MINIMAL-WASTE ATHLETIC WEAR DESIGN

MORGAN MANUEL, ARCHANA MEHTA, FACULTY ADVISOR

INTRODUCTION: THE CHALLENGE WAS TO DESIGN AN ACTIVE ATHLETIC APPAREL, SUITABLE FOR RUNNING BUT UTILIZING ZERO-WASTE METHODS. IN TRADITIONAL PATTERN MAKING AND FABRIC CUTTING APPROACH, UP TO 15% OF FABRIC IS WASTED, WHICH IF NOT RECYCLED ENDS UP IN LANDFILLS.

BY USING JIGSAW CUTTING, WE ONLY WASTED BETWEEN 2-5% OF THE FABRIC ORIGINALLY PURCHASED.

ZERO WASTE IS MAKING ALL PATTERNS GO EDGE TO EDGE SO, THERE IS NO BLANK SPACE AND NOTHING WASTED.

THE RESULT WAS A THREE-PIECE ATHLETIC OUTFIT COMPRISING OF A T-SHIRT, SPORTS BRA, AND LEGGINGS. COMBINING FUNCTIONALITY WITH VISUAL APPEAL.

TRADITIONAL PATTERN MAKING

NO WASTE CROP TOP

MINIMAL-WASTE SPORTS BRA AND NO WASTE LEGGINGS

Laser cutting done at Fashion Tech Style Lab (adds breathability for athlete)

Key pocket on side of sports bra

Large pocket on back of leggings

Fabric wasted:

Introduction:

By using jigsaw cutting, we only wasted between 2-5% of the fabric originally purchased.

Zero waste is making all patterns go edge to edge so, there is no blank space and nothing wasted.

The result was a three-piece athletic outfit comprising of a t-shirt, sports bra, and leggings. Combining functionality with visual appeal.

This project is unique and much research is done combining zero-waste cutting with active sportswear. As a runner myself, making something that was practical for a runner was important to me and as a designer I wanted to combine aesthetic appeal with functionality and sustainability.