

|  |   |                                   |
|--|---|-----------------------------------|
| <b>Course name</b>                       | <b>Quality management</b>   |                                   |
| <b>Course code</b>                       | <b>E.1.QM.SC.ECTIE.A</b>  |                                   |
| <b>Department</b>                        | <b>Institute of Machinery Management, Ergonomics and Production Processes</b>   |                                   |
| <b>Faculty</b>                           | <b>Faculty of Production and Power Engineering</b>  |                                   |
| <b>Course supervisor/Lecturer</b>        | <b>Dr. hab. Barbara Krzysztofik, prof. UR, dr inż. Paulina Wrona</b>  |                                   |
| <b>General information</b>               | <b>Teaching period</b>  | <b>Winter and summer semester</b> |
|  | <b>ECTS credit</b>  | <b>6</b>                          |
|  | <b>Lectures total</b>   | <b>30</b>                         |
|  | <b>Practicals</b>   | <b>-</b>                          |
|  | <b>Project</b>  | <b>30</b>                         |
| <b>Objective and general description</b> | <p>The aim of the course is to acquaint students with the basics of quality management, mainly in the production and processing from foods. Understanding the principles, methods and management tools. Knowledge of ISO, TQM and HACCP system. Learn the basics of developing quality manuals. The use of selected management to evaluate the product, and the prevention of defects and hazards affecting the quality of the final product.</p>   |                                   |
| <b>Lectures – 30h</b>                    | <ol style="list-style-type: none"> <li>1. History, origins and definitions of quality management system - 3h;</li> <li>2. Features of the system of quality assurance - 2h;</li> <li>3. Precursors of quality management - 3h;</li> <li>4. System and quality policy - 2h;</li> <li>5. Total quality management – 3h;</li> <li>6. Functional and Process Management – 2h;</li> <li>7. Instruments of quality management – 3h;</li> <li>8. Documents quality management – 2h;</li> <li>9. ISO standards – 3h;</li> <li>10. HACCP – 3h;</li> <li>11. Quality costs – 2h;</li> <li>12. Control, controlling, auditing – 2h;</li> </ol> |                                   |
| <b>Project – 30h</b>                     | <p><b>Implementation of the following projects:</b></p> <ol style="list-style-type: none"> <li>1. Evaluation of the product – 6h;</li> <li>2. Develop instructions and procedures – 4h;</li> <li>3. The use of "fishbone" to assess the quality problems – 5h;</li> <li>4. Application of QFD to evaluate customer expectations – 5h;</li> <li>5. Application of FMEA to prevent the formation of defects in products – 3h;</li> <li>6. The use of histograms, spreadsheets, and statistical methods to assess the processes – 5h;</li> <li>7. Examination – 2h</li> </ol>  |                                   |
| <b>Assessment method</b>                 | <p>The material of instruction will be included based on an oral examination or written.<br/>The projects will prepare a written and electronic form will constitute the</p>  |                                   |

|                   |   |
|-------------------|---|
|                   | basis for the completion of the project   |
| <b>References</b> | <ol style="list-style-type: none"><li>1. Normy ISO 9000.</li><li>2. A. Hamrol, W. Mantura- Zarządzanie jakością - teoria i praktyka PWN - Warszawa, 2005.</li><li>3. Kołożyn-Krajewska D., Sikora T. - System zapewnienia bezpieczeństwa zdrowotnego żywności - HACCP, Wieś jutra.</li><li>4. Luningm P.A., Marcelius W.J., Jongen W.M.F. Zarządzanie jakością żywności</li><li>5. Dyrektywy, Ustawy, Normy.</li><li>6. Krzysztofik. B. Jakość i bezpieczeństwo żywności, systemy zarządzania i kontroli. IR. 2012.</li></ol> |