## **FiTech Summer Boost 2019**

# Additive Manufacturing and 3D-Printing



2019!





4th lecture: Busines	ss opportunities and pitching ideas		
12	Intro	Jouni Partanen	
12:10	3rd miniseminar: Introducing second best idea		
12:30	Business Models of 3D printing	Jan Holmström	
12:55	Markets and trends in AM	Markus Korpela LUT	
	Break		
13:30	Business model Canvas and Pitching	Meri Kuikka	
14:45	Discussion and plan for next lecture, homework assignment	Jouni Parta	anen



# **Teaching Staff**



Markus Korpela Researher LUT Pekka Törnqvist Laboratory Manager Turku AMK

Meri Kuikka, Aalto Univ, School of Business



Prof. Jan Holmström, Aalto Univ, School of Science

#### Teaching staff for the course

- Aalto University, ENG, SCI, BIS
- Lappeenranta University of Technology
- Tampere University
- University of Oulu
- University of Vaasa

#### Shark Tank

- EOS Finland
- Nokia, DIMECC
- · Benefon, Business Finland



## **Course Structure**

#### 05/2019

The first part of the course presents widely AM and 3D printing technologies and design aspects that are deepen by weekly group assignments. The assignments are presented before next week lecture in a miniseminar.

- 5 x 3 h lectures
- 4 x weekly group assignments
- · 4 x miniseminars before the lecture

#### 06-07/2019

In the second part, students will run a project in AM.

- Project: groups of five identify the problem, innovate AM solution, design AM model and print AM prototypes.
- Lecturers direct and support the project development in 3–5 appointments in Turku.
- Groups select one person, five in total, to take part in Nottingham conference (www.additiveinternational.com/about/).

#### 08/2019

Third part is for dissemination of project results.

- Groups evaluate group activity
- Groups present their project in a "Shark Tank" 16th of August 2019



Schedule: WEEK	М	Weekly events
Fri 17th		1st lecture: Introduction to AM and 3D printing
		Project assignment
Fri 24th	MAY	2nd lecture: Concept creation and Design
wed 29th		3rd lecture: Redesign of components
		1st support appointment
Fri 7th		4th lecture: Business opportunities and IPR
Fri 14th	JUNE	5th lecture: 3D printing clinic
Tue 25th	_	2nd support appointment
Fri 5th		3rd support appointment
Fri 19th		4th support appointment
Fri 2nd	g	5th support appointment
	AU	3D printing of final parts
Fri 16		"Shark Tank"



#### https://www.additiveinternational.com/about/





9TH - 11TH JULY, 2019 BELFRY HOTEL, NOTTINGHAM UK

#### Assessment Methods and Criteria:

Weekly activity in lectures: weight 10%, scale 1-5

Grade from home assignments: weight 30%, scale 1-5

Grade from final Project: weight 60%, scale 1-5



# Thank you!

# Jouni Partanen

Aalto University

Dept of Mechanical Engineering

jouni.partanen@aalto.fi, tel. +358 50 576 9804

