

Business Management for Engineers

This course provides an overview of basic principles used to manage a business. In particular, this course will help individuals with a strong technical background in science or engineering prepare for the transition from a role as a technical contributor to a business leader.

Overview of Basic Business Principles

- Capitalism & Economic Expansion
- Free Markets
- Cost, Price, and Value
- The Role of Governments
- The Business of Business
- Business Structure

Evaluating a Business

- Operations Management
- Evaluating a Product or Product Line
- Evaluating a Business Unit
- Evaluating a Company
- Evaluating a Government Program
- Real World Examples

Initiating & Planning a Program

- Engineering and Program Management
- Life Cycle Processes
- Program Artifacts
- The Business Impact of Technical Decisions

Monitoring & Controlling a Program

- Financial Management
- Earned Value Management (EVM)
- Taking Control - Business Decisions

Growing a Business

- Strategy – The Business Model
- Marketing – The Customer Base
- Sales – The Value Proposition

Developing & Presenting a Business Case

- Investment Required
- Return on Investment (RoI)
- Delivering a Business Message
 - Business vs Technical
 - Presentation Skills

Business Regulations

- US Federal Acquisition Regulations
- US Export Regulations - ITAR & EAR
- Globalization
 - Foreign Import Regulations
 - Differences in Culture & Currency

Learning to Lead

- Review of Key Takeaways
- Increasing Your Value Proposition
- Continuing Education

Dr. Alan Tribble is a Principal Program Manager for Rockwell Collins. He previously held positions as Systems Engineer, Engineering Manager, Marketing Manager, and Technical Project Manager. He has twenty-five years' experience in the aerospace industry, and has a PhD in Physics from the University of Iowa. He is also the winner of the AIAA James Van Allen Space Environments award.



Mr. Alan Breitbart is a Principal Sales Manager for Rockwell Collins. He previously held positions as Principal Program Manager and Principal Business Development Manager. He has twenty years' experience in the aerospace industry, and holds an MBA in International Marketing from Loyola University.

Mr. Breitbart and Dr. Tribble have collaborated on a number of programs in recent years as both program manager and chief engineer, or sales lead and marketing lead, respectively.