

# Computational Design for Manufacturing

July 16-18, 2018

Professor Wojciech Matusik

## Monday

## Tuesday

## Wednesday

9:00-10:00 am	<b>Course overview and introduction to additive manufacturing</b> Matusik	<b>Introduction to generative design</b> Matusik	<b>Automating design across multiple domains</b> Matusik/Schulz
10:00-11:00 am	<b>Solid modeling</b> Matusik/Schulz	<b>Topology optimization</b> Matusik	<b>Lab 3: Automating design across multiple domains</b> Matusik/Schulz
11:00 am - Noon	<b>Material modeling for additive manufacturing</b> Matusik/Schulz	<b>Multi-material generative design</b> Matusik	
Noon-1:00 pm	Lunch	Lunch	Lunch
1:00-2:15pm	<b>Material modeling for physical simulation</b> Matusik	<b>Introduction to optimization and design space reduction</b> Matusik/Schulz	<b>Expert systems for computational designs</b> Matusik/Schulz
2:15-3:30 pm	<b>New directions for direct design</b> Matusik	<b>Interactive design space exploration and optimization</b> Matusik/Schulz	<b>Data-driven methods for computational design</b> Matusik
3:30-5:00 pm	<b>Lab 1: Direct design for additive manufacturing</b> Matusik/Spielberg	<b>Lab 2: Topology optimization</b> Matusik/Spielberg	<b>Automated discovery of optimal designs</b> Matusik
5:00 pm	Adjourn	Adjourn	Adjourn