



D.D.G. 648
23/04/20

Notice of public selection process, by titles and examination, to fill 1 Technologist post, pursuant to art. 24 bis of Law 240/2010, with full time fixed-term contract for 3 years, at Department of Interteneo of Project Sciences and Territory Policies of this Polytechnic.

code 05/20/TD

The General Manager

IN VIEW of law 241 dated 7/08/1990 as amended;

IN VIEW of the National Collective Labor Agreements for staff of the University sector signed on 16/10/2008 and 12/03/2009;

IN VIEW of the Consolidating Act of the legislative and regulatory provisions on administrative documentation issued with Presidential Decree 445 dated 28/12/2000;

IN VIEW of Leg. Dec. 165 dated 30/03/2001 as amended;

IN VIEW of law 240 dated 30/12/2010 concerning rules in the field of the reorganization of Universities and improvement in the quality and efficiency of the university system and, in particular, art. 24 bis, which introduces the figure of the technologist on a fixed-term basis;

IN VIEW of Legislative Decree 49 dated 29/03/2012, concerning rules on the matter of programming, monitoring and assessing budgetary and recruitment policies of Universities;

IN VIEW of Law 190 dated 6/11/2012, on the matter of "Regulations for the prevention and suppression of corruption and crime in the Public Administration";

IN VIEW of Leg. Dec. 81 dated 15/06/2015 on the matter of "Rules for employment contracts and revision of the regulations in terms of duties, according to article 1, paragraph 7, of law 183 dated 10 December 2014;

IN VIEW of the "Regulation relating to the procedures for selection, recruitment and management of the employment relationship of technologists on fixed-term contracts at the Turin Polytechnic", issued with Regional Decree dated 1/3/2017;

IN VIEW of the note dated 16/04/2020 from the Head of Division Department of Interteneo of Project Sciences and Territory Policies concerning the request to activate a public selection process to fill 1 full time fixed term contract Technologist post, to realize the project "Implementation and management of SDG11 laboratory research projects";

CONSIDERED the professionalism required to realize the project above in terms of the competencies connected with the specific profile;

HAVING CERTIFIED that the financial coverage of the relevant expense is guaranteed by the fund n. 60_RID_DIP_ECC_MIUR; CUP: E11G18000350001;

HAVING VERIFIED the absence of rankings in force at this University to recruit Technologists required for this process;



ORDERS

Art. 1

Number of posts – Professional profile

A public selection process, by titles and examination, has been announced by the Polytechnic of Turin to fill a Technologist post according to art. 24 bis of law 240/2010 with a full time fixed term contract, for a duration of three years, at the Department of Applied Science and Technology of this Polytechnic.

The candidate has a master technical degree and the title of PhD relevant to the activities and skills required by this call. The profile sought will be a transversal figure suitable to fill the roles of geodatabase and hardware/software architecture administrator, integrator of data management software procedures and publication of the implementation results in shared environments.

The figure sought will have the role of supporting the analysis and studies dedicated to the implementation of a georeferenced data management system and all the procedures designed to extract value added information from data.

The figure required must have experience in the field of modeling and management of relational databases with particular reference to spatial geodatabases, excellent knowledge of programming languages (in particular Python and/or Java), configuration of hardware and software architectures, standards of map data and use of open source data repositories.

Activities and responsibilities

The role that will be covered includes the development of the following support activities for the SDG11 LAB projects:

- ✓ Hardware and software management and maintenance of innovative equipment;
- ✓ Implementation of a spatial geodatabase containing vector data (reference and digital thematic maps) and raster data archives (images acquired from aerial/satellite platform/s);
- ✓ Implementation in a cloud platform of spatial data analysis and management software;
- ✓ development of useful codes for the automation of standard spatial analysis procedures and specific specialized application domains.

Skills:

The candidate must certify in-depth knowledge and experience in the field of relational databases, data modeling, Spatial Data Infrastructures (SDIs) and programming (Java and Python).

The use of the video terminal is foreseen for more than 20 hours per week.

An in-depth knowledge and documented experience in the field of relational databases is required, with particular attention to the definition of conceptual, logical and physical models of georeferenced data in a direct and/or indirect way. These techniques will be used for the implementation of a spatial data infrastructure to be implemented in customized cloud environments.

Specific requirements:

A high degree of autonomy is required in the preparation, development and implementation of codes (mainly in Java and Python) useful for the automation of standard and specialist domain analysis procedures using different frameworks and public domain libraries (OS - Open Source). An excellent knowledge of English, a demonstrated ability to work in teams and interaction with heterogeneous research groups and dissemination and communication of the results of research results, also through international publications, are also considered desirable requirements.

This notice will be published on the Official Gazette of the Politecnico di Torino, on the website of the Polytechnic of Turin at www.swas.polito.it/services/concorsi/persta.asp, as well as on the site of the Ministry of Education, 'University and Research (MIUR), at <http://bandi.miur.it> and on the website of the European Union, at <http://ec.europa.eu/euraxess>.



Art. 2

Admission requirements

To be admitted to the selection process the following is required:

a) academic title:

Second-cycle degree of the Italian educational system in conformity with Min. Dec. 270/2004 or academic degrees equivalent, by law, to the degrees of the old educational system.

and

PhD in Computer Science or Science and High Technology with computer address

The Interministerial Regulation 9/7/2009 related to the equivalence between degrees of the previous academic system, specialist degrees and second-cycle degrees is available on the link below:
<http://attiministeriali.miur.it/UserFiles/3160.pd>

Applicants who have attained their academic title outside Italy must attach the degree translated and authenticated by the competent diplomatic or Italian consular representative, indicating that the equivalence with one of those indicated above has occurred. The equivalence, solely for admission to the selection process, between the degree attained outside Italy and the professionalism connected with the selection itself is certified, on request of the applicant, by a dedicated commission of experts appointed by the General Manager.

- b) capacity to exercise civil and political rights;
- c) absence of criminal convictions which may impede the entering of an employment contract because of the regulations in force;
- d) they must not have been excluded from active political electorate, or made redundant on disciplinary grounds or deprived of or dismissed from employment at a public administration for ongoing underperformance or have attained the employment through false declarations or production of false documents or flawed by invalidity which is not remediable;
- e) they must not have been declared disqualified from state employment, according to art. 127 paragraph one, lett. d) of the consolidating act of the provisions concerning the statute of civil servants, approved by Presidential Decree no. 3 dated 10.1.1957;
- f) they must not be related up to the fourth degree of consanguinity or affinity, or have a relationship of marriage or registered partnership between people of the same sex or living together as if married, with a professor belonging to the Department who has proposed the activation of the contract, or the Rector, the General Manager, a component of the Board of Administration according to art. 18 paragraph 1 letter c) of Law 240/2010.

Foreign citizens, for the purposes of accessing public administration posts, must be capable of exercising their civil and political rights in the country of nationality or origin, be in possession, with the exception of the ownership of Italian citizenship, of all the other requirements for the citizens of the Republic, have suitable knowledge of the Italian language.

Applicants must be in possession of the above-mentioned requirements at the date of expiry of the deadline for presentation of the application for admission to the selection process. Those who have attained their academic title outside Italy and requested but have not yet obtained the recognition of equivalence within the expiry term set out above, will be admitted to the selection process under reserve.

For needs connected with the organization of the work and in compliance with principles of timeliness, effectiveness, efficiency and cost-effectiveness of the administrative action, all applicants will be admitted to the selection process under reserve; hence, this Administration reserves the right to control only the



applications of those who will have sat the written exam; therefore, exclusion from the competition, due to lack of the admission requirements set out above, may be ordered at any time, for any justified reason.

This Administration guarantees fairness and equal opportunities for men and women to access the job and treatment at work, according to art. 7 of Leg. Dec. 165/2001.

Art. 3

Applications and deadline to submit applications

The application for admission to the selection process should be presented on paper not subject to stamp duty to Area Risorse Umane e Organizzazione – Ufficio Personale Tecnico-Amministrativo (Human Resources and Organization Area – Technical-Administrative Personnel Office), using the form set out in annex “A”, of this notice, by the date **04/05/2020** . Applications arrived after the abovementioned deadline shall not be considered valid.

The applications must be submitted in one of the following ways:

- by registered letter with return receipt to the following address: Politecnico di Torino – Area Risorse Umane e Organizzazione – Ufficio Personale Tecnico Amministrativo –C.so Duca degli Abruzzi, 24 – 10129 Turin. For this purpose the stamp and date of the accepting post office shall be proof of dispatch;
- by PEC (certified email address), sending an email from one’s own personal PEC address to politecnicoditorino@pec.polito.it containing the application of participation duly compiled and signed and any other document required, in PDF format, together with the scan of a valid identity document. The subject of the email must show the following wording “PEC DOMANDA DI CONCORSO TD. COD. 05/20/TD” [“PEC APPLICATION FOR SELECTION PROCESS TD. COD. 05/20/TD”];
- by fax, to no.0110906043, attaching copy of a valid identity document.

All applicants must state, under their own responsibility:

1. their surname, name, date and place of birth;
2. their citizenship;
3. the municipality in whose electoral rolls they are registered, or the reasons for non-registration or cancellation from the same rolls;
4. to have no previous or current criminal record (even if amnesty, remission, pardon or judicial pardon has been granted) and pending proceedings against him;
5. to be in possession of the required academic title;
6. their position held as regards military obligations;
7. any services provided at Public Administrations and causes of termination of preceding relationships;
8. that they have not been deprived of or dismissed from employment according to art. 127 d) of the Consolidating act approved by Presidential Decree no. 3 dated 10/1/1957, or made redundant from employment at a Public Administration;
9. that they are not related up to the fourth degree of consanguinity or affinity, or have a relationship of marriage or registered partnership between people of the same sex or living together as if married, with a professor belonging to the Department who has proposed the activation of the contract, or the Rector, the General Manager, a component of the Board of Administration according to art. 18 paragraph 1 letter c) of Law 240/2010.
10. whether they are in possession of any preferential rights , as set out in annex B.

The application must be accompanied by the European style curriculum vitae (annex C) containing a detailed description regarding the studies and professional experience gained, as well as any other information which the applicant considers useful for assessment purposes, in relation to the professional profile required; the Curriculum vitae must be produced by personal sworn declaration pursuant to art. 47 of Pres. Dec. 445 dated



28.12.2000. The curriculum will be completed by the 10 most relevant products (also in .pdf format) the candidate will decide to submit to evaluation.

The applicants, recognized as disabled according to law 104/1992, must make explicit request for the necessary aid, as well as any need for additional time to carry out the tests, depending on their handicap.

According to art.13 of the "Code regarding the protection of personal data" issued with Leg. Dec. 196 dated 30/6/2003, all data provided by the applicants by application shall be processed respecting the aforementioned regulations and the obligations of confidentiality, to fulfill the obligations connected with the selection procedure.

The application form to participate in the selection process and the curriculum vitae format are distributed in the Office mentioned above and available on the website of the University at the following address: www.swas.polito.it/services/concorsi.

The bottom of the application must be signed; the signature requires no authentication pursuant to art. 39 of Pres. Dec. 445 dated 28/12/2000, under penalty of exclusion from the selection process.

Art. 4 Selection committee

The Selection Committee, appointed with a subsequent order of the General Manager, will be composed by experts on the subjects regarding the professionalism required, the type and scientific-disciplinary area of the research project, as well as the organization and/or selection of staff.

Art. 5 Evaluation of titles

The Evaluation Board will evaluate the qualifications declared by the candidates according to pre-defined criteria. The qualifications will be awarded a maximum of 50 points out of 100. The qualification categories and related maximum scores are the following:

1. titoli professionali: esperienze ed incarichi professionali, docenze in ambito accademico e non accademico sui temi dell'avviso, partecipazione a programmi e reti di ricerca, coordinamento e gestione di gruppi e laboratori di ricerca o strutture similari: fino ad un massimo di 15 punti;
2. formazione tecnica e/o scientifica ad esclusione di corsi finalizzati all'acquisizione di competenze linguistiche o informatiche specifiche: fino ad un massimo di 10 punti;
3. dottorato di ricerca: per il conseguimento del titolo punti 15 o in assenza del conseguimento del titolo 3 punti per ogni anno di frequenza fino ad un massimo di 12 punti;
4. altri titoli e prodotti quali pubblicazioni, articoli, prodotti multimediali, brevetti, premi, conseguimento di finanziamenti competitivi e altri riconoscimenti: fino ad un massimo di 10 punti.

Art. 6 Examination

The exam is an interview.

The interview will be about the following programme.

- Spatial data modeling, GIS, data formats, spatial data accuracy and metadatation
- Spatial relational databases, spatial SQL (definition of tables, indexes and queries with spatial criteria)
- Tools and techniques for spatial data management
- Open source spatial data platforms
- Knowledge and management of open source spatial data, OGC standards, SDI infrastructure, Inspire directive
- Knowledge and management of Big Data, NOSQL database



The aim of the oral discussion is to verify the skill and abilities described in the following at item 10. During the discussion the knowledge of the English language will be tested (very good knowledge both written and spoken is required).

The Evaluation Board can award a maximum of 50 points out of 100. A candidate passes the interview if he/she scores at least 35 points.

Art. 7

Calendar of examinations

The interview will take place in telematics mode on **27/05/2020**, starting at 10.00 under art. 87 of D.L. 18/2020. The list of those admitted to the interview will be published on the web page of the Polytechnic of Turin at the address <https://www.swas.polito.it/services/concorsi/>

Applicants are required to be on the premises at the time and on the day mentioned above to sit the examination. They must be in possession of a valid identity document.

Art. 8

Formulation and approval of ranking

Having performed the test for the selection process, the Committee draws up the merit ranking in descending order of the overall vote based on the results of the title's evaluation and of the interview.

Applicants who have passed the final test and intend to exercise their preferential rights as set out at paragraph 4 of art. 5, Presidential Decree no. 487 dated 9.5.1994 (annex B) are required to show the relevant original documents, or authenticated copy thereof, within the deadline of 15 days. This term starts from the day following that on which individual applicants have passed the final test.

By Decree of the General Manager, the merit ranking will be approved and the successful candidates will be declared, on condition that it is verified that they are in possession of the requirements to be admitted to the job.

The final ranking will be published on the Administration web page at the address: www.swas.polito.it/services/concorsi.

Art. 8

Entering into the contract

A full time fixed-term employment contract for duration of three years will be entered into with the candidate who is declared successful. A probationary period of work as Technologist is envisaged.

For the remuneration reference shall be made to the rules laid down for the technical-administrative staff for category D, economic position D3.

The employment relationship is governed by the individual contract and by the employment provisions in force, which also include the taxation, welfare and social security, envisaged for employee income. As regards the rights and duties of the employee, reference is made to the principles established by the National Collective Labor Agreement - University Sector and to the regulations in force on public sector employment.

The candidate who has successfully completed the selection process is required to submit all documents, which will be requested from this Polytechnic within thirty days from recruitment, under penalty of dismissal.

The probationary period will last for three months and cannot be renewed or extended. Once this period has been completed without termination of the employment relationship by one of the parties, the employees



will be considered as being confirmed in service and their length of service will be calculated in every respect as of the day of recruitment.

Art. 9

Head of procedure and competent office

For all purposes of this notice is identified, as the competent office in the Human Resources and Organization Area, the Technical Administrative Personnel Office, tel. 0110907955 – 3218 – 6054, e-mail: ruo.selezionita@polito.it. The Head of the procedure is Dr. Lina Miniello.

Art. 10

Referral to the performance of the selection process

For all that is not provided for in this selection process notification, reference shall be made to the rules laid down in the Regulation on the selection, recruitment and management process of the fixed-term employment relationship of the Technologists as set out in the introduction, and - as far as compatible - to the Regulation concerning the selection processes for recruiting permanent technical-administrative staff at the Polytechnic of Turin, issued with Regional Decree no. 339 dated 31/05/2002, and to the provisions in force on the procedures for public selection processes.

THE GENERAL MANAGER
(Dr. Ilaria ADAMO)