

Safety Hot Topics – Debunking the Myths For Engineers and Managers, on Projects and in the Workplace Program/Course Information

By: S. Bobby Rauf, P.E., C.E.M, MBA

Credit: 7.5 PDH's (1-Day); 0.75 CEU's

Lead Instructor: Professor Bobby Rauf, PE, CEM, MBA

Description:

This course covers important concepts in the realm of construction and workplace safety. This course is designed to cater to Project Engineers, Construction Personnel, Construction Supervision, Principals/Owners of Construction Firms and Construction Administrative Staff. This course begins with importance of safety, supported by safety statistics and clarification of “myths” about need for safe practices at work and at home. Most of the main stream, PPE, Personal Protective Equipment and their proper use, is introduced through illustrations and in-class discussion. The importance of Workplace Environmental Safety and Health – namely, indoor air quality - is covered with emphasis on HVAC Systems and Mold Issues, as pertinent to residential, commercial and industrial buildings. The latter part of this course deals with the one of the most significant hazards, in almost any environment, “fire.” Attendees are introduced to fire classifications and associated fire extinguishers. Hazards or arc flash (NFPA 70E) and lockout tag-out best practices are covered.

Topics to be Covered:

1. Importance of safety in workplace
2. Methods and best practices for identification, quantification and mitigation of safety risks
3. PPE, Personal Protective Equipment, and its proper use
4. Important discussion on elevated work
5. Learn about the importance of workplace environment health and safety
6. Discuss “fire” a common yet serious hazard and selection of a proper fire extinguisher.
7. Lock-out and tag-out best practices.
8. Brief Review of Arc Flash and Electrical Shock Hazard
9. Ergonomics and its importance in designing equipment, tools and work stations.

What Attendees Can Take Away from This Course into the Workplace:

1. Safety on Construction Projects and Industrial or Commercial Workplace, is not commonly taught as a part of Engineering Curriculum. This course offers a means to offset this deficiency and provides attendees an opportunity to learn basic, yet vital, safety principles and concepts pertaining to Construction Projects, System Installation Projects and Work in an industrial and commercial environment.
2. Knowledge about basic, yet vital, PPE, Personal Protective Equipment.
3. Understanding of OSHA I and I Rate Calculations
4. Be better equipped to dispel myths and misconceptions about safety.
5. Skill to perform Safety Risk Assessments of Equipment, Systems and Projects.
6. Some understanding of Arc Flash and Electrical Shock Hazard

7. Importance of ergonomics in equipment and workplace design.

Who should attend:

- Engineers of all disciplines
- Licensed Professional Engineers, who need to meet the annual or biennial license renewal PDH (Professional Development Hour) or CEU (Continuing Education Units) requirements.
- Facilities and Maintenance Managers
- Safety Engineers and Supervisors
- Project Engineers and Project Managers
- Construction Managers
- Purchasing/Procurement Professionals
- Technicians with Plant Maintenance Responsibility in Industrial, Commercial or Institutional Environment
- Other professionals whose annual PLP, Performance and Learning Program, includes acquisition of facilities management knowledge.

“SemTrain, LLC, is an approved sponsor and course provider with NY, NYSED, Maryland, NCBELS, North Carolina Board of Examiners for Engineers, New Jersey, and FBPE, Florida Board of Professional Engineers, for the provision of CPC, Continuing Professional Competency, courses.”

“SemTrain, LLC, is approved for US Federal Government Contract Work, and is SAM and CAGE registered.

Important Notes for Participants:

- In order to enhance the learning experience, the class size is limited – register early.
- Seminars are subject to cancellation if the minimum registration threshold is not met. Registration fees will be refunded in entirety if a seminar is cancelled.
- Name on the attendance certificate will be as it appears on the registration documents. Please Note: If an admin associate registers you, have them enter YOUR name on the registration/payment form.
- Verify exact location of venue before the seminar date. *
- Bring valid ID and copy of registration information. *
- Light refreshments will be served. *
- Certificates of attendance will be provided.
- The handouts for the course will be provided via “Drop Box.”
- Seminar Hours – Each Day: 8:00 am - 5:00 pm. One hour for lunch. *
- Venue Wi-Fi where available. *

* This information applies to in-person, face to face, seminars only.

Instructor Bio:

Professor S. Bobby Rauf, P.E, C.E.M, MBA; Member, ASEE, American Society of Engineering Education.



Professor Bobby Rauf is the President, Chief Consultant and a Senior Instructor at Sem-Train, LLC. Bobby has over 25 years of experience in teaching undergraduate and post graduate Engineering, Science, Math, Business Administration and MBA courses, seminars and workshops. Prof. Rauf is registered (PE) **Professional Engineer**, in the State of North Carolina, a **Certified Energy Manager** and a **certified ergonomist**.

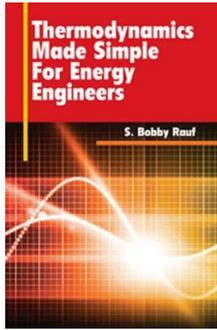
Prof. Rauf was inducted as “**Legend in Energy**” by AEE, in 2014. He is a published author of multiple engineering and energy books, and professional development courses. He holds a patent in process controls technology.

Prof. Rauf develops and instructs PDH (Professional Development Hour) and, continuing education, engineering skill building courses. He conducts these course in form of webinars, live on-site presentations, workshops, pre-recorded audio and self-study texts. Some his major clients include **Texas A&M University, Saudi Aramco – KSA, University of North Carolina at Charlotte, McNeese University, Lamar University, Clemson University, Association of Energy Engineers, EPIC College - Canada; US Bureau of Reclamation, BHP Billiton, PDHengineer, CED, Y-F Asia, and PDH Source.**

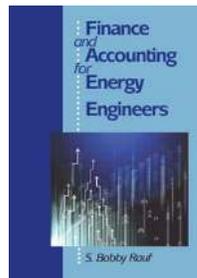
Prof. Rauf’s last full-time engineering employment, in the corporate world, was at PPG Industries, Inc. where he served as a **Senior Staff Engineer**. He brings to this program more than 25 years of hands-on experience in a broad spectrum of areas within large industrial plant engineering and plant maintenance departments, including electrical, controls, energy and mechanical projects. Professor Rauf has served as **Adjunct Professor at Gardner-Webb University** since 1989, where he has instructed classes in both the B.A. and M.B.A. programs.

Professor Rauf’s publications include (Available through AEE, Amazon.com, and Barnes and Noble):

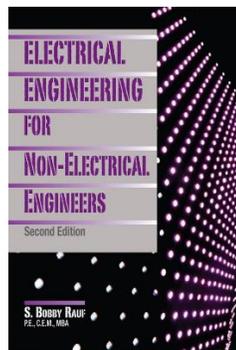
- 1) Text book titled “**Thermodynamics Made Simple for Energy Engineers,**” Published in 2012 through Fairmont Press and CRC Press – Worldwide distribution.



- 2) Text book titled **“Finance and Accounting for Energy Engineers,”** Published in 2011 through Fairmont Press and CRC Press – Worldwide distribution.



- 3) Text book titled **“Electrical Engineering for Non-Electrical Engineering,”** The Second Edition of this book was published in 2016 through Fairmont Press and CRC Press – Worldwide distribution.



Mr. Rauf of Sem-Train has provided training and/or consulting services to the following organizations over the last fifteen years:

1. **BHP Billiton**
2. **Saudi Aramco (Dammam, Kingdom of Saudi Arabia)**
3. **US Bureau of Reclamation (Hoover Dam)**
4. **CED**
5. **Balfour Beatty**
6. **Shaw Group**
7. **McNeese University**
8. **North Carolina State University**

9. University of North Carolina, Charlotte
10. Texas A&M University,
11. Clemson University,
12. PPG Industries, Inc.,
13. PDHengineer,
14. PPI, Professional Publications
15. University of Maryland Baltimore County,
16. EPIC (Canada)
17. Y-F Asia – Singapore

Testimonials from clients:

- 1) Kimberly T., 2011: Bobby, I would like to say that even though I am not an engineer, I am really glad that I took this. You have helped me to dissect and visualize some of the terms and concepts that were not tangible to me prior to this class.
- 2) Jim L. S. PE, CMRP, Manager Engineering: “....Bobby is an outstanding instructor and the material was very well presented.....We will want to do this again next year...”
- 3) Gregory (Greg) V. D., P.E.: “Hi Bobby, I've enjoyed both of your pdhengineer.com webinars that I've attended.....I don't know how you get through a full 8 hours at such a high energy level!”

Lead Instructor's Phone: (704) 477-9166

Cancellation Policy: Full refund granted if registration is cancelled **30 days** or more prior to the scheduled date of the seminar; otherwise, registrant can apply the course credit toward attendance at another, scheduled, equivalent event, in the region, at a later date.

Sem-Train, LLC, reserves the right to cancel the seminar when minimum registration threshold is not met. In such case, Sem-Train, LLC, will issue full refund to the registrant. Registrants, in some cases, may be given the option to attend the on-line, live, webinar, version of the seminar.

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