



## Subject card

|   |   |  |   |                                     |  |            |     |
|---|---|--|---|-------------------------------------|--|------------|-----|
| Subject name and code                       | Quality Management and Building Chemistry Products, PG_00018825   |  |   |                                     |  |            |     |
| Field of study                              | Chemistry in Construction Engineering   |  |   |                                     |  |            |     |
| Date of commencement of studies             | October 2023  |  | Academic year of realisation of subject |                                     | 2024/2025  |            |     |
| Education level                             | first-cycle studies   |  | Subject group                           |                                     | Obligatory subject group in the field of study<br>Subject group related to scientific research in the field of study |            |     |
| Mode of study                               | Full-time studies   |  | Mode of delivery                        |                                     | at the university  |            |     |
| Year of study                               | 2   |  | Language of instruction                 |                                     | Polish   |            |     |
| Semester of study                           | 3   |  | ECTS credits                            |                                     | 2.0  |            |     |
| Learning profile                            | general academic profile  |  | Assessment form                         |                                     | assessment   |            |     |
| Conducting unit                             | Department of Process Engineering and Chemical Technology -> Faculty of Chemistry   |  |   |                                     |  |            |     |
| Name and surname of lecturer (lecturers)    | Subject supervisor  |  | dr hab. inż. Anna Zielińska-Jurek       |                                     |  |            |     |
|   | Teachers  |  |   |                                     |  |            |     |
| Lesson types and methods of instruction     | Lesson type   | Lecture  | Tutorial                                | Laboratory                          | Project  | Seminar    | SUM |
|   | Number of study hours   | 0.0  | 0.0                                     | 0.0                                 | 0.0  | 30.0       | 30  |
|   | E-learning hours included: 0.0  |  |   |                                     |  |            |     |
| Learning activity and number of study hours | Learning activity   | Participation in didactic classes included in study plan |   | Participation in consultation hours |  | Self-study | SUM |
|   | Number of study hours   | 30   |   | 4.0                                 |  | 16.0       | 50  |
| Subject objectives                          | Gaining knowledge regarding management systems, the quality management (TQM), methods, tools, and instruments of quality management. Basic knowledge of ISO 9001, 14001, 18001. Quality audits, environmental audits, quality costs |  |   |                                     |  |            |     |

|                                 |   |  |  |
|---------------------------------|---|--|--|
| Learning outcomes               | Course outcome  | Subject outcome  | Method of verification   |
|                                 |   | Student is able to:<br>1. point and discuss basic ideas of quality management<br>2. define, evaluate and solve simple problems<br>3. apply rules of production management and total quality management<br>4. apply ground rules of quality control for building materials and products<br>5. find and comply with regulations of chemical substances management related to building materials and products.                                | [SU3] Assessment of ability to use knowledge gained from the subject<br>[SU4] Assessment of ability to use methods and tools<br>[SU5] Assessment of ability to present the results of task |
|                                 |   |  | [SU2] Assessment of ability to analyse information<br>[SU4] Assessment of ability to use methods and tools   |
|                                 |   |  | [SU3] Assessment of ability to use knowledge gained from the subject   |
|                                 |   |  | [SU2] Assessment of ability to analyse information<br>[SU4] Assessment of ability to use methods and tools   |
|                                 | K6_W11  | student is able to:<br>1. prepare an audit<br>2. be fluent in ISO 9001<br>3. discuss the REACH system principles<br>4. discuss the principles, methods and tools of quality management   |  |
| K6_U04                          | student is able to describe the existing technical solutions, apparatus, processes in the field of construction chemistry. Can prepare an environmental impact assessment of the existing technology.   |  |  |
| Subject contents                | Basics of total quality management. Business excellence. Normalization, certification and integration of quality, environment, industrial safety and information safety management systems. Methods and tools of quality improvement. Quality costs. Selected systems and standards of quality management. Quality in production management. Regulations on chemical substances management. Normalization and conformity estimation for building materials. |  |  |
| Prerequisites and co-requisites |   |  |  |
| Assessment methods and criteria | Subject passing criteria  | Passing threshold  | Percentage of the final grade  |
|                                 | Homework in the field of ISO standards  | 60.0%  | 50.0%  |
|                                 | Activity during classes   | 60.0%  | 20.0%  |
|                                 | Multimedial presentation  | 60.0%  | 30.0%  |
| Recommended reading             | Basic literature  | 1. J. Łunarski, Zarządzanie jakością, WNT 2008 2. Ustawa z dn. 16 kwietnia 2004 r. o wyrobach budowlanych (Dz.U. nr 92, poz. 881) z późn. zmianami 3. Ustawa z dn. 30 sierpnia 2002 r. o systemie oceny zgodności (Dz.U. nr 166, poz. 1360) z późn. zmianami 4. Rozporządzenie (WE) nr 1907/2006 Parlamentu Europejskiego i Rady w sprawie rejestracji, oceny, udzielania zezwoleń i stosowanych ograniczeń w zakresie chemikaliów (REACH) |  |
|                                 | Supplementary literature  | 1. P. F. Drucker – Praktyka zarządzania<br>2. L. Iacocca – Autobiografia<br>3. J. Stoner, R. Freeman, D. Gilbert – Kierowanie<br>4. H. Drummond – W pogoni za jakością<br>5. A. Chauvet – Metody zarządzania – przewodnik<br>6. J. Brilaman – Nowoczesne koncepcje i metody zarządzania<br>7. A. Koźmiński, W. Piotrowski Zarządzanie – teoria i praktyka  |  |
|                                 | eResources addresses  | Adresy na platformie eNauczanie:   |  |
|                                 | Example issues/<br>example questions/<br>tasks being completed  | 1. Discuss the modern methods of management, Quality Management (ZPJ), the philosophy of quality - concepts of Deming, Juran, Crosby<br><br>2. Discuss the quality management system based on ISO 9000<br><br>3. What management system should be implemented at the time of development of the organization   |  |
| Work placement                  | Not applicable  |  |  |