



UNIVERSITATEA „VASILE ALECSANDRI” din BACĂU

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**Tematică de concurs pentru ocuparea postului de profesor, poziția 4, din Statul de Funcții și de Personal Didactic al Departamentului Ingineria și managementul sistemelor industriale din anul universitar 2024-2025:**

**1. Dezvoltarea de produs, de la nevoie la produs finit: etape, abordări conceptuale**

- Dorin Diaconescu, Designul conceptual al produselor, Ed. Univ. Transilvania, Brașov, 2005, ISBN: 973-635-544-6;
- Karl T. Ulrich, Steven D. Eppinger, Product design and development, 5th edition, Ed. McGraw-Hill, 2012, ISBN: 978-0-07-340477-6;
- Stuart Pugh, Total design. Integrated methods for successful product engineering, Addison-Wesley Publishing Comp., Wokingham-England, 1997, ISBN: 978-0201416398;
- King S., Chang K., Understanding industrial design. Principles for UX and interaction design, O'Reilly Media, Inc., 2016, ISBN: 978-1-491-92039-8;
- John Whalen, Design for how people think. Using brain science to build better products, O'Reilly Media, Inc., 2019, ISBN: 978-1-491-98545-8;
- Donald Norman, Emotional design. Why we love (or hate) everyday things, Basic Books, New York, 2004;
- Wolfgang Wimmer, Ecodesign for sustainable development. Product development, Transilvania University of Brasov Printing House, 2007, ISBN: 978-973-598-103-7.

**2. Managementul calității în accepțiunea standardului ISO 9001:2015**

- Standardul SR EN ISO 9000:2015 – Sisteme de management al calității. Principii fundamentale și vocabular;
- Standardul SR EN ISO 9001:2015 – Sisteme de management al calității. Cerințe;
- Standardul SR EN ISO 9002:2017 – Sisteme de management al calității. Linii directoare pentru aplicarea ISO 9001:2015;
- David Hoyle, ISO 9000 Quality Systems Handbook. Increasing the Quality of an Organization's Outputs, 7th edition, Routledge, New York, 2018, ISBN: 978-1-138-18863-1.

**3. Informații documentate ale sistemelor de management al calității: dezvoltare și menținere**

- Standardul SR EN ISO 9001:2015 – Sisteme de management al calității. Cerințe;
- Standardul SR EN ISO 9002:2017 – Sisteme de management al calității. Linii directoare pentru aplicarea ISO 9001:2015;
- Standardul SR ISO 10013:2021 – Sisteme de management al calității. Recomandări pentru informații documentate.

**4. Managementul calității totale: principii, abordări, instrumente**

- Standardul SR EN ISO 9001:2015 – Sisteme de management al calității. Cerințe;
- Standardul SR EN ISO 9004:2018 - Managementul calității. Calitatea unei organizații. Îndrumări pentru obținerea unui succes durabil;
- John S. Oakland, Total quality management and operational excellence, 4th edition, Routledge, New York, 2014, ISBN: 978-0-415-63549-3;
- Pascal Dennis, Lean production simplified. A plain-language guide to the world's most powerful production system, 3rd edition, CRC Press, Boca Raton, 2015, ISBN: 978-1-4987-0888-3;

- Michael L. George, David Rowlands, Mark Price, John Maxey, The Lean Six Sigma pocket toolbox. A quick reference guide to nearly 100 tools for improving process quality, speed, and complexity, McGraw-Hill, New York, 2005, ISBN: 978-0-07-150573-4;
- Phil Ledbetter, The Toyota template. The plan for just-in-time and culture change beyond Lean tools, CRC Press, Boca Raton, 2018, ISBN: 978-1-138-57871-5.

## **5. Auditarea sistemelor de management al calității: etape, metode, informații documentate specifice**

- Standardul SR EN ISO 9001:2015 – Sisteme de management al calității. Cerințe;
- Standardul SR EN ISO 19011:2018 – Linii directoare pentru auditarea sistemelor de management;
- Standardul SR ISO 10013:2021 – Sisteme de management al calității. Recomandări pentru informații documentate.

## **6. Sisteme integrate de management: abordări, cerințe**

- Standardul SR EN ISO 9001:2015 – Sisteme de management al calității. Cerințe;
- Standardul SR EN ISO 9002:2017 – Sisteme de management al calității. Linii directoare pentru aplicarea ISO 9001:2015;
- Standardul SR EN ISO 14001:2015 – Sisteme de management de mediu. Cerințe cu ghid de utilizare;
- Standardul SR EN ISO 45001:2023 – Sisteme de management al sănătății și securității în muncă. Cerințe și îndrumări pentru utilizare.

## **7. Monitorizarea calității: aplicabilitate, metode**

- Standardul SR EN ISO 9001:2015 – Sisteme de management al calității. Cerințe;
- Standardul SR EN ISO 9002:2017 – Sisteme de management al calității. Linii directoare pentru aplicarea ISO 9001:2015;
- Standardul SR ISO 10004:2019 – Managementul calității. Satisfacția clientului. Linii directoare pentru monitorizare și măsurare;
- Statistical Process Control (SPC), Reference Manual, 2nd Edition, DaimlerChrysler Corporation, Ford Motor Company, General Motors Corporation, 2005;
- Stephen B. Vardeman, Marcus Jobe, Statistical methods for quality assurance: Basics, Measurement, Control, Capability, and Improvement, 2nd edition, Springer-Verlag, New York, 2016, ISBN: 978-0-387-79106-7.

## **1. Product development from need to finished product: stages, conceptual approaches**

- Dorin Diaconescu, Designul conceptual al produselor / Product conceptual design, Transylvania University of Brașov Publishing House, Brașov, 2005, ISBN: 973-635-544-6;
- Karl T. Ulrich, Steven D. Eppinger, Product design and development, 5th edition, Ed. McGraw-Hill, 2012, ISBN: 978-0-07-340477-6;
- Stuart Pugh, Total design. Integrated methods for successful product engineering, Addison-Wesley Publishing Comp., Wokingham-England, 1997, ISBN: 978-0201416398;
- King S., Chang K., Understanding industrial design. Principles for UX and interaction design, O'Reilly Media, Inc, 2016, ISBN: 978-1-491-92039-8;
- John Whalen, Design for how people think. Using brain science to build better products, O'Reilly Media, Inc, 2019, ISBN: 978-1-491-98545-8;
- Donald Norman, Emotional design. Why we love (or hate) everyday things, Basic Books, New York, 2004;
- Wolfgang Wimmer, Ecodesign for sustainable development. Product development, Transylvania University of Brasov Printing House, 2007, ISBN: 978-973-598-103-7.

## **2. Quality management according to ISO 9001:2015**

- SR EN ISO 9000:2015 - Quality management systems - Fundamental principles and vocabulary;
- SR EN ISO 9001:2015 - Quality management systems. Requirements;
- SR EN ISO 9002:2017 - Quality management systems - Guidelines for the implementation of ISO 9001:2015;
- David Hoyle, ISO 9000 Quality Systems Handbook. Increasing the Quality of an Organisation's Outputs, 7th edition, Routledge, New York, 2018, ISBN: 978-1-1-138-18863-1.

### **3. Documented quality management system information: development and maintenance**

- SR EN ISO 9001:2015 - Quality management systems. Requirements;
- SR EN ISO 9002:2017 - Quality management systems - Guidelines for the application of ISO 9001:2015;
- SR ISO 10013:2021 - Quality management systems. Recommendations for documented information.

### **4. Total quality management: principles, approaches, tools**

- SR EN ISO 9001:2015 - Quality management systems. Requirements;
- SR EN ISO 9004:2018 - Quality management. Quality of an organisation. Guidance for achieving sustainable success;
- John S. Oakland, Total quality management and operational excellence, 4th edition, Routledge, New York, 2014, ISBN: 978-0-415-63549-3;
- Pascal Dennis, Lean production simplified. A plain-language guide to the world's most powerful production system, 3rd edition, CRC Press, Boca Raton, 2015, ISBN: 978-1-4987-0888-3;
- Michael L. George, David Rowlands, Mark Price, Mark Price, John Maxey, The Lean Six Sigma pocket toolbox. A quick reference guide to nearly 100 tools for improving process quality, speed, and complexity, McGraw-Hill, New York, 2005, ISBN: 978-0-07-150573-4;
- Phil Ledbetter, The Toyota template. The plan for just-in-time and culture change beyond Lean tools, CRC Press, Boca Raton, 2018, ISBN: 978-1-1-138-57871-5.

### **5. Auditing quality management systems: steps, methods, specific documented information**

- SR EN ISO 9001:2015 - Quality management systems. Requirements;
- SR EN ISO 19011:2018 - Guidelines for the audit of management systems;
- SR ISO 10013:2021 - Quality management systems. Recommendations for documented information.

### **6. Integrated management systems: approaches, requirements**

- SR EN ISO 9001:2015 - Quality management systems. Requirements;
- SR EN ISO 9002:2017 - Quality management systems - Guidelines for the implementation of ISO 9001:2015;
- SR EN ISO 14001:2015 - Environmental management systems. Requirements with guidance for use;
- SR EN ISO 45001:2023 - Occupational health and safety management systems. Requirements with guidance for use.

### **7. Quality monitoring: applicability, methods**

- SR EN ISO 9001:2015 - Quality management systems. Requirements;
- SR EN ISO 9002:2017 - Quality management systems - Guidelines for the application of ISO 9001:2015;
- SR ISO 10004:2019 - Quality management. Customer satisfaction. Guidelines for monitoring and measurement;
- Statistical Process Control (SPC), Reference Manual, 2nd Edition, DaimlerChrysler Corporation, Ford Motor Company, General Motors Corporation, 2005;
- Stephen B. Vardeman, Marcus Jobe, Statistical methods for quality assurance: Basics, Measurement, Control, Capability, and Improvement, 2nd edition, Springer-Verlag, New York, 2016, ISBN: 978-0-387-79106-7.