



Albo n. 1799/2020

Call for applications

for the 2nd level Specializing Master's programme in

"Artificial Intelligence & Cloud: Hands-on innovation"

Academic Year 2020/2021

(Annex "A"- Rector's Decree no. 826/2020 of 21/09/2020)





Art.1

(Programme overiew)

The 2nd level Specializing Master's programme in Artificial Intelligence & Cloud: Hands-on innovation is offered by Politecnico di Torino, in accordance with D.M.270/2004, for academic year 2020/2021.

The programme coordinator is Enrico Macii, from the Interuniversity Department of Regional and Urban Studies and Planning Department of Environment, Land and Infrastructure (DIST) of Politecnico di Torino (hereinafter referred as to "Programme Coordinator").

The duration of this 2nd level Specializing Master's programme is one year for a total of 60 ECTS.

This programme is offered in collaboration with the company Reply S.p.A. (hereinafter referred as to "Reply"). The 2nd Level Specializing Master's programme will begin in January 2021.

Art. 2

(Training objective, didactic contents and organization of the activities)

This Specializing Master's programme aims to train young graduates to the use of digital technologies: data management, implementation of artificial intelligence and machine learning techniques, usage of Cloud Services and techniques.

Nowadays, Data, AI and Cloud are technology streams at the base of every technology innovation processes in all production sectors.

The programme benefits from Reply experience in this sector with many projects realized. As a consequence, the programme offers its participants a unique opportunity to get involved in high-level projects under Reply's experts guidance.

The programme is structured into three specialization fields among which students have to choose: **AI: Data Management** (Data Engineering & Data Science), **AI: Machine Learning** and **Cloud**".

The 2nd level specializing Master is a full time programme of approximately one academic year duration for a total of 60 ECTS; it will start in January 2021 and end in December 2021.

The 2nd Level Specializing Master's programme is organized as follows:

- 9 compulsory courses 26 credits
- 1 specialization to choose among 3 14 credits
- Project work 250 hours, 10 credits
- Final thesis 250 hours, 10 credits

Table n.1 – Organization of the courses

Compulsory Courses	CFU
Advanced data bases	3





AI and ML (theory and models)	3
Cloud Infrastructures and networks	3
Security	3
Advanced programming	4
Software engineering / Microservice architectures	4
Security - Lab on Attack/Defense	2
Blockchain	2
Quantum	2
Specializiation: Cloud	
Specialization Cloud	3
CLOUD implementations within the major vendor solutions	11
Specialization: AI / ML	
Specialization AI / ML	3
MACHINE LEARNING as implemented within the major vendor solutions	11
Specialization: Al / Data	
Specialization AI / Data	3
Classifiers, recommendation and anomaly detection method as implemented within the major commercial solutions	11

Classes are held in presence at Politecnico di Torino – starting in January 2021 and ending in July 2021. Politecnico di Torino defined specific operational procedures concerning the measures against the spread of COVID-19 that are constantly updated according to the provisions of the Italian Authorities on this matter (please refers to http://www.coronavirus.polito.it).

In case the situation get worse significantly, or a new lockdown should be imposed by the Italian Authorities, classes will continue remotely, on the Politecnico's digital platform (on synchronous basis with possibility to register classes to make these available on asynchronous basis).

The official language of the programme is English.

Art. 3

(Admission requirements)

The Specializing Master's programme is open to a maximum of 40 participants.

The programme is inteded for both Italian and foreign citizens who must:

- have earned a Master's degree (or equivalent qualification) within December, 31st 2020;
- prove knowledge of the English language (minimum CEFR B2-level).





In order to be admitted to this 2nd Level Specializing Master's programme, you must hold, by December, 31st 2020, a full degree (Master of Science degree/Laurea specialistica/Laurea magistrale) in one of the following degree classes (D.M. 270/2004):

- LM-32 Computer Systems Engineering;
- LM-18 Computer Science;
- LM-25 Automation Engineering;
- LM-27 Telecommunications Engineering;
- LM-29 Electronic Engineering.

Even if you have not earned your Master's degree yet but are going to graduate within December, 31st 2020 can submit your application for admission to the programme.

Art. 4

(Application deadline and selection process)

Admission and deadline

You can apply for admission for this Specializing Master's Programme ONLY through the Application Form available at:

https://didattica.polito.it/master/ai_cloud/2021/how_to_apply

DO NOT apply by e-mail, fax or mail because these applications will not be considered.

Applications are due by:

- November 2nd, 2020 at 1 p.m. - Italian time

You can find the list of mandatory documents that you must attach to your application.

Please note: only documents in English or in Italian will be accepted.

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 the General Data Protection Regulation (EU Regulation 2016/679) and the Personal Data Protection Code, Legislative Decree 30 June 2003 no. 196 and subsequent amendments);
- Application form and questionnaire (available on the webpage of the Specializing Master's programme <u>https://didattica.polito.it/master/home/en/request</u>)
- list of exams of both Bachelor's and Master's degree programmes (or equivalent):
 - If your degree(s) was awarded by a <u>non-Italian University or by a private Italian University</u>: official transcript(s) of records, issued by the University of origin, produced on letter-headed paper, containing the full list of all the exams passed, the grades obtained the graduation final grade, final thesis topic and the date of degree conferral.





or	
0	If your degree(s) was awarded by an <u>Italian Public University</u> : self-certificate (<i>dichiarazione sostitutiva di certificazione</i> - Art. 46 DPR 28 December 2000, n. 445) in which you declare that you earned both a Bachelor's and a Master's degree. Your self-certificate must include: name of degree programme, name of the University, date of degree conferral, final thesis topic and graduation final grade. In compliance with art. 75 of D.P.R. 445/2000, should your self-certificate be found to be false or incorrect, you will lose any benefit acquired based on your untruthful declaration.
	ion Letter: max 1 page (see the template available on the webpage of the Specializing Master's mme https://didattica.polito.it/master/ai_cloud/2021/documentation)
OPTIO	NAL DOCUMENTS
– English	Language Certificate
- Official	certificates related to other academic careers (i.e. PhD, Master Universitari ecc.)
- Certifica	ates related to professional courses
- Resider	at permit (for extra ELL citizens only)

Resident permit (for extra-EU citizens only)

If you fail to attach even one of the above mandatory documents, you will be excluded from the selection process.

Selection process

Step 1. Evaluation of applicants' qualifications

After the application deadline, the Selection Committee assesses all the applications and the attached documents.

The Selection Committee can assign you a maximum of 70 points, according to the following criteria:

- MSc's final grade (for graduands: weighted average grade of the exams passed before the application deadline as stated in the documentation uploaded to Apply@polito) – maximum 25 points;
- number of years needed to get the final degree and graduation date: degrees awarded in the past two solar years obtain higher score maximum 10 points;
- grade obtained in the MSc's exams and their coherence with programme's topic maximum 10 points;
- MSc's final thesis topic coherence with programme's topic maximum 10 points;
- work experiences related to programme's topic maximum 5 points;
- study and work experiences abroad related to programme's topic maximum 5 points;
- others academic careers related to programme's topic maximum 5 points.

The final score of the first step of the evaluation is based upon the above-mentioned criteria, up to a maximum of 70 points.

You will be considered as "ineligible" and you will not be admitted to the second step of the selection process if you:

- do not attach all the compulsory documents;
- do not fulfill all the admission requirements;





- do not reach the minimum score of 30 points.

Step 2. Interview

In this phase, the Selection Committee interviews the applicants who passed the first step of the selection process. The Selection Committee can assign you a maximum of 30 points. Interviews aim to assess:

- your motivation;
- soft skills;
- technical knowledge (included any project performed at University which may be relevant to the contents of the Specializing Master's programme);
- your level of English proficiency;
- work experience.

If you passed the first step of selection you will be able to see your name and the date and place for the interview on the programme website. The interviews will begin two days after the publication of the first step' results.

In case you cannot attend the interview in the day assigned, you can ask to postpone it in the next four days following the publication of the results.

If you do not attend the interview you are automatically excluded from the selection process.

In exceptional cases, if you are unable to attend the interview in presence, you can request the Selection Committee, within three days prior to the interview, to have a remote interview. The decision of the Selection Committee is unquestionable.

The overall score is the sum of the score obtained in the first and second step of the selection process. If you do not score at least **60 points** you are not admitted to the programme.

The person responsible for the admissions administrative procedure is Mr. Alberto Pusceddu (Head of the Specializing Master's Programmes and Lifelong Learning Office at Politecnico di Torino).

Art. 5

(Selection outcomes)

At the end of the selection process, a ranking list is published on the online University Bulletin and on the Selection Outcomes page of the Specializing Master Programme's website.

The ranking list will contain:

- the list of applicants admitted to the Specializing Master's Programme;
- applicants on reserve list.





Provided that you have attached all the required documents, fulfilled all the requirements, scored at least 60 points you will see your position in the rankings and your final score on the Selection Outcomes page.

Please note that if you have not yet obtained the Master's degree you will be provisionally accepted. In case you will not obtain the degree within December, 31st 2020 you will not be admitted to the programme (approximately at beginning of January 2021).

Art. 6

(Participation confirmation, enrolment and documents submission)

Participation confirmation

In case you are on the list of applicants admitted to the Specializing Master's programme, in order to confirm your participation, you must comply within the deadline (usually a week after the publication of the selection outcomes) defined by Politecnico for participants to accept the offer and download **the Acceptance Declaration**, fill it in and send it by e-mail to <u>master.universitari@polito.it</u>.

Failure to send the declaration within the aforementioned terms is considered as final renunciation to the programme.

In case you are on the reserve list, it means that you are eligible for replacement and will have the possibility to enrol in the programme if one or more participants renounce their offer of admissions. In this case, the Office of Specializing Master's Programmes will contact you according to your order on the ranking list. Admitted students are given a deadline to confirm their participation (usually a week).

If you decide to decline your offer of admission, you are invited to inform the Office of Specializing Master's Programmes (<u>master.universitari@polito.it</u>) with an official notification.

Enrolment

If you are admitted, you must enroll at Politecnico before the programme starts. You will receive an e-mail with useful information for your enrolment.

At the moment of the enrolment you will be requested to pay the participation fee (see Art. 8). Failure to send payment within the terms is considered as final renunciation to the programme.

N.B.: In case your participation is sponsored by the partner Reply, Politecnico will agree the methods and the deadlines for the payment of the participation fee directly with the sponsor (see Art. 8).

You are not allowed to be simultaneously enrolled in another Specializing Master's programme nor in any other university programme. If you are enrolled in another programme, you must finish your studies or suspend them





before enrolling in the 2nd level Specializing Master's programme in "Artificial Intelligence & Cloud: Hands-on innovation".

Documents submission

After completing the enrolment process, admitted students must present the original documents uploaded to their Application Form to the Office of Specializing Master's Programmes together with the Acceptance Declaration before the programme starts (please refer to art.5).

If your degree was awarded by a non-Italian University, upon enrolment you must submit the original copy of the Dichiarazione di Valore/Statement of validity (related to your degree) issued by the Italian Diplomatic Mission in the country where the qualification was awarded or Attestato di Comparabilità /Statement of Comparability issued by the CIMEA Centre.

If your degree was awarded by a European university, you can submit your Diploma Supplement instead of the Dichiarazione di Valore/Statement of validity.

If you do not submit your Statement of validity, you can enroll in the programme with condition, but you must present this document within 6 months of the beginning of the programme. If you do not provide the abovementioned mandatory document by the deadline, you are placed on hold and cannot progress in your studies until you actually present this document.

If you are a non-EU national, you are required to comply with the norms on entry visa and residence permit. You have to submit:

- Student Visa type D for participants who are non-EU citizens residing abroad;
- Valid residence permit for non-EU citizens residing in Italy.

Politecnico di Torino reserves itself the right to check the truthfulness of the declarations included in selfcertificate sent by the applicants (pursuant to Article 46 of DPR. no. 445 of 28 December 2000) and Politecnico excludes them from the ranking list in the event of false declarations.

Art. 7

(Student assessment and final qualification)

The Specializing Master's programme requires you full time commitment. You are requested to attend activities for at least 80% of the programme.

Absences for more than this limit leads you to exclusion from the Specializing Master's programme.

Withdraw from the programme must be put in writing.

You cannot be simultaneously enroled in a Specializing Master's programme and in another university programme.





STUDENT ASSESSMENT

At the end of each course, you have to take an exam consisting in a written test and/or an oral evaluation test. If you fail the exam, you can arrange a make-up exam directly with the professor responsible for the course. You can take a make-up exam just once.

At the end of the programme, participants make a final report related to their project work and are assessed for it.

FINAL QUALIFICATION

Upon completion of the programme, participants who regularly attended the activities and earned 60 ECTS (required for graduation), are awarded the "Artificial Intelligence & Cloud: Hands-on innovation" 2nd level Specializing Master's diploma by Politecnico di Torino. The Diploma will be issued in Italian.

If, at the end of the Specializing Master's Programme, you have not passed all the exams included in your Study Plan you can get a Certificate of Attandance and a Transcript of Records with the list of the exams that you have passed with grades, dates, credits and scientific disciplinary field.

Art. 8

(Participation and enrolment fee)

Participation and enrolment fee

The participation fee is 18.000,00 Euro (eighteen thousand/00) + 21,00 Euro (twentyone/00)¹ for the enrolment fee (Premium for accident insurance $5,00 \in +$ Enrolment revenue stamp $16,00 \in$).

The total amount must be paid to Politecnico di Torino according to the following instalments:

- 9.000,00 Euro (nine thousand/00) Euro + 21,00 Euro (twentyone/00) at the time of enrolment (January 2021);
- 9.000,00 Euro (nine thousand/00) Euro before July 31st 2021.

If you withdraw from the programme or are excluded from it, you will not be reimbursed your participation fee and enrolment fee under any circumstances and furthermore you will be requested to pay the whole amount of the participation fee.

The issue of the Diploma of the 2nd level Specializing Master's programme in "Artificial Intelligence & Cloud: Hands-on innovation" requires the payment of a revenue stamp.

Area Gestione Didattica Politecnico di Torino Corso Duca degli Abruzzi, 24 – 10129 Torino – Italia master.universitari@polito.it; www.polito.it

¹ The insurance premium may change due to new rules adopted by Edisu and to the stipulation of an insurance contract





Participation sponsored by Third Parties

If your participation in the programme is sponsored by Third Parties (payment of one or more instalments), it will be processed as follows:

- the sponsor must complete and submit the form available at <u>https://didattica.polito.it/master/ai_cloud/2021/participation_fee</u>
- After the end of the admission process, the sponsor will receive a message with:
 - the list of admitted sponsored candidates.
 - payment methods
- The 2nd level Specializing Master's Programme in "Artificial Intelligence & Cloud: Hands-on innovation" is included in the course catalogue of Politecnico. Therefore, participation and enrolment fees are VAT exempt (Article 4 of DPR 633/72). Upon payment, Politecnico di Torino will issue a payment receipt.
- The sponsor undertakes to host the student(s) it sponsors for the project work activity.

In case of participations sponsored by Third Parties, Politecnico di Torino may provide for exceptions from the provisions related to the number of instalments and to the deadlines scheduled for the payment of the participation and enrolment fee.

If you are enrolled in the 2nd level Specializing Master's Programme in "Artificial Intelligence & Cloud: Handson innovation", including if you are sponsored by Third Parties, you are subject to the rules and provisions of the Tuition Fee Guide concerning failure to pay or late payment and hold on academic progress.

Art. 9

(Additional positions for Reply employees)

Politecnico di Torino reserves itself the right to assign additional positions in the programme to Reply employees up to a maximum of 10 participants. These candidates need to meet all the admission requirements (in accordance with Art. 3) and must go through a specific selection procedure carried out by the partner Reply.

Art. 10

(Competent office)

The competent office is the Office of Specializing Master's Programmes and Lifelong Learning of Politecnico di Torino, Tel. 0110907986 – e-mail: <u>master.universitari@polito.it</u>





Art. 11

(Person responsible for the administrative procedure)

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

Art. 12

(Privacy Information Notice)

In accordance with the General Data Protection Regulation (EU Regulation 2016/679) and the "Code regarding the protection of personal data" (Legislative Decree No. 196 of 30th June 2003 and further amendments) personal data are processed by Politecnico di Torino exclusively for the selection and enrolment process in pursuit of the university aims and in accordance with the transparency purposes imposed by the law. The processing of personal data is based on the principles of correctness, lawfulness and relevance of purposes. More information on the processing of personal data is available at: https://didattica.polito.it/privacy/.

The Data Controller is Politecnico di Torino, represented by the Rector, with statutory seat in Corso Duca degli Abruzzi, 24-10129 Torino.

You can contact the Data Controller at politecnicoditorino@pec.polito.it (certified e-mail).

For further information and inquiries write to privacy@polito.it.

You can contact the Data Protection Officer (DPO) of Politecnico di Torino for inquiries on the processing of your personal data and your rights at: <u>dpo@polito.it</u>; <u>dpo@pec.polito.it</u> (certified email).

The Parties declare that they have mutually acknowledged compliance with the obligations related to personal data protection, each for the part under its responsibility.

The Parties acknowledge that they both act as autonomous data controllers and are committed to operating in full compliance with the applicable personal data protection legislation to them in relation to the data processing activities related to the execution of this Call for applications In particular, students personal data are processed by Politecnico di Torino exclusively for institutional purposes of education and by Reply for the evaluation and the possible training and hiring. The processing of personal data is based on the principles of correctness, lawfulness and relevance of purposes. In order to pursue the "Specializing Master's Programme in Data, AI, Cloud" candidates agree that the Politecnico di Torino shares their personal data with Reply S.p.A (hereinafter "Reply").

Reply will use the information provided as autonomous controllers of students personal data.

For the Politecnico di Torino the privacy policy is available at: <u>https://didattica.polito.it/privacy</u>

ForReplytheprivacyinformationnoticeisavailableat:https://www.reply.com/it/Shared%20Documents/Privacy/Privacy Policyita.pdf





Art. 13

(Access to documents)

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

Art. 14

(Final provisions)

- 1. The programme will start only if the minimum number of participants is reached.
- Communication with applicants takes place primarily through the "Apply@Polito" platform.
 Specific communications might be sent via email or SMS using the contact details provided by applicants during registration on the platform.
- 3. Politecnico does not take any responsibility in case of unavailability of recipients and for loss of communications due to inexact indication of an applicant's email address or telephone number or due to delay or failure to notify changes to the contacts provided during registration.
- 4. The Call for applications is published on the online University Bulletin available at https://www.swas.polito.it/dotnet/albo_online. The same can be found on https://didattica.polito.it/dotnet/albo_online.