



Co-funded by the  
Erasmus+ Programme  
of the European Union



# QMS/EMS Implementation and Control

The course is developed under Erasmus+ Program Key Action 2:  
Cooperation for innovation and the exchange of good practices [Knowledge Alliance](#)

**ICT IN TEXTILE AND CLOTHING HIGHER EDUCATION AND BUSINESS**

Project Nr. 612248-EPP-1-2019-1-BG-EPPKA2-KA

*The information and views set out in this publication are those of the authors and do not necessarily reflect the official opinion of the European Union. Neither the European Union institutions and bodies nor any person acting on their behalf may be held responsible for the use which may be made of the information contained therein.*



---

# TRAINING COURSE

## INDUSTRIAL ENGINEERING, QUALITY CONTROL AND MANAGEMENT

**Course:** QMS/EMS Implementation and Control

Partner: P4 – University of Zagreb Faculty of Textile Technology

Assoc. Prof. Sanja Ercegović Ražić, Ph.D.

---

## Lecture plan:

### Certification of the Quality Management System

- The certification process typically consists of several steps, each of which must be validated. It is usually a programme consisting of initial certification followed by surveillance audits and recertification after 3 years.
- The process and its timing are largely determined by the respective accreditation body.
- The assessment is carried out in accordance with ISO /IEC 17021-1:2015.
- The findings are divided into major, minor and observation findings. All major findings must be resolved prior to certification. Once resolved, the audit report can be completed and reviewed before submitting for certification.
- Certificates are issued with a validity of 3 years.



## Lecture plan:

### Certification Process

Preliminary audit (optional) – stage 1 and 2

Certification audit – stage 3 to 4

Issue Certificate - 4 to 5

Surveillance audits – stage 5

Re-certification – stage 6



## Certification Process

### 1. Preliminary audit (optional):

This is initial assessment of the QMS implementation in company, and the audit focuses mainly on the areas of the system for which further improvements according to ISO requirements are needed. After identification and eradicating potential vulnerabilities in the management system, the audit in relation to the certification begins.

### 2. Certification audit:

This phase is comprised of a stage 1 and stage 2 audit consists of detailed review where, the auditors assess documentation and practical application of quality management system according to certification requirements.

## Certification Process

### 3. Issue Certificate:

Once when the auditors who are experts in the sector, identifies that audited QMS satisfies the requirements of ISO 9001:2015, accredited certification body with expertise in QMS will Issue the ISO 9001:2015. certificate.

### 4. Surveillance audit:

Annual surveillance of the processes optimization in company and quality management system to ensure conformity of the system with the ISO standards carried out.

### 5. Re-certification:

Every 3 years from the certificate date, which is also maximum validity of the certificate, organization passes the re-certification process for the next term.

## Lecture plan:

### Risk-based thinking

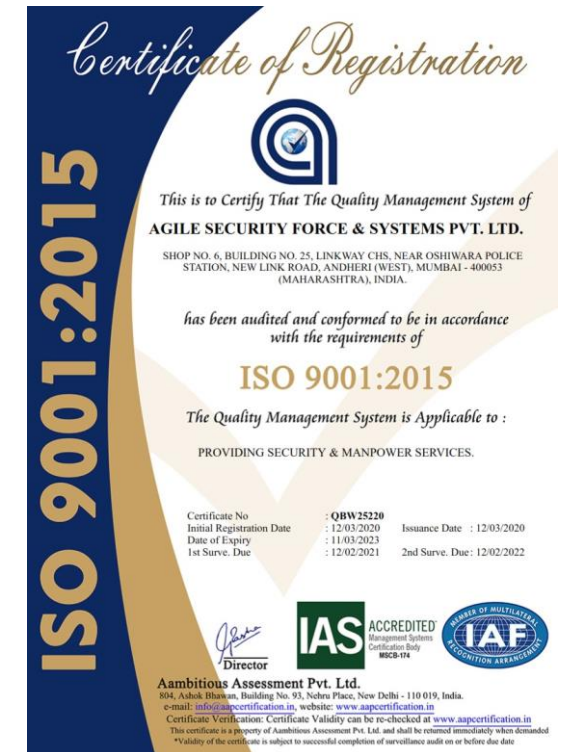
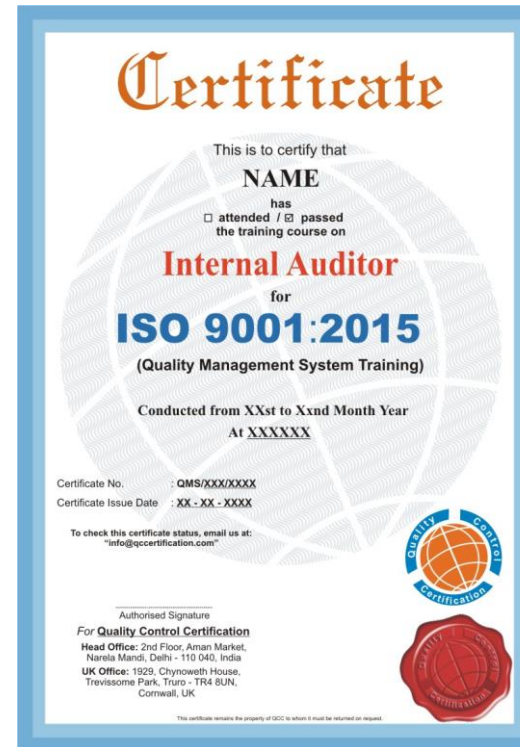
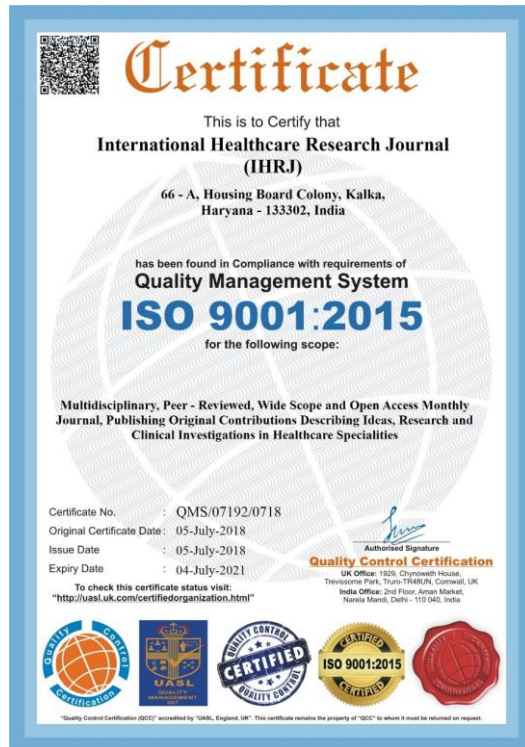
- Risk-based thinking is essential for achieving an effective quality management system.
- The concept of risk-based thinking including, for example,
  - carrying out preventive action to eliminate potential nonconformities,
  - analysing any nonconformities that do occur,
  - taking action to prevent recurrence that is appropriate for the effects of the nonconformity.
- To conform to the requirements, an organization needs to plan and implement actions to address risks and opportunities.
- Addressing both risks and opportunities establishes a basis for increasing the effectiveness of the quality management system, achieving improved results and preventing negative effects.





## Lecture plan:

**Certification** – the provision by an independent body of written assurance (a certificate) that the product, service or system in question meets specific requirements.





# CONTACTS

## **Coordinator of project:**

Technical University of Sofia  
Department of Textile Engineering

## **Project Manager of ICT-TEX:**

Prof. Dr. Angel Terziev

**e-mail:** [aterziev@tu-sofia.bg](mailto:aterziev@tu-sofia.bg)

**Web-site:** [ICT-TEX.eu](http://ICT-TEX.eu)



Co-funded by the  
Erasmus+ Programme  
of the European Union

KNOWLEDGE ALLIANCE

**ICT-TEX**

ICT IN TEXTILE AND CLOTHING  
HIGHER EDUCATION AND BUSINESS

*The information and views set out in this publication are those of the authors and do not necessarily reflect the official opinion of the European Union. Neither the European Union institutions and bodies nor any person acting on their behalf may be held responsible for the use which may be made of the information contained therein.*