Utrecht Summer School: '3D Printing and Biofabrication', July 2026				Program	
		Time	Location	Topic	Speaker
Monday	13-Jul	9.30 - 10.00	UMC	Check in and coffee	
		10.00 - 10.15	Heidelberglaan 100	Welcome & Course Overview	Jos Malda (UMCU, Netherlands)
		10.15 - 10.40	Blue college room	Student Introductions	Estee Grandidier (UMCU, Netherlands)
		10.40 - 11.15		Basics of Additive Manufacturing	Riccardo Levato (Utrecht University, Netherlands)
		11.10 - 11.45		3D technology in modern healthcare	Joëll Magré (UMCU, Netherlands)
		11.45 - 12.45		Lunch (Included)	
		12.45 - 13.15			
		13.15 - 13.45		AI-powered bioprinting	TBA
		13.45 - 14.15		Medical 3D Planning and Printing: Optimal Medical Solutions for Better Clinical Outcomes	Arsham Makaryan (Materialise NV, Belgium)
		14.15 - 14.30		Coffee break	
		14.30 - 15.45		Generation of 3D anatomical models using medical data	Arsham Makaryan (Materialise NV, Belgium)
		15.45 - 16.15		Shape morphing biomaterials for additive manufacturing	Tina Vermonden (Utrecht University)
		16.15 - 17.00		Advanced technologies for bioprinting at organ-scale cell density	Yu Shrike Zhang (Harvard University, USA)
		17.00 - 17.15		Explaining assignments	
Tuesday	14-Jul		University of Applied Science		
		9.00 – 9.30	Location: Padualaan 99	Introduction fablab	Joris van Tubergen
Workshop 3D Printing		10.00 - 12.00	Start workshops, choosing 1 out of 3.	1. Getting to know the firmware: introduction to gcode and using it on bioprinting, z-corp) 2. workflow introduction, 3D drawing (tinkercad) & printing 3. Hands-on machinework with different material (porcelain, chocolate, PLA)	1. Gabriel Groesbacher 2. Bram Nijhoff 3. Joris van Tubergen
		12.00 - 13.00		Lunch with lecture about scanning for protheses	
		13.00 - 15.30	Start workshops, choosing 1 out of 3.	1. Getting to know the firmware: introduction to gcode and using it on bioprinting, z-corp) 2. workflow introduction, 3D drawing (tinkercad) & printing 3. Hands-on machinework with different material (porcelain, chocolate, PLA)	1. Gabriel Groesbacher 2. Bram Nijhoff 3. Joris van Tubergen
		15.45 - 17.45	Start workshops, choosing 1 out of 3.	1. Getting to know the firmware: introduction to gcode and using it on bioprinting, z-corp) 2. workflow introduction, 3D drawing (tinkercad) & printing 3. Hands-on machinework with different material (porcelain, chocolate, PLA)	1. Gabriel Groesbacher 2. Bram Nijhoff 3. Joris van Tubergen
		18.00	End		
Wednesday	15-Jul		UMC		
		08.30 - 09.00	Heidelberglaan 100	Introduction to Regenerative Medicine & Stem Cells	Bernard Roelen (Utrecht University, Netherlands)
		09.00 - 09.45	Blue college room	From biomedical bioprinting to biotechnology and towards space...	Michael Gelinsky (TU Dresden, Germany)
		09.45 - 10.00		Coffee break	
		10.00 - 10.30		Shaping matter using light for cell mechanobiology and in-vitro disease/treatment modelling	Aleks Ovsianikov (TU Wien, Austria)
		10.30 - 11.15		Soft robotics and biofabrication	Simone Schürle (ETH Zuirch, Switzerland)
		11.15 - 11.45		Electrowriting in tissue engineering and biofabrication	Tomasz Juengst (Wuerzburg University, Germany)
Applications of 3D biofabrication		11.45 - 13.00		Meet the expert - Lunch	
		13.00 - 13.45		Microfluidic-assisted biofabrication	Utrecht Advanced in Vitro Models team
		13.45 - 14.15		Regulatory aspects in biofabrication and medical 3D printing	Hanneke Later Nijland (Genome Lawyers)
		14.15 -14.45		Organ on-a-chip technologies	Utrecht Advanced in Vitro Models team
		14.45 -15.00		Coffee break	
		15.00 - 16.00		Electrowriting in tissue engineering	Juergen Groll (Wuerzburg University, Germany)
		16.00 - 17.30		Work on assignment	
Thursday	16-Jul		Hubrecht / RMCU		
		8.45 - 09.15	Uppsalalaan 8	Volumetric Bioprinting for Fabrication of Highly Complex Living Structures	Paulina Nunez Bernal (UMCU, Netherlands)
		09.15 - 9.45		Taming Multi-material Biofabrication to Influence Stell Cell Activity	Lorenzo Moroni (MERLN, Netherlands)
		9.45 - 10.00	Auditorium 08.30 -12.45	Coffee break	
				Printing cartilage	Jos Malda (UMCU, Netherlands)
		10.00 - 10.30		Biofabrication with microgels	Laura de Laporte (Aachen, Germany)
		10.30 - 11.00		Adult Stem Cells for Advanced In Vitro Models and Whole Organ Engineering	Bart Spee (Utrecht University, Netherlands)
		11.00 - 11.30		Cardiac Tissue Engineering	Joost Sluijter (UMCU, Netherlands)
Applications of 3D biofabrication		11.30 - 12.00		Building the kidney – from design to function	Anne Metje van Genderen (Utrecht University, Netherlands)
		12.00 - 12.45		Perspectives in the biofabrication industry	Jasper van Hoorik (BioINX), Fabien Guillemot (Poietis), Maaike Braham (ICAT), Anke de Leeuw (regenHu)
		12.45 - 14.00		Lunch (included)	
		14.00 - 17.15		Laboratory tour and 3D bioprinting workshop	
				Station 1 - Extrusion printing technologies	Paulina Nunez Bernal (UMCU, Netherlands)
				Station 2 - Melt Electrowriting	Georgia van der Linden (UMCU, Netherlands)
				Station 3 - Volumetric printing	Sammy Florczak (Utrecht University, Netherlands)
				Station 4 - LIFT printing	Fabien Guillemot (Poietis)
				Station 5 - Microfluidics and Organ-on-a-chip	Gaja Zanoni (UMCU, Netherlands)
				Station 6 - Meet the Industry	all industry partners
		17.15 - 18.00		Work on assignment	
Friday	17-Jul	9.00 - 9.30	UMC	Key collection	
		9.30 - 10.30	Heidelberglaan 100	Learning from nature: inspired by regenerative axolotls	Sarah Heilshorn (Stanford University, USA)
		10.30 - 12.00	Blue college room	Student presentations	
Presentations Assignments Wrap up		12.00 - 12.15		Announcement of award for best presentation	
		12.15 - 12.45		Wrap-up	
		12.45 - 14.00		Class Lunch (included)	