

Engineering ethics in the U.S. and Germany

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Upon reading the IEEE Code of Ethics, the author immediately began his acquaintance with the subject of engineering ethics. Later, he even learned that engineering ethics lectures are complementary or compulsory parts of curricula at almost all U.S. universities — yes, he found, even books on engineering ethics did exist.

The author's personal learning experience should not lead the reader to the misinterpretation that he or other German electrical and electronics engineers would have behaved unethically in the past; merely that engineering and business ethics are observed more tacitly in Germany.

At first glance, one might assume that those who deal extensively with the subject of ethics might need it badly. False — the author's great familiarity with the U.S. engineering community enables and legitimizes his judgment that U.S. engineers behave at least as ethically as other engineers throughout the world. They might even be considered role models for ethics awareness.

TWO PROBLEM CLASSES. Apparently, there exist two major ethical problem classes: one dealing with ethical harassment of engineering professionals by their employers, the other dealing with personal ethical behavior. Because U.S. engineers are infrequently protected by written employment contracts, their ethical principles are at risk once those principles clash with a company's short-term business objectives. When such cases cannot be settled to the company's satisfaction, firing is not unlikely.

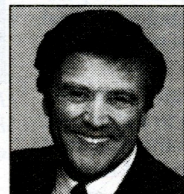
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Fortunately, this class of ethics problems hardly exists in Germany. Since no one is hired without a written contract, firing is not a hip-shooting, instantaneous process, but a cumbersome procedure that protects individuals for quite a while. In fact, most employees cannot be fired at all, or must be bought out with high severance payments. From a German engineer's point of view, working without a written contract seems to be totally unacceptable; if done in order to reduce an employer's commitment to zero, the employer would be considered unethical. How about requiring written contracts by law in the U.S.? This should solve a good portion of ethics problems of the first kind.

Regarding personal ethical behavior, life is different at the university level. For instance, if written examinations at German universities were not intensely supervised, some students might consider themselves very clever in checking their answers against the results of others. This would be tolerated by many of their colleagues and might even be considered social charity towards the less gifted. It is the student who reported cheating to the supervisors who would be considered by his peers to be unethical. This benign climate is not to be found in later professional competition, when engineers deal with other engineers who will put their own interests first. This is mutually accepted by all professionals and finds its limits only when external, less qualified shareholders get involved.

A NATIONAL CODE? Curious about efforts in his own country, the author asked his national engineering society, VDE, whether it had an engineering ethics code. He learned that such a code had been occasionally and repetitively discussed for a long time, but it had been always decided that editing or publishing an engineering ethics code would be very delicate. Therefore, results of the discussions have never materialized.



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Lacking a national engineering ethics code for electrical and electronics engineers, the author has translated the IEEE Code of Ethics into German and included it in the introductory remarks of his lecture notes. For more than 15 years now, his students have appreciated the awareness of their professor regarding engineering ethics problems. They wonder why engineering ethics is not dealt with on a broader basis. Germany has adopted Coca-Cola, Camels, basketball, golf, the IEEE, etc. The engineering ethics discussion will be next.