STUDY MODULE DESCRIPTION FORM

Name of the module/subject **Pro-quality statistical applications**		Code **1011105311011002037**
Field of study **Engineering Management - Part-time studies -**	Profile of study (general academic, practical) **(brak)**	Year /Semester **1 / 1**
Elective path/specialty **Marketing and Company Resources**	Subject offered in: **Polish**	Course (compulsory, elective) **elective**
Cycle of study: **Second-cycle studies**	Form of study (full-time,part-time) **part-time**	

No. of hours				No. of credits **2**
Lecture: **12**	Classes: **-**	Laboratory: **-**	Project/seminars: **-**	

Status of the course in the study program (Basic, major, other) **(brak)**	(university-wide, from another field) **(brak)**

Education areas and fields of science and art	ECTS distribution (number and **%)**

Responsible for subject / lecturer:	**Responsible for subject / lecturer:**
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Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	Student defines and describes the basic concepts of descriptive statistics.
2	**Skills**	The student is able to interpret and describe the insights and observations. The student can conclude.
3	**Social competencies**	The student is aware of the importance of quality for its addressees and creators of its level.

Assumptions and objectives of the course:

Transferring knowledge and allowing the acquisition of skills relating to the application of statistical methods and benefits resulting from them.

Study outcomes and reference to the educational results for a field of study

Knowledge:

1. The student knows the basic concepts regarding the statistical pro quality applications - [K2A_W01]

2. The student knows the basic rules and procedures of the statistical research regarding quality supply and/or products - [K2A_W01]

3. The student knows the basic rules and procedures for the statistical examination of production processes - [K2A_W01]

4. The student knows the status of normalization connected with the use of statistical methods in relation to the pro quality activities in enterprises - [K2A_W12]

Skills:

1. The student is able to use the descriptive statistics for analysis e g. customer requirements in specific groups of products at the stage of the project, in the area of customer?s satisfaction with the product, etc. - [K2A_U02, K2A_U06]

2. The student is able to make decisions on the basis of the facts, that means on the results of data analysis - [K2A_U02, K2A_U06]

3. The student is able to manage a company in terms of quality by easiness to associate technical issues with the quality and economic ones - [K2A_U02, K2A_U06]

4. The student is able to schedule inspections and verify, on the basis of population size and fixed border quality - [K2A_U02, K2A_U06]

5. The student is able to work with the standards related to statistical checks - [K2A_U02, K2A_U06]

6. The student has the ability to control the process based on the results of the control cards analysis - [K2A_U02, K2A_U06]

Social competencies:

1. The student is aware of the importance of applying statistical methods - [K2A_K03, S2A_K06]

2. The student is aware of the results of statistical applications in an enterprise - [K2A_K03, S2A_K06]

3. The student is focused on the use of statistical methods for conscious quality improvement in an enterprise - [K2A_K03, S2A_K06]

Assessment methods of study outcomes

Formative assessment:

Classes: current evaluation of the tasks performed during classes

Lectures: evaluation of participation in discussions on the material discussed in previous lectures.

Collective assessment:

Classes: test- credits based on classes will take place in 14-15 week semester

Lectures: written test in 14-15 week semester (open questions) from the content presented during lectures.

Course description

Basic concepts of statistical pro quality applications. The use of statistics in quality management. Capabilities and examples of the use of descriptive statistics (data grouping, series distribution and histograms, and methods of data presentation).The statistical research regarding quality supply and/or products. Control, measurement and verification. Sampling, sample distribution and sampling methods. Plans for 1-, 2-, multi-step tests. Statistical control of inbox. Statistical examination of production processes. Statistical process control of SPC. Analysis and assessment of process suitability (the control card X-R, the control card of defective p, control card (c).

Basic bibliography:

Additional bibliography:

Result of average student's workload

Activity	Time (working hours)
1. Lectures	15
2. Classes	15
3. Final credits	2
4. Discussion of results	2

Student's workload

Source of workload	hours	ECTS
Total workload	34	2
Contact hours	19	1
Practical activities	15	1