

Faculty of Food Science

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**Course title / code: ADVANCED INFORMATION TECHNOLOGIES / 03S20-AIT**

ECTS credit allocation (and other scores): 2

Semester: summer

Level of study: ISCED-7 - second-cycle program EQF-7

Branch of science: Agricultural sciences

Language: English

Number of hours per semester: 30h computer classes

Course coordinator/ Department and e-mail: dr inż. Aneta Dąbrowska / Department of Dairy Science and Quality Management / anetazj@uwm.edu.pl

Type of classes: computer classes

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### SUBSTANTIVE CONTENT

**COMPUTER CLASSES:** Practical application of computer science in food technology and nutrition with particular emphasis on monitoring and modelling of technological processes. The use of advanced logical functions and data analysis using numerical methods. Computer creation of complex algorithms for determining solutions. The use of computer computational techniques useful in the development of data from experimental research and the presentation of their results using various types of non-text objects. Creating reports with references.

**Learning purpose:** Gaining advanced skills in the use of software application as a tool supporting solving problems in the field of food technology. Computer documentation and data analysis of technological processes, research data and methods of their presentation.

### ON COMPLETION OF THE STUDY PROGRAMME THE GRADUATE WILL GAIN:

**Knowledge:** student, at an advanced level, knows the possibilities of using software application as a tool supporting solving problems related to the technological process

**Skills:** student is able to use application software for documentation, data analysis, presentation of results and reports' preparation

**Social Competencies:** student is ready to use professionally software application to solve practical problems arising in connection with the profession of a food technologist

### Basic literature:

1. Maślowski K., "Excel 2003 PL. Ćwiczenia zaawansowane", Wyd. Helion, R. 2004
2. Kopertowska M., Sikorski W., "Funkcje w Excelu w praktyce", Wyd. PWN, R. 2006
3. Kopertowska M., "Zaawansowane możliwości arkusza Excel 2000PL. Ćwiczenia.", Wyd. Mikom, R. 2000

### Supplementary literature

1. Any domestic and foreign authors, *Computer magazines, "student's choice"*, Wyd. any, R. 2000

The allocated number of ECTS points consists of: 32 contact hours with an academic teacher: Student's independent work: 18.