# COURSE DESCRIPTION

1. **Course title:** PRODUCTION CONTROL

2. **Course code:** S-I-AiIP/30

3. **Validity of course description:** 2017/2018

4. **Level of studies:** 1st cycle of higher education

5. **Mode of studies:** intramural studies

6. **Field of study:** AUTOMATICS AND INDUSTRIAL INFORMATICS (RG)

7. **Profile of studies:** practical profile

8. **Programme:**

9. **Semester:** 5

10. **Faculty teaching the course:** Faculty of Mining and Geology, Department of Mining Management and Safety Engineering

11. **Course instructor:** Anna Manowska, Ph.D.

12. **Course classification:** specialty items

13. **Course status:** elective

14. **Language of instruction:** English

15. **Pre-requisite qualifications:** Data bases (SQL), Basics of programming.

16. **Course objectives:** The objective of this course is to familiarize students with the current state of knowledge in management and control. Selected algorithms for production planning and control (MRP, CRP, SFC, MPS, JIT, Kanban) and methods of follow-up control of production will be analyzed. Wide theme of the subject and the practical possibilities of its use should encourage students to further individual studies.

17. **Description of learning outcomes:**

<table>
<thead>
<tr>
<th>Nr</th>
<th>Learning outcomes description</th>
<th>Method of assessment</th>
<th>Teaching methods</th>
<th>Learning outcomes reference code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Knows and understands the mathematical tools useful to describe the processes related to the life cycle of equipment, facilities and technical systems</td>
<td>Written test, defending project</td>
<td>Lectures, project</td>
<td>K_W01++</td>
</tr>
<tr>
<td>2</td>
<td>Knows and understands the basic principles of economics and management as well as the principles of creating and developing forms of enterprise, including individual</td>
<td>Individual problem solving during class</td>
<td>Lectures, project</td>
<td>K_W07+++</td>
</tr>
<tr>
<td>3</td>
<td>Can present and evaluate different views and positions as well as discuss them using specialized terminology (including English)</td>
<td>Individual problem solving during class</td>
<td>Project</td>
<td>K_U16++</td>
</tr>
<tr>
<td>4</td>
<td>Is able to plan experiments and to work individually or in a group</td>
<td>Individual problem solving during class</td>
<td>Project</td>
<td>K_U17+++</td>
</tr>
<tr>
<td>5</td>
<td>Can independently plan and implement self-learning throughout life</td>
<td>Individual problem solving during class</td>
<td>Lectures, project</td>
<td>K_U18++</td>
</tr>
<tr>
<td>6</td>
<td>Is willing to critically evaluate their knowledge, understands its importance in solving cognitive, especially practical problems</td>
<td>Individual problem solving during class</td>
<td>Lectures, project</td>
<td>K_K01++</td>
</tr>
</tbody>
</table>

18. **Teaching modes and hours**

Lecture 15 h, Project 15 h

19. **Syllabus description:**

**Lectures:**

Project:
Analysis of the sample production process. Technical preparation of the sample production process (the tree structure of the product, storage index, flow of materials in the production process). Application of selected methods of intracellular control of production flow.

20. Examination: No

21. Primary sources:

22. Secondary sources:

23. Total workload required to achieve learning outcomes

<table>
<thead>
<tr>
<th>Lp.</th>
<th>Teaching mode :</th>
<th>Contact hours / Student workload hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lecture</td>
<td>15/30 – including reading bibliography (10) individual preparation (15), writing the test (5)</td>
</tr>
<tr>
<td>2</td>
<td>Classes</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Laboratory</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Project</td>
<td>15/30 – including reading bibliography (10) discussing project task (20) consultations (10) project preparation (5) defending the project (5)</td>
</tr>
<tr>
<td>5</td>
<td>BA/ MA Seminar</td>
<td></td>
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<tr>
<td>6</td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total number of hours</td>
<td>30/60</td>
</tr>
</tbody>
</table>

24. Total hours: 90

25. Number of ECTS credits: 3

26. Number of ECTS credits allocated for contact hours: 2

27. Number of ECTS credits allocated for in-practice hours (laboratory classes, projects): 2

28. Comments:

Approved:

(date, Instructor's signature)  (date, the Director of the Faculty Unit signature)