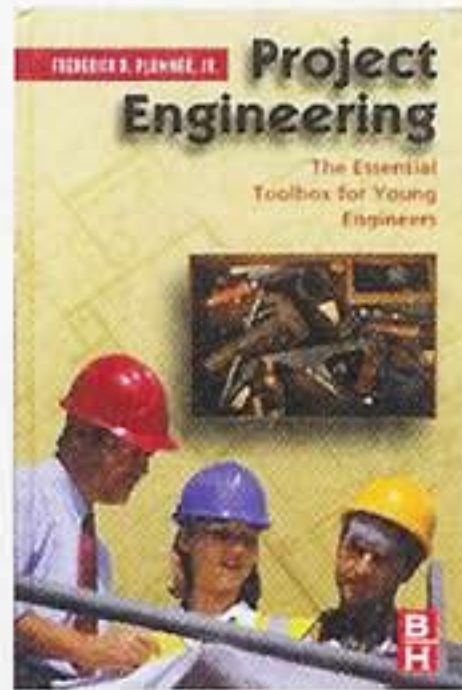


**Project Engineering: The Essential Toolbox for Young Engineers** by Frederick B. Plummer, Jr. Burlington, Massachusetts: Butterworth-Heinemann, 2007; 222 pages; \$34.95.

**P**roject Engineering was written with two goals in mind: helping the freshly minted engineer survive his or her first foray into the workforce and aiding the established working engineer as he or she seeks to advance to a leadership position. As it happens, author Frederick Plummer sees these two transitions as requiring the same types of skills, among them sound business judgment, an ability to survive the vicissitudes of office politics, and knowing how to outdo the competition.

Written in much the same way as a project-oriented engineering work, Plummer's "toolbox" is filled with a wide array of practical advice. An engineer with a doctorate in theoretical and applied mechanics who served for 10 years with the U.S. Army Corps of Engineers and another three decades in the oil and gas industry and is now the direc-



tor of execution excellence for a start-up engineering firm, Plummer can draw on a wealth of experience.

Beginning with a description of the scope of a project engineer's typical areas of responsibility, Plummer notes that they run the gamut from core planning to safety, risk management, cost control, and scheduling. Subsequent chapters are entitled "How Projects Work" (project implementation details for engineering, manufacturing, or construction), "Skills That Can Get You Ahead" (efficiency, judgment, technical prowess, an ability to work effectively with others), and "Things That Can Get You Fired" (bribery, false reporting, drugs, harassment). It is this last chapter that in some ways epitomizes the book's intent: while some pitfalls may be obvious and others are covered in the employee manual buried somewhere in your desk, it can be helpful to inexperienced engineers to be reminded of what will help them steer clear of trouble as they advance in their careers.

Concluding with an extended "mock case study" of learning project engineering on the job, along with a chapter containing advice from respected people at various levels, *Project Engineering* is an excellent reference work on the basics of launching an engineering career and staying on the right course.