

**STUDIA II LEVEL, MAGISTERSKIE (3 sem)****DIRECTION: CHEMICAL TECHNOLOGY**Specialty: **Technology of fine chemicals**

<b>Sem.</b>	<b>I</b>	<b>II</b>	<b>III</b>
<b>Godz.</b>	<b>24h / 30 ECTS / 3E</b>	<b>25h / 30 ECTS / 3E</b>	<b>23h / 30 ECTS</b>
<b>26</b>			
<b>25</b>		Design and feasibility study of technological process 2p (3 ECTS)	
<b>24</b>	Experimental design and data analysis 2p (3 ECTS)	Polymer additives 2w (2 ECTS)	Sensors and biosensors in fine chemicals manufacturing 2w +2l (2 +3 ECTS)
<b>23</b>	Environmental protection in chemical technology 1w + 2l (2 + 2)ECTS	Data mining in chemical technology 2l (3 ECTS)	
<b>22</b>	Process modeling in chemical technology 1w + 2l (1 + 2)ECTS	Pharmaceuticals and biopharmaceuticals 2w + 2l (3 + 2) ECTS	
<b>21</b>			Production control and quality management 1w + 1p (1 + 2) ECTS
<b>20</b>			Process project 1w (1 ECTS)
<b>19</b>	Chemical reaction engineering 1w + 1p (2 + 2)ECTS	Sustainable energy and fuels 1w + 2p (1 + 2) ECTS	Agrochemicals and plant health products 1w (1 ECTS)
<b>18</b>			Graduate laboratory II 14l (10 ECTS)
<b>17</b>			
<b>16</b>			
<b>15</b>			
<b>14</b>	Fundamentals of biotechnology 2w (2 ECTS)	Analytical methods in fine chemicals 2w + 2l (2 + 2)ECTS	
<b>13</b>	Specialty surfactants and dispersed systems 2w + 2l (3 + 3) ECTS	Specialty polymers – physicochemistry and technology 2w + 2l (3 + 3) ECTS	
<b>12</b>			
<b>11</b>			
<b>10</b>			
<b>9</b>			
<b>8</b>	Surface phenomena and applied catalysis 2w + 2l (3 + 2) ECTS	Graduate laboratory I 4l (4 ECTS)	
<b>7</b>			
<b>6</b>			
<b>5</b>			
<b>4</b>	Foreign language II 3c (2 ECTS)		
<b>3</b>			
<b>2</b>	Foreign language I 1c (1 ECTS)		Graduate seminar- and thesis preparation 1s (10 ECTS)
<b>Sem.</b>	<b>I</b>	<b>II</b>	<b>III</b>

Allowable deficit of ECTS credits after each semester **15** credits