

# An Accelerated Bachelor's Degree in Semiconductor Materials and Devices<sup>1</sup>

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Kettering University, a STEM-focused private university in Michigan, is gearing up to launch an Accelerated Bachelor of Science degree in Semiconductor Materials and Devices that is designed to address one of the major hurdles in bringing semiconductor manufacturing back to the United States: a shortage of skilled workers. With the current strain on the global supply chain, and the CHIPS and Science Act injecting billions of dollars into bringing semiconductor manufacturing back to the US, the demand for highly-skilled professionals with semiconductor-industry-relevant training is skyrocketing. Funding for the development of this program has been obtained through a Strategic Investment Grant from the Michigan Economic Development Corporation (MEDC) intended to bolster Michigan's technological workforce. Kettering University has also become one of the participating schools under the MEDC-supported Michigander Scholars program to bolster workforce preparation in Michigan's high-tech sectors. The skill set required for a career in the semiconductor industry is inherently interdisciplinary, and this degree program reflects this, as it has elements from physics, chemistry, and engineering. In this talk, we will present the motivation behind this degree, the plan of study itself, and the reasoning behind why it was constructed in the manner in which it was.

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<sup>1</sup> An application for this new program has been submitted to the Higher Learning Commission (HLC) and is pending approval.