

# **American Society for Quality 2024 Annual EMEA Conference**

## **Big Data Analytics for Quality Improvement**

### **February 25<sup>th</sup>- 8:00 AM-3:00 PM**

#### **Introduction:**

In the current service and manufacturing systems environment, the skill sets for data utilization became a vital component. This one-day hands-on workshop will provide the participants with practical knowledge, skills, and a toolkit in data analytics. In this workshop, we will focus on fundamental concepts and skill sets of data analytics and their applications in service and manufacturing systems for process and quality improvement purposes. Case studies from healthcare, Human Resources and manufacturing industry will be used. Major technologies to be used during the workshop: Power BI, Excel query, RapidMiner, and other open source programs.

#### **Takeaways:**

1. Understand and explain the basic concepts and framework of data analytics
2. Translate quality and business inquiries into specific analytical questions
3. Manage data using data analytics software tools
4. Perform data cleaning, preprocessing and analytics operations to answer business analytics questions.

#### **Biography**

Hussam Alshraideh is an Associate Professor of Industrial Engineering and Data Science at The American University of Sharjah with more than 15 years of experience in teaching and utilizing data analytics tools. His research interests include healthcare data analytics and statistical process optimizations. He has more than 50 papers published in reputable international journal in the field of data science and analytics.