



Course ID: HTHI25	Course name: AUTOMATION AND MANAGEMENT OF TECHNOLOGICAL PROCESSES		
Cycle: II (SECOND)	Year: I (FIRST)	Semester: I	ECTS credits: 5
Course status: MANDATORY		Total course hours: 75 Lectures: 45 Laboratory: 30	
Teaching participants:	Teachers and associates with expertise in the field to which the subject belongs.		
Prerequisite for enrollment:	-		
Course aims:	Consulting the importance of management in the chemical industry, as well as the roles of the Chemical Engineer in this area.		
Thematic course units:	<ul style="list-style-type: none">- Basic definitions, basic principles and elements of the management system.- Process system as a management facility: Dynamic characteristics in a temporal and frequency domain, simple examples of characteristic processes in industrial chemistry.- Instrumentation: Measuring elements, executive elements, regulators and accessories.- Basic practical aspects of management of technological processes.		
Learning outcomes:	Students will be able to: <ul style="list-style-type: none">- Apply knowledge, basic principles and elements of the management system- Assess dynamic characteristics in a temporal complex frequency domain- master practical aspects of management of technological processes		
Teaching methodology:	1) Method of verbal exposure		

	2) Discussion method 3) Research method 4) Method of practical work																																													
Assessment methods and grading system:	<table border="1"> <thead> <tr> <th colspan="3">Grading criteria</th> </tr> <tr> <th>Criteria</th> <th>Maximal score</th> <th>Required score</th> </tr> </thead> <tbody> <tr> <td>1. Class attendance</td> <td>5</td> <td>3</td> </tr> <tr> <td>2. Class activities</td> <td>15</td> <td>8</td> </tr> <tr> <td>3. Midterms</td> <td>40</td> <td>22</td> </tr> <tr> <td>4. Final exam</td> <td>40</td> <td>22</td> </tr> <tr> <td>Total</td> <td>100</td> <td>55</td> </tr> <tr> <th colspan="3">Scores and grading</th> </tr> <tr> <th>Score</th> <th>Grade (B&H)</th> <th>Grade (ECTS)</th> </tr> <tr> <td>< 55</td> <td>5</td> <td>F, FX</td> </tr> <tr> <td>55-64</td> <td>6</td> <td>E</td> </tr> <tr> <td>65-74</td> <td>7</td> <td>D</td> </tr> <tr> <td>75-84</td> <td>8</td> <td>C</td> </tr> <tr> <td>85-94</td> <td>9</td> <td>B</td> </tr> <tr> <td>95-100</td> <td>10</td> <td>A</td> </tr> </tbody> </table>	Grading criteria			Criteria	Maximal score	Required score	1. Class attendance	5	3	2. Class activities	15	8	3. Midterms	40	22	4. Final exam	40	22	Total	100	55	Scores and grading			Score	Grade (B&H)	Grade (ECTS)	< 55	5	F, FX	55-64	6	E	65-74	7	D	75-84	8	C	85-94	9	B	95-100	10	A
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Literature:	Dopunska: 1. M. Petkovska, "Merenje i upravljanje u procesnim sistemima" TMF, Beograd, 2007 2. A. Gilat, "Uvod u Matlab 7 sa primjerima", Mukro knjiga, Beograd, 2005 3. D.E. Seborg, T.E. Edgar, D.A. Mellichamp, "Process Dynamics and Control", Willey, Danvers, 2004 4. G.K. McMillan, D.M. Considine, "Process/Industrial Instruments and Controls Handbook", McGraw-Hill, New York, 1999																																													