

# **Ansys + NMITE**

"Ansys Granta EduPack has been invaluable for students and teaching alike. It has supported them in selecting materials confidently and proficiently. The comprehensive and flexible database allows students to not only include the materials' properties in the analysis and selection process, but also the processing and environmental impact properties. Ansys Granta EduPack is a brilliant tool!"

#### — Aris Quintana-Nedelcos PH.D, FHEA

Assitant Professor / 3D The New Model Institute for Technology & Engineering (NMITE)



#### CASE STUDY

#### / Unlocking Student Success: Proficient and Effective Materials Selection Training

Appropriate materials selection for a specific application can be a daunting task. When aiming to identify "the best material," a rigorous analytical process is often required, necessitating compromises in certain areas. To ensure students are prepared to tackle these issues, it is vital to provide them with a tool that allows them to be trained in the analytical process with a comprehensive materials dataset. Doing so in the most efficient way is paramount to their professional training.

To better support students in their training in material selection for specific applications, we need to give them access to a large library of materials' datasheets. They should be able to filter for specific properties and range, and compare the top selections in a flexible way. The ability to export the materials profile to simulation packages for further analysis is also important.

#### Ansys Products Used

• Ansys Granta EduPack

## / Engineering Solution

Granta Edupack is particularly attractive for NMITE for the following reasons:

- Comprehensive database of materials datasheets
- Flexible usage options that enable a variety of different analysis
- The ability to include not only the material's properties but also its processing and environmental impact properties in the analysis and selection process

#### / Benefits

- The size, richness and flexibility of the database enables NMITE to focus on the most critical aspects of the materials selection analytical process
- Emphasis on the anaytical process
- Student confidence when using a large database

### / Company Description

The New Model Institute for Technology & Engineering (NMITE) is breaking the mold of higher education with a focus on developing high qualty, industry-ready engineers. NMITE's unique approach to learning takes place through a curriculum that has been co-developed with industry, and the community, to meet the engineering, and technical demands of the 21st century.

Aris Quintana-Nedelcos PH.D, FHEA is an Assitant Professor of heat flow and energy and the module lead for MATI (Materials I) at NMITE.



Students are introduced to a material's properties and gain an understanding of its potential uses and limitations



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