

# Applied Economics and Management Degree Requirements

## CALS Distribution Requirements

### Physical Sciences

*Minimum 18 credits:*

Quantitative Methods Required by AEM:

AEM 2100: Introductory Statistics

Calculus (MATH 1106 or MATH 1110)

Introductory Life Sciences (2 courses that fulfill the CALS requirement)

Physics or Chemistry: Any 3-credit course offered by the physics or chemistry department

Other Physical/Life Sciences course

### Social Sciences & Humanities

Economics Required by AEM: consists of at least 2 economics courses in the Social and Behavioral Analysis category (SBA)

*And a minimum of 2 courses of 3 or more credits from at least 2 different categories:\**

Cultural Analysis (CA)

Historical Analysis (HA)

Human Diversity (D)\*

Knowledge, Cognition, & Moral Reasoning (KCM)

Literature and the Arts (LA)

Foreign Language (FL)

*\*Starting with Fall 2009 freshman admits, at least one course must be from the Human Diversity category.*

### Written & Oral Expression

*Minimum 9 credits:*

Written Expression (6 credits; e.g., First-Year Writing Seminar, AEM 2000)

AEM 2700: Management Communication\*

*\*Students who matriculated as freshmen before Fall 2013 and transfers before Fall 2014, must take COMM 2010 or ILRLR 2300 in place of AEM 2700*

## AEM Core Requirements

### Management Requirements

AEM 2200: Business Management and Organization

AEM 2225: Financial Accounting for Dyson

AEM 2420: Marketing

AEM 2240: Finance

### Economics Requirements

ECON 1110: Introductory Microeconomics

ECON 1120: Introductory Macroeconomics

AEM 2600: Managerial Economics I\*

AEM 2601: Managerial Economics II

*\*For certain concentrations, ECON 3030 may be required instead of AEM 2600.*

### Quantitative Methods Requirements

AEM 2100: Introductory Statistics

MATH 1106: Calculus for the Life and Social Sciences *or*  
MATH 1110: Calculus I

AEM 2010: Spreadsheet Modeling

**At least 3 credits from:**

AEM 2770: Computational Sustainability

AEM 3030: Explorations in Analytic Modeling

AEM 3100: Business Statistics

AEM 3390: Research Methods in Internat'l Development

AEM 4060: Risk Simulation & Optimization

AEM 4110: Introduction to Econometrics

AEM 4120: Comptnl Methods for Mgmt. & Econ.

AEM 4150: Price Analysis

AEM 4170: Decision Models for Sm & Lg Bus.

AEM 4190: Strategic Thinking

ECON 4020: Game Theory

ILRST 2110: Statistical Methods for Social Sciences II

ILRST 3030: Policy Analysis by the Numbers

ILRST 3110: Probability Models and Inference

MATH 1120: Calculus II

ECON 3130: Statistics and Probability

ECON 3140: Econometrics

BTRY/ILRST/STSCI 3080: Probability Models  
and Inference

### Applied Economics Requirements

*At least 6 credits; must come from 2 different categories. Courses used to fulfill a concentration or Quantitative Methods requirement cannot also be counted towards a core Applied Economics requirement, unless that concentration is EERE.*

### Environmental, Energy, & Resource Economics

AEM 2500: Environmental and Resource Economics

AEM 4500: Resource Economics

AEM 4510: Environmental Economics

### Economic Analysis

AEM 3310: Introduction to Business Regulation

AEM 4140: Behavioral Economics and

Managerial Decisions

AEM 4160: Strategic Pricing

AEM 4550: Economics of Advertising

AEM 4580: The Economics and Psychology of  
Sustainable Business

### International Trade and Development

AEM 2300: International Trade and Finance

AEM 2350: Introduction to the Economics of  
Development

AEM 4300: International Trade Policy

AEM 4350: The Political Economy of the WTO

AEM 4420: Emerging Markets

AEM 4450: Food Policy for Developing Nations

AEM 4545: International Finance & Macroecon

### Food and Agricultural Economics

AEM 4070: Advanced Financial Analytics with  
Applications in Agriculture and Development

AEM 4150: Price Analysis

AEM 4210: Derivatives and Risk Management

AEM 4310: Agricultural and Food Policy

# Concentrations

Students must choose at least one of the following 10 concentrations, and may choose no more than two. *Note: A course may be used to fulfill only one Dyson School requirement unless the course is specifically required for two concentrations. Students concentrating in ERE shall select one non-ERE course to fulfill their Applied Economics core requirement.*

## Accounting

AEM 3200: Business Law I  
AEM 3230: Managerial Accounting  
AEM 3360: Intermediate Accounting I  
AEM 3370: Intermediate Accounting II

*At least 6 credits from the following:*

AEM 3520: Financial Statement Analysis  
AEM 4520: Advanced Accounting  
AEM 4530: Auditing and Assurance  
AEM 4531: Federal Income Taxation  
AEM 4560: Federal Income Taxation of Business Entities, Estates & Trusts  
NBA 5020: Managerial Cost Accounting  
NBA 5090: Advanced Financial Analysis  
NBA 5110: Financial Modeling

## Agribusiness Management

AEM 3020: Farm Business Management  
AEM 3200: Business Law I  
HADM 2810 *or* ILRHR 2600

*At least 6 credits from the following:*

AEM 3040: Dairy Markets and Policy Seminar  
AEM 3210: Business Law II  
AEM 3260: Cooperative Management  
AEM 3290: International Agribusiness Study Trip  
AEM 4030: Farm Management Study Trip  
AEM 4040: Credit & Banking in Agriculture  
AEM 4150: Price Analysis  
AEM 4310: Agricultural and Food Policy

## Applied Economics

ECON 3040: Intermediate Macroeconomic Theory

*Note: ECON 3020 can replace ECON 1120 and ECON 3040 (can replace 3040 with a grade of B or better).*

At least 12 credits listed under Applied Economics Requirements and 3 credits under Quantitative Methods Requirements that have not already been used to fulfill the AEM Core Requirements.

*Note: MATH 1120 is strongly recommended, especially as preparation for graduate work in economics.*

## Environmental, Energy, & Resource Economics

AEM 2500: Environmental and Resource Economics  
AEM 4500: Resource Economics  
AEM 4510: Environmental Economics  
ECON 3030: Intermediate Microeconomic Theory  
ECON 3040: Intermediate Macroeconomic Theory

*Note: ECON 3010 can be used to replace both ECON 1110 and 3030 (can replace 3030 with a grade of B or better) ECON 3020 can replace ECON 1120 and ECON 3040 (can replace 3040 with a grade of B or better).*

Minimum 6 credits of ERE-related electives offered by the following departments:  
BIOEE, BEE, CRP, EAS, GOVT, NTRES, DSOC

## Entrepreneurship

AEM 1230: Foundations of Entrepreneurship and Business  
AEM 3200: Business Law I  
AEM 3230: Managerial Accounting

*At least 8 credits from the following:*

AEM 1210: Entrepreneurial Thought Leadership Seminar  
AEM 1220: Entrepreneurship in the Life Sciences  
AEM 3220: Digital Business Strategy  
AEM 3245: Organizational Behavior  
AEM 3249: Entrepreneurial Marketing & Strategy  
AEM 3250: Business Planning Process For New Ventures  
AEM 3340: Women, Leadership, and Entrepreneurship  
AEM 3380: Social Entrepreneurs, Innovators, and Solvers  
AEM 3381: Social Entrepreneurship Field Study  
AEM 4370: Strategy and Innovation  
AEM 4380: Entrepreneurial Strategy for Technology Ventures  
AEM 4390: Technology Strategy  
AEM 4420: Emerging Markets  
HADM 4130: Entrepreneurial Management  
HADM 4211: Entrepreneurial Finance  
NBA 3000: Entrepreneurship and Private Equity

*Note: Any of the following courses, or other entrepreneurship courses outside AEM, may be substituted for up to 3 credits from the list of electives above: CHEME 5720, DEA 6450, ENGI 1270, HADM 4145, HE 4070, LSP 3950/6590, NBA 5900, NBA 5930*

## Food Industry Management

AEM 2480: Food and Consumer Packaged Goods Industry Dynamics  
AEM 3440: Consumer Behavior (or HADM 3470)  
AEM 4400: Retail Strategy

*At least six credits from the following:*

AEM 3200: Business Law I  
AEM 3230: Managerial Accounting  
AEM 3270: Marketing-Operations Simulation  
AEM 3430: Principles of Supply Chain Management  
AEM 3450: Sustainability Marketing  
AEM 4150: Price Analysis  
AEM 4460: Food Marketing Colloquium

## International Trade and Development

*Must take Either:*

AEM 2300: International Trade and Finance OR  
AEM 2350 Intro to The Economics of Development

*At least 15 credits from the following:*

AEM 4290: International Financial Management  
AEM 4300: International Trade Policy  
AEM 4350: The Political Economy of the WTO  
AEM 4420: Emerging Markets  
AEM 4421: Research and Strategy in Emerging Markets  
AEM 4450: Toward a Sustainable Global Food System: Food Policy for Developing Countries  
AEM 4545: International Finance & Macroeconomics  
AEM 4640: Economics of Agricultural Development

## Finance

AEM 3200: Business Law I  
AEM 3230: Managerial Accounting

*At least 9 credits from the following:*

AEM 4000: Practitioner's Overview of Securities Markets and Investment Banking  
AEM 4010: Commercial Bank Management  
AEM 4060: Risk Simulation and Optimization  
AEM 4070: Advanced Financial Analytics with Applications in Agriculture and Development  
AEM 4210: Derivatives and Risk Management  
AEM 4230: Contemporary Topics in Behavioral Finance  
AEM 4260: Fixed Income Securities  
AEM 4280: Valuation of Capital Investment  
AEM 4290: International Financial Management  
AEM 4570: Advanced Corporate Finance  
AEM 4590: Financial Markets and Institutions  
AEM 4620: Advanced Financial Modeling and Analysis  
AEM 4630: Asset Pricing and Management  
AEM 4670: Investments In The Global Economy

## Marketing

AEM 3200: Business Law I  
AEM 3230: Managerial Accounting  
AEM 3440: Consumer Behavior (or HADM 3470)

*At least 6 credits from the following:*

AEM 3210: Business Law II  
AEM 3245: Organizational Behavior  
AEM 3249: Entrepreneurial Marketing & Strategy  
AEM 3270: Marketing-Operations Simulation  
AEM 3350: International Technology Marketing of Biotechnology  
AEM 3430: Principles of Supply Chain Management  
AEM 3450: Environmental Marketing  
AEM 4020/4021: Food and Brand Lab Workshop  
AEM 4150: Price Analysis  
AEM 4160: Strategic Pricing  
AEM 4400: Retail Strategy  
AEM 4420: Emerging Markets  
AEM 4550: Economics of Advertising

## Strategy

AEM 3200: Business Law I  
AEM 3230: Managerial Accounting

*At least 9 credits from the following:*

AEM 3210: Business Law II  
AEM 3220: Digital Business Strategy  
AEM 3245: Organizational Behavior  
AEM 3430: Principles of Supply Chain Management  
AEM 4140: Behavioral Economics and Managerial Decisions  
AEM 4160: Strategic Pricing  
AEM 4190: Strategic Thinking  
AEM 4370: Strategy and Innovation  
AEM 4380: Entrepreneurial Strategy for Technology Ventures  
AEM 4390: Technology Strategy  
AEM 4480: Executing Firm Strategy  
AEM 4580: The Economics and Psychology of Sustainable Business