

# CURRICULUM

EDUCATIONAL AND QUALIFICATION DEGREE: MASTER  
 COURSE OF STUDY: CORE DRILLING ENGINEERING  
 VOCATIONAL FIELD: 5.8. EXPLORATION, MINING, AND PROCESSING OF MINERALS

FORM OF STUDY: FULL-TIME  
 DURATION OF STUDY: 1.5 year  
 Duration of the semester: 15 weeks

Year	Semester	N.	Course unit code	Full name of the course unit (course projects, practical trainings)	Form of control	Teaching hours (weekly)		Teaching hours per type of seminars			Total	Credits	
						L	S	S	Lab	Pr			
First	First	1	162119	Well Design ( Oil and Gas Drilling)	E	3	3	3	-	-	90	8	
		2	162120	Borehole Design (Core Drilling)	E	3	3	3	-	-	90	8	
		3	162133	Water well and Geotechnical well Design	E	2	2	2	-	-	60	5	
		4A	162250	Drilling Fluids and Cement Slurries for Core, Geotechnical and Water-well Drilling	E	2	2	2	-	-	60	4	
		4B	162232	Drilling Optimization	E	2	2	2	-	-	60	4	
		5	162134	Underground Drilling	E	2	2	2	-	-	60	5	
	<b>Overall for the 1st semester:</b>					<b>5</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>-</b>	<b>-</b>	<b>360</b>	<b>30</b>
	Second	6	162124	Computer application in drilling and petroleum engineering	TO		4		4	-		60	6
		7	162135	Special technologies and tools for core drilling	E	3	3	3	-	-	90	8	
		8	142142	Well logging	E	3	3	3	-	-	90	8	
		9	162131	Directional and Multilateral Drilling	E	3	3	3	-	-	90	8	
		<b>Overall for the 2nd semester:</b>					<b>3+1</b>	<b>9</b>	<b>13</b>	<b>9</b>	<b>4</b>	<b>-</b>	<b>330</b>
	<b>Overall for the first year:</b>					<b>8+1</b>	<b>21</b>	<b>25</b>	<b>21</b>	<b>4</b>	<b>-</b>	<b>690</b>	<b>60</b>
	Second	Third	10	162125	Geothermal Drilling	E	3	3	3	-	-	90	8
11			172174	Health, Safety and Environment Protection	TO	2	1	1	-	-	45	3,5	
12			272144	Concession, Lidence and Patent Legislation	TO	2	1	1	-	-	45	3,5	
13			162146	Diploma Thesis Filed Practice - 30 days	-	-	-	-	-	180*	180*	-	
<b>Overall for the 3rd semester:</b>					<b>1+2</b>	<b>7</b>	<b>5</b>	<b>5</b>	<b>-</b>	<b>180*</b>	<b>360</b>	<b>15</b>	
<b>Diploma thesis preparation and defense:</b>					<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>15</b>	
<b>Overall for the second year:</b>					<b>1+2</b>	<b>7</b>	<b>5</b>	<b>5</b>	<b>-</b>	<b>180*</b>	<b>360</b>	<b>30</b>	
<b>OVERALL FOR THE FULL COURSE OF STUDY:</b>					<b>9+3</b>	<b>28</b>	<b>30</b>	<b>26</b>	<b>4</b>	<b>180*</b>	<b>1050</b>	<b>90</b>	
						<b>420</b>	<b>630/450+180*/</b>			<b>/870+180*/</b>			

## PARAMETERS OF THE CURRICULUM

Overall teaching hours: 1050/870+180\*, as follows:

- Lectures - 420 h.
- Seminars - 450 h.
  - Seminars – 390/345 h.
  - Lab practice – 60 h.
- Assessment - 180\* h.
  - Diploma thesis practice - 180\* h (30 days x 6 h.)

Abbreviations: E - exam; CA - continuous assessment; L - lectures; S - seminars; Lab – lab practice; S – seminar, CP – course project.