



**POLITECNICO
DI TORINO**

Scuola di Master
e Formazione Permanente

Call for applications

for the 2nd level Specializing Master Programme in

“Tunnelling and Tunnel Boring Machines”
(11th edition)

Academic Year 2017/2018

(Annex “A” - Executive Decision of the Head of the Division of Student Affairs no. 726/2017)



ART. 1

Programme overview

The 11th edition of the 2nd level Specializing Masters Programme in “Tunnelling and Tunnel Boring Machines” (T&TBM) is offered by Politecnico di Torino for the academic year 2017/2018.

The administrative seat of this Specializing Master Programme is located at Politecnico di Torino – Office of Specializing Masters Programmes and Lifelong Learning (“Ufficio Master e formazione permanente”).

The programme is managed by the “Specializing Masters Programmes and Lifelong Learning School” (“Scuola di Master e Formazione Permanente”).

The Programme Director is Daniele Peila, professor at the Department of Environment, Land and Infrastructure Engineering of Politecnico di Torino.

ART. 2

Training objective, didactic contents and organization of the activities

The purpose of the programme is to provide young graduates with a sound of technical and managerial knowledge so that they can acquire a multidisciplinary knowledge that is necessary to work in the tunnelling sector.

The 2nd level specializing master is a full time programme of one academic year duration for a total of 60 ECTS; it will start in January 2018 and will end in December 2018.

Lectures will be held in English at Politecnico di Torino premises – starting in January 2018 and ending in July 2018. An internship period in a construction site or in a tunnelling design company will follow.

The teaching programme includes 7 months of classroom activities with academic and corporate teaching staff and it is structured as follows:

- 9 course divided in three modules (table n. 1)
- internships

Table n.1 – Organization of the courses

	ECTS
MODULE 1	
Tunnel design and construction method	8
Rock Mass Characterization. Geo investigations and risk assessment	6
Tunnel supports	5
Numerical design	3
MODULE 2	
General aspects of mechanized tunnelling and Hard Rock TBMs	8
Soil mechanics tunnelling	6
Plants and microtunneling	3
MODULE 3	
Contractual and legislative aspects, work sites management, quality	4
Safety and environmental issues of work sites	10

ART. 3

Admission requirements

In order to be enrolled at a 2nd Level Specializing Master Programme, applicants must have at least a 5-year (10 semesters) university career.

The T&TBMs programme is addressed to graduate students having completed a Master of Science Degree (or equivalent title) in the following areas or related subjects:

- Civil Engineering (LM 23)
- Environmental Engineering (LM 35)
- Geology (LM 74)



All candidates must prove to have a good knowledge of English language, which must be certified by a language certificate included in the list of accepted certificates (see **Table n.2 English language certificates** at the end of this article in order to know the required level and accepted certificates).

Candidates who have a Bachelor's degree or a Master's degree from a University where English is the medium of instruction do not need to submit these certificates. In this case the University must issue a transcript of records which also states that "The medium of instruction is English".

Table n.2 – English language certificates

Examination Board	Certificate	Minimum score accepted
ETS http://www.ets.org/toefl	TOEFL (Test Of English ad a Foreign language) - ibt	62
	TOEFL (Test Of English ad a Foreign language) - cbt	210
	TOEFL (Test Of English ad a Foreign language) - pbt	547
	TOEIC (Test of English for International Communication)	Listening: 360 Reading: 350 Speaking: 150 Writing: 140
Cambridge English Language Assessment http://www.cambridgeenglish.org/exams/	Cambridge Preliminary English Test (PET)	Pass with Merit
	Cambridge English First (FCE)* *All higher Cambridge English certificates (ADVANCED/CAE and PROFICIENCY/CPE) are automatically accepted with any pass mark.	160 (for FIRST taken from Jan 2015) 60 (for FCE taken before Jan 2015) NB: see Statement of Results for scores
	Cambridge English Council of Europe Level B1	154 (for FIRST taken from Jan 2015) 55 (for FCE taken before Jan 2015) NB: see Statement of Results for scores
	BULATS	Reading & Listening: overall score 54 Writing e Speaking: overall score B2 NB: Certificate should state the name of authorized BULATS center where the exam was taken.
IELTS https://www.ielts.org/	IELTS (International English Language Testing System) – Academic or General training	5.0
Pearson http://pearsonpte.com/	Pearson Test of English Academic	51
LCCI / Pearson http://qualifications.pearson.com/en/qualifications/lcci.html	ELSA (English Language Skills Assessment)	At least THREE B2 between the Reading, Writing, Listening and Speaking tests
	JETSET	At least THREE "JETSET Level 5" between the Reading, Writing, Listening and Speaking tests.

ART. 4

Admission and Selection Procedures

The Specializing Masters Programme is open to a maximum of **15** participants.

Application to the Specializing Masters Programme must be made by completing the on-line application form available on the Politecnico di Torino website: https://didattica.polito.it/master/tunnelling/2018/how_to_apply



Application forms must be submitted within:

- **October 16th, 2017** at 11:59 a.m. - Italian time

ALL the following supporting documents must be attached to the application form on Politecnico di Torino website (in English or Italian only):

1. valid identification document (passport for extra EU applicants)
 2. curriculum vitae (cv must include the authorization to the processing of personal data – in compliance with Legislative Decree no. 196/2003);
 3. English certificate (see table n. 2 “English language certificates”, art. 3);
 4. List of exams of both Bachelor’s and Master’s degree programmes:
 - for applicants with degree(s) obtained from a non-Italian University or from a private Italian University: official transcript(s), by University of origin, produced on headed paper, containing the full list of all the exams passed and the grades obtained. The transcript(s) must also include the date of the degree conferral.
Upon enrolment, the admitted candidates must submit the original copy of the “Dichiarazione di Valore/”Statement of validity” (related to the Master’s degree) issued by the Italian Diplomatic Mission in the country where the qualification was awarded. If the Master’s degree was awarded by a European university, admitted candidates can turn in the “Diploma Supplement” instead of the “Dichiarazione di Valore”.
- or
- for applicants with degree(s) obtained from an Italian Public University: self-certification (“dichiarazione sostitutiva di certificazione” - Art. 46 DPR 28 December 2000, n. 445) in which applicants declare to have obtained **both a Bachelor and Master’s degrees**.
The self-declaration must include: the name of degree, the name of the University, the date of degree conferral and the graduation final grade, the full list of all the exams passed and the grades obtained (these information are required for both degrees).
In compliance with art. 75 of D.P.R. 445/2000, should the self-certification be found to be false or incorrect, the applicant loses any benefit which he/she might have acquired on the basis of the untruthful declaration.
5. Admission Request Form (available on the webpage of the Specializing Masters Programme link https://didattica.polito.it/master/tunnelling/2018/documentation_required);
 6. Motivation Letter: max 1 page (see the template available at this link https://didattica.polito.it/master/tunnelling/2018/documentation_required)

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

After the application deadlines, the Selection's Commission will evaluate all the applications received.

Selections will consist in the evaluation of:

- Curriculum Vitae;
- Academic Results;
- Motivation

The Selection's Commission will assign a maximum of 100 points on the basis of the following criteria:

- Max 20 points for academic background's coherence with T&TBM programme's topic;
- Max 25 points for MSc's final grade;
- Max 25 points for motivation;
- Max 21 points for average grade obtained in the exams, number of years needed to get the final degree and CV evaluation;
- Max 8 points for work experiences related to T&TBM programme's topic (max 1 point per year);



- Max 1 point for work experiences in a different field but in the engineering and/or geology's field (max 0,5 points per year)

Candidates who will not reach the minimum score of 60 points will be considered "not suitable" and they will not be admitted.

The person responsible for the admissions administrative procedure is Mrs. Antonella Mina (Head of the Specializing Masters Programmes and Lifelong Learning Office at Politecnico di Torino).

ART. 5 Selection Outcomes

At the end of the selection process, the following lists will be published on the "Selection outcomes" page of the specializing master programme's website:

- the lists of applicants admitted to the Specializing Master programme
- the reserve list

Candidates who attached all the required documents, who fulfills all the requirements, and who will reach the minimum score of 60 points will see their position in the rankings and their final score on the "Selection outcomes" page, where the official lists are published.

Please note that:

- Candidates who will not reach the minimum score of 60 points, who will not satisfy all the requirements or who did not attached all the required documents will not be admitted.
- Candidates who have not yet obtained the Master of Science's degree will be provisionally accepted. In case they will not obtain the degree within the enrollment deadline they will not be admitted to the programme (approximately in the middle of January 2018).

ART. 6 Enrollment

Admitted candidates who accept the offer to participate in the programme will have to enrol at Politecnico di Torino by the starting date of Specializing Masters Programme.

Upon enrolment, participants who hold a degree from a non-Italian University must submit the original copy of the "Dichiarazione di Valore"/"Statement of validity" (related to the Master's degree) issued by the Italian Diplomatic Mission in the country where the qualification was awarded.

If the Master's degree was awarded by a European university, participants can turn in the "Diploma Supplement" instead of the "Dichiarazione di Valore".

Participants who are non-EU citizens and reside in Italy must submit a valid Italian residence permit.

Participants who are non-EU citizens and reside abroad must submit an Italian VISA for study purpose "type – D".

ART. 7 Evaluation and qualification

STUDENTS' OBLIGATIONS

The Specializing Masters Programme requires the participants a full time commitment. Attendance to the activities foreseen by the programme is mandatory for at least 85% of the programme.

Absences will be allowed up to a maximum of 15% of total classroom hours, they must be certified and approved by the Master Coordinator. Absences for more than 15% of total classroom hours will lead to expulsion from the Specializing Master programme.

Withdraw from the programme must be put in writing.



For the purpose of obtaining the Specializing Master's degree, the Master Coordinator will also evaluate the student's participation in the activities and the appropriateness of his/her behaviour.

Participation will be subject to performance evaluation throughout the programme. Detailed rules about the exams will be provided during the opening day.

It is not possible to be enrolled in a Specializing Masters Programme and in another University programme at the same time.

EVALUATION METHOD

For each course participants will have to take an exam consisting in a written and/or an oral evaluation test. At the end of the programme the final presentation (dissertation of the thesis prepared during the internship) will allow to assess the student's skills.

QUALIFICATION

After completing the programme, participants who have regularly attended the activities and reached the total amount of 60 ECTS required for graduation, will be awarded the "Tunnelling and Tunnel Boring Machines" 2nd level Specializing Master's degree by Politecnico di Torino. The diploma will be issued in Italian.

ART. 8

Tuition and enrolment fee

The tuition fee is 6.000,00 Euro (six thousand/00) + an *enrolment fee* (20,86 Euro): the total amount shall be paid to Politecnico di Torino according to the following installments:

- 1.000,00 Euro within the deadline which will be defined by Politecnico for participants to accept the offer for the Specializing Masters Programme;
- 2.000,00 Euro at the time of enrollment + *enrolment fee*
- 3.000,00 Euro as balance payment after six months

The tuition and the enrolment fee can be paid by wire transfer through the "Apply@polito" platform.

The tuition fee paid by the participants to accept the offer for the Specializing Masters Programme (1.000,00 Euro) will be refunded only in case of failure of VISA issuing by the Italian Embassy (for extra-EU citizens only) or in case that the programme will not be activated, which happens only if the minimum number of participants required will not be reached.

In case of withdrawal or exclusion from the programme the tuition and enrolment fee won't be refunded under any circumstances.

The programme will start only if the minimum number of 10 participants is reached.

FOR ANY INQUIRY OR ADDITIONAL INFORMATION PLEASE CONTACT:

Office of Specializing Masters Programmes and Lifelong Learning

Corso Duca degli Abruzzi, 24 - 10129 Torino (ITALY)

Email: master.universitari@polito.it

ART. 9

Privacy policy and access to documents

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

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

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

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



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

**ART. 10
Selection Commission**

A Selection Commission, nominated with a decree of the Rector, will evaluate all the application received within the given deadline (16th October 2017, 11:59 Italian time).

**ART. 10
Final provisions**

1. Communication with candidates will take place primarily through the “Apply@Polito” platform. Specific communications might be sent via email or SMS using the contact details provided by candidates during registration on the platform.
2. Politecnico does not take any responsibility in case of unavailability of recipients and for loss of communications due to inexact indication of a candidate's email address or telephone number or due to delay or failure to notify changes to the contacts provided during registration.
3. This Call 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/master/>.