Dreaming-Spacing • Lifestyle Design in the 3D Printing Age

—— 2018 Jiangnan University International Design Summer School (IDSS2018)

June 20th to July 4th, 2018

School of Design, Jiangnan University, 2018

In 1986, Charles Hull invented the first commercial 3D press.
In November 2010, Urbee, the world's first car printed from a 3D printer was introduced.
In July 2011, British researchers developed the world's first 3D chocolate printer.
In November 2012, Scottish scientists used human cells for the first time to print artificial liver tissue using a 3D printer.
April 7, 2017, the German sports brand adidas launched the world's first soles made of 3D printed sneakers, plans to begin mass production in 2018 in response to the rapidly changing fashion trends, the production of more customized products ...

So, what else is 3D printing impossible?

Welcome to join 2018 JUIDSS! Let' s work together to discover the widespread use of 3D printing technologies in people's life in the future!

Introduction:

This summer school is designed to create an interdisciplinary practice for design students from various background, to explore the different emerging issues along with the new technologies, and to create a unique cultural experience of the traditional and the new cultures in China.

The contents of the summer school are waiting for you to explore!

- **3D Printing (3DP) Technology**

Ordinary printers used in daily life can print computer-designed flat articles, and the so-called 3D printer and ordinary printer works basically the same, but the print material is somewhat different, the ordinary printer's printing material is ink and paper, and the 3D printer has a metal , Ceramic, plastic, sand and other different "printed materials", is a real raw material, the printer and the computer connected through computer control can be "printed materials" layer by layer together, the final blueprint on the computer into In kind. To put it in a nutshell, a 3D printer is a device that "prints" real 3D objects, such as printing a robot, printing a toy car, printing various models, even food, and more.

There are many different techniques for 3D printing. They differ in the way they are made of materials and build parts in different layers. Materials commonly used in 3D printing include nylon glass fiber, polylactic acid, ABS resin, durability nylon material, gypsum material, aluminum material, titanium alloy, stainless steel, silver plating, gold plating and rubber materials.

- **Dream, Space and Dreaming-Spacing**

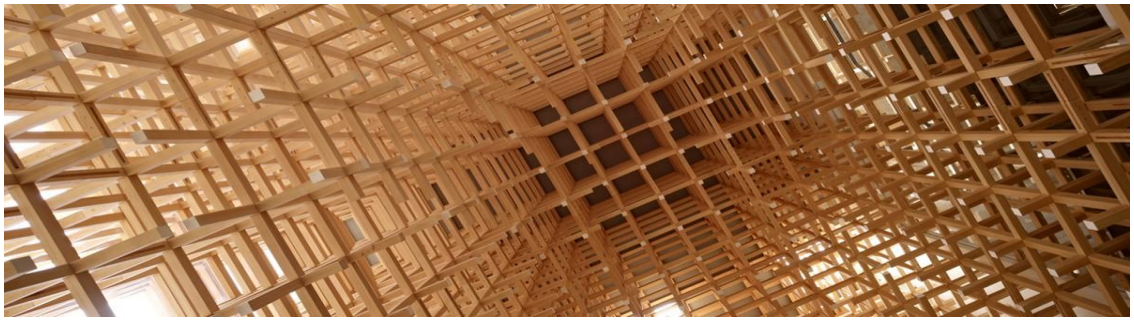
What is Dream Space about?

Everyone has his/her own dream space. Children in their childhood create their dream space with building blocks, in which their beloved stay-in; Designers' dream space is a process that makes dreams come true. The intangible, unknown dreams that emerge from the beginning of the concept are recorded through the tip of pencil, and the outline of the dream gradually becomes clearer and clearer. Turn your dreams into sketches, into drawings, build models, and ultimately make 1: 1 dreams a reality.

Future dream space is the carrier of a new lifestyle. What is the life of the dreamed future? The basic necessities of life in the future, can be achieved through 3D printing.

This technological innovation will inevitably lead to changes in lifestyles. It will also trigger the thinking of the design education session, break the limitations of existing professional divisions and realize the integrated design of interdisciplinary integration.

What is your dream space? We are looking forward to your answer.



- **Lifestyle Design in the 3D Printing Age**

In recent years, along with the development of the Internet, cloud computing, big data and other technologies, the soft technical conditions for mass production of personalized products have gradually matured through 3D printing in a timely manner to meet the needs of consumers. A computer and a printer can complete the manufacture of goods, production costs greatly reduced, anyone can become a producer. The knowledge economy is no longer just an empty talk, people can produce goods anywhere, and knowledge can quickly be translated into entities to gain value. Macroscopically speaking, 3D printing will bring about tremendous changes in our production and life in three aspects.

- Changes in the mode of production - large-scale production to personalized customization. The current mode of production is a large-scale standardization, the use of machine production methods; New mode of production, is the Internet-based intelligent mass customization. The leap of information technology makes a lot of material flow can be transformed into information flow. Compared with material flow, information flow can be easily processed, shared and reorganized. People at home can use the appropriate software to assemble the desired finished product.
- Production organization changes - decentralized production, sales in place. Our current mode of production organization is "centralized production, global distribution," first to build factories, collecting raw materials from around the world, and then shipped to all parts of production sales, high transportation costs, transaction costs, waste of resources. The new production organization is not the same, it uses a "decentralized production, sales in place", and only one 3D printing will be able to complete the large-scale plant to complete the matter.
- Changes in lifestyle - consumption is production, personalized consumption. 3D printing is much faster than traditional production and greatly reduces the time and cost of manufacturing due to the omission of assembly and shipping times, which can take less than a few hours from drawing to finishing. In other words, consumption is production. More prominent feature is also reflected in the 3D printing to avoid the shortcomings of large-scale production line to provide trial and

error opportunities, new product development is also more rapid and reliable, personalized custom consumer will become the mainstream.

In addition, 3D printing will also lead to changes in living space. 3D printed buildings give people a personalized living experience. People can really make living environment creators, every door, every window or even every table corner, can be arranged according to the imagined scene. At the same time, home 3D printers will also enter every household, making it possible to add furniture at any time.

It is the era of smart retail marketing relationship. The grasp of the user's psychology, the remodeling of the scene and the products services are the implications of the upgrade of consumption. 3D printing technology will redefine people, products, space, to provide consumers with the ultimate experience.

Schedule:

The IDSS2018 is from 20th June to 4th July. The detailed schedule is subjected to the actual conditions during the summer school, i.e. weather.

Schedule			
Date		**Time**	**Activities**
20th June	Wed	Whole day	Check in
21st June	Thurs	Morning	Opening and welcome from Jiangnan University
		Afternoon	Summer school introduction and team building; University and school tour--knowing the place
22nd June	Fri	Morning	Lecture 1&2
		Afternoon	Brain Storming and team discussion
23rdJune	Sat	Morning	Cultural Exploration—Traditional Craft
		Afternoon	Cultural Exploration—Traditional Space and Architecture
24th June	Sun	Morning	Cultural investigation—Emerging concepts in traditional crafts
		Afternoon	Cultural investigation—Emerging concepts in traditional crafts
25th June	Mon	Morning	Cultural experience— making with crafts and experience (pottery and other traditional art)
		Afternoon	Cultural experience— making with crafts and experience (pottery and other traditional art)
26th June	Tue	Morning	Group working—collection and sharing of the research
		Afternoon	Conceptualization & poster presentation
27th June	Wed	Morning	Lecture 3
		Afternoon	Group working& 3D practice

28th June	Thurs	Morning	Group working
		Afternoon	Group working& 3D practice
		Evening	Group working
29th June	Fri	Morning	Group presentation
		Afternoon	Group Working & Lab Experience
30th June	Sat	Morning	Field research
		Afternoon	Group working
1st July	Sun	Whole day	Free
2nd July	Mon	Morning	Group working
		Afternoon	Group working
3rd July	Tue	Morning	Submission of projects
		Afternoon	Final Presentation
		Evening	Farewell Party
4th July	Wed	Whole day	Check out and say goodbye

Program Details:

A. General

1. Language: English

2. The schedule is subject to objective conditions, for instance, weather.

B. Credit hours

100 credit hours, students will get a certificate after the completion of the workshop

C. Design Approaches

It's a project-based course and deploys service design approach and 3 D Printing Technologies. With strong research intention, it aims to build the concerns in problem discovering and opportunity identification, analysis and definition and developing solutions, in particular, it enables students to learn the know-how, design principles, methods and tools of projects towards complex problem and multiple approaches of innovation, in particular, Digital Social Innovation will be introduced and support to subjects. See the following in details:

(1) to understand the new paradigm of design by the change of industries and society;

(2) to learn the scope, principles and methods of product-service system design comprehensively;

(3) to understand the feathers of service design, such as user-centred design, problem-based approaches, system design thinking and context-based approaches; and to apply the design process and methods and tools of service and have experiences by the design project exercise;

(4) to learn the design matters with complexity and different approaches of innovation toward the complex problems.

(5) to employ issue mapping to navigate the contextual complexity.

D. Participants

- International students in the field of design or design related fields;
-International students who are not design background students but are interested in the topic;
- Selected students in the hosting design school;

E. Introduction to the city of Wuxi and Jiangnan University

Wuxi, a city featured with profound historical culture and modern vitality. It is a city stands in the most developed region in China, 40mins train away from the metropolis of Shanghai, Wuxi embraces friends from all over the world with its rich Wu culture, profound crafts of ceramics and clay making, tea, bamboo making, and the natural view of the Taihu lake as well as the 2500-year-old Grand Canal. It is the harbor of Internet of things, as well as the most advanced solar technology and electronics technology, cultural tourism, and creation and innovation in China.

Reputed as the "Pearl of China's Light Industry Higher Education", Jiangnan University is the cradle, and one of the major supporting institutions， of China's light industry, food science, biotechnology and industrial design. Being a featured research oriented university, Jiangnan University constantly promotes the educational reform and dedicates in the contribution to the regional and national development. With the Eco-campus of over 208 hectares nearby the scenic Taihu Lake, the university is home for more than 25,000 students and over 5000 faculty and staff from 18 different schools.

Being the very first design program in China, the history of design can be dated back to 1960, and now the design program system in Jiangnan is an integration of 3 diversified schools: School of Design as a center, School of Digital Media and School of Textile Engineering as two satellites. In the latest discipline ranking by the Ministry of Education (2017), the design discipline in Jiangnan ranks the 5^{th}, and in the Best

Discipline Ranking by Shanghai Ranking (one of the most credited social ranking), the design discipline in Jiangnan University ranks the 3rd in China.

The design programs are vital with innovation, responsibility and sustainability, providing solutions with design tools to respond to social concerns and problems, to advance industries and economy, to improve the quality of everyday life, and to cultivate aesthetic appreciation for the general public.

F. Finance

1000 USD per person. Fees including accommodation (standard hotel room), lunch, airport transportation, express mail fee, local travel, lecture fees, workshop materials, etc. Bank account information is show below. (Kindly note that the transaction fees should be paid by the participants, and Jiangnan University shall receive the complete 1000 USD) All participants for the relevant courses on a 'first-come, first-served' basis.

PS: All Taiwan partners' can be given 50% discount on the tuition fee.

G. Submission Deadline

April 16th(Bank Transfer deadline can be done before May 15th).

H. Contact Information

Please submit your application to your school and make sure your school coordinator contacts School of Design directly in representation of all student applicants from your school.

Please email the students' list (excel file, including student name, gender, date of birth, passport number, major, year of study, and email), application forms and a copy of students' passport to the following email address:

sara.xjchen@jiangnan.edu.cn

WELCOME TO JOIN US IIN WUXI!!!

Application Table for 2018 Summer School

Home institution			
Name		Date of birth	
Passport No.		Nationality	
Gender		Religion	
Phone number		Email	
Mailing address			
Emergency contact (name, relation and contact information)			
Level of study		Major	
Contact information from home institution			
Briefly describe your professional skills or interest in design.			
Do you have any toboos or any specific food choice?			
More information you would like to provide?			

Please note that students need to buy the insurance on their own before come to China.

Fees for the summer school are to be transferred to the following account before arrival.
1) Bank Name and Address:
Bank name: Bank of China, Wuxi Branch
Bank Address: No.258 Zhongshan Road, Wuxi, 214002, Jiangsu, P. R. China
Swift code: BKCHCNBJ95C

2) Beneficiary
Name: Jiangnan University
Account No. : 474158228044
Address: No.1800 Lihu Road, Wuxi 214122, Jiangsu, P. R. China City/Province: Wuxi/Jiangsu
Tel: 0510-85913145