

# ATOMIZATION AND PULVERIZATION MECHANISMS

<b>1</b>	Course Title:	ATOMIZATION AND PULVERIZATION MECHANISMS	
<b>2</b>	Course Code:	MAK6226	
<b>3</b>	Type of Course:	Optional	
<b>4</b>	Level of Course:	Third Cycle	
<b>5</b>	Year of Study:	1	
<b>6</b>	Semester:	2	
<b>7</b>	ECTS Credits Allocated:	6.00	
<b>8</b>	Theoretical (hour/week):	3.00	
<b>9</b>	Practice (hour/week):	0.00	
<b>10</b>	Laboratory (hour/week):	0	
<b>11</b>	Prerequisites:	-	
<b>12</b>	Language:	Turkish	
<b>13</b>	Mode of Delivery:	Face to face	
<b>14</b>	Course Coordinator:	Prof. Dr. A.ALPER ÖZALP	
<b>15</b>	Course Lecturers:		
<b>16</b>	Contact information of the Course Coordinator:		
<b>17</b>	Website:		
<b>18</b>	Objective of the Course:	Atomization and pulverization mechanisms will be considered at scientific level and discussed its integration with novel industrial systems.	
<b>19</b>	Contribution of the Course to Professional Development:	In this course atomization and pulverization mechanisms will be considered at scientific level and discussed its integration with novel industrial systems.	
<b>20</b>	Learning Outcomes:		
		<b>1</b>	Atomization and pulverization mechanisms will be outlined in detail.
		<b>2</b>	The influences of structural and fluid properties on atomization and pulverization mechanisms will be determined.
		<b>3</b>	Information on the aims and contents of the related scientific research will be given.
		<b>4</b>	The aim in applying in novel industrial systems will be determined.
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<b>21</b>	Course Content:		
		<b>Course Content:</b>	
Week	Theoretical	Practice	
<b>1</b>	Introduction to atomization.		
<b>2</b>	Basics of mass and momentum transfer in atomization mechanism.		

<b>3</b>	Basics of heat transfer in atomization mechanism.	
<b>4</b>	Investigation of engineering designs involving atomization mechanism.	
<b>5</b>	Literature based approaches for research applications.	
<b>6</b>	Literature based approaches for research applications.	
<b>7</b>	Evaluation of multi-disciplinary fluid flow platforms involving atomization mechanism.	
<b>8</b>	Introduction to pulverization.	
<b>9</b>	Basics of mass and momentum transfer in pulverization mechanism.	
<b>10</b>	Basics of heat transfer in pulverization mechanism.	
<b>11</b>	Investigation of engineering designs involving pulverization mechanism.	
<b>12</b>	Literature based approaches for research applications.	
<b>13</b>	Literature based approaches for research applications.	
<b>14</b>	Evaluation of multi-disciplinary fluid flow platforms involving pulverization mechanism.	
<b>22</b>	Textbooks, References and/or Other Materials:	Atomization and Sprays By Arthur H. Lefebvre, Vincent G. McDonell SBN 9781498736251 Published March 30, 2017 by CRC Press
<b>23</b>	Assesment	
<b>TERM LEARNING ACTIVITIES</b>		<b>NUMBE R</b>
Midterm Exam		0
Quiz		0
Home work-project		2
Final Exam		1
Total		3
Contribution of Term (Year) Learning Activities to Success Grade		40.00
Contribution of Final Exam to Success Grade		60.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		Questions Related to The Technical Background of The Course Are Given
<b>24</b>	<b>ECTS / WORK LOAD TABLE</b>	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	3.00	42.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	7.00	98.00
Homeworks	2	2.00	4.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	0	0.00	0.00
Others	1	34.00	34.00
Final Exams	1	2.00	2.00
Total Work Load			180.00
Total work load/ 30 hr			6.00
ECTS Credit of the Course			6.00

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	5	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	5	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0
ÖK3	5	5	5	5	0	0	5	0	0	5	0	0	0	0	0	0
ÖK4	5	5	5	5	0	0	0	0	5	0	0	0	0	0	0	0
<b>LO: Learning Objectives PQ: Program Qualifications</b>																
<b>Contribution Level:</b>	<b>1 very low</b>		<b>2 low</b>			<b>3 Medium</b>			<b>4 High</b>			<b>5 Very High</b>				