



DEADLINE AUGUST 10th 2018

SELECTION PROCEDURE TO COVER 32 POSITIONS FOR ASSISTANT PROFESSORS IN TENURE-TRACK (RICERCATORI A TEMPO DETERMINATO) WITH A 3 YEARS CONTRACT, IN ACCORDANCE WITH ARTICLE N. 24, PARAGRAPH N. 3, LETTER B), ITALIAN LAW 240/2010 (OF WHICH 25 POSITIONS ASSIGNED BY THE ITALIAN MINISTRY DECREE N. 168 OF FEBRUARY 28TH 2018 -"PIANO STRAORDINARIO PER I RICERCATORI"-).

Notice of Competition

Decree n. 604 of June 14th 2018

THE RECTOR DECREES

**Art. 1
Selection procedure**

Selection procedures are held to assign a total number of 32 tenure track positions for Assistant Professor (three years contract, full-time), in accordance with art. 24, paragraph 3, letter b) of the Italian Law 240/2010 in the following Departments and within the following Academic Recruitment Fields (formally named in Italian "Settori Concorsuali") / Academic Disciplines (formally named in Italian "Settori Scientifico Disciplinari") and research programs if specified:

Place of work: Department of Architecture and Design – (DAD)

Academic Recruitment Field	Academic Discipline	Internal Code	Number of positions
08/C1 Design and Technological Planning of Architecture	ICAR/12 Architectural Technology	01/18/P/RB	1

Academic Recruitment Field	Academic Discipline	Internal Code	Number of positions
08/D1 Architectural Design	ICAR/14 Architectural and Urban Design	02/18/P/RB	1

Place of work: Department of Control and Computer Engineering – (DAUIN)

Academic Recruitment Field	Academic Discipline	Internal Code	Number of positions
09/H1 Information Processing Systems	ING-INF/05 Information Processing Systems	03/18/P/RB	2

Place of work: Department of Energy – (DENERG)

Academic Recruitment Field	Internal Code	Number of positions
09/C1 Fluid Machinery, Energy Systems and Power Generation	04/18/P/RB	1



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Academic Recruitment Field 09/E2 Electrical Energy Engineering	Research Program	Internal Code	Number of positions
Academic Discipline ING-IND/33 Electrical Power Systems	<p>Title Electro-energetic aspects of Energy Transition, between Europe and China, in the framework of "The Belt and Road Initiative (BRI)/new silk road".</p> <p>Description At the world level we witness an "Energy transition" towards decarbonisation, with a prominent role of electricity. The generation from renewables and the exploitation of electricity from long distances as energy vector, representing some of the energy dimensions of the new silk road ("The Belt and road Initiative - BRI"). Politecnico has established a China Competence Center, with a special focus on the BRI also with reference to the energy issues, and it has been funded a joint lab between Politecnico and Shanghai Jiao Tong University (SJTU) of Shanghai that studies those aspects. The researcher will work on the modeling, the simulation and the analysis of the electrical energy aspects of the BRI, with special reference to the "Global Energy Interconnection", proposed by the Chinese government, studying the relations with European and Chinese energy systems as well as the impacts on the countries included in the BRI.</p> <p>It's required the availability to stay in China, at Shanghai Jiao Tong University or other Universities/Research Institutes in China, for at least 2 months per year.</p> <p>During the discussion, as the specific research program, the candidate's knowledge of the Chinese language will be checked as well as the knowledge of English.</p>	05/18/P/RB	1

Place of work: Department of Electronics and Telecommunications – (DET)

Academic Recruitment Field 09/E3 Electronics	Research Program	Internal Code	Number of positions
Academic Discipline ING-INF/01 Electronic Engineering	<p>Title Design methodologies and CAD tools for sensors and sensor networks.</p> <p>Description The research is oriented to the design of analog sensors of their preprocessing and conditioning circuits and their integration in sensor networks using CAD tools for seamless network configuration, data collection and integration.</p>	06/18/P/RB	1

Academic Recruitment Field	Academic Discipline	Internal Code	Number of positions
09/F2 Telecommunications	ING-INF/03 Telecommunications	07/18/P/RB	1

Place of work: Department of Environment, Land and Infrastructure Engineering – (DIATI)

Academic Recruitment Field	Internal Code	Number of positions
08/A2 Sanitary and Environmental Engineering, Hydrocarbons and Underground Fluids, Safety and Protection Engineering	08/18/P/RB	1



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Academic Recruitment Field	Academic Discipline	Internal Code	Number of positions
08/A3 Infrastructural and Transportation Engineering, Real Estate Appraisal and Investment Valuation	ICAR/04 Roads, Railways and Airports	09/18/P/RB	1

Academic Recruitment Field	Internal Code	Number of positions
08/A4 Geomatics	10/18/P/RB	1

Place of work: Department of Management and Production Engineering – (DIGEP)

Academic Recruitment Field 09/A3 Industrial Design, Machine Construction and Metallurgy	Research Program	Internal Code	Number of positions
Academic Discipline ING-IND/15 Design Methods for Industrial Engineering	<p>Title Innovative 3D acquisition and modelling methods for supporting product design.</p> <p>Description The research to be carried out is embedded in the context of tool and methodology development for adopting 3D models in various application fields. The first research area concerns the development of novel collaborative design methodologies for supporting product innovation through product lifecycle management integrated management (CAD/PLM). The second research vein concerns tool and method development for three-dimensional evaluation and reconstruction of complex objects (Scanner 3D/Reverse Engineering). Thus, tools will be designed for evaluating the object 3D shape with the aid of computer vision techniques; strategies and algorithms will be developed for managing point clouds and 3D models, with a specific focus on human face analysis for medical and security applications.</p>	11/18/P/RB	1

Academic Recruitment Field 09/B1 Manufacturing Technology and Systems	Research Program	Internal Code	Number of positions
Academic Discipline ING-IND/16 Manufacturing Technology and Systems	<p>Title Inspection and quality control methods in production processes.</p> <p>Description The research program will focus on the activities concerning industrial quality management and statistical control in manufacturing processes. In detail, the scientific activity will include:</p> <ul style="list-style-type: none"> • the development of advanced procedures for inspection and quality control in industrial processes; • the implementation of models for analysis and prediction of the defects in the assembly of complex products; • the analysis of performance indicators in production processes; • the definition of methods of measure and control of industrial production with uncertainty evaluation. 	12/18/P/RB	1



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Academic Recruitment Field 09/B1 Manufacturing Technology and Systems	Research Program	Internal Code 13/18/P/RB	Number of positions
Academic Discipline ING-IND/16 Manufacturing Technology and Systems	<p>Title Additive manufacturing of metallic components by Selective Laser Melting.</p> <p>Description Research is framed within the new perspectives generated by the increasingly growing spread of Additive Manufacturing (AM) technologies. Component design requirements are becoming increasingly complex: from biomimetic structures to the integration of elements such as cooling circuits in components. The scientific activity will focus on:</p> <ul style="list-style-type: none"> • definition of Design for Additive Manufacturing (DfAM) rules for the creation of complex shapes in innovative metallic materials using Selective Laser Melting (SLM) technology, integrating software tools such as topology optimization; • development and characterization of unconventional finishing techniques to be applied on metal components made by SLM; • development of innovative methodologies for the testing of metal components made by SLM process using Reverse Engineering techniques based on structured light. 		1

Academic Recruitment Field 09/B2 Industrial Mechanical Systems Engineering	Research Program	Internal Code 14/18/P/RB	Number of positions
Academic Discipline ING-IND/17 Industrial Mechanical Systems Engineering	<p>Title Innovative models for supply chain management in industry and services using ICT Technologies.</p> <p>Description The research program will focus on logistic systems and supply chain management with regards to decision making and complex problem solving in logistics. By means of operational research methods in management, simulation models and empirical analyses, the research program will involve mechanisms of supply chains in industrial, servicing and city logistics fields. The study will also include the stakeholder relationship analysis, the performance measurement, the inventory and material flow management, the economic assessment, as well as the usage of digital technologies.</p>		1

Place of work: Department of Mechanical and Aerospace Engineering – (DIMEAS)

Academic Recruitment Field	Academic Discipline	Internal Code	Number of positions
09/A1 Aeronautical and Aerospace Engineering and Naval Architecture	ING-IND/03 Flight Mechanics	15/18/P/RB	1

Academic Recruitment Field	Academic Discipline	Internal Code	Number of positions
09/A2 Applied Mechanics	ING-IND/13 Applied Mechanics	16/18/P/RB	1



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Academic Recruitment Field	Academic Discipline	Internal Code	Number of positions
09/A3 Industrial Design, Machine Construction and Metallurgy	ING-IND/14 Mechanical Design and Machine Construction	17/18/P/RB	1

Academic Recruitment Field 09/G2 Bioengineering	Research Program	Internal Code	Number of positions
Academic Discipline ING-IND/34 Industrial Bioengineering	<p>Title Multiscale/multiphysics modeling.</p> <p>Description The research program concerns molecular and/or multiscale/multiphysics modelling. In particular, approaches applied to investigate the biomechanics of natural and biomimetics materials with multiscale features, physiological and pathological mechanisms, from molecular to supramolecular level, cells, tissues and organs. The employed methods are based on the structure-to-function links characterizing emergent properties of biological structures. In this regard, emphasis will be given to i) computational approaches employed to elucidate protein structure to function relationships, to characterize physiological and pathological behavior of subcellular and cellular structures, to investigate biotransport phenomena; ii) computational approaches to guide nanoparticle design, bionanomachines, biopolymers, bioinspired materials and biological-artificial interfaces; iii) drug-design tools with focus on ligand-target interactions at structural and pathway level.</p>	18/18/P/RB	1

Place of work: Department of Applied Science and Technology – (DISAT)

Academic Recruitment Field 03/B2 Principles of Chemistry for Applied Technologies	Research Program	Internal Code	Number of positions
Academic Discipline CHIM/07 Principles of Chemistry for Applied Technologies	<p>Title Innovative polymers and technologies for their processing at the micro and nanoscale.</p> <p>Description The research program is in the field of polymer chemistry and polymer science, it additionally focuses on the modification and processing of polymeric materials. The activities are addressed to:</p> <ul style="list-style-type: none"> • The preparation of new oligomers and macromers for polymerization processes • Investigation of polymerisation processes and their modelling , in particular crosslinking and reversible crosslinking reactions induced by light. • Characterisation of polymeric materials, giving special relevance to microscopies • Chemical modification of polymer surfaces and their characterization by surface spectroscopies • Processing of polymers: micro and nanofabrication by patterning, imprinting, spinning processes. 	19/18/P/RB	1



Academic Recruitment Field 09/D1 Materials Science and Technology	Research Program	Internal Code 20/18/P/RB	Number of positions
Academic Discipline ING-IND/22 Materials Science and Technology	<p>Title Glasses and ceramic materials for biomedical applications.</p> <p>Description The candidate will be requested to organize and implement research activity, to transfer theoretical and experimental knowledge to PhD and post-doc students, to raise funded projects and new resources within Dipartimento di Scienza Applicata e Tecnologia (DISAT), to consolidate collaborations with academic and industrial partners with the aim of transforming their requests in new ideas and products.</p>		1

Academic Recruitment Field 09/D2 Systems, Methods and Technologies of Chemical and Process Engineering	Research Program	Internal Code 21/18/P/RB	Number of positions
Academic Discipline ING-IND/26 Analysis, Design and Control of Chemical Processes	<p>Title Develop innovative approaches for on-the-fly real-time multiscale modelling based on the use of database, surrogate models and software adaptors.</p> <p>Description The research activity at the Department of Applied Science and Technology (DISAT), in the Research Sector 09/D2, in the field of multi-phase systems, has for many years a strong modeling address focused on the numerical simulation of the behavior of dispersed systems, in particular solid-liquid, gas-liquid and liquid-liquid. The study allowed to develop expertise on the different scales of interest:</p> <ul style="list-style-type: none"> • at the molecular level for the prediction of the transport properties of substances; • at the mesoscale level for the characterization of colloidal processes; • at the macroscale level using classical techniques based on the coupling of computational fluid dynamics and population balance of the dispersed phase. <p>The research program focuses on the ability to integrate these methodologies with a multiscale approach, both in the micro-macro and in the opposite direction. In the first case, more common, some properties evaluated at the smaller scales are then used in progressively larger scale simulations. In the opposite case, however, is the macroscopic behavior of the system that determines the phenomena at the smallest scales (consider for example the role of fluid dynamics in the formation of micelles or of the mixing in crystallization).</p>		1

Academic Recruitment Field 09/D3 Chemical Plants and Technologies	Research Program	Internal Code 22/18/P/RB	Number of positions
Academic Discipline ING-IND/25 Chemical Plants	<p>Title Chemical plants and processes for promotions of industrial wastes.</p> <p>Description The research activity in the Sector 09/D3 at the Department of Applied Science and Technology (DISAT) is traditionally characterized by a high industrial vocation.</p>		<p>Title</p> <p>Description</p>



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	In particular, the scientific activities are oriented towards the development of innovative processes for the valorisation of residues and food waste, of biomasses of vegetable or marine origin, and/or of by-products from the so-called biorefinery processes, in order to obtain new chemicals, new feedstock or novel biofuels for a more sustainable society. In more recent times, the Scientific Sector is investing many of its resources in research topics that require, together with the usual skills in chemical and process engineering, also the capacity to develop biochemical or biotechnological processes applied to the food and/or waste treatments industry.		
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Place of work: Department of Structural, Geotechnical and Building Engineering – (DISEG)

Academic Recruitment Field 08/B1 Geotechnics	Research Program	Internal Code	Number of positions
Academic Discipline ICAR/07 Geotechnics	<p>Title Experimental characterization of hydro-chemo-mechanical behaviour of soils.</p> <p>Description The research program regards experimental study of hydro-chemo-mechanical behaviour of soils in saturated and unsaturated conditions, under static and dynamic loads, through both standard and innovative experimental techniques. The research aims at studying the impact of chemical and hydraulic actions on the hydro-mechanical behaviour of soils with reference to issues geotechnical problems (e.g. slopes stability, geo-environmental problems, seismic local response analysis, etc...). To calibrate models' parameters for the interpretation of in situ geophysical tests, the research will use laboratory non-destructive techniques based on elastic waves propagation and on electric phenomena. In addition to these activities, the research program will regard dynamic monitoring of historical structures.</p>	23/18/P/RB	1

Academic Recruitment Field 08/B2 Structural Mechanics	Research Program	Internal Code	Number of positions
Academic Discipline ICAR/08 Structural Mechanics	<p>Title Robustness and complexity in structural mechanics.</p> <p>Description The candidate will develop the research activity within the fundamental topics of Structural Mechanics, adopting computational, experimental as well as analytical methodologies to solve problems related to the mechanical behaviour of structures in the realm of civil engineering, also considering their interaction with natural and man-made hazard. Modern and innovative aspects like robustness and complexity with regard to structural response will be investigated. In particular, in the context of the new Interdepartmental Centre on Structural Safety, the candidate will be involved in the modelling and experimental activity on real-scale structures, using a multi-disciplinary approach taking into account ageing and degradation.</p>	24/18/P/RB	1



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Academic Recruitment Field 08/B3 Structural Engineering	Research Program	Internal Code 25/18/P/RB	Number of positions
Academic Discipline ICAR/09 Structural Engineering	<p>Title Design criteria and safety evaluation of structures.</p> <p>Description Research activities will be focused on the construction field concerning:</p> <ul style="list-style-type: none"> • effects of seismic action, behavior of structures taking into account type, morphology, materials, technologies and soil interaction; • traditional and innovative seismic protection techniques; • assessment of vulnerability, structural and seismic reliability, safety and durability. <p>Specifically, the candidate is requested to provide innovative impulse to the research in these fields with potential transfer of the research results into European and / or international structural design codes.</p>		1

Place of work: Department of Mathematical Sciences "G. L. Lagrange" – (DISMA)

Academic Recruitment Field 01/A2 Geometry and Algebra	Research Program	Internal Code 26/18/P/RB	Number of positions
Academic Discipline MAT/03 Geometry	<p>Title Global analysis on differentiable manifolds.</p> <p>Description The research program is within the SSD MAT/03 Geometria and, specifically in the field of Differential Geometry. It deals with global geometrical properties of Riemannian manifolds and their submanifolds. More specifically, the program focuses on geometric flows, variational geometric problems, differential-topological methods and analytic techniques for global analysis on manifolds and geometric analysis.</p>		1

Academic Recruitment Field 01/A4 Mathematical Physics	Research Program	Internal Code 27/18/P/RB	Number of positions
Academic Discipline MAT/07 Mathematical Physics	<p>Title Mathematical Models for Life and Engineering Sciences.</p> <p>Description The research project focuses on the deduction of mathematical models applied to biomedical and engineering problems. In particular, the aim is to study problems with multiscale and multi-level characteristics, due to the presence of phenomena that occur at different spatial and temporal scales. For this purpose, upscaling methods will be applied to several modelling frameworks such as discrete models, agent-based models, individual cell-based models, kinetic models, non-local models, and continuous models.</p>		1



Place of work: Interuniversity Department of Regional and Urban Studies and Planning – (DIST)

Academic Recruitment Field 08/D1 Architectural Design	Research Program	Internal Code 28/18/P/RB	Number of positions
Academic Discipline ICAR/15 Landscape Architecture	<p>Title Urban ecology.</p> <p>Description a) The researcher is asked to integrate the competencies present in the Department with regard to the sub-goal 11.6 of the Sustainable Development Goal 11, which reads: "By 2030, reduce the adverse environmental impact of cities" and the part of the sub-goal 11.b which requires to significantly increase "the number of cities and human settlements using integrated policies and plans towards resource efficiency, mitigation and adaptation to climate change". b) The declination, within the DIST Project of Excellence, of this sub-goal refers to an interpretation of the urban territory that weaves its character of "unceasingly shaped space" (Corboz) with the question of its fragility, assessable in terms of ecological sustainability also by applying the tools of urban metabolism analysis. It is required to show ability to tackle problems at different scales, to bring to synthesis multiple knowledge (nature sciences, earth sciences, humanities), to measure oneself with the adaptive transformation processes. c) The research activity will be mainly focused on the elaboration of innovative solutions able to face decisional, implementation, realisation and management aspects in an integrated way, when dealing with the natural resources in urban areas. It will therefore be situated at the intersection of landscape planning, territorial planning, ecology, with attention to the economic implications of environmental impacts. Furthermore, to fit within this framework, the research activity will be based on a cognitive and design approach able to deal with environmental problems at different levels of complexity.</p>		1
Academic Recruitment Field 08/E2 Conservation, Restoration and History of Architecture	Research Program	Internal Code 29/18/P/RB	Number of positions
Academic Discipline ICAR/18 History of Architecture	<p>Title History and construction of medieval architecture.</p> <p>Description The researcher will be asked to carry out research in the field of the history of architecture and the city, with a privileged reference to the medieval and early modern age, applying research methodologies related to the examination of material and documentary sources (in particular for the study of monastic and conventual religious buildings), and using the capacity to analyse historical building systems and the organization of construction sites. The researcher must also engage in internationalisation of DIST research activities.</p>		1



Academic Recruitment Field 08/F1 Urban and Territorial Planning and Design	Programma di ricerca	Internal Code	Number of positions
	<p>Title Public space, green areas and security.</p> <p>Description a) The researcher is asked to integrate the competencies present in the Department with regard to sub-goal 11.7 of the Sustainable Development Goal 11, which reads: "By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities". b) The declination, within the DIST Project of Excellence, of this sub-goal is open and rooted within an idea of public space and its role, proper to the European tradition, for which it is essentially the main urban infrastructure: it is the plot that gives overall meaning to the city and the territory; it is a "dense space" that declines regulatory, value and use aspects. From a non-dissimilar standpoint, sub-goal 11.7 refers to the implications of public space in terms of comfort, well-being, security and equality. c) The research activity will mainly focus on the elaboration of innovative solutions able to face the complexity of the question of how contemporary urban space can be "public". It will therefore be situated at the intersection of urban and architectural planning, territorial planning and social sciences. Furthermore, to fit within this framework, the research activity must be based on sensitivity and design skills on the theme of public space, aimed at increasing the individual and collective benefits of urban open spaces in terms of public health, greater accessibility and usability, favouring the reduction of exclusion and marginality related to socio-economic inequality.</p>	30/18/P/RB	1

Academic Recruitment Field 14/C2 Sociology of Culture and Communication	Research Program	Internal Code	Number of positions
<p>Academic Discipline SPS/08 Sociology of Culture and Communication</p>	<p>Title Digital technologies and creative and cultural industries.</p> <p>Description The researcher will be called to carry out research in the field of communication sociology and new media, with reference to the relationship between digital technologies and creative and cultural industries, both in terms of the impact on creative media forms and of the impact between technological innovation and production and labour processes. The research will make use of empirical methods, with particular reference to qualitative methods and action-research, as well as quantitative methods. The researcher must also engage in the objectives of internationalisation of the research activities of DIST research activities.</p>	31/18/P/RB	1

Art. 2

Description of the contents of Academic Recruitment Fields and Academic Discipline

As for the description of the contents of the Academic Recruitment Fields and of the Academic Discipline included in this Call, please refer to the Italian Ministry Decree n. 855 of October 30th 2015 - <http://attiministeriali.miur.it/anno-2015/ottobre/dm-30102015.aspx> - published in the ordinary supplement of the Italian *Gazzetta Ufficiale* (National Journal) n. 271 of November 20 2015 – *Serie Generale, annexe B* of the Italian Ministry of Education Decree of October 4 2000 <http://attiministeriali.miur.it/anno-2000/ottobre/dm-04102000.aspx>



Art. 3 Admission and Eligibility requirements

Only the candidates having a PhD degree or equivalent qualification awarded in Italy or abroad are eligible to participate in the selection. Candidates must certify that they comply with such requirement according to article 4 of this call.

If the PhD degree or equivalent qualification has been awarded abroad, candidates must provide the documents which certify that these qualifications are considered equivalent according to the Italian law in force (equipollence/equivalence-recognition of degrees).

Candidates must provide alternatively

- Determina di Equivalenza del titolo (equivalence-recognition of degrees) in accordance with the Italian Law art. 38 D.Lgs. n. 165/2001 (cfr. sito web <http://www.funzionepubblica.gov.it/articolo/dipartimento/22-02-2016/modulo-la-richiesta-dellequivalenza-del-titolo-di-studio-stranieri>)

or

- Dichiarazione di Equipollenza del titolo (equipollence-recognition of degrees) in accordance with the Italian Law art. 74 D.P.R. n. 382/1980 (cfr. sito web <http://www.miur.gov.it/equipollenze-equivalenza-ed-equiparazioni-tra-titoli-di-studio>)

as certified by the Italian Public Authorities.

In order to assure the widest participation in the selection procedure, if candidates do not comply with the requirement while submitting the application, **they have to submit all necessary documents certifying that their qualifications are considered equivalent according to the Italian law in force by the date of the signature of the contract.**

In addition to the above mentioned requirements, can participate in the selection procedure:

- a) Candidates who hold the national scientific qualification to function as associate or full professor in Italian Universities in accordance with art. 16 of the Italian law n. 240/2010;
- b) Candidates who benefited from contracts in accordance to art 24, paragraph.3, letter a) of the Italian law n. 240, December 30 2010;
- c) Candidates who have benefited for at least three years, (also not consecutive), from fellowships awarded in accordance to art 51, paragraph 6 of the Italian law n.449, December 27 1997 and subsequent changes, that is in accordance with article n. 22, Italian law 240/2010, or from post-doc scholarships, in accordance to art.4 of the Italian law November 30 1989 n.398 or from similar contracts, fellowships or scholarships at foreign universities;
- d) Candidates who have benefited for at least three years, (also not consecutive), from the contracts in accordance to art 1, paragraph.14 of the Italian law n. 230, November 4 2005.

All the typologies of activities described at points b, c and d performed by the candidate can be taken into consideration in order to cumulate a three years' time, as whole period to be considered in order to comply with the above mentioned requirements.

Candidates must ensure that they comply with the eligibility requirements listed above according to article 4 of this call.



The candidates who cannot be eligible to participate in the selection are:

- Full and Associate Professors ("I and II fascia") and Assistant Professors who are already holding a permanent position in a university will not be considered, even if they are no longer in service.
- Those who are excluded from civil and political rights (for Italian candidates, in Italy, for foreign candidates, in their own country).
- Those who have been destituted or relieved from their role in a Public Administration office or those who have been declared destituted from another Public Administration office in accordance to the Italian law article n. 127, letter d), of the law "Testo unico" approved by a decree of the President of the Italian Republic of January 10 1957, n. 3, or those who have been dismissed from their post in a Public Administration office in the two years with or without notice before the application deadline;
- Those candidates who have a kinship or affinity degree, including the fourth degree, or a conjugal relationship or cohabitation, with a Professor belonging to the Department which decides to stipulate the contract or with the Rector, General Director or a member of the Board of Governors of the Politecnico di Torino; if this case occurs after the procedure deadline, the information must be provided and these candidates have to withdraw from the selection officially.
- Those candidates who have held a fellowship and contracts as assistant professor (temporary term), in accordance with articles 22 and 24 of the Italian law 240/10 at Politecnico di Torino or at other Italian Universities (public or not, or online universities) or at institutions included in article 22, paragraph 1, of the Italian law 240/10, for a period of time which, summed to the period of time related to the contract concerned by this call, exceeds 12 years, (also not consecutive). Periods referring to maternity leaves or health leaves are not taken into consideration in the above mentioned periods of time, according to the Italian law in force.

Please note that, in order to be eligible in the selection, candidates must possess the above mentioned requirements within the submission deadline.

Candidates who do not possess the above mentioned requirements are excluded from the selection procedure.

Foreign candidates are required to prove a knowledge of Italian or English.

Politecnico guarantees equality and equal opportunities in accessing job posts and in job treatment between male and female participants.

Art. 4

Application for the selection procedure

The applications must be submitted by Friday, August 10th 2018, 3.00 p.m. (Italian time) by only using the online procedure available through the following website <http://careers.polito.it/>, otherwise candidates will be excluded from the selection.

Submission of the application

The participation application must be completed by sending the *dichiarazione sostitutiva di atto di notorietà* and the admission application created in the "pdf" format and available on the online procedure, according to one of the following procedures:

- Through digital signature of the candidate, by using a specific software; in this specific case the application and the *dichiarazione sostitutiva di atto di notorietà* **must be signed and uploaded to be sent electronically through the "p7m" format available in the specific section through the online procedure, together with the format "p7m copy of a valid identity document;**



- By printing the application and the *dichiarazione sostitutiva di atto di notorietà*. **The signed documents must be scanned and converted in "pdf" format, uploaded and sent e through the special section available through the online procedure together with the pdf copy of a valid identity document.**

The participation application must include:

- **The admission application** which has to be filled in all its parts, according to the details included in the online procedure. In particular it must include:
 - Complete personal data of the candidate;
 - The Department, the Academic Recruitment Field, the Academic Discipline, where it is specified, the code of the selection in which the candidate intends to participate.
 - The domicile post address and the e-mail address of the candidate.
- **The Curriculum Vitae**, which must include the list of all the publications (the uploaded publications and the overall scientific production) and the list of the elements included in the specific sections of the CV, which will be filled in all parts, according to the word form accessible through the online procedure, uploaded and sent in "pdf" format only through the special section.
- **Any other document different from the publications which can be evaluated by the Committee must be submitted** through the form of the *dichiarazione sostitutiva di atto di notorietà* (document in which candidates declare that all what they stated is true) and uploaded and sent in "pdf" format only through the special section.
These elements must be duly illustrated in the cv (period of time of reference, institution where the activity has been developed, description of the activity, etc..).
- **The publications**, which must be uploaded and sent in "pdf" format only through the special section.
Candidates are allowed to submit a maximum number of 12 publications otherwise they will be excluded from the selection. Among these 12 publications no more than 4 publication per year can be submitted and no more than 3 publications must be prior to January 1 2013. The retroactivity is allowed of this period only if maternity/ paternity/health/ civil service leave periods with a minimum duration of 5 months are certified.
Each candidate involved in procedures with an Academic Recruitment Field defined "bibliometrico" as indicated in Annex A of the Ministerial Decree n. 76/2012 must declare the following indicators by specifying the origin database:
 - Overall scientific production (indicators must be declared in the CV)
 - a) Total citations;
 - b) Total impact factor;
 - c) H-index or similar;
 - For each of the 12 publications submitted in the on-line procedure (indicators must be declared in the on-line procedure)
 - a) Citations;
 - b) Impact factor.

Among the 12 uploaded publications the candidate must choose the 3 most significant ones. These 3 publications must be indicated in the CV and in the specific on-line procedure section.



- **La dichiarazione sostitutiva di atto di notorietà**, available through the online system which certifies:
 - The veracity of what the candidate has declared in his/her CV;
 - Declaration of conformity of elements included in the specific sections of the CV, of the publications and veracity of the inserted data.
- **The € 30,00 payment invoice which** must be uploaded and sent by the candidate through the special section accessible through the online procedure, otherwise he/she will be excluded from the selection.
 - Candidates are required to pay and deposit a Euro 30,00 fee on the Politecnico bank account **IBAN IT51N0200801160000002551101** – Agenzia Politecnico della Banca UNICREDIT S.p.A. Via D'Ovidio, n. 6 - 10129 TORINO - intestato al Politecnico di Torino – Amministrazione Centrale, Corso Duca degli Abruzzi, n. 24 – 10129 TORINO - and to specify in the "causale" (reason for payment): "Contributo partecipazione selezione per ricercatore a tempo determinato b), Settore Concorsuale..... Codice interno.... ("Fees for the participation in the selection procedure for Assistant Professor, Academic Recruitment Field....., Academic Discipline....., internal code).

Any other documents different from the publications which can be evaluated by the Committee and Publications

Candidates are not allowed to refer to documents, elements included in the specific sections of the Cv and publications already submitted to the Politecnico di Torino for other notices of competition or comparative overall evaluations.

Publications, documents and certifications in English, French, German, Spanish or Portuguese can be issued in the original language.

Publications, documents and certifications issued in other languages must be submitted in the original language, translated into one of the following languages: Italian, English, French, German, Spanish or Portuguese; the translation must be certified and in compliance to the foreign text.

As far as certifications and *dichiarazioni sostitutive di atto di notorietà*, are concerned, please refer to the decree of the President of the Italian Republic n. 445/2000, with particular reference to articles 3, 40-47.

If the degrees have been issued by Public Administration offices, please note that they can be only self-certified by the candidate, in accordance with the Italian law 183/2011 (Stability law), through *dichiarazione sostitutiva di atto di notorietà* available through the online procedure.

Our Institution may proceed with specific checks, even random sampling, on the veracity of the *dichiarazioni sostitutive di notorietà*.

For all publications it is necessary to specify, if available, the DOI code.

If the candidate is author or co-author of a book or catalogue, these are considered as publications; if the candidate is author or co-author of single chapters of a book, each chapter is considered to be a publication.

If the publications have been produced/published abroad, date and place of publication, code ISBN or some other equivalent detail must clearly appear.



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If the publications have been partly published Italy, such publications must meet the duties provided/in accordance with the article n.1 of the decree of August 31 1945, n. 660 and the Italian law n. 106, April 15 2004 on the basis of the rules D.P.R. n. 252, May 3 2006 published in the Gazzetta Ufficiale n. 191 of August 18 2006. Such duties have to be met and certified by specific supporting documents, which attest that the publications have been delivered or which must be accompanied by the *dichiarazione sostitutiva di atto di notorietà*. Such documents must be submitted together with the publications.

The texts which have been accepted for publication must be accompanied by specific documents certifying that they can be published without further revisioning.

Internal documents (without DOI or ISBN code) or department reports are not considered as publications.

Cv, degrees publications and any other document which will be submitted not through the above mentioned proedure, **will not be considered for the selection procedure form.**

In accordance with the Italian law n.104, February 5th 1992, handicapped candidates are required to submit a specific request concerning logistics details and support needed for the participation in the discussion.

Foreign candidates

Foreign candidates must apply according to the procedure and the deadline included in this article.

In the application the candidate must include, if available, also the mail address in Italy.

Any variation or change must be promptly communicated to the Comparative Evaluations and Research Grants Office by fax (011-090.5919) or certified e-mail to the address politecnicoditorino@pec.polito.it.

Non-Eu foreign citizens, in order to submit documents and publications must meet the following duties:

-in accordance with the article n. 3 of the Decree of the President of the Republic n. 445/2000 the Non-Eu foreign citizen with a regular residence permit in Italy can use the *dichiarazioni sostitutive di certificazioni* (art. 46 D.P.R. 445/2000) and *di notorietà* (art. 47 D.P.R. 445/2000), limited to the status, the personal qualities, to the elements and documents which can be certified by Italian public or private bodies, excluded special rules included in the laws and regulations concerning the Immigration and the Foreign individuals condition law.

Excluded the above mentioned cases, the non-Eu foreign citizens allowed to sojourn in Italy, are allowed to use the above mentioned declarations/documents if they are related to international agreements between Italy and the country of origin of the candidate. The non-Eu foreign citizens who cannot use the above mentioned declarations and documents, must provide to the Comparative Evaluations and Research Grant Office the hard copies of the such papers before the day of the discussion.

Change of domicile postal address or e-mail address after the submission of the application

All the communications will be sent only through e-mail to the e-mail address included in the participation application. Therefore, any change of domicile postal address or e-mail address inserted in the application must be promptly communicated to the Comparative Evaluations and Research Grants Office by fax (011-090.5919) or certified e-mail to the following address politecnicoditorino@pec.polito.it. Politecnico does not take on any responsibilities for the spread of communications originated from a non correct indication of the domicile address by the candidate or if the change of the e-mail address inserted in the application is communicated late or not communicated at all or for possible misunderstanding which have not to be ascribed to our Institution.



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Participation application in more than one selection

The candidates who intend to apply for more than one selection must use the online procedure for each selection.

Exclusion from the selection procedure

The exclusion from the selection procedure is applied through a decree of the Rector and notified to the candidate.

Withdrawal of the candidate: procedure

If a candidate withdraws from the selection procedure, he/she has to send an official document by fax (011-090.5919) or by certified e-mail to the address politecnicoditorino@pec.polito.it, by enclosing the copy of a valid identity document to the Human Resources and Organization, Comparative Evaluations and Research Grants Office (Annex A).

**Art. 5
Evaluation Committees**

Constitution and appointment

The Committee will be composed according to the rule including in art.9 "Commissione di Selezione" of the "Regolamento di Ateneo per il reclutamento dei Ricercatori a tempo determinato" (Rules for the recruitment of Assistant Professors-3 year contract), issued by the Decree of the Rector n. 595/2018.

The Evaluation Committees are appointed by decree of the Rector and published in the Official Register (Albo Ufficiale) and on the following university website

https://www.swas.polito.it/services/concorsi/240.asp?id_documento_padre=152983

If changes in the position covered by the candidate in the university of origin have occurred after the appointment, the quality of a member of the Judging board cannot be considered undermined.

Notification of incompatibilities and anomalies

It is possible to address to the Rector notifications of incompatibilities and anomalies through the Comparative Evaluations and Research Grants Office which will be evaluated by a specific Committee appointed by the Rector.

Committee: Closing phase

The Committee must complete all the procedures within three months since the date of publication of the Appointment Rector's decree. The Rector can postpone the deadline of the end of the procedure only one time and not for more than two months, due to exceptional and proved reasons, indicated by the Chair of the Committee. If the closing phase of the procedure is not completed after the postponement, the Rector starts the procedure to substitute the members of the Committee, to whom it is possible to ascribe a delay in the procedure, through a justified provision. Then, the Rector establishes a new deadline for the end of the procedure.

**Art. 6
Selection procedure - Evaluation Committee**

Definition and publicity of the evaluation criteria

When appointed, the Evaluation Committee defines in details:

- the criteria and indicators, also recognized at an international level, on which a preliminary evaluation of the candidates will be based, in accordance with art. 7, which includes articles 2 and 3 of the Italian decree n. 243 of May 25, 2011;
- the criteria to assign point to each of the elements included in the specific sections of the cv and to each typology of publication submitted by the candidates admitted in the public discussion.



The Commission can ascribe a maximum score equal to 100, in particular:

- a maximum score equal to 40 can be ascribed to the elements included in the specific sections of the cv, including 10 points reserved to the teaching activity in Italian and /or foreign universities;
- a maximum score equal to 60 can be ascribed to the publications submitted by the candidates, including 30 points reserved to the three main/most significant publications.

The responsible, provided with these criteria, is in charge to assure the publicity in the Official Register and on Polito website, at least seven days before the progression of the procedure.

The evaluation of the elements included in the specific sections of the cv and scientific production

In the following meetings the activities of the Committee will be based on the following steps:

- a) Admission of the most deserving candidates to the public discussion of the documents included in the specific sections of the cv and of his/her scientific production, for a number which must not be higher than 20 % of the total of the candidates and not lower than 6. If the number of the total of the candidates is equal or lower than 6, the preliminary evaluation procedure does not take place and all candidates are admitted in the selection. If the selection is held for 'n' positions the most deserving candidates will be admitted to the public discussion of the documents included in the specific sections of the cv and of his/her scientific production, for a number which must not be higher than 20 % of the total of the candidates and not lower than 5 + n. The Commission can decide to admit to the public discussion more candidates than the minimum numbers above mentioned.
- b) Discussion on the cv and on the candidate's scientific production. During the discussion the Commission will focus particular attention to the teaching activity and teaching methodologies developed by the candidate also by using practical demonstration.
The candidate can decide whether to discuss in English or Italian, even though the candidate knowledge of English will be checked all the same.
The candidate will be invited to take part in the discussion **exclusively through a communication sent by e-mail to the e-mail address inserted in the application form, at least 10 days before the discussion.** The date and the place where the discussion will take place will be made public through the Polito website. The candidate must show a valid identity document the day of the discussion.
- c) Assignment of points to any other documents different from the publications and to each of the submitted publications by the admitted candidates, after the discussion.

Committee: Closing phase

At the end of the procedure, the members of the Committee, on the basis of the evaluation and on the points assigned in accordance with article n. 8, drafts a summary report where joint judgements are expressed on each candidate who took part in the discussion. Afterwards, on the basis of the assigned score and the joint judgement, it identifies the most qualified candidate with the majority of the members of the Committee for each position to be covered or it declares that no candidate is qualified to cover the position. For each meeting, minutes have to be drafted signed by all the members, with related annexes.

At the end of the procedure, the Committee gives the related acts by hand to the Rector (minutes of the single meetings, preliminary evaluation, evaluation of the any documents different from the publications which can be evaluated by the Committee and of the candidate's scientific production, joint judgments expressed on each candidate). A summary report where joint judgments are expressed on each candidate is published on the Polito website.

At the end of the procedure, the Commission gives the related acts by hand to the Rector.

[...]



Art. 9
Verification of regularity of acts

In accordance to art. 10 paragraphs 12,13,14 of the Rector's Decree. n. 595/2018, the Rector verifies the regularity of the acts within 60 days from the submission of the documents by the Committee.

If the verification is positive, the Rector approves the Committee acts through his decree where he declares the name of the selected candidate/candidates.

If after the verification, faults are identified, in case they can be rectified, the Rector sends back the acts to the Committee by his decree and indicate a deadline for their regularization.

If the observed faults cannot be rectified, the Rector does not approve the Committee acts and appoints a new Committee by his decree.

If after the verification, faults referring to obvious falseness, discrepancy and illogicality in the Committee acts are identified the Rector proceeds with the verification of such acts by a specific and proper investigation.

In this case, the verification procedure can end within the subsequent 30 days.

If these faults are not verified and cannot be rectified, the Rector does not approve the Committee acts and proceeds to appoint a new Committee.

Art. 10
Call of the selected candidate

Within 30 days from the date in which the acts are approved by the Rector, the Department proposes the call of the candidate/candidates selected by the Committee to the Board of Governors.

The proposal is adopted through a resolution with positive vote of the absolute majority of the Full Professors and Associate professors.

Subsequently, the Board of Governors decides to approve or not the proposals of the Department within 3 months from the approval of the acts by the Rector.

If the Department does not take action, the Board of Governors decrees on the call of the candidate/candidates selected by the Committee.

Art. 11
Employment conditions

After the candidate is called, he/she will be invited to sign and full-time, three year contract individual agreement, not renewable, in accordance with the Italian law in force and with the "Regolamento di Ateneo per il reclutamento dei Ricercatori a tempo determinato" (Rules for the recruitment of Assistant Professors-3 year contract), issued by the Rector's decree n. 595/2018.

In the case of Academic Recruitment Field in which there are no significant teaching requirements, the contract may provide explicitly that the Assistant Professor performs its teaching activities in different Academic Recruitment Field from the subject of the Notice of Competition.

The candidate who has been called is asked to provide Politecnico with the documents required by the Italian law in force, with exception of the provisions of article 3, within 30 days since the signature date of the contract.

The gross salary is 40.132,77 Euro/year for the whole period.

The typology of the relationship between Politecnico di Torino and the Assistant Professor is ruled by the Italian law in force, also in relation with the social security, health insurance, fiscal aspects (redditi da lavoro dipendente"-incomes related to wage labour). Politecnico di Torino as Contractor will be charged for the workplace injuries and illnesses compulsory insurance, as well as for civil liability.



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The activities to be performed by the Assistant Professor are defined together with the Head of the Department. In order to perform teaching activities, supplementary teaching activities and student tutoring activities the Assistant Professor's total workload per year is 350 hours. Assistant Professors can be responsible of official courses.

Art. 12
Treatment of personal data

With reference to the regulations expressed by the decree n. 196/2003, concerning the personal data treatment, the data provided by the candidates will be protected in accordance with the mentioned law and to the confidentiality obligations, as far as the selection procedure is concerned.

Art. 13
Selection Procedure Responsibility

Further information/details or clarifications concerning the submission procedure of the application will be provided by the Comparative Evaluations and Research Grants, Human Resources and Organization Office by phone 011-090.6052/5975/6064/6789/6047 and by e-mail ruo.valutazionicomparative@polito.it or during the office hours:

Monday-Thursday from 9.00 a.m. to 12.00 a.m. and from 2.00 p.m. to 4.00 p.m. Friday from 9.00 a.m. to 12.00 a.m.

If you need support with technical problems you can send an e-mail to servizio.intranet.swa@polito.it by specifying the username used for the registration in the online procedure.

The person responsible for the procedure is Mrs Francesca MANFRONI- Human Resources and Organization Area-Academic staff and researchers/Overall Comparative Evaluations and Research Grants Office.

Art. 14
Reference to the Italian law in force

The Italian law in force which rules Public notices of competition are in compliance with this notice, even though it is not explicit in the notice itself.

The text of the notice, once it is published in the official in the National Journal, will be inserted in the official Register, as well and available through the following Politecnico website https://www.swas.polito.it/services/concorsi/240.asp?id_documento_padre=152983

The notice of competition can be accessible through:

- On the MiUR (Ministry of Education and Research) website <http://bandi.miur.it/>
- On the European Union website <http://ec.europa.eu/euraxess/>

Please note that the official document having a binding force of law is the one worked out in Italian. An English version is available, as well, but only for information purposes.

Turin, June 14th 2018

**On behalf of the RECTOR
The DEPUTY RECTOR
(Prof.ssa Patrizia LOMBARDI)
*sgd Patrizia LOMBARDI***