



FINITE ELEMENT ANALYSIS TRAINING

Over 100 AWE mechanical engineers have completed theoretical and practical training in finite element analysis (FEA).

FEA is a computer-based numerical technique for calculating the strength and behaviors of engineering structures, including stress, vibration and buckling – without it mechanical robustness of structures under load has to be verified by hand calculations.

Senior design engineer Neil Turner co-coordinated the collaboration with two external companies, DAMT Ltd and CADPO, to develop the training program, culminating in a tailored suite of courses based on feedback from those who attended.

“AWE is investing heavily in model base engineering which means that engineers will increasingly have more access to design tools like FEA,” says Neil. “The company’s commitment to providing expert training in this area has raised the engineers’ capability, and has done much to promote their professional development. “The courses were launched as a ‘safety net’ to ensure that engineers who were using the FEA software would have received a minimum level of training to be able to carry out simple FEA effectively. More complex work in this area will always remain the domain of the existing expert analyses group already in existence.