NATIONAL ASSOCIATION FOR BUSINESS ECONOMICS
CERTIFIED BUSINESS ECONOMIST (CBE)

CANDIDATE INFORMATION GUIDE

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National Association for Business Economics, Certified Business Economist (CBE)
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WHAT IS THE CERTIFIED BUSINESS ECONOMIST (CBE)?

The Certified Business Economist™ (CBE) program is the certification in applied economics and data analytics. Candidates who complete the requirements of the CBE program earn the CBE designation, a symbol that documents your professional accomplishments, experience, and abilities.

The CBE program was designed by experts in the profession to fill the considerable gap that exists between an academic education in economics and the skills and knowledge required for a successful career as a practitioner. Course content ranges from applied econometrics to verbal communication, presentation skills, and writing proficiency.

CBE's gain distinct professional advantages as recognized leaders in the field of economics. Certification represents an opportunity for practitioners to demonstrate to others (the public, employers, customers, clients, and their peers) that they have achieved a level of competence in the field.

CBE BODY OF KNOWLEDGE

Leading practitioners have collaborated to develop a Body of Knowledge for the profession that includes the competencies that employers, clients, and other stakeholders value. NABE strives to achieve worldwide excellence in the practice of business economics through the identification and structuring of competencies that are widely recognized and consistently applied.

Body of Knowledge

NABE has developed a library of competencies for the profession known collectively as the Body of Knowledge. These competencies are grouped into eight themes listed below and reflect the expansive nature of the business economist field. As the profession grows and changes, the suite of NABE Competencies will evolve accordingly.

- Applied Econometrics
- Writing Skills
- Economic Measurement
- Strategy and Managerial Decision Making
- Communication and Presentation Skills
- Statistics and Data Analytics
- Theoretical Macroeconomics
- Theoretical Microeconomics

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CBE COMPETENCIES

A competency is a fundamental knowledge, ability, or expertise in a specific subject area or skill set that is established by a consensus-based process that provides guidelines, rules, and characteristics for the topic it is covering. Presently, NABE's library of competencies is grouped into seven categories based on knowledge areas identified by member surveys and competency committees.

NABE competencies are developed through the following process:

1. Identification and Creation: Each competency is created and updated by a group of volunteer NABE members who are also subject matter experts.

2. Competency Approval: The CBE Steering Committee – the governing body for the CBE – approves all competencies and related support materials and has final approval in their incorporation into the CBE program. The Steering Committee is made up of leading practitioners appointed by the NABE Board of Directors.

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CBE REQUIREMENTS

Candidates are required to meet a prescribed set of standards to attain the CBE certification. Candidates must show evidence of having completed the following requirements:

Certification Exam

Candidates must take and pass the CBE Exam. The exam covers the following six content areas:

- Applied Econometrics
- Business Applications of Statistics and Data Analytics
- Economic Measurement
- Economics of Strategy and Managerial Decision Making
- Macroeconomics
- Microeconomics

Membership

Candidates must be a member in good standing with the National Association for Business Economics (NABE).

Experience

Candidates must have two years of work experience in applied business economics or in a related field.

Education

Candidates must have at least a four-year degree.

Curriculum Requirements

Candidates must complete NABE's *Communication and Presentation Skills for Business Economists and Analysts* and *Writing Skills for Business Economists and Analysts* certificate courses or courses deemed equivalent by NABE.

Ethics

CBE candidates must be of sound moral character and subscribe to an ethical standard of doing his or her best work in support of the community or client served and the public good. CBE candidates must make a conscious effort to avoid harm to others, especially any potential harm to the most vulnerable members of society. Candidates must adhere to the NABE Code of Ethics.

Continuing Education

It is important for candidates to maintain their skills over the course of their career and stay current with new tools and methods of analysis as they materialize. CBE Designees are required to earn 30 hours of continuing education and pay a certification renewal fee every two years. Continuing education hours can be earned by attending industry conferences, seminars, or other relevant educational activities.

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Renewal

In addition to the continuing education requirements, CBE Designees will be required to pay a renewal fee every two years of $75.00 and be a NABE member in good standing.

CBE EXAMINATION

Today's business economists and analysts are expected to master a wide array of disciplines. The CBE examination, developed and administered by the National Association for Business Economics, is based on an advanced body of knowledge, created and reviewed by leading business economists to ensure that it reflects the most relevant information and core competencies demanded by today's top employers.

The CBE Exam is designed to be a comprehensive multiple-choice assessment, testing a candidate's practical and applied knowledge in the following areas:

- Applied Econometrics
- Statistics and Data Analytics
- Economic Measurement
- Strategy and Managerial Decision Making
- Macroeconomics
- Microeconomics

Preparation

Candidates for the CBE have several options to prepare for the examination and the best method is ultimately up to the candidate. NABE offers the following courses for candidates:

- *Applied Econometrics*
- *Business Applications of Statistics and Data Analytics*
- *The Economic Measurement Seminar*
- *Economics of Strategy and Managerial Decision Making*

The NABE CBE website contains practice exam questions, course content outlines, and self-study resources. While the NABE courses covers the topics on the CBE exam, a candidate well versed in the subject should not feel compelled to take a course on that topic.

The exam can be taken at either a testing center near you or remotely. Note that candidates who take the exam remotely must have a webcam on their computers so that a proctor can monitor the exam.

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APPLIED ECONOMETRICS

In the Applied Econometrics content area, candidates will be asked to demonstrate knowledge of statistical techniques and quantitative analysis, including:

I. The Nature of Applied Econometrics
II. Getting Started
   a. The Model Specification Phase
   b. The Generic Single-Equation Linear Regression Model
   c. Data and Data Transformations
III. Mathematical and Statistical Considerations
IV. Common Tests of Hypotheses
V. Use of Indicator or Dummy Variables
VI. Autocorrelation or Serial Correlation
VII. Heteroscedasticity
VIII. Collinearity
IX. Influence Diagnostics: The Detection and Assessment of Data Outliers and Leverage Points
X. Structural Change and Stability of Structural Coefficients
XI. Distributed Lag Models
XII. ARCH and GARCH Models
XIII. Qualitative Choice Models
XIV. Censored Response Models
XV. Pooling of Time-Series and Cross-Sectional Data
XVI. Simultaneous-Equation Models
XVII. Seemingly Unrelated Regression (SUR) Models

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ECONOMIC MEASUREMENT

In the Economic Measurement content area, candidates will be asked to demonstrate knowledge of economic statistics sources and uses, including:

I. Financial Accounts (formerly known as Flow of Funds)
II. GDP and National Accounts
III. International Statistics
IV. Employment and Unemployment
V. Inflation
VI. Productivity

STATISTICS AND DATA ANALYTICS

In the Statistics and Data Analytics content area, candidates will be asked to demonstrate knowledge of data analysis, statistics, and quantitative methods, including:

I. Basic Probability, Sampling, and Survey Methods
II. Data: Characteristics, Structure, Cleaning, Distribution, Outliers and Big Data
III. Analytical Tools: Confidence Intervals, Hypothesis Testing, Regression Analysis, Multivariate Regression, and Discrete Methods
IV. Project Planning
V. Common Errors and Diagnostics

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STRATEGY AND MANAGERIAL DECISION MAKING

In the Strategy and Managerial Decision Making content area, candidates will be expected to demonstrate knowledge of good managerial and strategic decision making and the practical use of applied microeconomic analysis, including:

I. Supply and Production

II. Estimating Cost Functions and Production Functions

III. Financing the Firm

IV. Analysis of Demand

V. Pricing

VI. Market Structure and Strategic Behavior

VII. Regulation

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MACROECONOMICS

In the Macroeconomics content area, candidates will be expected to demonstrate knowledge of sound theoretical and practical macroeconomic principles, including:

I. Fundamental Relationships and Tools
II. Static Models/Frameworks
III. Fiscal Policy
IV. Inflation Dynamics
V. Money and Monetary Policy
VI. Interest Rates
VII. Dynamic Models and Long-term Growth
VIII. Business Cycle Analysis

MICROECONOMICS

In the Microeconomics content area, candidates will be expected to demonstrate knowledge of sound theoretical and practical microeconomic principles, including:

I. Theory of the Consumer
II. Theory of the Firm
III. Market Equilibrium
IV. Distortions to the Market
V. Market Structure
VI. Externalities and Public Goods

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APPLIED ECONOMETRICS

The Applied Econometrics Certificate Program is not like academic econometric courses, which are often long on theory and short on practical applications. This program emphasizes business applications of statistical techniques and covers cutting-edge developments in economic methodologies and quantitative analysis.

Topics to be covered:

- Econometric (structural) models
- Dummy (indicator) variables
- Diagnostics of structural models
- Distributed lag models
- ARCH and GARCH models
- Nonlinear models
- Probit/logit models
- Censored response models
- Pooling of time-series and cross-sectional data
- Multi-equation model applications
- Ex-post forecast evaluation

At minimum, participants should have a background in economic theory and econometric methods, as this course is quite comprehensive. Experience in the use of mathematics, statistics and regression analysis is also helpful. The course content and time spent on each subject is tailored to the participants' backgrounds. Examples in economics and finance will be used. Time will be set aside to work on problems to complement the lecture material. The EVIEWS software package will be used in the course, and complimentary trial versions of EVIEWS are typically provided to all attendees.

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BUSINESS APPLICATIONS OF STATISTICS AND DATA ANALYTICS

This course covers data analysis, statistics, and quantitative methods, with a focus on hands-on, applied problems. It discusses the collection and analysis of data, including survey and sampling methods, cleaning and coding data, and structuring datasets. It also covers statistical techniques, including basic probability, probability distributions, descriptive statistics, confidence intervals, and hypothesis testing. In addition, the course covers various quantitative methods, including analysis of variance, simple and multivariate regression, discrete models, diagnostics, and an introduction to basic big data analysis. The course also covers basic project planning and gives an overview on communicating technical concepts such as elasticity, regression estimates, and forecasting.

Topics to be covered:

- Basic probability
- Sampling and Survey methods
- Probability Distributions
- Cleaning and Coding Data
- Descriptive Statistics
- Introduction to Basic Big Data
- Confidence Intervals
- Hypothesis Testing
- Basic Correlation and Regression Analysis
- ANOVA
- Discrete Methods
- Project Planning
- Communicating Technical Results
- Diagnostics

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ECONOMICS OF STRATEGY AND MANAGERIAL DECISION MAKING

In today's fast-paced economy, good managerial and strategic decisions require a solid foundation in the practical use of applied microeconomic analysis. In this course, students will develop the tools necessary to provide managers with sound economic insights and advice.

Following this course, students will be able to:

- Model cost functions and recognize the issues in cost and production data collection
- Identify factors that influence a firm's decision to internationally expand horizontally and/or vertically
- Understand the calculation and uses of cost of capital and net present value
- Model and forecast demand using various functional forms
- Estimate and use price elasticity to determine optimal price
- Define market structure and calculate market concentration
- Apply game theory models to business situations
- Explain how cost-benefit analysis and cost effectiveness are used to determine a change in government policy or programs

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ECONOMIC MEASUREMENT SEMINAR

The NABE Foundation's Economic Measurement Seminar is a convenient, cost-effective program designed to strengthen your knowledge of economic statistics and analytical techniques, enhancing your ability to add value in your workplace. Each session at the EMS pairs data producers with prominent data users; this approach provides you with an insightful view of how data are compiled and how they are used by leading analysts. EMS attendees earn the Certificate in Economic Measurement and enjoy numerous opportunities to network with instructors and colleagues.

Some of the topics to be covered:

- Corporate Profits
- Federal Reserve: Regional Economic Information, Analysis, and Beige Book
- Financial Accounts (formerly referred to as Flow of Funds)
- GDP and the National Accounts
- Housing Prices
- International Statistics
- Employment and Unemployment
- Inflation
- Productivity

Duration: two days

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COMMUNICATION AND PRESENTATION SKILLS FOR BUSINESS ECONOMISTS AND ANALYSTS (REQUIRED)

A prerequisite for the CBE designation, this program offers the skills needed for effective verbal communication and best practice presentation tools and techniques.

Learn to give presentations that get a group's attention, hold people's interest, and persuade them to act. This course introduces the principles of a powerful presentation, key characteristics of powerful presentations, and the 5-step process for preparing a presentation.

After completing this course, you will be able to:

- Select specific tools and strategies for analyzing audiences
- Use the tools of communication: eye contact, voice, and body language
- Create and deliver complex content in a format that increases audience attention
- Think quickly and deal with presentation anxiety
- Develop presentations using a specific format
- Structure an effective opening, body, and closing
- Use the best visual effects to add punch to your presentations
- Lead an effective Q&A, dealing with difficult questions and participants
- Deliver an effective impromptu presentation

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WRITING SKILLS FOR BUSINESS ECONOMISTS AND ANALYSTS (REQUIRED)

A prerequisite for the CBE designation, this course program provides useful tips for effective written communication. It explores common pitfalls in communicating technical economic information to users of varying levels of sophistication.

After completing this course, you will be able to:

- Convey your thoughts concisely, clearly, and cohesively
- Systematically organize your material to maximize readability and retention
- Understand how to alter your approach for different end users
- Present complex technical information simply
- Determine the best writing style to use for your office, agency, or firm
- Avoid common writing mistakes made by economists and analysts
- Appropriately employ jargon, analogies, and visual aids to drive home your message

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CONTINUING EDUCATION AND RENEWAL REQUIREMENTS

Once certified, Designees are required to earn 30 hours of continuing education every two years. Designees may earn continuing education from a variety of sources. (One hour of education equals one continuing education unit.) Designees must also be a member in good standing with the National Association for Business Economics and submit Renewal Fee of $75.00.

Approved forms of Continuing Education

NABE Events:

- NABE Conferences and Seminars (maximum of 15 hours in the two-year period).
- NABE Webinars (maximum of 10 hours in the two-year period).
- NABE courses, taken after certification has been awarded (no limit).

NABE Chapter Events:

Attend NABE Chapter events.

Other Industry Education Sources:

Classes/seminars from a reputable source or approved CFA education.

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FREQUENTLY ASKED QUESTIONS

1. **Do I need to take all of NABE's courses to earn the CBE?**
Answer: Candidates are required to take *Communication and Presentation Skills for Business Economists and Analysts* and *Writing Skills for Business Economists and Analysts,* or an equivalent course. Other NABE courses are not required, though they are helpful in developing business economists' skills.

2. **Do I have to take the two required courses (*Communication and Presentation Skills for Business Economists and Analysts* and *Writing Skills for Business Economists and Analysts)* before I take the CBE Exam?**
Answer: You can take the exam first; the certification (CBE) will be awarded after all the requirements are completed.

3. **What are some of the "courses deemed equivalent" for the two required courses for the certification requirement?**
Answer: Candidates can submit a course from a continuing education organization such as NABE. Some companies may offer this type of training "in-house." The candidate must show evidence of attending including date, location of training, and topics covered in the course. Evidence can be in the form of a certificate, letter from a supervisor, or the provider. Note that undergraduate coursework will not qualify.

4. **I have extensive professional experience writing and giving presentations. Can the requirement for the two courses be waived for me?**
Answer: Candidates can apply to waive the two required classes. For the exemption request, please submit the following to nabe@nabe.com, which will go before NABE's CBE Steering Committee for a vote.

   Writing Skills: List of publications, certificate or registration from similar course, statement from supervisor, years of experience, and/or a writing sample.

   Communication and Presentation Skills: List of large group presentations, media appearances, and times you have presented at NABE events; years of experience; certificate or registration from similar course; and/or statement from supervisor. If any of your presentations are recorded, it would be helpful to include a link.

5. **Where can I find the content outlines and sample test questions for the exam?**
Answer: The NABE CBE website contains practice exam questions, course content outlines, and self-study resources.

6. **Does NABE provide self-study materials?**
   Answer: The NABE CBE website contains practice exam questions, course content outlines, and self-study resources.

7. **Who should earn the CBE?**
   Answer: Anyone who practices economics is eligible to earn the CBE. Candidates must have two years of work experience in applied business economics or in a related field. Practitioners employed in the public, private, nonprofit, and academic fields are encouraged to earn the certification.

8. **I am a member of my local chapter. Does that meet the NABE membership requirement?**
   Answer: The NABE and NABE chapters are separate entities with independent membership policies; in other words, a membership in one organization does not include membership in the other. As such, all candidates will be required to have a membership with NABE to earn and maintain the CBE.

9. **Where will the exam be offered?**
   Answer: The exam can be taken at either a testing center near you or remotely. Note that candidates who take the exam remotely must have a webcam on their computers so that a proctor can monitor the exam.

10. **I have fulfilled all the CBE requirements. How do I officially become a CBE?**
    Answer: Fill out the CBE graduation application, sign the CBE code of ethics, and send them to nabe@nabe.com. NABE staff will process your application and work with the CBE Steering Committee to officially grant you the CBE credential.

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CANDIDATE CHECKLIST

Candidates are eligible to earn the CBE once they have completed the following requirements. Please use this sheet to keep track of your progress.

Eligibility Requirements:

_____ I am a Member of NABE

_____ I have two years of work experience in applied business economics or in a related field

_____ I have attained at least a four-year degree

_____ I have agreed to adhere to the NABE Code of Ethics

Exam and Curriculum Requirements:

_____ I passed the Certification Exam, Exam Date ____________________

_____ I have completed, or received a waiver for, NABE's C*ommunication and Presentation Skills for Business Economists and Analysts* course on _________________

_____ I have completed, or received a waiver for, NABE's *Writing Skills for Business Economists and Analysts* course on ________________

Once you have met these requirements, please contact nabe@nabe.com to process your CBE graduation.

Optional Courses/Seminars taken to prepare for the CBE Exam:

_____ *Applied Econometrics*

_____ *Business Applications of Statistics and Data Analytics*

_____ *The Economic Measurement Seminar*

_____ *Economics of Strategy and Managerial Decision Making*

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