



WORKSHOP

Engineering Ethics Case Study

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WORKSHOP MODE

Hybrid mode during Perth business hours

OVERVIEW OF WORKSHOP

This workshop will involve participants in the evaluation of a case study of ignition switch failures on some US automobiles in the early 2000's. It explores how a failure of professional judgment progressed to a failure of professional ethics, resulting in avoidable deaths. Other factors magnified the extent of harm caused by these failures, but this case study is limited primarily to the root cause: decisions concerning the early engineering design of the ignition switch, and subsequent decisions in relation to that design. The case aims to show, amongst other things, how an ethical failure does not always start with bad intentions. The ethical dimension may develop gradually, and consequently evolve into a continuing intention to deceive.

ACTIVITIES

The case study (about five pages of reading) will be provided to registered participants in advance. Written questions will be provided with the case study. Groups of 3 – 5 participants (virtual if necessary) will work together to respond to the questions, following a ten-minute introduction from a Lead Facilitator. Groups will briefly report at the end of the session.

TARGET AUDIENCE

The target audience of the workshop is all staff who are engaged in L&T activities for professional practice and engineering design (all disciplines), although it is open to all who may be interested. The case is sufficiently non-technical and generic to provide valuable learnings for all engineering disciplines. A working knowledge of the EA professional Code of Ethics is highly recommended.

OUTCOMES

Appreciation of metacognition in professional judgment and decision; an understanding of the gradual nature of many ethical failures; case study materials for teaching professional ethics.

REFERENCES

Engineers Australia Code of Ethics 2019
<https://www.engineersaustralia.org.au/sites/default/files/resource-files/2020-02/828145%20Code%20of%20Ethics%202020%20D.pdf> (accessed 25 July 2021)

KEYWORDS

Professional judgment and decision, professional ethics, engineering design

PRESENTERS' BACKGROUNDS

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