

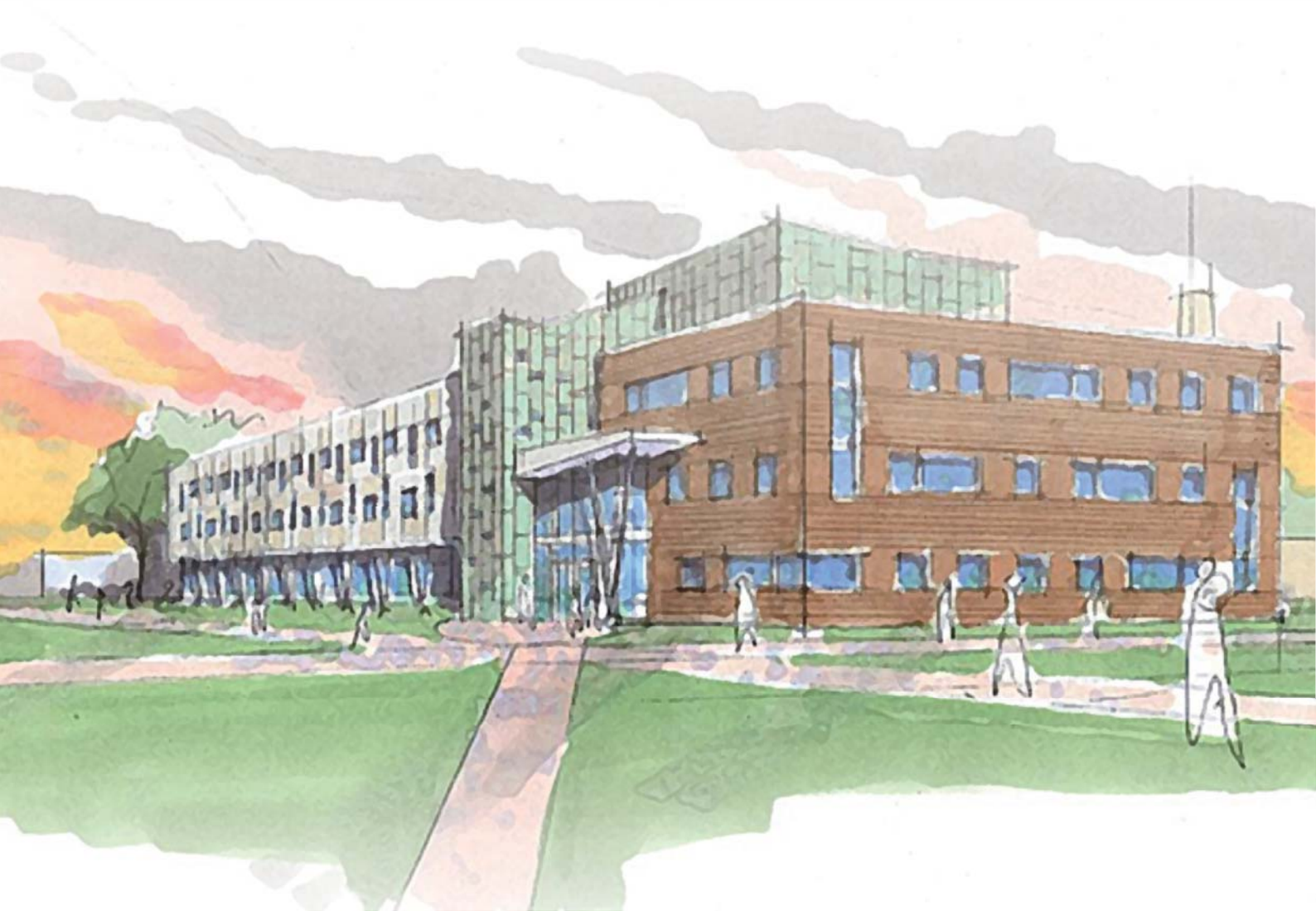
Buffalo State College: Engineering Training for the Future

Buffalo State University, a US university founded in 1871 in the state of New York, has established a nationwide reputation for offering practical engineering courses of the highest standard. Small class sizes and direct contact with the teaching staff are just two of the benefits of studying here. The university offers its 12,000 or so students more than just clearly laid-out campus structures: it also provides an academic home in which they can fully realise their potential.



The new building for the Technology Department

This extends to modern infrastructure and equipment. To this end, a new building has been planned to house the entire Technology Department with its electrical and mechanical engineering students. A modern exterior has to go hand in hand with state-of-the-art technical equipment. Ilya Grinberg, Professor at the Technology Department, therefore visited the headquarters of Lucas-Nülle in Kerpen to find out more about the company's latest training systems.





Ilya Grinberg: Professor in Buffalo State College's Technology Department

LN Practice:

What do you attach particular importance to in engineering training?

Ilya Grinberg: I want our students to acquire the kind of skills that I believe are vital for engineers. They should be self-confident, fascinated by technology and able to think on their feet.

Engineers often have a lot of responsibility within the scope of their projects. They therefore need to be able to identify a problem quickly, come up with a swift solution and implement it competently. Technical skills are therefore just as important as personal soft skills. We try to teach them both.

LN P.: Didactically, how do you bridge the gap between the teaching of personal and technical skills – something that at first glance appears to be fairly challenging?

I. G.: We achieve this by closely integrating the theoretical and practical elements of our courses. A solid theoretical foundation is essential for engineers, but how this theory is applied in practice must be made clear straight away. Only in this way can the students recognise where their strengths and weaknesses lie.

Besides, the emphasis on practical application also has a very motivating effect. The range of suitable training systems to choose from is actually limited somewhat by this requirement. But we have found exactly what we need in Lucas-Nülle's portfolios, both in terms of content and the didactic approach.

LN P.: How are you going to use the new training systems?

I. G.: The Electric Machines laboratory courses, for example, are mandatory for all Bachelor engineering students at our university, regardless of their particular discipline.

Here we will use the UniTrain-I courses to provide students with a solid technical grounding. Advanced students, and in some cases those working on projects for their graduate thesis, will use Lucas-Nülle systems based on UniTrain-I. We will also cooperate with other universities in the city to enable as many students as possible to use the new equipment.

The fact that the systems offer such a broad range of applications is important to us. It allows us to carry out experiments that tie in with theoretical instruction while also covering more advanced research work as well – an added value which, to my knowledge, is not offered by any other manufacturer. And we will be able to make even better use of it once we move to our new premises.

LN P.: All the best with the move and thank you for talking to us. ■