Not So Different After All

Material Scientists, Engineers and Product Designers all design things. Whether it be experiments, new materials, components or products, students of these subjects need to acquire skills in researching, accessing data, modelling, testing, and making their ideas a reality. This poster shows how CES EduPack, its tools and supporting teaching resources can support students as they develop these skills.

Understanding the Fundamentals

The Elements database of CES EduPack, coupled with online exercises, helps students understand the fundamentals.

Exploring Heat Treatments

The effects of heat treatments on properties can be mapped and displayed visually. The accompanying lecture and, Many heat treatments, shown many examples.

Getting Material Inspiration

Visualise the materials world and get ready access to data on 400+ materials. Typical image and searching can help students see what's been done before.

Modelling Materials

The Hybrid Synthesis helps students to calculate the properties of hypothetical composites and frames. Highlights one aspect of new material design.

Materials and Process Selection

Helping teach a critical selection methodology. Students can then see how this affects the many metrics and case studies.

Evaluating Environmental Performance

Technical performance isn't good enough any more. The Eco Audit Tool and the new Sustainable Technology Database help students evaluate the life performance of a design and then take into consideration in the many metrics when choosing a material.