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| Title<br><b>Diagnostics and monitoring manufacturing systems</b>                                 | Code<br><b>10102212710102203185</b> |
| Field<br><b>Mechanical Technology</b>  | Year / Semester<br><b>4 / 7</b>     |
| Specialty<br><b>Mechanical engineering</b>   | Course<br><b>elective</b>           |
| Hours<br>Lectures: <b>1</b> Classes: <b>-</b> Laboratory: <b>1</b> Projects / seminars: <b>-</b> | Number of credits<br><b>2</b>       |
|  | Language<br><b>polish</b>           |

**Lecturer:**

Paweł Twardowski, Ph. D. (Eng.)  
Piotrowo 3, 60-965 Poznan  
phone: +48(61) 665 2608  
e-mail: Pawel.Twardowski@put.poznan.pl

**Faculty:**

Faculty of Mechanical Engineering and Management  
ul. Piotrowo 3  
60-965 Poznań  
tel. (061) 665-2361, fax. (061) 665-2363  
e-mail: office\_dmef@put.poznan.pl

**Status of the course in the study program:**

Optional course at the Faculty of Mechanical Engineering and Management.

**Assumptions and objectives of the course:**

Acquaint future engineers with technique of diagnostics and monitoring manufacturing systems.

**Contents of the course (course description):**

Essence of the diagnostics and monitoring manufacturing systems. Physical phenomena accompanying to the machining process as a source of process. Measuring of physical phenomena. Description of monitoring, control and automation system. Concluding methods. Design of automation system for some machining operations. Future trends of machining automation.

**Introductory courses and the required pre-knowledge:**

Basic knowledge from physics, machine tools and machining.

**Courses form and teaching methods:**

Lectures and laboratories.

**Form and terms of complete the course - requirements and assessment methods:**

Passing of the lectures and laboratory credit on the basis of reports and knowledge.

**Basic Bibliography:**

**Additional Bibliography:**