

## Guidelines for Approval of VEE Courses and Educational Experiences Effective July 1, 2018 – *Updated July 19, 2018*

The following guidelines are effective as of July 1, 2018 for the three Validation by Educational Experience (VEE) requirements. They are used by the VEE Administration Committee to determine whether or not specific courses or educational experiences are appropriate to fulfill the VEE requirements. To seek approval for a course, the [VEE Application for Course Evaluation](#) must be submitted along with the required documentation. If a course/educational experience is approved, it will be added to the [Directory of Approved VEE Courses/Experiences or the Alternate VEE Options list](#).

### VEE–Accounting and Corporate Finance

While this material may be entirely covered in a course or courses that cover both topics, it is more likely that separate courses will be used for accounting and for corporate finance. If distinct courses are used, the application should indicate which are for the accounting topic and which are for the corporate finance topic. The typical corporate finance program covers the topics below in one semester with an introductory course. Should the topics be split across two semesters or courses, both will be required. Most of the topics listed below should be covered:

#### Accounting

- Describe the basic principles of personal and corporate taxation and the taxation of investments held by institutions.
- Explain why companies are required to produce annual reports and accounts.
- Explain fundamental accounting concepts and terms, and describe the main sources of accounting regulation.
- Explain the purpose and interactions between the income statement, balance sheet, and cash flow statements.
- Explain the value of reporting on environmental, social and economic sustainability and other alternatives to traditional financial reporting, and describe possible contents of such reports.
- Explain the basic structure of company and group accounts.
- Explain the purpose of the main components of company accounts and interpret them.
- Construct simple statements of financial position and profit or loss.
- Calculate and interpret financial and accounting ratios.

#### Corporate Finance

- Explain the characteristics of various forms of equity capital from the point of view of the issuer and the investor.
- Explain the characteristics of various forms of long-term debt capital from the point of view of the issuer and the investor.

- Explain the characteristics of various forms of short- and medium-term financing from the point of view of the issuer and the investor.
- Calculate weighted-average cost of capital.
- Explain the main methods of capital budgeting.
- Calculate a project's investment return.

## VEE–Economics

Typically, the VEE requirement for economics will be met if a candidate has completed two economics courses, one course covering microeconomics and the other covering macroeconomics. If distinct courses are used, the application should indicate which are for the microeconomics topic and which are for the macroeconomics topic. Most of the topics listed below should be covered:

### Microeconomics

- Explain the concept of utility and how rational utility maximizing agencies make consumption choices.
- Explain the elasticity of supply and demand and the effects on a market of the different levels of elasticity.
- Explain the interaction between supply and demand and the way in which equilibrium market prices are achieved.
- Explain various pricing strategies that can be used by firms.
- Explain the core economic concepts involved in choices made by businesses with respect to short-run and long-run investment and production choices.
- Explain competitive markets and how they operate.
- Explain profitability in markets with imperfect competition.

### Macroeconomics

- Explain basic macroeconomic measures (e.g., GDP) used to compare the economies of countries.
- Describe the structure of public finances for an industrialized country.
- Explain the effect of fiscal and monetary policy on the economy, including the effect on financial markets.
- Explain the role of international trade, exchange rates and the balance of payments in the economy.
- Explain the effect of savings and consumption rates on the economy.
- Explain the major factors affecting the level of interest rates, the rate of inflation, the exchange rate, the level of employment and the rate of growth for an industrialized country.
- Describe the function of money in the economy.
- Explain the relationship between money and interest rates.
- Explain how macroeconomic policies affect businesses.

## VEE—Mathematical Statistics

Typically, the VEE requirement for mathematical statistics will be covered by a one semester course that follows the probability course used to cover the learning objectives for Exam P. This course should be calculus-based. All of the topics listed below should be covered:

- Explain the concepts of random sampling, statistical inference and sampling distribution, and state and use basic sampling distributions.
  - Describe the main methods of estimation and the main properties of estimators, and apply them. Methods include matching moments, percentile matching, and maximum likelihood, and properties include bias, variance, mean squared error, consistency, efficiency, and UMVUE.
  - Construct confidence intervals for unknown parameters, including the mean, differences of two means, variances, and proportions.
  - Test hypotheses. Concepts to be covered include Neyman-Pearson lemma, significance and power, likelihood ratio test, and information criteria. Tests should include for mean, variance, contingency tables, and goodness-of-fit.
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## Previously Required VEE Topics

The following are no longer required VEE topics, but some candidates may be eligible to obtain VEE transition credit for these previously required topics.

- Candidates who earn **VEE Corporate Finance** credit by completing an approved course(s) prior to July 1, 2019 will receive, upon claiming that credit, transition credit for the complete Accounting and Finance requirement. Note that it is not required that the credit be claimed by this date. Candidates who have not earned Corporate Finance credit by July 1, 2019 must earn and claim both the Accounting and Finance requirements of this topic. In line with the general principles of VEE, Accounting courses offered prior to July 1, 2019 can be submitted. If approved, candidates who earned Accounting credit prior to this date can claim it. **Applications for VEE Corporate Finance course approval may still be made, however, only courses offered prior to July 1, 2019 will be accepted.**
- **VEE Applied Statistics** credit earned prior to July 1, 2018 can be claimed at any time. Under the transition rules, such credit then becomes credit for the new VEE Mathematical Statistics and the Statistics for Risk Modeling Exam. Candidates who have not earned this credit prior to July 1, 2018 must pass the Statistics for Risk Modeling Exam and, unless they passed Exam C prior to July 1, 2018, will also be required to complete the VEE Mathematical Statistics requirement. **Applications for VEE Applied Statistics course approval may still be made, however, only courses offered prior to July 1, 2018 will be accepted.**

## VEE—Applied Statistical Methods

Courses that meet this requirement may be taught in the mathematics, statistics, or economics department, or in the business school. In economics departments, this course may be called

Econometrics. The material could be covered in one course or two. The mathematical sophistication of these courses will vary widely and all levels are intended to be acceptable. Some analysis of real data should be included. All of the topics listed below should be covered:

### **Regression analysis**

- Least square estimates of parameters
- Single linear regression
- Multiple linear regression
- Hypothesis testing and confidence intervals in linear regression models
- Testing of models, data analysis and appropriateness of models

### **Time series/forecasting**

- Linear time series models
- Moving average, regression-based and/or ARIMA models
- Estimation, data analysis and forecasting with time series models
- Forecast errors and confidence intervals

## **VEE—Corporate Finance**

The typical corporate finance program covers the topics below in two semesters with an introductory course followed by a more advanced semester. If the second course covers most of the topics, then only the second course will be required. Where the topics are split across two semesters or courses, both will be required. The exceptional case where the corporate finance topics are covered in only one course, with no finance prerequisite, will also be considered, however, this will typically be at a more advanced level than a course designed for general business students. Most of the topics listed below should be covered:

- Definitions of key finance terms: stock company; capital structure
- Key finance concepts: financing companies; characteristics and uses of financial instruments; sources of capital; cost of capital; dividend policy; personal and corporate taxation
- Factors to be considered by a company when deciding on its capital structure and dividend policy
- Impact of financial leverage and long/short term financing policies on capital structure
- Characteristics of the principal forms of financial instruments issued or used by companies, and the ways in which they may be issued
- How a company's cost of capital relates to the investment projects the company wishes to undertake
- Definitions of key finance terms: financial instruments – bond, stock, basic options (calls, puts); dividends; price to earnings ratio
- Structure of a stock company and the different methods by which it may be financed
- Calculate value of stocks
- Measures of financial performance: balance sheet; income statement; statement of cash flows; financial ratios (e.g. leverage, liquidity, profitability, market value ratios); net present value: the payback, discounted payback models; internal rate of return and profitability index models

- Assessment of financial performance using various measures: balance sheet; income statement; statement of cash flows, financial ratios (e.g. leverage, liquidity, profitability, market value ratios); net present value; the payback, discounted payback models; internal rate of return and profitability index models