

Albo n. 98/2018



# Call for applications for the 2<sup>nd</sup> level Specializing Master's programme in

"Additive Manufacturing" (3rd edition)

offered in apprenticeship format 2016-18 (Art. 45 – D.Lgs. n. 81/2015)

# Academic Year 2017/2018

(Annex "A"- Executive Decision of the Head of the Division of Student Affairs no. 65/2018 of January 19th, 2018)







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#### Art.1

#### (Programme overiew)

The 2<sup>nd</sup> level Specializing Master's programme in Additive Manufacturing is offered by Politecnico di Torino for academic year 2017/2018.

The Programme Coordinator is Luca Iuliano, professor at the Department of Management and Production Engineering (DIGEP) of Politecnico di Torino.

The duration of this 2<sup>nd</sup> level Specializing Master's programme is 2 years for a total of 72 ECTS.

This programme is offered in the apprenticeship format (Apprendistato di Alta Formazione e di Ricerca) and it has been designed in close cooperation with the companies involved in the educational project.

The objective of this programme is to train young, motivated newly-graduated engineers in order to create a new generation of high-level specialists in the field of additive manufacturing.

This programme is designed to prepare future Technical Leaders, Project Managers, Industrial Operational Leaders, Mechanical Designers, Software Designers and Spare Parts Managers.

The peculiarity of these international professional profiles is to merge technical and managerial expertise for the implementation and management of Additive Manufacturing.

As a consequence, the 2<sup>nd</sup> level Specializing Master's programme offers its participants a unique opportunity to be trained in an international environment and to gain work experience by getting involved in high-level projects.

A project proposal for this 2<sup>nd</sup> level Specializing Master's programme will be submitted for funding to Regione Piemonte in the framework of a specific regional call for proposals (Avviso Pubblico per la realizzazione dei percorsi formativi per: Laurea triennale e magistrale, Diploma Accademico di I e II livello, Master di I e II livello, Dottorato di Ricerca e Diploma Accademico di Formazione alla Ricerca, Attività di Ricerca - in attuazione della D.G.R. n. 37-3617 del 11/07/2016).

In accordance with the above mentioned call for proposals, selected candidates will be hired by the partner companies and upon completion of the programme they will attain a 1<sup>st</sup>/2<sup>nd</sup> level Specializing Master's diploma.

The partner companies have undertaken to recruit at least ten apprentices.

The 2<sup>nd</sup> Level Specializing Master's programme will begin in April 2018 and the apprentices will be recruited by the partner companies at the same time.

More information on the learning objectives, programme contents and possible career opportunities is available on the website of the 2<sup>nd</sup> Level Specializing Master's programme in Additive Manufacturing at: link <a href="https://didattica.polito.it/master/additive\_manufacturing/2018">https://didattica.polito.it/master/additive\_manufacturing/2018</a>



## Art. 2

## (Educational objectives, learning contents and organization of the activities)

This Specializing Master's programme is an experiential learning path which combines educational activities at Politecnico and on-the-job training at the company's premises.

The 2<sup>nd</sup> Level Specializing Master's programme is organized as follows:

- training activities at Politecnico di Torino (classroom laboratory lecture- business case): approximately 400 hours
- training activities at the partner company: approximately 800 hours, carried out at the employer's premises
- self-learning activities: approximately 300 hours, carried out at the employer's premises.

## Table n.1 - Organization of the courses

COURSE	Training activities	Training activities (hours)	Training activities (hours)
	ECTS	Politecnico	Company
Design for Additive Manufacturing	7	60	12
Materials for Additive Manufacturing	5	44	12
Additive Manufacturing systems	6	60	n.a.
Advanced sensors for the control of Additive Manufacturing systems	4	30	12
Integration of Additive Manufacturing technologies with conventional processes for parts' finishing	3	34	n.a.
Systems for the evaluation of products made using Additive Manufacturing	3	28	12
Production management in Additive Manufacturing systems	2	16	12
Supply chain management in Additive Manufacturing systems	2	16	12
ICT platforms for facilitating the integration of Additive Manufacturing in traditional manufacturing processes	2	16	12
Sustainability of additive manufacturing	1	8	8
Marketing strategies for additive manufacturing	1	8	8
Intellectual property in the context of additive manufacturing	1	8	8
Managerial training processes	8	72	12
Project Work	27	0	680
TOTAL	72	400	800



The 2<sup>nd</sup> level Specializing Master's programme will start on April 2018 and will last 2 years. The official language of the programme is English.

#### Art. 3

## (Admission requirements)

The 2<sup>nd</sup> level Specializing Master's programme in Additive Manufacturing is intended for graduates who have to meet the following compulsory requirements:

- to be under the age of 30 on the date of recruitment;
- to have been awarded a full degree (Master 's degree/Laurea specialistica/Laurea magistrale) in one
  of the following areas of study within the deadline for enrolment in the 2<sup>nd</sup> Level Specializing
  Master's programme:
  - LM-20 (Aerospace and Astronautic Engineering)
  - LM-25 (Automation Engineering)
  - LM-28 (Electrical Engineering)
  - LM-29 (Electronic Engineering)
  - LM-31 (Management Engineering)
  - LM-32 (Computer Systems Engineering)
  - LM-33 (Mechanical engineering)
  - LM-53 (Material engineering).
- High-level English language skills.

The Office of Specializing Master's Programmes and Lifelong Learning will examine the documentation received within the deadline. Only non-Italian university degrees will be evaluated by a specific board chaired by the Programme Coordinator of the 2<sup>nd</sup> Level Specializing Master's programme in Additive Manufacturing. The partner companies will evaluate only the candidates who meet the above mentioned compulsory requirements.

#### Art. 4

## (Partner companies selection process)

The partner companies will evaluate the applications which meet the compulsory requirements (*Art. 3 "Admission requirements"*), reserving themselves the right to contact only the candidates who meet their internal selection criteria. The selected candidates will be hired by the partner companies within the meaning of ex-art. 45 of D. Lgs 81/2015.

A good knowledge of the English language is considered an essential prerequisite for the final selection. The partner companies will assess the candidate's level of proficiency during the interview.



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During the entire application period the partner companies can contact the applicants who satisfy both the compulsory requirements (art.3) and the corporate selection criteria.

For further information refer to the website of the 2<sup>nd</sup> level Specializing Master's programme in Additive Manufacturing:

https://didattica.polito.it/master/additive manufacturing/2018

#### Art. 5

## (Admissions and deadlines)

Applications for this 2<sup>nd</sup> Level Specializing Master's programme must be submitted on-line by filling out the Admission Request Form available on Politecnico di Torino website (*Apply@polito*) at the following link: https://didattica.polito.it/master/additive\_manufacturing/2018

DO NOT apply by e-mail, fax or mail because these applications will NOT be considered. Admission Request Forms must be submitted within the following deadline:

March 23<sup>rd</sup>, 2018 at 11:59 a.m. - Italian time

The following supporting documents must be attached to the application form (in English or Italian only):

## MANDATORY DOCUMENTS

- valid identification document (passport for extra-EU applicants)
- curriculum vitae (cv must include the authorization to the processing of personal data in compliance with Legislative Decree no. 196/2003);
- Admission Request Form
- Exam transcripts for both Bachelor's and Master's degree programmes:
  - for applicants with degree(s) awarded by a <u>non-Italian University or by a private</u>

    <u>Italian University</u>: official transcript(s), issued by the University of origin, produced on letter headed paper, containing the full list of all the exams passed and the grades obtained. The transcript(s) must also include the date of the degree conferral. Upon enrolment, admitted students must provide the original copy of the "Dichiarazione di Valore"/"Statement of validity" (related to the Master's degree) issued by the Italian Diplomatic Mission in the country where the qualification was awarded. If the Master's degree was awarded by a European university, admitted students can provide the "Diploma Supplement" instead of the "Dichiarazione di Valore".

or

- for applicants with degree(s) awarded by an <u>Italian Public University</u>: self-certification ("dichiarazione sostitutiva di certificazione" - Art. 46 DPR 28 December 2000, n. 445) in which the students declare to have obtained both a Bachelor's degree and a Master's degree. The self-declaration must include: the name of degree programme, the



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name of the University, the date of degree conferral, the graduation final grade, the full list of all the exams passed and the grades obtained (this information is required for both degrees). Upon enrolment admitted students must provide the original copy of the self-certification, in compliance with art. 75 of D.P.R. 445/2000. Should the self-certification be found to be false or incorrect, the applicant loses any benefit which he/she might have acquired on the basis of the untruthful declaration.

## **OPTIONAL DOCUMENTS**

- Cover letter
- o Reference letter
- Italian language certificate (only for non–Italian applicants)
- English language certificate
- o Residence Permit (only for non-EU citizens)

Failure to attach even one of the above mandatory documents will result in the exclusion from the selection process.

#### Art.6

## (Selection outcomes)

At the end of the selection process carried out by the partner companies, Politecnico di Torino will publish the list of the candidates admitted to the programme on the online University Bulletin and on the "Selection outcomes" section of the programme website:

https://didattica.polito.it/master/additive manufacturing/2018

#### Art.7

## (Enrolment)

The candidates who have been admitted to the programme will have to enrol at Politecnico di Torino before the starting date of the 2<sup>nd</sup> Level Specializing Master's programme. Further information about enrolment will follow by e-mail.

Admitted candidates are not allowed to be simultaneously enrolled in another Specializing Master's programme nor in any other university programme.



#### Art.8

## (Participation fee)

The participation in the 2<sup>nd</sup> level Specializing Master's programme is free of charge for admitted students, as provided for by the regional call "Apprendistato di Alta Formazione e di Ricerca 2016 – 2018 (Art. 45 - D. Lgs. n. 81/2015).

In accordance with the "Tuition Fee Guide" of Politecnico di Torino, admitted students are exempted from paying their participation fee, but they still have to pay a fee (€ 19,53) for insurance and revenue stamp for every academic year.

#### Art. 9

## (Qualification)

Upon successful presentation of the student's Project Work, Politecnico di Torino will confer the 2<sup>nd</sup> Level Specializing Master's diploma in Additive Manufacturing.

#### Participants are required to:

- reach the total amount of 72 ECTS;
- attend at least 67% of total classroom hours (section 5.2.1 of the Bando della Regione Piemonte "Apprendistato di Alta Formazione e di Ricerca 2016 – 2018 - in attuazione della D.G.R. n. 37-3617 del 11/07/2016" - D.D. N. 537 03/08/2016).

## Art. 10

#### (Competent office)

The competent office is the Office of Specializing Master's Programmes and Lifelong Learning of Politecnico di Torino, Tel. 0110905713 – e-mail: <a href="master.apprendistato@polito.it">master.apprendistato@polito.it</a>

## Art.11

## (Person responsible for the administrative procedure)

The person responsible for the administrative procedure is Mr. Alberto Pusceddu (Head of the Specializing Masters Programmes and Lifelong Learning Office)

#### Art. 12

## (Privacy policy and access to documents)

The information provided for in Article 13 of the "Code regarding the protection of personal data" (Legislative Decree No. 196 of 30th June 2003) is available at: https://didattica.polito.it/privacy/.



The personal data included in the on-line application form are treated for the selection and enrolment process only; the data are used by Politecnico di Torino within the institution itself, and exclusively for the purposes of the institution: for this reason, personal data are shared with various offices within the University (to carry out the activities within their competence) without further notification to the applicants.

The personal data included in the on-line application form are also forwarded to the partner companies by Politecnico di Torino for selection purposes.

Owner of the database is Politecnico di Torino, represented by the Rector, with legal seat in Corso Duca degli Abruzzi, 24-10129 Torino.

The person in charge of the student data is the Head of the Division of Student Affairs.

Access to all documents is allowed in the forms provided by current Legislation.

#### Art. 13

## (Access to documents)

Access to all documents is allowed in the forms provided by current legislation.

## Art. 14

#### (Final provisions)

Politecnico di Torino does not take any responsibility in case of unavailability of recipients and for loss of communications due to inexact indication of a candidate's email address or telephone number or due to delay or failure to notify changes to the contacts provided during registration.

This Call is published on the online University Bulletin available at <a href="https://www.swas.polito.it/dotnet/albo">https://www.swas.polito.it/dotnet/albo</a> online/.

The same can be found on <a href="https://didattica.polito.it/master/additive\_manufacturing/2018">https://didattica.polito.it/master/additive\_manufacturing/2018</a>

Torino, 19/01/2018