Petroleum Engineering Approved Technical Electives
2016-18 catalog

12 hours of technical electives are required for the PEN BS degree
Up to four courses from section I can be taken for credit, up to 1 course from section II can be taken for credit

SECTION I
PGE 323M Reservoir Engineering III (Reservoir)
PGE 364 Natural Gas Engineering (Production, Reservoir)
PGE 372 Advance Drilling & Well Completion (Drilling, Production)
PGE 376 Special Problems in Petroleum/Geosystems Engineering (depends on research area) (always available)
PGE 378 Applied Reservoir Characterization
PGE 379 Wellbore to Reservoir Geomechanics: Applications from Offshore to Unconventionals
PGE 379 Advanced Well Construction
PGE 379.17 Applied Subsurface Geology (Formation Evaluation, Reservoir)
PGE 379.10 Artificial Lift (Production)
PGE 379.12 Blowout Prevention and Control (Drilling)
PGE 379.11 Facilities Management (Production)
PGE 379.13 Fundamentals of Enhanced Oil Recovery (Reservoir)
PGE 379.16 Hydraulic Fracture and Evaluation (Drilling, Production, Reservoir)
PGE 379 Wellbore Mechanics and Managed Pressure Drilling (Drilling)
PGE 679HA Undergraduate Honors Thesis, must be in honors program (always available)
PGE 679HB Undergraduate Honors Thesis, must be in honors program (always available)

Some PGE graduate courses can be taken as technical electives. Students are required to have approval to take a graduate course for undergraduate credit. The application is found at http://www.engr.utexas.edu/undergraduate/forms/graduatecourse.

SECTION II: Courses not on this list must be preapproved
BGS 370.1 Energy, Technology & Policy (fall)
C E 370K Environmental Sampling and Analysis (?)
C E 374K Hydrology (fall)
C E 374L Groundwater Hydrology (?)
COE 321K Computational Methods for Structural Analysis
C S 323E Elements of Scientific Computing
C S 367 Numerical Methods
FIN 320F Foundations of Finance (available summer, fall, spring)
GEO 330K Energy Exploration (available some springs)
GEO 346C Introduction to Physical and Chemical Hydrology (spring)
GEO 376L Field Methods in Groundwater Hydrology (summer)
GEO 376M Chemical Hydrology (spring)
GEO 376S Physical Hydrology (fall)
GEO 377K Applied Karst Hydrology (spring)
GEO 420K Introduction to field and Stratigraphic Methods (spring)
GEO 468 Geophysics for Geology Majors (spring)
GEO 476K Groundwater Hydrology (fall)
IBF 320f Foundations of International Business (available summer, fall, spring)
LEB 320F Foundations of the Legal Environment of Business (available summer, fall, spring)
LEB 370 Oil and Gas Law (summer)
M 340L Matrices and Matrix Calculation (fall, spring, summer?)
M 341 Linear Algebra and Matrix Theory (fall, spring)
M 346 Applied Linear Algebra (fall, spring)
M 348 Scientific Computation in Numerical Analysis
M 368K Numerical Analysis (spring)
M 427L Advanced Calculus for Applications II (fall, spring)
MAN 320F Foundations of Organization Behavior and Administration (available summer, fall, spring)
MAN 335 Operations Management
MAN 366L Operations Research
PGE 371 Energy Finance (spring 2018) Malik