

School of Geosciences
Core Areas for MS Geology Students

Core Area #1: Geochemistry

GEOL 4633	Hydrogeology	K. Dee
GEOL 5003	Diagenesis	Elmore
GEOL 5223	Principles of Geochemistry	M. Elwood Madden
GEOL 5343	Stable Isotope Geochemistry	Engel
GEOL 5544	Minerals and the Environment	A. Elwood Madden
GEOL 5853	Groundwater Seepage (CEES 5864)	Civil Engineering Fac.
GEOL 6103	Petroleum Geochemistry	Liu
GEOL 6633	Aqueous Geochemical Modeling	K. Dee
GEOL 5970	Biogeochem of the Critical Zone	Hodges
GEOL 6970	Exploring Planetary Geology	M. Elwood Madden
GEOL 6970	Clay Mineralogy	A. Elwood Madden
GEOL 6970	Organic Geochemistry	Liu

Core Area #2: Geophysics

GEOL 4233	Subsurface Methods	Pranter
GEOL 4553	Introduction to Seismology	Jiang
GPHY 4874	Seismic Exploration	Bedle
GPHY 5020	Computational Geophysics	Jiang
GPHY 5364	Paleomagnetism	Elmore
GPHY 5413	Global Geophysics	Jiang
GPHY 5513	3D Seismic Interpretation	Bedle
GPHY 5523	3D Seismic Processing	---
GPHY 5533	Quant Seismic Interpretation	Bedle
GPHY 5613	Introduction to Seismic Stratigraphy	Pigott
GPHY 5864	Gravimetric and Magnetic Exploration	Behm
GPHY 5970	Fractures, Faults, Earthquakes	Carpenter
GPHY 5970	Advanced Seismic Exploration	Bedle
GPHY 5970	Remote Sensing Crustal GeoPhys	Jiang
GPHY 5970	Electrical Environmental Geophysics	Saneiyani
GPHY 5970	Near-Surface Geophysics	Saneiyani
GPHY 6873	Seismic Modeling and Migration	---
GPHY/GEOL 6970	Multidisciplinary Exploration	Bedle
GPHY 6970	Work Flows in 3D Seismic	Bedle
GEOL 6970	Catastrophic Sedimentation	Dulin

Core Area #3: Igneous and Metamorphic Petrology

GEOL 5923	Pegmatites	London
GEOL 6970	Exploring Planetary Geology	M. Elwood Madden
GEOL 6970	Clay Mineralogy	A. Elwood Madden

Core Area #4: Paleontology and Paleobiology

GEOL 5204	Vertebrate Paleobiology	--
GEOL 5213	Earth System History	M. Soreghan
GEOL 5413	Paleobotany	Lupia
GEOL 5513	Evolutionary Paleobiology	Westrop
GEOL 5533	Earth's Past Climate	L. Soreghan/Dulin

Core Area #5: Sedimentary Geology

GEOL 4133	Petroleum Geology	Pranter
GEOL 4233	Subsurface Methods	Pranter
GEOL 4633	Hydrogeology	K. Dee
GPHY 4874	Seismic Exploration	Bedle
GEOL 5003	Diagenesis	Elmore

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GEOL 5113	Depositional Systems and Stratigraphy	L. Soreghan
GEOL 5173	Clastic Facies	Elmore
GEOL 5213	Earth System History	M. Soreghan
GEOL 5353	Carbonates and Sequence Stratigraphy	L. Soreghan
GEOL 5363	Carbonate Geology	Pigott
GEOL 5533	Earth's Past Climate	L. Soreghan/Dulin
GEOL 5733	Sedimentation and Tectonics	M. Soreghan
GEOL 5813	Basin Analysis Oil and Gas	Pigott
GEOL 5853	Groundwater Seepage (CEES 5864)	Civil Engineering Fac.
GPHY 5613	Introduction to Seismic Stratigraphy	Pigott
GPHY 5970	Advanced Seismic Exploration	Bedle
GEOL 5970	Turbidite Petroleum Geology	Slatt
GEOL 5970	Introduction to Unconventional Resource Shales	Slatt
GEOL 5970	Advanced Unconventional Resource Shales	Slatt
GEOL 5970	Genesis and Properties of Soils	Hodges
GEOL 6970	Catastrophic Sedimentation	Dulin
GEOL 6970	Reservoir Characterization	Pranter
GEOL 6970	Reservoir Modeling/Simulation	Pranter
GEOL 6970	Reservoir Characterization and Modeling	Pranter
GEOL 6970	Clay Mineralogy	A. Elwood Madden
GPHY/GEOL 6970	Multidisciplinary Exploration	Bedle
GPHY 6970	Work Flows in 3D Seismic	Bedle

Core Area #6: Structural Geology

GPHY 4874	Seismic Exploration	Bedle
GEOL 5733	Sedimentation and Tectonics	M. Soreghan
GPHY 5970	Advanced Seismic Exploration	Bedle
GEOL 6970	Structural Geology in Petroleum and Exploration Production I	Mitra
GEOL 6970	Structural Geology in Petroleum Exploration and Production II	Mitra
GPHY 6970	Fractures, Faults, Earthquakes	Carpenter
GPHY/GEOL 6970	Multidisciplinary Exploration	Bedle
GPHY 6970	Work Flows in 3D Seismic	Bedle

Core Area #7: Environmental Geoscience and Hydrology

GEOL 4633	Hydrogeology	K. Dee
GPHY 4874	Seismic Exploration	Bedle
GEOL 5633	Field Methods in Hydrogeology	K. Dee
GEOL 5223	Principles of Geochemistry	M. Elwood Madden
GEOL 5343	Stable Isotope Geochemistry	M. Engel
GEOL 5544	Minerals and the Environment	A. Elwood Madden
GPHY 5970	Near-Surface Geophysics	Saneiyani
GPHY 5970	Advanced Seismic Exploration	Bedle
GEOL 5970	Biogeochem of the Critical Zone	Hodges
GPHY 5970	Remote Sensing Crustal GeoPhys	Jiang
GPHY 5970	Electrical Environmental Geophysics	Saneiyani
GEOL 5970	Genesis and Properties of Soils	Hodges
GEOL 6633	Aqueous Geochemical Modeling	K. Dee
GEOL 6970	Clay Mineralogy	A. Elwood Madden