

# **Academic Preparation Class of 2020**

For many of you, it's been quite a while since you've been in school, so re-establishing routines for reading and testing early will help you to be successful when your classes begin. In addition, some students have not taken formal coursework in accounting or finance. The compressed nature of the program requires that students have this foundation before embarking on their graduate coursework to ensure success.

To meet this need, Michigan State University's Executive MBA has secured access to a series of Harvard Business School online (non-credit) courses: Introduction to Financial Accounting; Introduction to Spreadsheet Modeling; Mathematics for Management: Algebra, Statistics, and Probability; and Introduction to Finance. Each of these is designed to provide comprehensive introductions and tools in key areas and our faculty have recommended them for all incoming students. Students will build/refresh their knowledge in these areas by working through a sequence of increasingly sophisticated subject matter. All students should pass one of the tests for each course prior to beginning the MBA courses.

You are highly encouraged to work through this material prior to orientation while you have the time to move through this at your own pace. Once you receive your first course materials in June, you will have significant academic work and less time to focus on this foundational work.

### Pre-program Academic Preparation: Summary

Online Course Prep	Recommended Completion Date	Required or Recommended
Financial Accounting	June 15, 2018	Recommended
Introduction to Spreadsheet Modeling	August 4, 2018	Required
Mathematics for Management: Algebra	August 4, 2018	Recommended
Mathematics for Management: Statistics	August 24, 2018	Required
Mathematics for Management: Probability	August 24, 2018	Required
Introduction to Finance	January 4, 2019	Required

# Electronic links to below material will be available on the Welcome Portal on May 2<sup>nd</sup> Complete prior to Orientation (June 15, 2018)

Introductory Course: Financial Accounting (Recommended for PIM 811)
Course Pack Link: http://cb.hbsp.harvard.edu/cbmp/access/77454808

Expected Length: 8-10 hours

This online course provides an introduction to financial accounting in a management context. Learning Objectives: To understand (1) basic financial accounting terms and concepts; (2) the financial statements—balance sheet, income statement, statement of cash flows—that firms use to describe their businesses; (3) the approach used to construct the financial statements; and (4) some simple ratios that capture key elements of firm performance.

Introduction to Spreadsheet Modeling (Required for PIM 850)
Course Pack Link: http://cb.hbsp.harvard.edu/cbmp/access/77451394

**Expected Time to Complete:** 

4-6 hours

This online course shows students how to use functionality in Excel to create and leverage spreadsheet models to analyze both simple and complex business problems. Student's learning will include using functions, if statements, sensitivity analysis, pivot tables, charting, making spreadsheets intuitive, using solver, advanced modeling and more.

**Mathematics for Management: Algebra** 

**Expected Time to Complete:** 

4-6 hours

(Recommended for PIM 850, PIM 821, and PIM 841)

Course Pack Link: http://cb.hbsp.harvard.edu/cbmp/access/77451076

This online course covers essential algebra concepts students must know when pursuing a business education. The course covers: variables, functions, linear equations, the Cartesian Plane, linear inequalities, polynomials and quadratic functions, powers and exponents, power function, Cobb Douglas Function, order of operations, entering formulas and



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graphing functions in Excel, inverse functions, ratios and percentages, elasticity of demand, logarithms and index numbers.

## Complete prior to Fall Semester (August 24, 2018)

Mathematics for Management: Statistics (Required for PIM 850)

**Expected Time to Complete:** 

3-5 hours

Course Pack Link: http://cb.hbsp.harvard.edu/cbmp/access/77451215

This online course covers statistical concepts commonly applied within an MBA curriculum. The section includes: Summation Notation / Using Bar Graphs and Histograms to Summarize Data / Measures of Central Tendency / Skewness and Measure of Central Tendency / Measures of Variability / The Rule of Thumb and Outliers / Covariance and Correlation

Mathematics for Management: Probability (Required for PIM 850)

**Expected Time to Complete:** 

3-5 hours

Course Pack Link: http://cb.hbsp.harvard.edu/cbmp/access/77451168

This online course reviews the fundamentals of predicting outcomes in a business setting. The section includes: Experiments, Sample Spaces, and Events / Calculations Involving Sample Spaces / Mutually Exclusive Events / Complementary Events / Conditional Probability / Independent Events / Random Variables / Continuous Random Variables / The Normal Random Variable

# Complete prior to 2019 Spring Semester (January 4, 2019)

Introduction to Finance (Required for PIM 841)

**Expected Time to Complete:** 

Course Pack Link: http://cb.hbsp.harvard.edu/cbmp/access/77454542

7-9 hours

This online course is designed to help students understand the basic principles of Corporate Finance, the essential tools for financial analysis, and introductory models and frameworks used in corporate finance decision making. The course presumes that students possess a working knowledge of financial accounting. The course covers ratio analysis, cash cycle, pro forma forecasting, financial statement analysis, capital structure, time value of money, and project valuation.

### To Access:

### Electronic links to below material will be available on the Welcome Portal on May 2<sup>nd</sup>

- Click on the first course pack link http://cb.hbsp.harvard.edu/cbmp/access/77454808 and click on Register Now link
- Fill out the required information and click on the register button.
- Once the registration is complete you will receive an email confirmation.
- Click on the Login link. The Introductory Course: Financial Accounting has now been added to your Library.

Proceed to open a new browser tab and enter the course pack link for Introduction to Spreadsheet Modeling http://cb.hbsp.harvard.edu/cbmp/access/77451394. Click on the Go to Course button. Spreadsheet Modeling has now been added to your library.

#### Repeat the same process for:

Mathematics for Management: Algebra http://cb.hbsp.harvard.edu/cbmp/access/77451076
Mathematics for Management: Statistics http://cb.hbsp.harvard.edu/cbmp/access/77451215
Mathematics for Management: Probability http://cb.hbsp.harvard.edu/cbmp/access/77451168
Introduction to Finance http://cb.hbsp.harvard.edu/cbmp/access/77454542

- You only have to add the course pack links to your Library the first time you login.
- Online courses will be available for one year from the date that you add the materials to your library.
- For technical support, please contact <u>techhelp@hbsp.harvard.edu</u> or call (800) 810-8858 or (617) 783-7700 Monday through Friday 6am 8pm EST and Saturday & Sunday 9am 5pm EST (email is best way to contact on weekend).