**Purpose and Background**

It is not uncommon for engineering firm principals, project managers and technical staff to become confused and handcuffed when confronted with firm financial matters. After all, you were trained as an engineer, not an accountant. This program is designed to peel away the layers of mystery and provide you with the necessary basics - specifically as they pertain to engineering firm management. You will return to your office energized by new found financial skills, increased confidence, and a set of simple yet powerful tools and procedures you will use day in and day out to understand and manage your firm.

On day one we will explore the ins and outs of the income statement, company budgeting and the financial aspects of project management. Learn the difference between cash basis versus accrual basis revenue and expense recognition methods (and when, and when not, to use each method). Understand gross revenue, net service revenue, direct expenses and reimbursements. Learn how overhead is determined and how it applies to individual projects. Come to grips with establishing a company budget. Of the four possible types of company budgets any firm may choose to do, find out which of the four is absolutely crucial. Become proficient in extracting and then using key financial measurements such as the effective multiplier, breakeven overhead rate, target billing multiplier and labor utilization percentage. Find out how to create a no nonsense financial instrument dashboard for your firm that will allow you to efficiently, effectively and confidently follow and manage your practice. Understand the link between firm financial operations and project management. See how to relate companywide financial performance down to any individual project in your office, or to relate any individual project, or group of projects, back to the company statement. Find out why traditional profit center accounting by department or office - all the rage at larger firms - is generally a bad idea. Discover new ways to increase cash flow - the lifeblood of any organization.

On day two, we will delve into the intricacies of the balance sheet, concepts of firm valuation and ownership transition. Items of income and expense are recorded on a company income statement. The balance sheet reflects capital transactions, assets, liabilities and shareholders equity. Understand the nature and differences between short term and long term assets and liabilities. Learn how to extract and use key balance sheet indicators such as current ratio, debt to worth and working capital. Become comfortable with accounting terms such as leverage, capitalization, off balance sheet financing and liquidity. Gain insight as to what to look for when reading any firms annual report from its outside accountants. Discover how and when you should just say no to your bank when they require the shareholders to personally guarantee loans made to the company. Examine various concepts for determining firm value and why a firm can be worth more or less depending on choices made years before you ever attempt to sell. Learn why ownership transition is very much more than just moving dollars around - that is the easy part. Go through the pros and cons of an inside sale versus a sale to outsiders.

**Seminar Instructor**

DAVID M. WAHBY is president of Wahby & Associates, a practice management consulting firm formed in 1990 working exclusively with architectural and engineering firms nationwide. Prior to beginning his consulting practice, Wahby garnered first hand expertise over 10 years as a principal level financial and administrative manager of a large, multi-office A/E firm.

As a consultant, Wahby works week in and week out with architectural and engineering firms of all sizes and configurations providing organizational, financial, marketing and human asset support and guidance. Please visit www.wahby.com for a complete description of services offered and a library of published A/E management articles.

To register your group, contact John Wyrick (JWyrick@asce.org) or Stephanie Tomlinson (STomlinson@asce.org)
Our highly interactive program format includes several practice exercises as we work through the material to give you an on the spot chance to test your new understanding.

Gain increased confidence and understanding of the financial operations of your company or, for that matter, any professional service firm.

Improve overall financial results through the timely and effective monitoring of those performance indicators that deserve the most attention.

Learn invoicing and collection strategies and techniques to increase the cash flow of your firm.

Become comfortably conversant in common engineering firm financial terms and measurements and in identifying and understanding your strengths and weaknesses as a business.

See how to relate and compare performance of your firm to that of your competitors.

Increase the financial effectiveness of your project management system.

Understand the key opportunities and limitations associated with ownership transition and firm valuation.

Enhance your ability to make better personal investment decisions in general by better understanding how to read and what to look for in any financial statement.

Who Should Attend?

The material presented has primary application for new or entry level engineering supervisors, project managers and newer principals and executives of any size firm. Those in senior management positions (new or unfamiliar with financial issues) will gain a fresh perspective and additional insight into the financial performance of their organizations.

Topics Covered

- Reading and Interpreting the Income Statement and Balance Sheet
- Industry Specific Accounting and Job Costing Packages
- Accrual and Cash Basis Accounting Methods
- Key Performance Measurements
- Creating Budgets, Plans and Establishing Targets
- Utilization Rate, Overhead, Direct Labor, Effective Multiplier
- Current Ratio, Working Capital, Liquidity, Debt to Worth
- Alternative to Profit Centers
- Firm Valuation Methods
- Ownership Transition Basics
- Creating a Financial Dashboard at Your Firm
- Project Management Financial Reporting and Monitoring
- Tangible Value and Goodwill
- Cash Flow - Invoicing and Collections

Summary Outline

DAY 1

How to Understand Financial Statements

- Income Statement
- Balance Sheet
- Forms of Business Organization
- Accrual vs. Cash

Key Performance Measures

- Utilization and Chargeability
- Overhead Rate
- Effective Multiplier
- Current Ratio - Debt to Worth - Working Capital

Company Budgeting

- Labor Budget
- General and Administrative Budget
- Revenue Budget and Forecasting
- Capital Budgeting

DAY 2

Project Management

- The Job of the Project Manager
- Budgeting and Tracking
- Finding Problems Before it is Too Late
- Skill Sets for Effective Project Managers

Finding the Value of Your Firm

- Book Value vs. Fair Market Value
- Revenue Based Approaches
- Profit and EBITDA Measures
- Goodwill Determinates
- Contrast Between Inside and Outside Buyers

Cash Flow - The Lifeblood of Your Firm

- Invoicing and Collections
- Accounts Receivable and Work in Process
- Retainers and Service Charges
- When to Pull the Plug
- Selecting the Right Contract Format

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John Wyrick, Director
On-Site Training Worldwide
ASCE Continuing Education
Tel.: 703-295-6184
Email: jwyrick@asce.org