

## Credential-Builders for Engineers

### Fiscal Responsibility for Engineers Short Course

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Est. Contact Hours	15 (1.5 CEUs)
Key Learning Objectives	<p>Students completing the course will be able to:</p> <ol style="list-style-type: none"> <li>1. Learn and understand the role of finance in an engineering position</li> <li>2. Learn how finance and other functions interact with engineering</li> <li>3. Understand how to read and interpret an income statement and balance sheet</li> <li>4. Understand key financial metrics that are used to evaluate a company</li> <li>5. Learn how to evaluate an engineering project from a financial perspective</li> <li>6. Learn how to project financial outcomes for an engineering project and company</li> <li>7. Understand why “cash is king”</li> </ol>
Credentialing	<p>Completing this short course leads to earning a <u>badge</u> in <u>Fiscal Responsibility for Engineers</u>. Continuing on to take <u>Strategic Business Acumen for Engineers and Engineering Entrepreneurship</u> results in a micro-credential in Engineering Finance.</p>

#### Sessions

General Topics	Approach
Welcome and Introduction	An overview of the course content and focus is provided.
1. Role of Finance	Although you may have selected a career in engineering, understanding the role and importance of finance can only accelerate your career path. Excelling in the engineering function is only part of what it takes to truly succeed and exceed in the business world.
2. Engineering versus Finance and Other Functions	Can you let other functions play in your Engineering sandbox? Do you know why it is important for engineers to understand the roles of Finance, Procurement, Sales, Marketing, Logistics, etc.?



General Topic	Approach
3. Reading an Income Statement and Balance Sheet	The two most basic financial schedules are an Income Statement (also referred to as a Profit and Loss Statement) and a Balance Sheet. Understanding how to read and interpret them will provide you with a more balanced perspective on how broader corporate decisions are made.
4. Key Financial Metrics	Do you know what EBITDA means? Do you know the difference between gross margin and net margin? Do you know that “Income” and “Revenue” are not the same? Should you be focusing on Revenue, or Margin, or Cash, or Other when considering financial metrics?
5. Projects from a Financial Perspective	You’re an Engineer and you believe you have an outstanding project or concept or product that you have developed. That could be true from a technical perspective, but how can you ensure that it makes sense from a business aspect and that the project will be approved? What are the key financial considerations that you need to consider so that you will be proposing a well-rounded and fully vetted proposal?
6. Projecting Financials	So an Income Statement and Balance Sheet provide a financial summary of a business at a point in time or over a historical period. But how can you project where a business may be heading from a financial perspective? What are the key assumptions that drive a project or a business or a company’s outlook?
7. Cash is King	Have you ever heard the phrase “paper profits”? Do you understand that you may earn an adequate gross margin as a business, but you can still go bankrupt because you can run out of cash? Do you know what “working capital” is and how it can impact the success of a company? Well now you will...
8. Let’s Add it All Up	We will summarize the lessons learned throughout this short course and conclude with a final business case example to bring these financial concepts to life. The business case will bring some perspective with real world examples of the various items discussed throughout the course.

#### Resources Provided

Students will have free access to the University of Florida e-library system and the Canvas course site for assigned and recommended resources.

