

# COMP 220: INTRODUCTION TO COMPOSITES RECYCLING

Learn about reclamation and recycling of advanced composite materials including terminology, composite materials, thermoplastics and thermoset, and the challenges involved in recycling composites life cycle—from raw material manufacturing to product end-of-life. Students will view case studies and have complementary lab time, in order to explore hands-on reclamation and recycling opportunities.

## Course Student Learning Outcomes

1. Describe the current state of recycling, with an emphasis on advanced composites recycling.
2. Identify thermoplastic and thermoset chemistries, and the methods and challenges faced in recycling each.
3. Utilize the-sources of scrap in composites recycling, from raw materials to product end-of-life.
4. Differentiate the concepts of down cycling, design for recycling, scrap minimization, and life cycle analysis.
5. Analyze and utilize the processes of sorting, quantifying and using composite scrap materials to create new goods.

Credits: 5

Program: [Advanced Manufacturing / Composites Technology](#)