Relationship Management in China   Supply & Quality Management in Global Production Networks   Strategic Supplier Management in China  <b>Industry Excursion</b>	<b>Supplier Management</b> Case Study Strategic Supplier Management   Supplier Risk Management   Operational Supplier Management in China  <b>Industry Excursion</b>  <b>SIP Museum &amp; Dinner</b>	<b>Supplier Management</b> Case Study Operational Supplier Management   Sustainable Supplier Development  <b>Industry Excursion</b>

## Registration & Organizational Details

Duration	5 days
Cost	3.500 € per participant
Group Size	max. 15 participants
Certificate	Certificate of the HECTOR School of Engineering & Management, Technology Business School of the Karlsruhe Institute of Technology (KIT)
Requirements	First University Degree (Bachelor or equivalent) A minimum of 5 years of professional experience in the specific field of the course is recommended The course can be held in German or in English – appropriate skills in the respective language are required. For international companies translators can be hired.
Registration	Register online via <a href="http://www.ectorschool.kit.edu/certificate_courses.php">www.ectorschool.kit.edu/certificate_courses.php</a>



For consultancy or company arrangements please contact:

### Program Consultancy

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## Course Instructor



### Prof. Dr.-Ing. Gisela Lanza

Management Board of the Institute of Production Science (wbk) at the KIT

Prof. Lanza holds the Professorship *Production System and Quality Management*. From 2008-11 she had been holding the Shared Professorship *Global Production Engineering and Quality* of the KIT, which offered her the opportunity to work with Daimler AG in the Department of Strategy Planning. Since 2009 she is Director of the *Global Advanced Manufacturing Institute (GAMI)* in PR China employing around 20 engineers.