

McGrail, B. P., S. Ahmed, H. T. Schaef, A. T. Owen, and T. Zhu. "Gas Hydrate Property Measurements in Porous Sediments With Resonant Ultrasound Spectroscopy." *Journal of Geophysical Research*, Vol.112, BO 5202, 5 May, 2007.

f. Successful Partnerships.

The PETE program has greatly benefited by the support from major oil companies, service companies, as well as state and federal government agencies in Alaska. Petroleum engineering, through the Petroleum Development Laboratory (PDL) has been able to form research partnerships with the following over the past three years: 1) BP Exploration (Alaska); 2) ConocoPhillips Alaska; 3) US Department of Energy- Arctic Energy Office; 4) State Division of Geological and Geophysical Survey, DNR; 5) Petrotechnical Resources of Alaska.

PDL has formed a successful research partnership with Kitami Institute of Technology, Kitami Japan for Methane Hydrate research. Similar partnerships are being developed with Gubkin State University for Oil and Gas, Moscow, Russia, and Chinese Ministry of Land Resources, Beijing, China.

g. Specialized Accreditation.

The master’s level degree program is not accredited by any specialized accreditation.

Outcome Assessment Plan (M.S. in Petroleum Engineering)

Program Educational Objectives	Assessment Tools
I. Admit high caliber students who have strong desire to conduct research on challenging opportunities in Alaska and the world.	<ul style="list-style-type: none"> ▪ UG GPA, GRE Scores, TOEFL scores ▪ Student Area of Research Interest Form ▪ Statement of Purpose ▪ Letters of Recommendation ▪ Work experience ▪ UG Institution and degree
II. Provide students with broad knowledge of the advanced principles of Petroleum Engineering and their application to global challenges, including the knowledge and skills required to design and analyze Petroleum Engineering Problems, taking into account, safety, environmental, and societal impacts.	<ul style="list-style-type: none"> ▪ Participation in national student paper contests ▪ Membership and participation in SPE/AADE ▪ Attendance at SPE/AADE Seminar’s ▪ Journal papers and conference presentations ▪ UAF GPA
III. Provide students with the skills necessary to perform in the multi-disciplinary environment of the 21st Century.	<ul style="list-style-type: none"> ▪ Involvement in multidisciplinary research ▪ Student placement (industry type) ▪ Alumni survey ▪ IAB survey ▪ Exit survey

	<ul style="list-style-type: none">▪ UAF GPA, Number of awards, journal publications/presentations at conferences
IV. Provide students with appreciation for the value of continuing professional development in maintaining their professional competence.	<ul style="list-style-type: none">▪ Evidence of continuing education▪ Employer survey▪ Alumni survey▪ Exit survey