

## Medical Device Usability Course

Instructor: Dr Nick Bradley, BERGO UK	
Day 1: Tuesday 17 June 2025	
Time zone: Londor	n (BST)
09.00 - 09.15	Objectives, Overview and Introductions
09.15 – 12.15	<ul> <li>1. Introduction to Usability Engineering <ul> <li>a) What is meant by usability?</li> <li>b) Legal framework for manufacturers</li> <li>c) Overview of usability engineering process in IEC 62366-1:2015 +AMD1:2020</li> </ul> </li> <li>Discussion: Experiences and Challenges</li> </ul>
12.15 – 13.15	Lunch
13.15 – 15:00	<ul> <li>2. User Research</li> <li>a) Design guidance in ANSI/AAMI HE75:2009/(R)2018</li> <li>b) User research techniques</li> <li>c) Preparing a use specification</li> <li>Exercise: Use Specification</li> </ul>
15.10 – 16.30	<ul> <li>3. Task Analysis</li> <li>a) Introduction to task analysis</li> <li>b) Task analysis techniques</li> <li>c) Hierarchical Task Analysis (HTA)</li> <li>Workshop: Task Analysis</li> </ul>
Day 2: Wednesday 18 June 2025	
Time zone: London (BST)	
09.00 – 12.15	<ul> <li>4. Managing the Risk of Use Error</li> <li>a) Introduction to use error</li> <li>b) Why do use errors occur?</li> <li><i>Exercise: Classifying Use Error Causes</i></li> <li>c) Techniques to manage use error</li> <li><i>Workshop: Use-Related Risk Analysis (URRA)</i></li> </ul>
12.15 – 13.15	Lunch
13.15 – 15.10	<ul> <li>5. Usability Evaluation</li> <li>a) Formative evaluations</li> <li>b) Summative evaluation</li> <li><i>Exercise: Cognitive Walkthrough</i></li> </ul>
15.20 - 16.20 16.20 - 16.30	<ul> <li>6. Usability Documentation and Integration <ul> <li>a) The usability engineering file</li> <li>b) The summary HFE/UE report for the FDA</li> <li>c) Developing a usability engineering procedure</li> <li>Discussion: Next Steps and Challenges</li> </ul> </li> <li>Course Summary and Conclusions</li> </ul>
10.20 10.00	