Summary
Dr. Rickli directs the Manufacturing and Remanufacturing Systems Laboratory (MaRSLab). MaRSLab targets fundamental and applied research in manufacturing and remanufacturing processes and systems while encouraging considerations for sustainability and life-cycle thinking in design, manufacturing, use, and recovery. Thrusts include: transforming manufacturing quality monitoring and remanufacturing core condition assessment via automated laser line scanning systems; remanufacturing core management considering uncertain core quality, quantity, and timing; and integrating design for disassembly and remanufacturing into CAD/CAM tools.

Design for Disassembly

Automated laser line scanning and collaborative robot automation in manufacturing

Using manufacturing data to improve decision making and prediction

Research experience for undergraduates as an approach for learning sustainable manufacturing fundamentals