<table>
<tr><td>Course code</td><td></td></tr>
<tr><td>Type and description</td><td>EC – Elective Course</td></tr>
<tr><td>ECTS credit</td><td>1</td></tr>
<tr><td>Course name</td><td>Development trends in mechanical textile technologies</td></tr>
<tr><td>Course name in Polish</td><td>Tendencje rozwojowe w mechanicznych technologiach włókienniczych</td></tr>
<tr><td>Language of instruction</td><td>English</td></tr>
<tr><td>Course level</td><td>8 PRK</td></tr>
<tr><td>Course coordinator</td><td>Dr hab. inż. Marcin Barburski prof. PŁ</td></tr>
<tr><td>Course instructors</td><td>Dr hab. inż. Marcin Barburski prof. PŁ, Dr Maria Cybulska, dr inż. Katarzyna Pieklak</td></tr>
<tr><td>Delivery methods and course duration</td><td>
<table>
<tr><th></th><th>Lecture</th><th>Tutorials</th><th>Laboratory</th><th>Project</th><th>Seminar</th><th>Other</th><th>Total of teaching hours during semester</th></tr>
<tr><td>Contact hours</td><td>0</td><td>0</td><td>0</td><td>15</td><td>0</td><td>0</td><td>15</td></tr>
<tr><td>E-learning</td><td>no</td><td>no</td><td>no</td><td>no</td><td>no</td><td>no</td><td>no</td></tr>
<tr><td>Assessment criteria (weightage)</td><td>0</td><td>0</td><td>0</td><td>100%</td><td>0</td><td>0</td><td>100%</td></tr>
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<tr><td>Course objective</td><td>Increasing the imagination of the PhD Students through the recognition of mechanical textile technologies, the construction, the property and application of unconventional constructions and textiles in different areas of life.</td></tr>
<tr><td>Learning outcomes</td><td>After the course PhD student is able to:
1. describe types of mechanical textile technologies
2. Define the most appropriate textile technologies for a given type of construction.
3 present development trends in mechanical textile technologies
W4, U4, K1</td></tr>
<tr><td>Assessment methods</td><td>Writing report</td></tr>
<tr><td>Prerequisites</td><td>Completion of the second cycle.</td></tr>
<tr><td>Course content with delivery methods</td><td>Project
Analysis of mechanical textile technologies Special technologies. Braided, embroidery weaving, knitting, nonwoven spinning technologies.</td></tr>
<tr><td>Basic reference materials</td><td>J. Szosland;Wieloprzesmykowe rotacyjne formowanie struktur tkanych; PAN Łódź 2002,
M. Snycerski;Strukturalne modelowanie własności filtracyjnych i technologiocznych siatek nawojowych i nawojów precyzyjnych; PAN Łódź 2005,
A.R. Horrocks, S.C.Anand; Handbook of techniocal textilies;, Woodhead Publishing Limited, Cambridge England 2000
J. Szosland;Struktury tkaninowe; PAN Łódź 2007,
A. Miravete;3-D textile reinforcements in composite materials; Woodhead Publishing Limited,
Bharat J. Gajjar, Warp Knit Fabrics Technologies, Emerald Ink Pub.
R. Seidl, Narrow Fabric Weaving Systems, Jacob Muller Institute of Narrow Fabric 2005,</td></tr>
<tr><td>Other reference materials</td><td>J.C. Charlin, The Story of The Jacquard Machine, Staubli 2003,
T. Ishida, Innovations in Weaving Machinery, JTN Osaka 1994,
R. Seidl, Preparation, Finishing, Making-up, Jacob Muller Institute of Narrow Fabric 2005,
H. Zajkiewicz, Budowa tkanin, WSiP, Warszawa 1975</td></tr>
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Average student workload outside classroom	15h
Comments	
Last update	March 2023