

Courses on Photonic Integrated Circuits Design, Fabrication & Packaging 2nd Edition, a.y. 2016/2017

Photonic Integrated Circuit Design and Fabrication (PIC D&F) Photonic and Electronic Integrated Circuit Packaging (PEIC Pack) Characterization and Testing (C&T) session

CALL FOR APPLICATIONS

ART. 1 – Courses presentation

The Sant'Anna School of Advanced Studies, Pisa, Italy, is offering the second edition of the Courses on Photonic Integrated Circuits Design, Fabrication & Packaging in collaboration with Integrated Photonic Technologies Center (INPHOTEC) and CNIT (National Inter-University Consortium for Telecommunications).

The Courses will take place at TeCIP Institute, Via Moruzzi 1, Pisa, according to the following schedule:

Photonic Integrated Circuit Design and Fabrication (PIC D&F)	8 – 12 May 2017
Photonic and Electronic Integrated Circuit Packaging (PEIC Pack)	15 – 17 May 2017
Characterization and Testing (C&T) session	4 – 7 December 2017

The courses imply a full time participation (eight hours per day) to both the front lectures and lab sessions. Certificate of attendance will be released as stated in art. 9.

ART. 2 – Training Objectives

The focus of the training program is on photonic integrated circuits design and fabrication, and on photonic/electronic packaging and characterization. INPHOTEC Center, part of the TeCIP Institute, makes available during the courses to the enrolled trainees its 700 sqm highly professional fabrication facility and technology platforms for clean room live sessions.

The **main training objective** of the courses is to strengthen skills in the design and fabrication of photonic integrated circuits, in photonic/electronic packaging and in characterization processes for staff from both the academic world and industry.

The courses offer the opportunity to interact with a unique infrastructure on the national scene – the Clean Room - located at the TECIP Institute, which operates in a highly-strategic environment at the international level.

The courses includes activities in both the classroom and laboratory, which are intensive pace and designed in order to teach concepts that will lead to the undertaking of independent activities in public or private institutions with integrated circuits design and manufacturing facilities.

The designed PIC will be actually manufactured by InPhoTec Center and delivered to the participant.

ART. 3 - Programmes

The courses are full time and are organized over three modules:

Photonic Integrated Circuit Design and Fabrication (PIC D&F) is a one-week course containing a comprehensive training program on design and preview of fabrication techniques.

Photonic and Electronic Integrated Circuit Packaging (PEIC Pack) covers the packaging techniques of PIC and a preview of the packaging techniques.

Characterization and Testing (C&T) session is focused on the characterization techniques of PIC and the live session of the manufactured device.

The language of instruction is English.

ART. 4 - Places Available and Entry Requirements

The courses address the needs of researchers and industry professionals working in the area of photonic and electronic integrated devices, who want to pursue intensive specialization courses with practical sessions in the complete line of design, fabrication, packaging and characterization. Perspective candidates should meet either of the requirements 1) or 2) and requirement 3):

- 1) Have a Master of Science University degree (5-year degree) in Electronic Engineering, Electrical Engineering, Telecommunication Engineering or Physics or equivalent in relevant disciplines, issued by a University institution or equivalent.
- 2) As an alternative are professionals with adequate background to face the courses.
- 3) Have a proficient working knowledge of English.

Each Course is open to a maximum of participants and it will be activated if a minimum of trainees is reached:

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| – Photonic Integrated Circuit Design and Fabrication (PIC D&F) | min 5 - max 20 |
| – Photonic and Electronic Integrated Circuit Packaging (PEIC Pack) | min 5 - max 20 |
| – Characterization and Testing (C&T) session | min 5 - max 20 |

ART. 5 - Application Procedure

The selection process is managed by the Sant'Anna School of Advanced Studies, Pisa. The application deadline is set on **26th April 2017**, Applicants can apply separately for the following combination of courses:

- 1st combination) all three courses
- 2nd combination) PIC D&F + C&T
- 3rd combination) PEIC Pack

Applications shall be submitted online, exclusively, at: <http://www.santannapisa.it/pic17/application/>

The following documents shall be enclosed with the online application:

- Personal information
- Detailed CV/résumé;
- Copy of passport or valid ID document.

Late applications or applications missing any mandatory information will not be taken into consideration.

In case of failure of the online application system, applicants are advised to contact the Course Secretariat via email to altaformazione@santannapisa.it.

Forged deeds and false statements shall be punished in accordance with the Criminal Code and any other applicable law and will result in exclusion from the course.

ART. 6 - Selection Process

The selection process covers an assessment of the applicants' qualifications with regard to the requirements set out in art. 4. The Selection Committee will judge the applicant as eligible for the course if he/she meets the requirements of art. 4.

If the number of eligible applicants exceeds the available positions, eligible applications containing a request for admission to the entire cycle of courses will be given priority and considered first on the basis of the chronological arrival order of the admission application.

If room allows, the other eligible candidates will be admitted on the basis of the chronological arrival order of the admission application.

In case of non-assigned places due to renunciation by one or more selected candidates, the Selection

Committee will decide to admit additional candidates on the basis of the chronological order of application presented by the eligible candidates

ART. 7 - Tuition fees

Registration fees are as follows:

- €500,00 for attendance at the entire cycle of courses PIC D&F + PEIC Pack + C&T session;
- €350,00 for attendance at the PIC D&F course (including the chip fabrication expenses) and C&T session or shipment of the circuit to the student;
- €150,00 for attendance at the PEIC Pack course.

Students enrolled in any PhD program of the Sant'Anna School of Advanced Studies are subject to a reduced flat fee of €200,00 for attendance at the entire cycle of courses PIC D&F + PEIC Pack + C&T session.

Any other expenses – such as visa, travel costs, lodging, meals etc. - are to be covered by the participants.

In accordance with art. 9 paragraph 2 of Decree No 68/2012, students with disabilities greater than or equal to 66%, recognized pursuant to art. 3, paragraph 1, of Law 104/1992, are exempted from the payment of the tuition fee.

A reduction of 1.5% for each percentage point of disability is applied to those students with disabilities less than 66%.

The student with disabilities who intends to make use of the exemption or reduction of the tuition fee shall attach a suitable certification in the on-line application.

ART. 8 – Attendance – Payment method

Admitted candidates will be notified acceptance at the courses by e-mail. Admitted applicants who wish to attend the courses shall give confirmation of their acceptance by the deadline indicated in the admission letter.

To confirm, they shall send by fax (++39 050-882633) or by email (altaformazione@santannapisa.it) the following documents:

- Letter of admission to the Course, duly counter-signed for acceptance;
- Copy of valid ID document;
- Receipt of payment of the full course fee.

Payment can be made:

- through bank transfer to the following account: Scuola Superiore Sant'Anna, UNICREDIT S.p.A., branch of Pisa, P.za Garibaldi 1, IBAN code IT 32 0 02008 14006 000401272765; BIC/SWIFT: UNCRITM1G12, description of payment: "Participant Name and Surname/PIC2017"

Admitted students who are citizens of non-EU countries residing outside Italy, as soon as they receive notification of admission, shall contact the Italian Embassy in their country of residence (for the addresses please see: <http://www.esteri.it/MAE/EN/Home.htm>) in order to apply for a *short-term visa for study purposes*.

Reimbursement for missed participation will be treated on individual basis. Absence for documented case of "force majeure" (e.g. documented medical issues) will be entitled to a reimburse of 30% of the paid fees.



Art. 9 – Certificate of attendance

A Certificate of Attendance will be awarded only to participants who have attended at least 92% of classes and have paid the tuition fee.

ART. 10 - Personal Data and measures of prevention of corruption

In accordance with Italian Law n. 241/1990 art. 5, the Responsible for the Administrative Proceeding is the Responsible of U.O. Alta Formazione – Sant'Anna School of Advanced Studies – via Maffi 27, 56127 Pisa – (phone +39 050 882645; e-mail altaformazione@sanntannapisa.it).

According to the Italian Legislative Decree n. 196/2003 art. 11 (Personal Data Protection Code), please note that the personal details collected by Scuola Superiore Sant'Anna, will be used solely for the purposes pertaining to the management of this Master Programme, in accordance with the applicable regulations.

The person in charge of personal data collection is Ms. Roberta Chiordi, Sant'Anna School of Advanced Studies, Piazza Martiri della Libertà 33 , PISA; tel. 050883193; fax 050883586. The interested party can assert his/her rights towards the "School" in observance of Art. 7 of Legislative Decree 196/2003 by writing to Ufficio Relazioni con il Pubblico – Sant'Anna School of Advanced Studies – Piazza Martiri della Libertà 33 – 56127 Pisa – email urp@sanntannapisa.it.

The Sant'Anna School of Advanced Studies operates in compliance with Law n.190/2012 concerning the prevention of corruption by implementing measures identified in the “Three-year plan for the prevention of corruption” published in the section “Transparent Administration” of the School website at: www.santannapisa.it.