

“There is a Weibull Distribution in Your Future”

by
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A presentation sponsored by the Central Iowa Section of the American Society of Mechanical Engineers for the professional development hours (PDH) for Professional Engineer License renewal in four one-hour sessions, 4 credits.

Date: April 27, 2007

Time: 1:00 to 5:00p.m.

Place: ISU Memorial Union Cardinal Room

Cost: \$100 for professional members; students are free

To register for the event, send email to Aaron Perrault (Aaron.Perrault@EmersonProcess.com) by April 20th. Individuals that register by April 20 are guaranteed the “The New Weibull Handbook” (cost is covered by the registration fee.) Individuals that register after April 20 are not guaranteed a copy of the handbook.

Note: Non-paying attendees (e.g., students) will not receive the handbook.

The goal is show you what has become the leading method worldwide for fitting life data. The Weibull Distribution is not usually found in a statistical textbook because it does not arise for “classical reasons”. Nevertheless, it is useful, important, and it is in your future.

Session 1: The Weibull Distribution and its anatomy.

Session 2: Finding distribution parameters from data.

Session 3: Moving to design considerations.

Session 4: Wider considerations in designing to a reliability specification.

Why You Should Attend:

Engineers rarely have sufficient content in their educational preparation to help them with stochastic considerations. What is learned during individual life-long self instruction can have many gaps, particularly in viewpoints. Some of these will be addressed. A devil is in the details! Extensive notes and examples will be provided. Come prepared to listen to the ideas, how they are related and play out, as opposed to taking copious notes, and half listening to matters of thought. Learn how to exploit linearization of cumulative distribution functions, allowing straight lines to be passed in-and-among plotted points permitting powerful insights to develop. These can be exploited in the quest of quantifying explanations of variation. Learn the role of least squares linear regression methods in assisting in the best-line weighting task. Discover what is approximate in grouped-data reduction. Learn how to check by hand, computer programs whose source code is not available to you. Learn the roles of normal, lognormal, and Weibull distributions in reliability analysis, and what is involved applying