**LETTER OF NOTIFICATION – 3**

NEW OPTION, EMPHASIS or CONCENTRATION

(Maximum 18 semester credit hours of theory courses and 6 credit hours of practicum courses)

1. Institution submitting request: University of Arkansas Fayetteville

1. Contact person/title: Dr. Terry Martin, Vice Provost for Academic Affairs
2. Phone number/e-mail address: (479) 575-2151/tmartin@uark.edu
3. Proposed effective date: Fall 2016
4. Title of existing degree program:

(Indicate if the degree listed above is approved for distance delivery)  
Bachelor of Science in Business Administration

1. CIP Code: 52.0801
2. Degree Code: 2580
3. Proposed name of new option/concentration/emphasis: Energy Finance Concentration
4. Reason for proposed action:   
   There is considerable interest by companies in the energy and energy service industries, and among banks and accounting firms supporting these industries, in finance students who are knowledgeable in energy finance and accounting, and, ideally, geology – especially as it pertains to oil and gas exploration and production. Long-term growth in energy and energy-related industries, energy price volatility and associated threats, opportunities, and need to control risk, has created a need for more and more of our best students to serve and support this industry. We are already placing increasing numbers of finance students as interns and permanent hires at energy companies like ExxonMobil, Shell/Royal Dutch Petroleum, ConocoPhillips, Phillips 66, Halliburton, Schlumberger, National Oilwell Varco, Helmerich and Payne, Compressco, BHP Billiton, Chesapeake Energy, Devon Energy, Apache Corporation, and others, and at banks and accounting firms supporting these industries, including Stephens Inc., Sumitomo Mitsui Banking Corporation, Credit Suisse, Raymond James Financial, Deloitte, PwC, CGG. We also hope to increase placements at Murphy USA and Murphy Oil, both based in El Dorado, AR. Executives at these companies are telling us demand for graduates from these types of programs far exceeds supply.
5. New option/emphasis/concentration objective:

To support demand from business and industry in the areas of energy and energy services and finance.

1. Provide the following:
   1. Curriculum outline - List of courses in new option/concentration/emphasis – Underline required courses

University Core Requirement:  
GEOL 1113/111L General Geology and Lab  
  
General Education Elective:  
GEOS 4253 Petroleum Geology

Finance Major Requirements (9 hours):  
FINN 3013 Financial Analysis  
FINN 3053 Financial Markets and Institutions  
FINN 3703 International Finance

Energy Finance Concentration (15 hours):

Required courses (9 hours)

FINN 3103 Financial Modeling

FINN 4173 Energy Finance   
FINN 449V/594V Energy Accounting

Choose six hours from the following courses (6 hours):

FINN 3063 Investments

FINN 3603 Corporate Finance

FINN 4133 Advanced Investments  
FINN 4233 Advanced Corporate Finance  
FINN 3163 Fixed Income Securities I  
FINN 3173 Fixed Income Securities II  
FINN 4143 Portfolio Management I

FINN 4153 Portfolio Management II

Note: If a student selects the Energy Finance Concentration, they must take ACCT 3723 and ACCT 3753 as junior/senior business electives in their junior year.

Note: these students will also be involved in management of the David Carter Adams Energy Sector student managed investment fund, and participate in the premiere Energy Risk Professional (ERP) certification program.

* 1. Provide degree plan that includes new option/emphasis/concentration

First Year

Fall

ENGL 1013 Composition I

MATH 2053 Finite Mathematics

COMM 1313 Public Speaking

WCOB 1111 Freshman Business Connection

BLAW 2013 The Legal Environment of Business

ISYS 1120 Computer Competency Requirement

U.S. History or Political Science

Total: 16 hours

Spring

ENGL 1023 Composition II

ACCT 2013 Accounting Principles

WCOB 1033 Data Analysis and Interpretation

ECON 2023 Principles of Microeconomics

GEOL 1133/1131L Environmental Geology and Lab

Total: 16 hours

Second Year

Fall

ACCT 2023 Accounting Principles II

ISYS 2103 Business Information Systems

MATH 2043 Survey of Calculus

ECON 2103 Principles of Macroeconomics

Social Science

Total: 15 hours

Spring

SCMT 2103 Introduction to Supply Chain Management

MGMT 2103 Managing People and Organizations

FINN 3043 Principles of Finance

Fine Art/Humanities

Natural Science

Total: 16 hours

ALL pre-business requirements should be met by end of term

Third Year

Fall

FINN 3013 Financial Analysis

MKTG 3433 Introduction to Marketing

FINN 3103 Financial Modeling

ACCT 3723 Intermediate Accounting I

GEOL 4253 Petroleum Geology

Total: 15 hours

Spring

ACCT 3753 Intermediate Accounting II   
 FINN 3053 Financial Markets and Institutions  
 FINN 4173 Energy Finance

MGMT 3013 Strategic Management

Fine Art/Humanities

Total: 15 hours

Fourth Year

Fall

ACCT 449V Energy Accounting  
 FINN 3703 International Finance

Junior/Senior Business Electives  
Finance Elective

General Education Electives   
Total: 15 hours

Spring

Finance Elective

General Education Electives (6 hours)

Junior/Senior Business Electives

Total: 12 hours

Total Units in Sequence: 120

c. Total semester credit hours required for option/emphasis/concentration

(Option range: 9–24 semester credit hours) 12-16 hours

d. New courses and new course descriptions

FINN 4173 Energy Finance

This course is a comprehensive introduction to the field of Energy Finance, i.e. the

application of Finance principles to energy, energy-service, and related industries.

Topics include: (1) physical fossil fuel markets; (2) physical electricity markets;

(3) financially traded energy products; and (4) credit, counterparty, and country

risk. Pre-requisites: FINN 3013 and 3043; Pre- or Co-requisite: ACCT 3723.

ACCT 449V Energy Accounting

This course covers the basic issues of accounting for energy issues including hydrocarbon production, processing and sales as well as accounting for wind, solar and other alternative energy sources. Financial reporting issues such as ‘full cost versus successful efforts accounting’ are covered as are oil and gas specific issues such as joint interest accounting. Much of the class is theoretical in nature. We will cover national and international energy policy, relevant public policy, environmental and geological issues and have guest speakers on environmental law, climate and economic topics relevant to energy topics.

e. Goals and objectives of program option

This college major concentration is designed to give finance majors a foundation in 1) energy finance and accounting theory and application; 2) with an intensive corporate and/or investments finance grounding; and 3) focus on meeting the current and future practical needs of the energy and energy service industries, and banking and accounting firms that support these industries, including dealing with changing technology, volatile prices, and risk.

Key program components include –

* Physical fossil fuel market analytics – Oil, gas, coal, and biofuel exploration and production, transportation, refining, and marketing.
* Physical electricity markets – Supply and demand for electricity, and the integration of wind and solar power into electric power grids.
* Financially traded energy products – Mitigation of price, volatility, credit, counterparty, and country risk.
* Accounting for energy issues – Hydrocarbon production, processing, sales, alternative energy, ‘full cost versus successful efforts energy accounting’, joint interest, and energy policy accounting.

f. Expected student learning outcomes

Students in this concentration will gain knowledge of and hands-on experience in the following:

* Fundamentals of energy finance and accounting modeling and interpretation
* Corporate and/or investment finance concepts
* Data analysis

g. Documentation that program option meets employer needs  
Attached.

h. Student demand (projected enrollment) for program option  
 2015-2017 -- Approximately 30-35 students per year

2017 + -- additional 30 students per year

i. Name of institutions offering similar program or program option and the institution(s) used as a model to develop the proposed program option

With industry input given priority in program development, a mix of undergraduate and graduate programs at the following institutions were used in the development of this concentration: Duke University; University of Texas at Austin; Southern Methodist University; Rice University; Oklahoma University; University of Houston; Oklahoma State University; University of Tulsa; University of Aberdeen; University of Calgary.

1. Institutional curriculum committee review/approval date: December 9, 2015
2. Will the new option/emphasis/concentration be offered via distance delivery? If yes, indicate mode of distance delivery:   
   No
3. Explain in detail the distance delivery methods/procedures to be used:
4. Specify the amount of additional costs required for program implementation, the source of funds, and how funds will be used.

Additional resources are not needed beyond the faculty needed to teach the courses. We are deleting the Personal Financial Management concentration in Finance along with the course FINN 4013, Seminar in Personal Financial Planning. The new course we are adding is FINN 4173, Energy Finance and we are modifying ACCT 449V, Energy Accounting, which has previously been taught at the graduate level as a Special Topics course. It will now become a dual level course with both graduate and undergraduate students enrolled. The major will utilize the students’ major courses, and science elective courses at the University of Arkansas (geology and petroleum geology). The courses will rely on the technologies available on campus. Finance faculty needs will be met through existing resources. Accounting faculty needs will be addressed through existing resources. There will be no additional cost required for program implementation.

1. Provide additional program information if requested by ADHE staff.

President/Chancellor Approval Date:

Board of Trustees Notification Date:

Chief Academic Officer Date: