Business, Entrepreneurship and Organizations

Business, Entrepreneurship and Organizations (BEO) is a multidisciplinary concentration that provides a rigorous and synergistic program in the study of commercial activity grounded in economics, sociology and engineering. BEO focuses on the formation, growth, and organization of new ventures, innovation in commercial applications, financial markets and the marketplace, and management and organizational theory. Concentrators seek to understand the basic principles, approaches and vocabulary relevant to the study of entrepreneurship from the disciplines of economics, organizational sociology and engineering. Building on this multidisciplinary base, students develop specialized expertise in one of the three disciplinary approaches, with special emphasis on critical reasoning and quantitative research methods. In senior year capstone projects, students apply and integrate multidisciplinary learning by working in groups on real world projects, including the creation of new ventures. BEO students interested in the theory and practice of addressing social challenges might consider the Engaged Scholars Program (https://www.brown.edu/academics/college/special-programs/public-service/engaged-scholars-program/engaged-scholars-program).

The three tracks of the concentration are as follows:
1. Business Economics
2. Organizational Studies
3. Entrepreneurship and Technology Management

Upon completion of all concentration requirements, students receive the Bachelor of Arts (A.B.) degree in Business, Entrepreneurship and Organizations.

The Curriculum

Business Economics Track
(Effective beginning with the graduating class of 2021)

**Foundation Requirements** (foundation requirements must be completed before taking the capstone in fall of senior year)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 0110</td>
<td>Principles of Economics</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1110</td>
<td>Intermediate Macroeconomics</td>
<td>1</td>
</tr>
<tr>
<td>SOC 1311</td>
<td>Micro-Organizational Theory: Social Behavior in Organizations</td>
<td>1</td>
</tr>
<tr>
<td>SOC 1315</td>
<td>Macro-Organizational Theory: Organizations in Social Context</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0020 or ENGN 0030</td>
<td>Transforming Society-Technology and Choices for the Future</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 1010</td>
<td>The Entrepreneurial Process: Innovation in Practice</td>
<td>1</td>
</tr>
</tbody>
</table>

**Math and Statistics Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0100</td>
<td>Introductory Calculus, Part I</td>
<td>1</td>
</tr>
<tr>
<td>or MATH 0170</td>
<td>Advanced Placement Calculus</td>
<td>1</td>
</tr>
<tr>
<td>or ECON 0170</td>
<td>Essential Mathematics for Economics</td>
<td>1</td>
</tr>
<tr>
<td>or AP BC Calculus score of 4 or higher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or IB High-level Math minimum score of 5 (IB Standard-level not accepted)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 1620</td>
<td>Introduction to Econometrics</td>
<td>1</td>
</tr>
</tbody>
</table>

**Track Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 0710</td>
<td>Financial Accounting</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1210</td>
<td>Intermediate Macroeconomics</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1710</td>
<td>Investments I</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1720</td>
<td>Corporate Finance</td>
<td>1</td>
</tr>
</tbody>
</table>

One Data Methods-intensive course from the following list:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1301</td>
<td>Economics of Education I</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1305</td>
<td>Economics of Education: Research</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1310</td>
<td>Labor Economics</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1355</td>
<td>Environmental Issues in Development Economics</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1360</td>
<td>Health Economics</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1375</td>
<td>Inequality of Opportunity in the US</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1400</td>
<td>The Economics of Mass Media</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1420</td>
<td>Urbanization in China</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1480</td>
<td>Public Economics</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1510</td>
<td>Economic Development</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1520</td>
<td>The Economic Analysis of Institutions</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1530</td>
<td>Health, Hunger and the Household in Developing Countries</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1629</td>
<td>Applied Research Methods for Economists</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1640</td>
<td>Econometrics II</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1650</td>
<td>Financial Econometrics</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1660</td>
<td>Big Data</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1759</td>
<td>Data, Statistics, Finance</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1765</td>
<td>Finance, Regulation, and the Economy: Research</td>
<td>1</td>
</tr>
</tbody>
</table>

One 1000-level economics course, including a second data methods intensive course from the list above

Capstone: one-semester required (must be taken fall of senior year)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEO 1930C</td>
<td>BEO Capstone I: Business Economics Track</td>
</tr>
</tbody>
</table>

Total Credits: 15

(Effective for graduating classes through 2020)

**Foundation Requirements** (foundation requirements must be completed before taking the capstone in fall of senior year)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 0110</td>
<td>Principles of Economics</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1110</td>
<td>Intermediate Microeconomics</td>
<td>1</td>
</tr>
<tr>
<td>SOC 1311</td>
<td>Micro-Organizational Theory: Social Behavior in Organizations</td>
<td>1</td>
</tr>
<tr>
<td>SOC 1315</td>
<td>Macro-Organizational Theory: Organizations in Social Context</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 0020 or ENGN 0030</td>
<td>Transforming Society-Technology and Choices for the Future</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 1010</td>
<td>The Entrepreneurial Process: Innovation in Practice</td>
<td>1</td>
</tr>
</tbody>
</table>

**Math and Statistics Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0090</td>
<td>Introductory Calculus, Part I</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1620</td>
<td>Introduction to Econometrics</td>
<td>1</td>
</tr>
</tbody>
</table>

**Track Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 0710</td>
<td>Financial Accounting</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1210</td>
<td>Intermediate Macroeconomics</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1710</td>
<td>Investments I</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1720</td>
<td>Corporate Finance</td>
<td>1</td>
</tr>
</tbody>
</table>

One Data Methods-intensive course from the following list:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1301</td>
<td>Economics of Education I</td>
<td>1</td>
</tr>
<tr>
<td>ECON 1305</td>
<td>Economics of Education: Research</td>
<td>1</td>
</tr>
</tbody>
</table>
ECON 1310 Labor Economics
ECON 1355 Environmental Issues in Development Economics
ECON 1360 Health Economics
ECON 1375 Inequality of Opportunity in the US
ECON 1400 The Economics of Mass Media
ECON 1420 Urbanization in China
ECON 1480 Public Economics
ECON 1510 Economic Development
ECON 1520 The Economic Analysis of Institutions
ECON 1530 Health, Hunger and the Household in Developing Countries
ECON 1629 Applied Research Methods for Economists
ECON 1640 Econometrics II
ECON 1650 Financial Econometrics
ECON 1660 Big Data
ECON 1759 Data, Statistics, Finance
ECON 1765 Finance, Regulation, and the Economy: Research

One 1000-level economics course, including a second data methods intensive course from the list above 1
Capstone: one-semester required (must be taken fall of senior year) 1
BEO 1930C BEO Capstone I: Business Economics Track

Total Credits 15

| Or an optional two-semester capstone from the BEO 1930 and 1940 series |

Organizational Studies Track

(Effective beginning with the graduating class of 2021)

Foundation Requirements (foundation requirements must be completed before taking the capstone in fall of senior year)

ECON 0110 Principles of Economics 1
ECON 1110 Intermediate Microeconomics 1
SOC 1311 Micro-Organizational Theory: Social Behavior in Organizations 1
SOC 1315 Macro-Organizational Theory: Organizations in Social Context 1
ENGN 0020 Transforming Society-Technology and Choices for the Future 1
or ENGN 0030 Introduction to Engineering
ENGN 1010 The Entrepreneurial Process: Innovation in Practice 1

Math and Statistics Requirements

MATH 0100 Introductory Calculus, Part II 1
or MATH 0170 Advanced Placement Calculus
or ECON 0170 Essential Mathematics for Economics
Or AP BC Calculus with a score of 4 or higher
Or IB High-level Math with a minimum score of 5 (IB Standard-level is not accepted)
SOC 1100 Introductory Statistics for Social Research 1
or APMA 0650 Essential Statistics
or ECON 1620 Introduction to Econometrics

Track Requirements

One Introduction to Research Methods course (selected from the following): 1

SOC 1020 Methods of Social Research

SOC 1050 Methods of Research in Organizations

Two Organization-Relevant Electives (OREs) (the following are approved examples-please consult with the CAB/BEO website for current offerings):

ORE courses allow students to deepen and/or broaden their exposure to topics and settings that are either strongly determined by, or strongly determining of, organizational activities and outcomes. To qualify for this list, a course should have a clear linkage to commerce, organizations and/or entrepreneurship, and it should incorporate organizational phenomena and perspectives into a significant portion of its coursework.

Any from the Advanced Research Methods or Advanced Organization-Studies lists; or

AMST 1610A American Advertising: History and Consequences
ECON 1760 Financial Institutions
EDUC 1020 The History of American Education
EDUC 1040 Sociology of Education
EDUC 1060 Politics and Public Education
EDUC 1150 Education, the Economy and School Reform
EDUC 1200 History of American School Reform
EDUC 1650 Policy Implementation in Education
EDUC 1730 American Higher Education in Historical Context
ENGN 1930S Land Use and Built Environment: An Entrepreneurial View
ETHN 1890C Business, Culture, and Globalization: An Ethnographic Perspective
PHP 2400 The U.S. Health Care System: Case Studies in Financing, Delivery, Regulation and Public Health
PLCY 1700R Urban Revitalization: Lessons from the Providence Plan
PLCY 1701J Policy Implementation
PLCY 1701K Governance in the Academy: A University at Work in the 21st Century
PLCY 1701O Labor Market Policy
PLCY 1701Q Leading Social Ventures - Social Entrepreneurship in Action
PLCY 1800 Investigating Modes of Social Change
PLCY 1910 Social Entrepreneurship
PLCY 2150 Strategic Communication
PLCY 2655 Regulation and Compliance
POLS 1150 Prosperity: The Ethics and Economics of Wealth Creation
POLS 1240 Politics, Markets and States in Developing Countries
POLS 1820W Market Liberalism: Origins, Principles and Contemporary Applications
SOC 1114 Law and Society
SOC 1115 The Enlightened Entrepreneur: Changemakers, Inspired Protagonists and Unreasonable People
SOC 1871C Sociology of the Legal Profession

One Advanced Organization Studies course (AOS) (the following are approved examples-please consult with the CAB/BEO website for current offerings):
AOS courses directly employ and extend the theories and perspectives introduced by the foundational Organizational Studies courses. They are either taught by core Organization Studies faculty or vetted on a regular basis by the Organization Studies track advisor, to ensure that they thoroughly incorporate Organization Studies perspectives and focus primarily on organizational processes and phenomena.

CLPS 1730 Psychology in Business and Economics
ECON 1790 Corporate Governance and Management
PLCY 1700V Nonprofit Organizations
PLCY 1700Y Crisis Management
PLCY 2020 Public Budgeting and Management
PLCY 2350 Thinking, Planning and Acting Strategically
PLCY 2550 Managing and Leading in Public Affairs
PLCY 2700 Advanced Organizational and Management Strategies
SOC 1060 Leadership in Organizations
SOC 1870A Investing in Social Change
SOC 1870L The Economic Foundations of Everyday Life
SOC 1871O Law, Innovation and Entrepreneurship
SOC 1872B Sociology of Money
SOC 1872H Sociology of FIRE: Finance, Insurance, + Real Estate
SOC 1872T Social Innovation and Disruption: The Case of Modern Turkey

One Advanced Research Methods course (ARM) (the following are approved examples—please consult with the CAB/BEO website for current offerings):

ANTH 1940 Ethnographic Research Methods
ECON 1390 Research Methods for Economists
EDUC 1630 Econometrics I
EDUC 1100 Introduction to Qualitative Research Methods
EDUC 1160 Evaluating the Impact of Social Programs
HPH 1320 Survey Research in Health Care
PLCY 1200 Policy Analysis and Program Evaluation
PLCY 2035 Statistics II for Public Policy Analysis
PLCY 2040 Policy Analysis and Program Evaluation
PLCY 2050 Program Evaluation
SOC 1117 Focus Groups for Market and Social Research
SOC 1118 Context Research for Innovation
SOC 1120 Market and Social Surveys
SOC 1127 EPIC: Ethnographic Praxis in Industry
SOC 1260 Market Research in Public and Private Sectors
SOC 1340 Principles and Methods of Geographic Information Systems

Capstone: two-semesters required

BEO 1930A BEO Capstone I: Organizational Studies Track
& BEO 1940A and BEO Capstone II: Organizational Studies Track

Total Credits 15

1 If a student in the Organizational Studies track completes only the fall semester of the capstone course (BEO 1930A), she/he must take one additional ARM or AOS course.

Organizational Studies Track
(Effective for graduating classes through 2020)

Foundation Requirements (foundation requirements must be completed before taking the capstone in fall of senior year)

ECON 0110 Principles of Economics 1
ECON 1110 Intermediate Microeconomics 1
SOC 1311 Micro-Organizational Theory: Social Behavior in Organizations 1
SOC 1315 Macro-Organizational Theory: Organizations in Social Context 1
ENGN 0020 Transforming Society-Technology and Choices for the Future 1
or ENGN 0030 Introduction to Engineering
ENGN 1010 The Entrepreneurial Process: Innovation in Practice

Math and Statistics Requirements

MATH 0090 Introductory Calculus, Part I 1
SOC 1100 Introductory Statistics for Social Research 1
or APMA 0650 Essential Statistics
or ECON 1620 Introduction to Econometrics

Track Requirements

One Introduction to Research Methods course (selected from the following): 1

SOC 1020 Methods of Social Research
SOC 1050 Methods of Research in Organizations

Two Organization-Relevant Electives (OREs) (the following are approved examples—please consult with the CAB/BEO website for current offerings):

ORE courses allow students to deepen and/or broaden their exposure to topics and settings that are either strongly determined by, or strongly determining of, organizational activities and outcomes. To qualify for this list, a course should have a clear linkage to commerce, organizations and/ or entrepreneurship, and it should incorporate organizational phenomena and perspectives into a significant portion of its coursework.

Any from the Advanced Research Methods or Advanced Organization-Studies lists; or
AMST 1610A American Advertising: History and Consequences
ECON 1760 Financial Institutions
EDUC 1020 The History of American Education
EDUC 1040 Sociology of Education
EDUC 1060 Politics and Public Education
EDUC 1150 Education, the Economy and School Reform
EDUC 1200 History of American School Reform
EDUC 1650 Policy Implementation in Education
EDUC 1730 American Higher Education in Historical Context
ENGN 1930S Land Use and Built Environment: An Entrepreneurial View
ETHN 1890C Business, Culture, and Globalization: An Ethnographic Perspective
PHP 2400 The U.S. Health Care System: Case Studies in Financing, Delivery, Regulation and Public Health
PLCY 1700R Urban Revitalization: Lessons from the Providence Plan
PLCY 1701J Policy Implementation
PLCY 1701K Governance in the Academy: A University at Work in the 21st Century
PLCY 1701O Labor Market Policy
PLCY 1701Q Leading Social Ventures - Social Entrepreneurship in Action
PLCY 1800 Investigating Modes of Social Change
PLCY 1910 Social Entrepreneurship
PLCY 2150 Strategic Communication
PLCY 2655 Regulation and Compliance
POL 1150 Prosperity: The Ethics and Economics of Wealth Creation
POL 1240 Politics, Markets and States in Developing Countries
POL 1820W Market Liberalism: Origins, Principles and Contemporary Applications
SOC 1114 Law and Society
SOC 1115 The Enlightened Entrepreneur: Changemakers, Inspired Protagonists and Unreasonable People
SOC 1871C Sociology of the Legal Profession

One Advanced Organization Studies course (AOS) (the following are approved examples-please consult with the CAB/BEO website for current offerings):

AOS courses directly employ and extend the theories and perspectives introduced by the foundational Organization Studies courses. They are either taught by core Organization Studies faculty or vetted on a regular basis by the Organization Studies track advisor, to ensure that they thoroughly incorporate Organization Studies perspectives and focus primarily on organizational processes and phenomena.

CLPS 1730 Psychology in Business and Economics
ECON 1790 Corporate Governance and Management
PLCY 1700V Nonprofit Organizations
PLCY 1700Y Crisis Management
PLCY 2020 Public Budgeting and Management
PLCY 2350 Thinking, Planning and Acting Strategically
PLCY 2550 Managing and Leading in Public Affairs
PLCY 2700 Advanced Organizational and Management Strategies
SOC 1060 Leadership in Organizations
SOC 1870A Investing in Social Change
SOC 1870L The Economic Foundations of Everyday Life
SOC 1871O Law, Innovation and Entrepreneurship
SOC 1872B Sociology of Money
SOC 1872H Sociology of FIRE: Finance, Insurance, + Real Estate
SOC 1872T Social Innovation and Disruption: The Case of Modern Turkey

One Advanced Research Methods course (ARM) (the following are approved examples-please consult with the CAB/BEO website for current offerings):

ARM courses allow students to deepen and/or broaden their expertise in one or more methods of empirical inquiry.

ANTH 1940 Ethnographic Research Methods
ECON 1390 Research Methods for Economists
ECON 1630 Econometrics I
EDUC 1100 Introduction to Quantitative Research Methods
EDUC 1160 Evaluating the Impact of Social Programs
PHP 1320 Survey Research in Health Care
PLCY 1200 Policy Analysis and Program Evaluation
PLCY 2035 Statistics II for Public Policy Analysis
PLCY 2040 Policy Analysis and Program Evaluation
PLCY 2050 Program Evaluation
SOC 1117 Focus Groups for Market and Social Research
SOC 1118 Context Research for Innovation
SOC 1120 Market and Social Surveys
SOC 1127 EPIC: Ethnographic Praxis in Industry
SOC 1260 Market Research in Public and Private Sectors
SOC 1340 Principles and Methods of Geographic Information Systems

Capstone:

For the class graduating 2018: one-semester required (must be taken fall of senior year) 1

<table>
<thead>
<tr>
<th>Track</th>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEO Capstone I</td>
<td>BEO 1930A</td>
<td>BEO Capstone I: Organizational Studies Track</td>
</tr>
<tr>
<td>BEO Capstone II</td>
<td>BEO 1940A</td>
<td>BEO Capstone II: Organizational Studies Track</td>
</tr>
</tbody>
</table>

Total Credits: 14-15

1 Or an optional two-semester capstone from the BEO 1930 and 1940 series

### Entrepreneurship and Technology Management Track

#### Foundation Requirements (foundation requirements must be completed before taking the capstone in fall of senior year)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 0110</td>
<td>Principles of Economics</td>
</tr>
<tr>
<td>ECON 1110</td>
<td>Intermediate Microeconomics</td>
</tr>
<tr>
<td>SOC 1311</td>
<td>Micro-Organizational Theory: Social Behavior in Organizations</td>
</tr>
<tr>
<td>SOC 1315</td>
<td>Macro-Organizational Theory: Organizations in Social Context</td>
</tr>
<tr>
<td>ENGN 0030</td>
<td>Introduction to Engineering</td>
</tr>
<tr>
<td>ENGN 1010</td>
<td>The Entrepreneurial Process: Innovation in Practice</td>
</tr>
</tbody>
</table>

#### Math and Statistics Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 0200</td>
<td>Intermediate Calculus (Physics/Engineering)</td>
</tr>
<tr>
<td>or APMA 0330</td>
<td>Methods of Applied Mathematics I, II</td>
</tr>
<tr>
<td>SOC 1100</td>
<td>Introductory Statistics for Social Research</td>
</tr>
<tr>
<td>or APMA 0650</td>
<td>Essential Statistics</td>
</tr>
<tr>
<td>or ECON 1620</td>
<td>Introduction to Econometrics</td>
</tr>
</tbody>
</table>

#### Track Requirements

One gateway course in Engineering or another physical science

Five courses that develop expertise in a technical subfield 1,2

Capstone: two-semesters required (must be taken in fall and spring of senior year)

<table>
<thead>
<tr>
<th>Track</th>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEO Capstone I</td>
<td>BEO 1930B</td>
<td>BEO Capstone I: Entrepreneurship and Technology Management Track</td>
</tr>
<tr>
<td>BEO Capstone II</td>
<td>BEO 1940B</td>
<td>BEO Capstone II: Entrepreneurship and Technology Management Track</td>
</tr>
</tbody>
</table>

Total Credits: 16

1 For specific gateway and subfield courses, refer to the BEO website.
Technical subfields include Biotechnology/Biomaterials, Information Technology and Computer Engineering, Energy and the Environment, and others.
Font Notice

This document should contain certain fonts with restrictive licenses. For this draft, substitutions were made using less legally restrictive fonts. Specifically:

Helvetica was used instead of Arial.

The editor may contact Leepfrog for a draft with the correct fonts in place.