

**Faculty of Architecture**

**ACCADEMIC YEAR 2017/2018**

**ANNOUNCEMENT FOR ADMISSION TO HIGHER EDUCATION COURSE**

**in**

**Responsive Surfaces**

**DIRECTOR: Graziano Mario Valenti**

**infostud code: 29543**

### **1 - Aims**

The summer school aims to provide participants with the theoretical and instrumental skills necessary to deal with the design and construction of responsive surfaces. The theoretical principles relate geometrical aspects, kinematic and interaction with forms. Instrumental skills consist in the ability to work with software and actuation devices, to experience - with the small-scale of physical models - the creation of responsive surfaces.

The course consists of a series of lectures (lectures), practice exercises (fablab), modelling, interaction and surfaces design (design lab).

The first part of the course will address the basics of geometric theory required to design kinetic surfaces. Subsequently the course will address algorithms and software useful for their digital implementation; the acquired knowledge will allow students to virtually simulate the designed surfaces.

Parallel to the virtual simulation, students will build physical models of kinetic surfaces. These activities will be conducted initially on an experimental basis and subsequently it will be aimed at the realization of the models made during the design activity (design lab).

In the final part of the course physical models will be completed with environmental sensors, digital logic and actuation devices, so as to be seen as responsive surfaces.

Participants will be able to use, for experimental purposes, the equipment for physical modeling: 3D printers, plotter cutting, thermoforming, and a variety of materials for the construction of physical prototypes.

### **2 - Admission Requirements**

May participate in the Higher Education Course those in possession of the first degree, master degree or graduation degree prior to DM 509/99, in: Architecture (L17, L21, L23, LM3, LM-4), Industrial Design (L4, LM12, LM19), Engineering (L-7, L9, LM20, LM23, LM24, LM25, LM28, LM30, LM32, LM33, LM34 LM35).

They can also access the Higher Education Course with students holding a degree issued by foreign



universities by submitting a diploma with official Italian translation with legalization and declaration of value.

### 3 – Available seats

The minimum number of participants to activate a course is 6. The maximum number is 30. If the number of applications exceeds the number of places available, there will be a selection process based on the students Curriculum Vitae.

### 4 – Duration and organisation of teaching activities

The Summer School R3S will last two weeks. Lessons will start on September 11, 2017 and will end on September 23, 2017. Total amount of activities is 90 hours of which at least 24 hours dedicated to lectures into the class. Official language of summer school is English.

| SSD   | TEACHING ACTIVITIES  | CFU      |
|---|--|----------|
|   | <i>Lectures</i>  |          |
| Icar\08<br>Icar\12<br>Icar\12<br>Icar\13<br>Icar\14<br>Icar\17<br>Icar\18 | <b>Responsive surfaces: general overview.</b><br>Francesco Romeo - Structural mechanics<br>Alessandra Battisti - Architectural technology<br>Fabrizio Tucci - Architectural technology<br>Lorenzo Imbesi - Design<br>Antonino Saggio - Architectural and urban design<br>Carlo Bianchini - Drawing<br>Antonella Romano - Architectural history | 1        |
| Icar\17   | <b>Module 1: Developable surfaces</b><br>Theory and digital modeling of developable surfaces. G.M.Valenti  | 0.5      |
| Icar\17   | <b>Module 2: Polyhedra and origami</b><br>Theory and digital modeling of polyhedral surfaces. Origami theory. A.Casale   | 0.5      |
| Icar\17   | <b>Module 3: Parametric and generative modeling</b><br>Design a responsive surface using parametric and generative modelling .G.M.Valenti  | 0.5      |
| Icar\17   | <b>Module 4: Rapid prototyping and physical computing</b><br>Instruments and techniques used to quickly fabricate a scale model of a physical part that can sense and respond to the analog world. G.M.Valenti   | 0.5      |
|   | <i>Laboratory activities</i>   |          |
| Icar\17   | Design, digital modeling and rapid prototyping of a responsive surface. A.Casale, G.M.Valenti  | 5        |
| <b>TOTALE CFU</b>   |  | <b>8</b> |



Students are required to total a minimum 80% attendance at the Summer School R3S in order to receive an attendance certificate and the 10 ECTS credits (European Credit Transfer System) in the relative field as per the rules and regulations of the Bachelors and Masters programmes. In case of insufficient attendance or arguable behaviour, the course director may decide not to issue an attendance certificate. Registration fees may not be refunded.

**For information about the teaching activities please contact:**

prof. Graziano Mario Valenti ([grazianomario.valenti@uniroma1.it](mailto:grazianomario.valenti@uniroma1.it))

Secretariat: Daniela Diamanti

Address: Faculty of Architecture, Via Gianturco 2 Rome 00196

Phone: +39: 3479045639

E-mail: [grazianomario.valenti@uniroma1.it](mailto:grazianomario.valenti@uniroma1.it)

**5.1 Submission of the application form for admission**

To enrol in the Summer School, candidates must:

**1** - Register on-line with the Sapienza (Infostud) at <http://www.uniroma1.it/studenti>.

Once your registration is completed, the system will provide you with a registration number and a password to access the system. You must use this registration number on your application form.

PLEASE NOTE: it is very important that a valid email address be provided as the system password will be sent to that e-mail address. If the candidate is or has been a Sapienza student, he/she will already have a registration number. If the candidate does not remember their registration number or password, the Infostud recovery procedure can be used.

**2** - To enrol in the Summer School, candidates must fill out the admission application form (Attachment 1 to this call) and enclose:

- Copy of a valid ID, signed and legible (I.D. Card / Passport);
- Self-certification of the university degree obtained;
- Consent to use personal data (Attachment 2 to this call).

**The deadline for submitting applications is August 22, 2017.**

The application may be delivered by e-mail with the required attachments to: [responsivesurfaces@uniroma1.it](mailto:responsivesurfaces@uniroma1.it) (subject: "Responsive Surfaces Summer School application")

**Applications received after the deadline will be rejected.**



## 5.2 Selection of applications

The Scientific Committee of the Summer School will verify the fulfilment of the requirements and will publish the list of the admitted students within **August 23, 2017** after which, it will be possible to subscribe to the course by infostud system and pay the tuition fee.

## 6 – Tuition fee

Tuition fee is € 400,00 to be paid in accordance with points 7.1 and 7.2. The deadline for payments is **September 5, 2017**.

Tuition fees do not include traveling expenses, meals and accommodation, and local transportation.

Tuition fees will be refunded if the Summer School is not activated. To obtain a refund, students should write to the Director of the Summer School.

## 7.1 – Method of payment

Students admitted to the course must login to INFOSTUD (<https://stud.infostud.uniroma1.it/Sest/Log/>) and click on "TASSE", then "alta formazione/formazione", enter the code indicated on the call for applications and click "AVANTI" and then "STAMPA".

Tuition fees must be paid within the deadline indicated in this call (see point 6) by presenting the payment slip downloaded from INFOSTUD at any UniCredit branch located throughout the country and can be made:

- in cash;
- Online, via credit card, on the Unicredit website through the online payment form;
- By check of the exact amount indicated on INFOSTUD, payable to "Gruppo UniCredit – Banca, issued by the student, if he/she holds an account with UniCredit or any other bank in Italy;
- By check of the exact amount indicated on INFOSTUD, payable to the student, issued by a third person holding an account with any bank in Italy or abroad.

## 7.2 – Method of payment by a third party (company, institution, etc.)

Third party sponsors must make payments, in the amount specified in this call (see Point 6), via wire transfer to:

IBAN code: IT71 I 02008 05227 000400014148

Corporation Code: 9011778

Unicredit University Treasury – Agency 30660

The payment description must include:

"FORM (course code) MATR. (student registration number)".



Please note: if making a wire transfer from a Unicredit branch, please also include the University account number: 1001. **This is necessary to match payments to beneficiaries.**

In the case of more than one beneficiary, the payment description must include all of the beneficiaries' names. Once the wire transfer has been sent, an email with all the sponsor's details (Company name, VAT number/fiscal code, address, name, surname of beneficiary/beneficiaries) and a copy of the receipt must be sent to [francesca.bernabei@uniroma1.it](mailto:francesca.bernabei@uniroma1.it); once the payment has arrived, the university accounting offices will send a receipt of the payment to the specified address.



## Attachment 1

### FORM FOR ADMISSION TO HIGHER EDUCATION COURSE

#### RESPONSIVE SURFACES

To the Director of the Higher Education Course  
Prof. Graziano Mario Valenti  
University of Rome "La Sapienza"  
At the Faculty of Architecture  
Via Gianturco, 2  
Cap 00186 ROM A

The undersigned.....  
fiscal Code.....  
born in.....the ..... nationality .....  
resident..... Street .....  
C.A.P..... Phone ..... Fax .....  
mobile .....e-mail .....  
INFOSTUD number: ..... (if present) Financial Institution.....  
VAT ..... Address .....  
Possessing the following university qualification: .....  
Obtained the day..... at the University / Institute.....  
..... With the following vote.....

Asks to be admitted to the High Education Course in Responsive Surfaces  
Set up at the Faculty of Architecture of the University of Rome "La Sapienza", for aa. 2016/2017.

To this end, attach to the form:

- Photocopy of a valid, duly signed and legible identity card (Identity Card - Passport);
- Self-certification of the university degree obtained;
- Photocopy of "Declaration of Value" (for those who have obtained a university degree abroad);
- Declaration of consent for the processing of personal data (Attachment 2);

The undersigned declares that he / she has read and approved in all its points the call for admission to the Higher Education Course, that he / she is in possession of all the requirements therein and that he / she understands that, pursuant to Legislative Decree no. 445/2000, the issue of false or incomplete declarations constitutes a criminal offense.

Date

Signature of the candidate



## Attachment 2

### Consent to use personal data

#### Information in accordance with the D.Lgs 196/2003 – Code on personal data

##### Purposes of the processing

In accordance with the section 13 D.lgs. n.196/2003 the provided data will be processed in the necessary measure and for the purposes connected to the enrollment and the attendance to the training course.

##### Methods of processing and subjects involved

The processing will be done both manually and by computer. The data may be communicated to institutions or public and private authorities if strictly necessary for the scope of the teaching activities of the course.

##### Nature of the provision of the data and consequences of a potential refusal

The provision of the data is mandatory, and the potential refusal of the provision involves the impossibility of the enrollment in the course and the management of the connected procedural activities, as well as the teaching activities.

##### Holder and supervisor of the processing

The holder of the processing of the data is the Università degli Studi di Roma represented in person by its pro tempore legal representative, the Magnifico Rettore, domiciled for the role at the university's headquarters. The supervisor of the processing is the Director of the Training Course. Section 7 d.lgs. 196/2003 - Right to Access Personal Data and Other Rights

- The data subject shall have the right to be informed

- a) of the source of the personal data;
- b) of the purposes and methods of the processing;
- c) of the logic applied to the processing, if the latter is carried out with the help of electronic means;
- d) of the identification data concerning data controller, data processors and the representative designated as per section 5 paragraph 2;
- e) of the entities or categories of entity to whom or which the personal data may be communicated and who or which may get to know said data in their capacity as designated representative(s) in the State's territory, data processor(s) or person(s) in charge of the processing.

- The subject shall have the right to obtain

- a) updating, rectification or, where interested therein, integration of the data;
- b) erasure, anonymizing or blocking of data that have been processed unlawfully, including data whose retention is unnecessary for the purposes for which they have been collected or subsequently processed;
- c) certification to the effect that the operations as per letters a) and b) have been notified, as also related to their contents, to the

entities to whom or which the data were communicated or disseminated, unless this requirement proves impossible or involves a manifestly disproportionate effort compared with the right that is to be protected.

- The subject shall have the right to object, in whole or in part,

- a) on legitimate grounds, to the processing of personal data concerning him/her, even though they are relevant to the purpose of the collection;
- b) to the processing of personal data concerning him/her, where it is carried out for the purpose of sending advertising materials or direct selling or else for the performance of market or commercial communication surveys.

Signature for acceptance