

**Course Requirements and Registration Priorities  
School of Mining and Geosciences, Spring 2020**

#	Abbr	Title	Cr(US)	Cr(ECTS)	PreRequisite	CoRequisite	AntiRequisite	1st priority registration	2nd priority registration	3rd priority registration	4th priority registration
<b>SMG</b>											
<b>Mining Engineering</b>											
1	MINE 201	Mineral Processing	3	6				Mining Engineering	Geology, Petroleum Engineering	SEDS, SMG, SSH, SoM	
2	MINE 507	Rock Excavation Methods	3	6				Mining Engineering			
3	MINE 508	Advanced Rock Mechanics	3	6				Mining Engineering			
4	MINE 509	Advanced Surface Mine Design	3	6				Mining Engineering			
5	MINE 510	Advanced Underground Mine Design	3	6				Mining Engineering			
6	MINE 691	Thesis II	15	30	MINE 690 Thesis I (4531) (P)			Mining Engineering			
7	MINE 702	Current Research Literature	4	8				Science, Engineering and Technology			
8	MINE 703	Advanced Mining Systems	4	8				Science, Engineering and Technology			
9	MINE 803	Advanced Geometallurgy	4	8				Science, Engineering and Technology			
10	MINE 806	Advanced Numerical Methods	4	8				Science, Engineering and Technology			
11	MINE 890-0	Thesis Research	0	0				Science, Engineering and Technology			
<b>Petroleum Engineering</b>											
12	PETE 202	Transport Phenomena	3	6	ENG 200 Engineering Mathematics III (Differential Equations and Linear Algebra) (5009) (C- and above) OR CHEM 101 General Chemistry I (113) (C- and above) OR CHEM 101L General Chemistry I lab (179) (C- and above)			Petroleum Engineering	SEDS, SMG, SSH, SoM		
13	PETE 203	Drilling Engineering with Laboratories	4	8	PETE 201 Fluid Mechanics and Thermodynamics (5120) (C- and above)			Petroleum Engineering	SEDS, SMG, SSH, SoM		
14	PETE 204	Reservoir Rock and Fluid Properties with Lab	4	8	PHYS 162 Physics II for Scientists and Engineers with Laboratory (173) (C- and above)			Petroleum Engineering	SEDS, SMG, SSH, SoM		

15	PETE 506	Advanced Reservoir Simulation	3	6				Petroleum Engineering	SEDS		
16	PETE 507	Advanced Reservoir Engineering	3	6				Petroleum Engineering	SEDS		
17	PETE 508	Advanced Production Engineering	3	6				Petroleum Engineering	SEDS		
18	PETE 600	Thesis I	6	12				Petroleum Engineering			
19	PETE 602	Research Seminar	3	6				Petroleum Engineering			
20	PETE 606	Advanced Enhanced Oil Recovery	3	6				Petroleum Engineering	SEDS		
21	PETE 610	Advanced Reservoir Geomechanics	3	6				Petroleum Engineering	SEDS		
22	PETE 702	Current Research Literature	4	8				Science, Engineering and Technology			
23	PETE 703	Advanced Reservoir Engineering	4	8				Science, Engineering and Technology			
24	PETE 803	Advanced Enhanced Oil Recovery	4	8				Science, Engineering and Technology			
25	PETE 890	Thesis Research	0	0				Science, Engineering and Technology			
<b>School of Mining and Geosciences</b>											
26	GEOL 101	Fundamentals of Geology	3	6				1 year UG SMG, Undeclared SMG	SEDS, SMG, SSH, SoM		
27	GEOL 204	Sedimentology and stratigraphy	3	6	GEOL 101 Fundamentals of Geology (4774) (D and above) OR GEOL 102 Fundamentals of Geology (4772) (D and above) AND GEOL 202 Geologic Maps and Cross-Sections (5123) (D and above)			Geology	Mining Engineering, Petroleum Engineering	SEDS, SMG, SSH, SoM	
28	GEOL 205	Paleontology	3	6	GEOL 101 Fundamentals of Geology (4774) (D and above) OR GEOL 102 Fundamentals of Geology (4772) (D and above)			Geology	Mining Engineering, Petroleum Engineering	SEDS, SMG, SSH, SoM	
29	GEOL 301	Sedimentary petrology	3	6	GEOL 101 Fundamentals of Geology (4774) (D and above) OR GEOL 202 Geologic Maps and Cross-Sections (5123) (D and above)	GEOL 202 Geologic Maps and Cross-Sections (5123) (D and above)		Geology	Mining Engineering, Petroleum Engineering	SEDS, SMG, SSH, SoM	
30	SMG 100	Introduction to Natural Resources Extraction	3	6				1 year UG SMG, Undeclared SMG	1 year UG SEDS, 1 year UG SSH	SEDS, SMG, SSH, SoM	
31	SMG 210	Strength of Materials	3	6				1 year UG SMG	SEDS, SMG, SSH, SoM		

32	SMG 520	Research Methods	3	6				Mining Engineering, Petroleum Engineering	GSB, GSE, GSPP, SEDS, SSH, SoM		
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