

AI for Computational Design and Manufacturing

Course Schedule

Instructor Wojciech Matusik

Time	Day 1 – July 21	Day 2 – July 22	Day 3 – July 23	Day 4 – July 24	Day 5 – July 25
9:00–10:30	Module 1: Digital Data Representations – Lecture	Module 3: Generative AI Models for Design – Lecture	Module 5: AI-based Simulation – Lecture	Module 7: Design Optimization– Lecture	Module 9: Design to Manufacturing – Lecture
10:30–12:00	Module 1: Digital Data Representations – Lab	Module 3: Generative AI Models for Design – Lab	Module 5: AI-based Simulation – Lab	Module 7: Design Optimization – Lab	Module 9: Design to Manufacturing – Lab
12:00–1:00	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break
1:00–2:30	Module 2: Design Spaces – Lecture	Module 4: Performance and Simulation – Lecture	Module 6: Simulation to Reality Gap – Lecture	Module 8: AI for Inverse Methods – Lecture	Module 10: AI for Process Optimization – Lecture
2:30–4:00	Module 2: Design Spaces – Lab	Module 4: Performance and Simulation – Lab	Module 6: Simulation to Reality Gap – Lab	Module 8 AI for Inverse Methods– Lab	Module 10: AI for Process Optimization – Lab
4:00–5:00	AI/ML Review	Tell Us About Your Design & Manufacturing Problems	Lab Tour	Latest Research in AI for Design and Manufacturing	Course Recap and Q&A