Evidence-based Management
How to use evidence to make better organizational decisions
CERTIFIED ONLINE COURSE MODULES
1. What is evidence-based management?

The basic idea of evidence-based management is that good-quality decisions require both critical thinking and use of the ‘best available evidence’. This evidence may come from scientific research, internal business information, stakeholder perspectives and concerns, and even professional experience. Although all management practitioners use evidence in their decisions, many pay little attention the quality of the evidence and tend to base their decisions on too few sources of evidence. As a result, decisions in business and organizations are too often based on fads, new ‘cutting edge’ solutions, and popular ideas promoted by consulting firms and management gurus. The bottom line is bad decisions, poor outcomes, and limited understanding of why things go wrong. In response to this problem the idea of evidence-based management has evolved, with the goal of improving the quality of decision making by using critically evaluated evidence from multiple sources – organizational data, professional expertise, stakeholder values and the scientific research literature.

While the idea of evidence-based management sounds sensible and straightforward, gathering, understanding and applying evidence can be challenging and requires a set of specific skills. This course will develop students’ evidence-based skills and enhance their understanding of how an evidence-based approach can be used to support organizational decision-making and management practice.
2. What are the course modules’ learning outcomes?

The course consists of 15 interactive modules designed to enhance students’ managerial skills through a distinctive, hands-on approach. These modules cover all six steps of evidence-based management. On its completion, your students will be able to:

- **Ask:** Identify the need for evidence and translate this need into a focused question
- **Acquire:** Systematically search for and/or retrieve evidence
- **Appraise:** Critically judge the trustworthiness and relevance of the evidence
- **Aggregate:** Weigh and pull together the evidence
- **Apply:** Incorporate the evidence into practice/the decision-making process
- **Assess:** Evaluate the outcome of the practice/decision taken

An overview of all learning outcomes is provided in Appendix I.

3. What is in the modules?

Each module in the course has features designed to support your students as an independent learner:

- **Explanatory content:** This is the informational “meat” of every module. It consists of short passages of text with information, examples, images, and explanations.
- **Learn By Doing activities:** Learn By Doing activities give students the chance to practice the concept that they are learning. They provide hints and feedback to guide them if your students struggle.
- **Did I Get This? activities:** Did I Get This? activities provide students the chance to do a quick self-check to assess their understanding of the material before doing a graded activity.
- **Many Students Wonder sidebars:** These short features provide supplementary material that students may find interesting but that is not necessary to understand the main concepts presented in the course.
- **Quizzes:** Taking these short assessments will assess how well your students have understood the material.
- **Podcasts:** Every module is supported by a podcast in which experienced evidence-based practitioners and academics reflect on topics and skills addressed in the module and provide examples on how to apply EBM skills in practice.
- **Exercises:** By doing these exercises your students learn how to apply your EBM skills in real-life organizations.
4. How many credit hours does it take to complete the modules?

As explained, the course exists of modules with explanatory content, learn-by-doing and did-I-get this activities, assessment quizzes, podcasts, and exercises. The total number of credit hours therefore depends on which course elements are used. For example, when only five modules are used the number of credit hours will be limited to 15. However, when all modules including the podcasts, exercises and in-class sessions are used the total number will increase to 166 hours (6 ECTS / 3 US Credits). An overview of all credit hours is provided in Appendix II.

Note that the time to complete a module also depends on the students’ level of knowledge: in general, young undergraduates with no work experience will need more time to complete the modules than executive MSc students.

5. What makes these course modules different?

The modules’ content was developed by the Center for Evidence Based Management (CEBMa), the leading authority on evidence-based practice in the field of management and leadership. The modules themselves were built by Carnegie Mellon’s Open Learning Initiative (OLI): learning engineers who integrate engineering and systems thinking with learning science to support better learning outcomes, and cognitive scientists and data scientists who design and test algorithms that analyze student learning. In addition, OLI uses student-centered design to make learning effective and fast:

- **Student-centered Learning Objectives.** Learning objectives are listed at the top of every module page. Your students will know exactly what they can expect to learn and do. In line with principles of evidence-based education, objectives make student expectations clear and demonstrable, and allow educators to see where their students are struggling or progressing as they complete practice exercises.

<table>
<thead>
<tr>
<th>SUB OBJECTIVE / SKILL</th>
<th>ACTIVITY</th>
<th>STUDENTS</th>
<th>CORRECT</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessing whether a statistical significant finding is of practical relevance</td>
<td>Learn By Doing: 2B.1</td>
<td>41</td>
<td></td>
<td>68%</td>
</tr>
<tr>
<td>Assessing the impact of an effect size</td>
<td>Did I Get This?: 2C.2</td>
<td>41</td>
<td></td>
<td>73%</td>
</tr>
<tr>
<td>Assessing whether an outcome was measured in a reliable way</td>
<td>Learn By Doing: 2B.2</td>
<td>32</td>
<td></td>
<td>66%</td>
</tr>
<tr>
<td>Identifying a study's research design</td>
<td>Did I Get This?: 2C.4</td>
<td>40</td>
<td></td>
<td>83%</td>
</tr>
<tr>
<td>Identifying the type of question a study aims to answer</td>
<td>Learn By Doing: 2B.3</td>
<td>41</td>
<td></td>
<td>61%</td>
</tr>
<tr>
<td>Grading a study's trustworthiness</td>
<td>Did I Get This?: 2D.2</td>
<td>41</td>
<td></td>
<td>72%</td>
</tr>
</tbody>
</table>
• **Immediate Targeted Feedback.** Every time students answer a question in a learning exercise, feedback is provided about their choice. When students answer incorrectly, feedback describes misconceptions behind their selection. When students answer correctly, positive feedback reinforces their learning. It’s like having a private tutor keeping each student on track.

![Not quite right](image)

- It is hard to determine whether the absenteeism rate at the 65 stores is too high, this depends on the number of employees that they employ. If the number of employees is much smaller than in the other stores, the rate of 6% may be distorted due to the small number problem and thus be substantially lower (or higher)

• **Learning Dashboard.** Data from your students’ learning activities and assessments are displayed in the instructor’s Learning Dashboard. It includes information about your students’ participation and performance at both the class and the individual level. This way you can quickly identify the concepts giving your students trouble and address these in class. In addition, you can quickly see how many students have attained each sub-objective (skills) and which ones are struggling.

![Learning Dashboard](image)

A science-based design underpins all of the modules’ content. Independent studies have shown that students using OLI’s interactive course modules achieve the same or better learning outcomes as students in traditional courses – and in half the time. More information about the course modules’ effectiveness can be found in **Appendix III**.
6. Can I first try out the modules?

Yes, you (and your colleagues) can have a look at all the course modules and try out the exercises and assessment quizzes by registering for an account at the OLI website. Use the course key **EBM-DEMO-40** to access the chapters. A more detailed description on how to get access can be found in *Appendix III*.

Please note that this demo-version only provides access to the course modules, not to the Learning Dashboard (but we are happy to give you a demonstration of the Dashboard).

7. Can I try out the course modules in my class?

Yes, we can set up a trial so you and your students can try out the modules at no cost.

8. How do my students get access to the course modules?

**OLI platform**

The course modules are accessible through the OLI platform ([https://oli.cmu.edu](https://oli.cmu.edu)). The students receive a pdf with instructions on how to set up an OLI account and a course key to enter the course.

**LMS integration**

The course modules can also be used within your university’s Learning Management System (LMS) – it can be seamlessly integrated into Blackboard, Moodle, Canvas, Desire 2 Learn, Sakai, and any other LTI-compliant LMS. The setup is entirely configuration-based and does not require any direct communication between your LMS and the OLI system.

9. What does it mean that the course is ‘certified’?

If your students complete all modules, they will receive an official CEBMa/CMU Certificate of Completion. However, they will only receive a certificate when they score 70% or higher on all assessment quizzes. Students have three attempts to reach this score: if they fail the first time – they can learn from the feedback and try again. Even if you use only a few modules in your class, your students will have access to all 15 modules and thus have the opportunity to obtain a CEBMa/CMU certificate.
10. Can the course modules be used in multiple courses and programmes?

Yes, most universities use the course modules as an (interactive) textbook that is used in multiple courses and/or programs. For example, an MBA program may include a course on research methodology that uses modules 6 and 7, and a course on organizational change that uses modules 13 and 14. Because the students pay a flat fee, you can use as many modules in as many courses and programs as you like. The modules will be accessible for the entire duration (e.g. 2 years) of the course or program.

11. Is there a textbook and is it included in the fee?

Yes, the fee includes a copy of CEBMa’s textbook Evidence-based management: How to use evidence to make better organizational decisions (Barends & Rousseau, 2018).
12. What if my students (or me) need help – is there a help desk available?

Yes, we have a Help Desk to assist your students (or you) when they encounter issues or when they have questions. They can access the Help Desk directly through the course modules. The Help Desk responds within 24 hours on business days.

13. What does it cost to use the course modules?

The fee for using the course modules is $150 USD per student. Note that this is a ‘flat’ fee, irrespective of the number of modules used. The fee is paid directly by the student using a credit card and can be paid in installments. Alternatively, the university can pay the fee for their students, in that case the university will receive an invoice from CEBMa. For low-income students there are CEBMa grants available.

14. Do you offer discounts?

Unfortunately we don’t offer discounts, as this may harm our relationships with other academic institutions and may set an unfair precedent. The only exception we make is when there is a long term commitment (3 years) for a substantial number of students (50+). In that case we can offer a price break up to 25%.
15. Where can my university or my students buy the course?

The course can be bought directly through CEBMa, campus bookstores, Barnes And Noble College, and third party suppliers such as VitalSource.

16. What about data protection: are the course modules GDPR compliant?

When students register for an OLI account, the only information that is recorded is their name, username, email address, institution name, and their responses to the learning activities. No other personal data are recorded. The course modules are compliant with all international laws and regulations in respect of processing personal data, including the EU General Data Protection Regulation (GDPR). In addition, OLI is part of Carnegie Mellon University’s larger Information Security, Risk and Compliance Program – all relevant policies and compliance statements can be found here:


17. Is a contractual agreement between the university and CEBMa needed?

Buying access to the course modules is more or less like buying a book from Amazon, so no license- or contractual agreement is needed. However, CEBMa’s Terms & Conditions apply, in addition CEBMa will set up a Service Level Agreement (SLA).
## Appendix I

### Overview Learning Objectives CEBMa course chapters

<table>
<thead>
<tr>
<th>Chapter</th>
<th>After completing this chapter, students will be able to ...</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chapter 1: The Basic Principles</strong></td>
<td>Summarize the basic principles of evidence-based management; Explain why we need evidence-based management; Explain what counts as evidence; Determine which sources of evidence were consulted; Assess (coarsely and in general terms) the quality of evidence; Determine whether the ‘best available’ evidence was used in a decision-making process; Correct common misconceptions about evidence-based management.</td>
</tr>
<tr>
<td><strong>Chapter 2: ASK</strong></td>
<td>Identify (hidden) claims/assumptions regarding a practical issue; Determine whether an (assumed) problem is sufficiently clear; Determining whether there is sufficient evidence to support the (assumed) problem; Determine whether the preferred solution is sufficiently clear; Determine whether there is sufficient evidence (from multiple sources) to support the preferred solution.</td>
</tr>
<tr>
<td><strong>Chapter 3: ACQUIRE – evidence from practitioners</strong></td>
<td>Determine what evidence to acquire from practitioners; Determine how to prevent selection bias when acquiring evidence from practitioners; Determine the best method(s) to acquire evidence from practitioners; Determine whether bias could have affected evidence from practitioners; Formulate clear, unambiguous, and unbiased questions.</td>
</tr>
<tr>
<td><strong>Chapter 4: APPRAISE – evidence from practitioners</strong></td>
<td>Assess whether professional experience is valid and reliable; Grade the trustworthiness of professional experience; Recognize how system 1 thinking influences valid and reliable professional expertise; Determine whether a decision is based on system 1 or system 2 thinking; Recognize common cognitive biases; Identify ways cognitive biases can be overcome; Critically appraise evidence from practitioners.</td>
</tr>
<tr>
<td><strong>Chapter 5: ACQUIRE – scientific evidence</strong></td>
<td>Determine the most relevant online research database(s) given the question; Determine whether a journal is peer reviewed; Determine the most important PICOC terms; Search the Internet for relevant alternative and/or related terms; Search Google Scholar for related or broader academic terms; Test search terms to identify terms that yield the most relevant results; Apply Boolean operators to specify a search query; Use the history function to combine search queries; Apply methodological filters to identify meta-analyses and/or longitudinal/controlled studies; Narrowing search results by adding additional PICOC terms; Limit a search result by limiting the date range.</td>
</tr>
<tr>
<td><strong>Chapter 6: A short introduction to science</strong></td>
<td>Assess whether a study was conducted according to the scientific method; Recognize pseudo-science; Assess whether a statistically significant finding is of practical relevance; Assess whether methodological bias may have affected the results; Determine whether confounders may have affected the results; Assess whether a placebo effect may have affected the results; Identify moderators or mediators that may have affected the results; Distinguish quantitative research methods from qualitative research methods; Determine a study’s research design; Efficiently read a research paper.</td>
</tr>
<tr>
<td>Chapter</td>
<td>After completing this chapter, students will be able to ...</td>
</tr>
<tr>
<td>---------</td>
<td>------------------------------------------------------------</td>
</tr>
<tr>
<td>Chapter 7:</td>
<td>Assess the impact of an effect size; Assess whether a statistically significant finding is of practical relevance; Assess whether a confidence interval is sufficiently narrow; Assess whether an outcome was measured in a reliable way; Distinguish cause-and-effect questions from non-effect questions; Determine a study's research design; Assessing whether a study’s research design is appropriate given the research question (methodological appropriateness); Assessing a study's methodological quality; Grading a study's trustworthiness on the basis of its methodological appropriateness and quality; Summarizing a study's main findings, weaknesses, and overall trustworthiness.</td>
</tr>
<tr>
<td>Chapter 8:</td>
<td>Explain the added value of organizational evidence; Distinguish data, from information and evidence; Determine what organizational evidence to acquire; Determine what types of organizational evidence are available and where they are kept; Distinguish 'normal' data from Big Data; Determine where to find relevant organizational evidence; Determine whether the evidence concerns operational data, metrics, KPIs or benchmarks; Explain the difference between descriptive and inferential measures; Identify potential barriers to acquire organizational evidence.</td>
</tr>
<tr>
<td>Chapter 9:</td>
<td>Determine whether a logic model was used to collect and analyze evidence from the organization; Assess whether organizational data are relevant; Identify steps in the collection and processing of data that could introduce risk of inaccurate data; Determine whether contextual information is missing; Determine whether there could be measurement error; Assess whether there could be a small number problem; Determine whether a metric is a good representation of the data; Interpret a metric's standard deviation; Assess whether a graph represents the data in a valid and reliable way; Interpret a correlation or regression coefficient; Determine whether a correlation- or regression coefficient is practically relevant; Assess whether there are outliers that may distort the evidence; Assessing whether range restriction may have affected the evidence; Assess whether a confidence interval is sufficiently narrow.</td>
</tr>
<tr>
<td>Chapter 10:</td>
<td>Identify and assess evidence from stakeholders; Identify and distinguish different types of stakeholders; Determine which stakeholders could be affected by a decision; Determine which stakeholders could affect a decision, its implementation, or its outcome; Identify the most relevant stakeholders; Determine how to acquire evidence from stakeholders in a valid and reliable way.</td>
</tr>
<tr>
<td>Chapter 11:</td>
<td>Explain why stakeholders' subjective feelings and perceptions should always be taken into account; Determine the practical and/or ethical impact a decision may have on stakeholders; Determine whether relevant stakeholders can freely express their views and feelings regarding a (proposed) decision; Determine whether there could have been selection bias in the way evidence from stakeholders was obtained; Determine whether the evidence from stakeholders is sufficiently representative.</td>
</tr>
</tbody>
</table>
| Chapter     | After completing this chapter, students will be able to ...
|-------------|-------------------------------------------------------------
| Chapter 12: AGGREGATE | Explain what proof, evidence, chance, and 'conditional' probability means; Assess the impact of a prior probability; Estimate the likelihood of the evidence: P(E|H_true) and P(E|H_false); Update the probability of a claim/ assumption/hypothesis when new evidence comes available; Aggregate evidence from multiple sources by applying Bayes Rule.
| Chapter 13: APPLY | Use the PICOC method to determine whether the evidence applies to the organizational context; Determine whether a decision/intervention gives you the biggest bang for your buck; Assess the level of risk inherent in a decision/ intervention; Identify ethical issues that need to be considered; Determine whether (and if so, how) the evidence is actionable; Determine whether there are moderators that need to be taken into account; Determine, given the type of decision at hand, how and in what form the evidence can be applied.
| Chapter 14: ASSESS | Identify the type of decision (to be) made (routine, non-routine, or novel/hyper complex); Determine whether a decision was executed as planned; Assess an outcome using the gold standard method; Assessing an outcome using quasi- or non-experimental methods; Suggest ways to improve the validity and reliability of an outcome assessment; Assess whether an outcome was measured in a reliable way; Assess whether indirect and intangible costs were taken into account; Assess the (unintended) consequences of a decision on stakeholders.
| Chapter 15: Building EBMgt capacity in your organization | Explain how to develop a questioning mindset; Explain how to make more mindful and explicit decisions more explicit; Create opportunities for people to practice and apply learning; Explain why evidence alone does not change people's minds; Illustrate how to give people's minds a way out; Help people to develop a new operating logic; Explain why increasing people's accountability leads to more information-seeking behaviour; Explain why it is important to take small steps; Determine the best way to build evidence-based capacity in your organization. |
Appendix II

Overview credit hours

<table>
<thead>
<tr>
<th>Course element</th>
<th>hours</th>
<th>EU credits</th>
<th>US credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 modules, on average 3 hours per module including quiz</td>
<td>45</td>
<td>1.5</td>
<td>0.75</td>
</tr>
<tr>
<td>15 podcasts, on average .5 hours per podcast</td>
<td>7.5</td>
<td>0.25</td>
<td>0.125</td>
</tr>
<tr>
<td>Contact hours &gt; evaluation, class discussion</td>
<td>10</td>
<td>0.5</td>
<td>0.25</td>
</tr>
<tr>
<td><strong>Total hours &amp; credits without exercises</strong></td>
<td>62.5</td>
<td>2.25</td>
<td>1.125</td>
</tr>
<tr>
<td>Exercise 1.1.</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise 1.2.</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise 1.3.</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise 1.4.</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise 2.1.</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise 2.2.</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise 3.1.</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise 3.2.</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise 4.1.</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise 4.2.</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise 6.1.</td>
<td>3</td>
<td>3.25</td>
<td>1.625</td>
</tr>
<tr>
<td>Exercise 7.1.</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise 8.1.</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise 9.1.</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise 10.1.</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise 11.1.</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise 13.1.</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise 14.1.</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise 14.2.</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise 15.1.</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise 15.2</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact hours &gt; evaluation, class discussion</td>
<td>14</td>
<td>0.5</td>
<td>0.25</td>
</tr>
<tr>
<td><strong>Total hours &amp; credits with exercises</strong></td>
<td>166.5</td>
<td>6.0</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Appendix III

What is the evidence that CEBMa’s EBMgt course modules are effective?

CEBMa’s interactive course modules were developed by Carnegie Mellon University’s Open Learning Initiative (OLI). As such, the use of OLI’s technology and learning science to support and accelerate learning outcomes is an important aspect of the modules. In considering the effectiveness of the modules, we would therefore suggest beginning with the module on OLI in the book *Game Changers* – the authors are well recognized as experts in this field and are exactly the scholars we would contact to discuss the validity and effectiveness of OLI’s work.

In addition, the OLI learning environment that CEBMa’s course modules use is built on decades of learning science research, using evidence-based methods to address instructional challenges and create conditions that enable robust learning and effective instruction. The extent of research demonstrating the effectiveness in this context cannot be covered in a quick précis. However, there is strong evidence that this approach offers strong potential benefits, which are reasonably well summarized by *John Hattie’s seminal work* that is based on a synthesis of 800+ meta-analyses:

- Formative Evaluation \( (d=.90) \)
- Acceleration \( (d=.88) \)
- Effective Feedback \( (d=.73) \)
- Meta-cognition \( (d=.69) \)
- Mastery Based Learning \( (d=.58) \)
- Concept Mapping \( (d=.57) \)
- Interactive content \( (d=.52) \)

With that said, several published peer-reviewed studies have shown the effectiveness of specific OLI courses, including:

1. **Accelerated Learning Study at CMU**
   - OLI students completed course in half the time with half the number of in-person course meetings
   - OLI students showed significantly greater learning gains and similar exam scores
   - No significant difference between OLI and traditional students in the amount of time spent studying statistics outside of class
   - No significant difference between OLI and traditional students in follow-up measures given 1+ semesters later
2. **Trial of OLI Statistics Course at Public Institutions**

- Comparable or better learning gains
- 25% more quickly

3. **Other OLI studies:**

- A small \( n = 24 + 32 \) randomized controlled trial with students from NYU Wagner School of Public Service in which the learning outcomes of the course module “ACQUIRE – scientific evidence” was compared with traditional lecturing found a significant moderate-to-large difference \( d = .69, 95\% \text{ CI} = .15-1.24 \), indicating that the e-module was more effective than the face-to-face condition.

- Students using an OLI course in the fully online mode at a large public university with a high proportion of English-as-a-second language-students achieved the same learning outcomes as students in traditional classes, and many more successfully completed the course (3)

- OLI stoichiometry course: The number of interactions with the virtual lab outweighed ALL other factors including gender and SAT score as the predictor of positive learning outcome (4).

- Engineering Statics: OLI instruction comparable to traditional Instructor-led coverage (5).

- Community College OLI Study (Psychology, A&P, Biology, Statistics): Faculty use of and experience with OLI course associated with higher student achievement gains, may help smooth out expected negative outcomes associated with race (6).

- An online course offered by OLI at Carnegie Mellon University, Computing@Carnegie Mellon, has seen enrollments of 6400 students since 2010; data from the course is used as part of an annual course improvement and redesign cycle. The iterative course improvements have been relatively successful, demonstrating an increase in successful student completion and the use of support mechanisms by at-risk students (7,8)

- More recently, an investigation into the use of OLI materials in the MOOC context has demonstrated the impact of OLI’s learning activities, suggesting that these learn-by-doing activities can have 6x the impact of activities such as static reading or videos (9,10)

We hope this evidence enables you to critically evaluate whether CEBMa’s use of OLI’s technology and learning science effectively supports learning outcomes.

**References**


3. Schunn & Patchan 2009


Appendix IV

How To Set Up A Demo Account

Please follow the steps below to enroll for the demo of CEBMa’s online course chapters offered through the website of Carnegie Mellon’s Open Learning Initiative (OLI)

Step 1: Register for an account at the OLI website

1. Go to the OLI website: https://oli.cmu.edu/
   In the upper right hand corner of the site, click “Students” and select “Start or Access Your Course”

2. On the next page, click the option “Register With Course Key”

3. On the next page, select the option “Register With Course Key” and enter the course key and click Register.
   The course key is EBM-DEMO-50

4. If you already have an OLI account, the system may recognize you as a registered user and direct you to the Sign In page*.
   Sign in with your Account ID and password and continue with step 8

5. If you don’t have an OLI account, the system will direct you to the Registration page.
   Fill out the form and click “Sign Up”

6. On the “Confirm Your Account Information” page, review the account information you entered. If everything is correct, click the “Confirm Account” button.
   If not, click “Edit Account” to make your changes.

7. Read the statements in the Online Consent Form and select “I Agree”, then select “Submit”

* If you are directed to the ‘Sign In’ page without having an OLI account, go to https://oli.cmu.edu/jcourse/webui/signup.do and fill out the form.
Step 2: Enroll for the course

1. Login into the OLI website with your username and password

2. Under “My Courses” you will see the course, it is named ‘DEMO EBM Certified Course vs 5.0’

3. To access the course in the future, visit https://oli.cmu.edu/ and sign in.