## COURSE DESCRIPTION CARD – SPECIMEN

<table>
<thead>
<tr>
<th>Field of study</th>
<th>Mechanics</th>
<th>Degree level and programme type</th>
<th>Bachelor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialization/ diploma path</td>
<td>general</td>
<td>Study profile</td>
<td></td>
</tr>
<tr>
<td>Course name</td>
<td>CAD/CAM Systems</td>
<td>Course code</td>
<td>IS-FME-00241W</td>
</tr>
<tr>
<td>Course type</td>
<td>obligatory</td>
<td>Course type</td>
<td>obligatory</td>
</tr>
<tr>
<td>Forms and number of hours of tuition</td>
<td>L</td>
<td>C</td>
<td>LC</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Entry requirements</td>
<td>Basic knowledge of manufacturing techniques</td>
<td></td>
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<tr>
<td>Course objectives</td>
<td>To acquaint the student with using of CAD / CAM systems in a modern design and manufacturing process. Learning of operating skills and rules of using specialized CAD / CAM software. Design of the part manufacturing technology in the CAD / CAM system, the programming and operation of the CNC machines and using of CAD / CAM systems for the design and generation of detail processing paths</td>
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<tr>
<td>Teaching methods</td>
<td>Lectures and project classes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment method</td>
<td>Lectures - mid-term and final test, Project - evaluation of reports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Symbol of Learning outcomes</td>
<td>Reference to the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>learning outcome</td>
<td>learning outcomes for the field of study</td>
<td></td>
<td></td>
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<tr>
<td>------------------</td>
<td>------------------------------------------</td>
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<tr>
<td>LO1</td>
<td>Uses CAD / CAM systems in the development of part manufacturing technology</td>
<td></td>
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<tr>
<td>LO2</td>
<td>Knows the general principles of using CAD / CAM systems</td>
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<tr>
<td>LO3</td>
<td>Has detailed knowledge of computer-aided design and manufacturing systems</td>
<td></td>
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<tr>
<td>LO4</td>
<td>Student able to work in a team.</td>
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<tr>
<td>LO5</td>
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<tr>
<td>LO6</td>
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<table>
<thead>
<tr>
<th>Symbol of learning outcome</th>
<th>Methods of assessing the learning outcomes</th>
<th>Type of tuition during which the outcome is assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>LO1</td>
<td>reports</td>
<td>P</td>
</tr>
<tr>
<td>LO2</td>
<td>mid-term and final test, reports</td>
<td>L, P</td>
</tr>
<tr>
<td>LO3</td>
<td>mid-term and final test,</td>
<td>L</td>
</tr>
<tr>
<td>LO4</td>
<td>observation of work during laboratory classes</td>
<td>P</td>
</tr>
<tr>
<td>LO5</td>
<td></td>
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<tr>
<td>LO6</td>
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<table>
<thead>
<tr>
<th>Student workload (in hours)</th>
<th>No. of hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculation</td>
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<tr>
<td>Laboratory classes</td>
<td>15</td>
</tr>
<tr>
<td>Project classes</td>
<td>30</td>
</tr>
<tr>
<td>Consultations</td>
<td>5</td>
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<tr>
<td>Realization of project tasks</td>
<td>20</td>
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<td>TOTAL:</td>
<td>70</td>
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### Quantitative indicators

<table>
<thead>
<tr>
<th>Student workload – activities that require direct teacher participation</th>
<th>50</th>
<th>3</th>
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<tbody>
<tr>
<td>Student workload – practical activities</td>
<td>20</td>
<td>1</td>
</tr>
</tbody>
</table>

### Basic references

1. M. P. Groover, Cad/CAM: Computer-Aided Design and Manufacturing,
2. I. Zeid, Mastering CAD/CAM

### Supplementary references


### Organisational unit conducting the course

Department of Materials and Production Engineering

### Author of the programme

Ph.D., Eng. Karol Golak

<table>
<thead>
<tr>
<th>Date of issuing the programme</th>
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<tbody>
<tr>
<td>16.03.2021</td>
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</table>

L – lecture, C – classes, LC – laboratory classes, P – project, SW – specialization workshop, FW - field work, S – seminar