

## **Engineering Ethics**

### **An On-Demand Course on Engineering Ethics and Engineering Code of Conduct for Professional Engineers**

**Credit:** 1 PDH's

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

#### **Course Description**

This Sem-Train on-demand course caters to Licensed Professional Engineers who are interested in refreshing their understanding of some of the terms and concepts associated with the practice of engineering and the code of ethics and conduct professional engineers are expected to abide by. After defining some of the terms and concepts pertaining to the practice of engineering, the course segues into the rules of professional conduct. Three rules of professional conduct are reviewed. Each of the three rules of conduct and the terms and concepts associated with the practice of engineering are illustrated through multiple case studies.

#### **Learning Objectives - Upon successful completion of this course, participants will be:**

- Refreshed on some of the important professional engineering terms, concepts and principles.
- Refreshed on the three fundamental Codes of Ethics that apply to the practice of professional engineering.
- Able to understand the essence and application of the three codes of ethic through multiple case studies.
- Reaffirm and assess their comprehension of the professional engineering codes of ethic through course quiz.

#### **Who can benefit from this course:**

- **Licensed Professional Engineers**, who need to meet the annual or biennial license renewal PDH (Professional Development Hour) or CEU (Continuing Education Unit) requirements.

- Engineers who aspire to attempt and pass their FE, Fundamentals of Engineering, NCEES exam.
- **Other professionals** whose annual **PLP, Performance and Learning Program**, include engineering ethics courses, training, or seminars.

### **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.

*“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.*

### **List of Past and Current Clients:**

Mr. Rauf of Sem-Train has provided training and/or consulting services to over 5000 engineers and non-engineers through some of 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. **US Dept. of State (SemTrain, LLC, is SAM/CAGE approved for Federal Contracts).**
5. **CED**
6. **Balfour Beatty**
7. **Shaw Group**
8. **McNeese University**
9. **North Carolina State University**
10. **University of North Carolina, Charlotte**
11. **Texas A&M University,**
12. **Clemson University,**
13. **PPG Industries, Inc.,**
14. **NEG, Nippon Electric Glass**
15. **PDHengineer,**
16. **PPI, Professional Publications**
17. **University of Maryland Baltimore County,**
18. **EPIC (Canada)**
19. **Y-F Asia – Singapore**
20. **Duke Energy**

### **Testimonials from clients:**

- 1) Steve B; May 18th Energy Conservation On-line Webinar:  
Bobby did a great job covering a wide variety of subjects related to energy conservation. His personal stories really added to the presentation.

- 2) Kimberly T.: 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.
- 3) 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...
- 4) 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!”
- 5) See other testimonials at our website at [www.Sem-Train.com](http://www.Sem-Train.com).

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