DEADLINE: 11 September 2017, h. 14 (Italian time)

- In accordance with Italian Law dated 9.5.1989, no. 168;
- In accordance with Italian Council of Ministers Presidential Decree 30.4.1997 as amended;
- In accordance with Italian Law dated 30.12.2010 no. 240;
- In accordance with Italian Ministerial Decree dated 08.02.2013 no. 45;
- Having regard to the Ministerial Decree of the MIUR No. 1583 dated 02/08/2016 which indicates the PhD programmes for which accreditation is granted to the Politecnico di Milano;
- In accordance with the Regulation of the Politecnico di Milano in relation to Research Doctorates, issued with Rector's Decree no. 2210 dated 12/05/2015;
- In accordance with the resolutions of the Ph.D. School Board dated 7 October 2013;
- In accordance with the resolutions of the Academic Senate dated 21 October 2013;
- In accordance with the resolutions of the Board of Governors dated 29 October 2013;
- In accordance with the resolutions of the Department Board of the Department of Energy dated 8 June 2017;

**DECLARATIONS:**

**Art. 1**  
(Institution)

The Politecnico di Milano, Department of Energy, has opened the admission selection call for 1 available place, with a Ph.D. research topic scholarship available, research being restricted to the research topic "3D CFD modelling of premixed combustion in natural gas SI engines" within the Ph.D Programme in Energy and Nuclear Science and Technology (STEN), 33rd cycle (as described in the Research topic description form attached).

The topic scholarship comes under the types indicated in article 5 of the Politecnico di Milano Ph.D. Regulations: "Ph.D. in cooperation with businesses, industrial Ph.D. and higher training apprenticeship and industrial career".

The selection call is open to Italian and foreign nationals. Stateless students are viewed as foreign students.

Admission to Ph.D. programmes will be determined on the basis of an assessment of the educational curriculum and qualifications, the Personal statement and a document illustrating the development of a possible Ph.D. research project, which candidates must send at the time of applying for selection, as specified in Art. 3 below, and of the suitability of the candidate for the research topic.

The PhD programme will last three years.

**Art. 2**  
(Requirements for Participation in the Selection)

Italian and foreign citizens holding a degree diploma achieved in the education system prior to Italian Ministerial Decree dated 3.11.1999 no. 509, or a Specialist degree achieved in accordance with Italian Ministerial Decree dated 3.11.1999 no. 509, or a Master of Science degree achieved in accordance with Italian Ministerial Decree dated 22.10.2004 no. 270, or an equivalent academic qualification achieved abroad, comparable in duration and content to the above Italian qualifications and approved in advance by the admission boards, may submit an application to participate in the call for admission to the selection.
In the case of a foreign qualification, candidates must submit all relevant documents for the purposes of allowing the admission boards to decide upon the suitability of the qualification achieved abroad.

Admission to the call is only for applicants who:

- have obtained a Laurea Magistrale in Italy (or equivalent qualifications that are valid for admission to PhD programmes) **with a final mark no lower than 95/110 or 86/100**;
- in case of qualifications obtained abroad, have **the minimum average score in exams indicated in the appendix to the call (attachment 1)**. For the Countries not included in this list, the evaluation will be carried out directly by the judging panel.

Former PhD candidates of Politecnico di Milano cannot participate in the call for the same programme if they have been issued a measure of exclusion from the programme in the last 5 years.

Those who have not completed their degree course at the time of the selection deadline may also apply to participate in the admission selection. Following the assessment by the examining boards, any admission of such candidates to Ph.D. programmes will be “with reservation”. In any case, the degree will have to be completed and submitted before the beginning of the Ph.D., **1st November 2017**, otherwise the penalty is the loss of the right to admission to the Ph.D. programme.

All candidates are required to speak the English language, enclosing one of the certificates identified below by and not beyond the start date of the Ph.D. course, if not already submitted by the call deadline.

Any non-production of certificates by the start date of the Ph.D. course irrevocably results in the loss of the right to enrol.

Identified below are the certificates accepted by the Politecnico di Milano and the respective levels:

<table>
<thead>
<tr>
<th>TEST</th>
<th>MINIMUM LEVEL REQUIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAMBRIDGE</td>
<td>≥ FCE grade B</td>
</tr>
<tr>
<td>CAMBRIDGE IELTS</td>
<td>≥ 6</td>
</tr>
<tr>
<td>ETS - TOEFL paper based</td>
<td>total score):  ≥ 547</td>
</tr>
<tr>
<td>ETS - TOEFL computer based</td>
<td>total score):  ≥ 210</td>
</tr>
<tr>
<td>ETS - TOEFL Internet based</td>
<td>total score):  ≥ 78</td>
</tr>
<tr>
<td>ETS - TOEIC Listening and Reading Test</td>
<td>≥ 720</td>
</tr>
<tr>
<td>TRINITY COLLEGE LONDON</td>
<td>≥ ISE II</td>
</tr>
</tbody>
</table>

The above certification is valid regardless of the date of achievement of the same.

The following candidates are exempt from certifying their knowledge of the English language: citizens of countries in which English is an official language; candidates who have achieved or will achieve a Bachelor’s or Master’s degree from an institution at which all teaching is provided in English. Those candidates must attach official documents to demonstrate the above, to the application: in particular, in the case where all teaching is provided in English, a declaration to that effect from the respective academic institution is required.

**Art. 3**

**(Applications for Selection)**

Admission applications, prepared according to the outline in attachment 2 and the respective attached documentation, must be prepared and sent exclusively by email to phd-sten@polimi.it by **14:00 on September 11th, 2017** (all times identified in this call are understood to be Italy time).
In the admission application, the candidate declares under his/her own responsibility:

- general information, date and place of birth, place of residence and contact address for the purposes of the selection (specifying postal code, telephone number, e-mail address and Skype contact if any). Candidates are also required to notify us promptly of any change to their place of residence and/or address where all communications should be sent;

- citizenship;

- degree qualification held and required for admission to the Ph.D. programme, specifying: date of achieving the degree, University at which the degree was achieved, official duration of the programme, Degree marks and respective grading scale (where applicable);

or

- academic qualifications held and necessary for admission to the PhD programme, awarded by a foreign University, specifying: date of award, corresponding University, official duration of the study programme, final mark associated with the qualifications awarded and corresponding scale of marks, and all the documents necessary for the recognition and evaluation of the suitability of such qualifications, for the sole purpose of being admitted to the PhD programme;

or

- that he/she will provide the Degree or equivalent qualification by the expected start date of the Ph.D. programme, specifying the University at which it will be achieved and the official duration of the study course;

- to be in possession of the certificate attesting to knowledge of the English language as specified in Art. 2 of this notice;

or

- that he/she will submit the certification attesting to knowledge of the English language as specified in Art. 2 of this notice, by the start date of the course;

- the title of the topic scholarship applied for;

- up to 2 names of referees, complete with their e-mail address, telephone number and any Skype contact details;

- to undertake to attend the Ph.D. in accordance with the provisions set out in this call, the Regulations of the Politecnico di Milano in relation to Ph.D. programmes and the procedures established by the Faculty Board;

- to authorise the relevant departments to process, communicate, disseminate and disclose the personal data also by the methods set out in Art. 6 of this call, in accordance with Italian Legislative Decree dated 30.6.2003 no. 196 ("Code in relation to personal data protection");

- to be aware that the originality of their publications and dissertations provided for this application or during their doctoral career at the Politecnico di Milano can be verified by anti-plagiarism software.

Applicants shall attach to their application:

- a certificate proving his/her knowledge of English, as specified in art. 2 of this call;

- a PDF report illustrating the development of a possible PhD research project (minimum 4,000, maximum 8,000 characters, excluding bibliographies and pictures), prepared using the RTF form available in the procedure. If the aimed PhD programme includes research areas, applicants must attach a report for each – maximum two – research area for which they intend to compete. Please note that the research project illustrated in the report prepared for the competition is not necessarily
the project that will be carried out during the PhD programme. If admitted, the research project that will in fact be carried out will be subsequently defined and approved by the Programme Faculty Board after the start of the PhD programme. The dissertation, complete with bibliographies and pictures must be contained in a single pdf file maximum size 3 MB;

- a curriculum vitae in PDF format, using the template provided in RTF in the procedure. Applicants must supply the information requested in the CV template. In particular, the CV should include the list of the applicant's publications and a recent photo of the candidate. Furthermore, it can also contain no more than two attached documents (for instance, a portfolio and a publication, or 2 publications) chosen among those that are deemed most significant to illustrate the applicant's potential. The curriculum and its attachments, must be provided in a single file that shall not exceed 10 MB;

- motivation letter for the admission to the chosen PhD programme (max 2000 characters); at this point, candidates are required to specify the research areas (max 2, in order of preference) for which they intend to compete among those proposed in the specific PhD programme for which they are applying; furthermore, they are required to explain clearly the reasons for choosing PhD topic scholarships, if any;

- PDF documents relating to all their University qualifications (awarded, or to be awarded), with the diploma, if available, in the original language, the list of exams taken, the corresponding scores and the translations in Italian or English;

- a duly signed copy of their identification document; non-EU applicants must attach a copy of their passport, or of another identification document together with its translation in Italian or English;

- a copy of their Italian tax code. This request is mandatory for Italian applicants, while foreign applicants will be required to obtain and submit an Italian tax code to complete the enrolment.

- photocopy of the receipt of payment of the fee of €25.82

The non-refundable fee of €25.82 is due for each application submitted.

The fee must be paid by:

bank transfer to current account number 000001600X69 in the name of the Politecnico di Milano – at BANCA POPOLARE DI SONDRIO - Branch no. 21 (international SWIFT code POSOIT22 – IBAN IT34T0569601620000001600X69) indicating the following as the payment description: “SELECTION for the PH.D. Programme in Energy and Nuclear Science and Technology (STEN) 33rd CYCLE”.

All documents submitted must be in Italian or English. If drafted in another language, they must be translated into Italian or English.

The Administration reserves the right, at any stage during the procedure and even after the commencement of the Ph.D. course, to perform checks on the accuracy of the declarations submitted and request that original documents be provided. Therefore, it may, at any time, for justified reasons, exclude candidates from the selection who do not meet the requirements set out by this call.

Art. 4
(Admission Boards)

Admission Boards for selection to the Ph.D. programme, referred to in Article 1, are constituted in accordance with the regulations relating to Ph.D. programmes at this University.
Art. 5
(Assessment Criteria)

Candidates duly enrolled in the selection procedure are admitted to the Ph.D. programme subject to an assessment of suitability by the Admission Board and within the limits of the number of places available.

The assessment of suitability for granting the topic scholarship, restricted to carrying out the research topic as specified in Art. 1, focuses upon examining the quality of the candidate and his/her aptitude for research in the scientific fields of the specified research topic for which the candidate has applied, and is based on his/her curriculum, personal statement and illustrative documents of the development of possible research in the areas of the Ph.D. programme for which he/she has applied, sent together with the application. It is reiterated that the research illustrated in the documents sent on application does not necessarily represent the research to be developed during the Ph.D. itself; in the case of admission, the actual Ph.D. research project to be carried out will be defined and approved by the Faculty Board of the relevant Ph.D. programme, after the commencement of the Ph.D. activities, as provided for by the Regulations of the Ph.D. School.

The Admission Board will assess each application, giving each a mark out of 100.

The rating is broken down as follows:
- curriculum: maximum 45 points;
- reasons for the development of the research topic: maximum 15 points;
- research proposal describing the development of a possible Ph.D. research project, within the given topic of the research applied for: maximum 40 points.

The Board will be evaluated suitable of the candidate if:
- achieves a total score of at least 60 out of 100 points
- the research topic is evaluated suitable by the Commission

The Board may contact candidates for an interview to investigate the material submitted (that interview does not involve additional points).

Art. 6
(Formulation of Rankings)

At the end of the assessments, each Admission Board will draw up, in accordance with the criteria identified in the Article above, a ranking list.

In the case of two candidates having the same score, the youngest candidate prevails.

The rankings will be published from October 9th, 2017 on the web page “33rd Cycle Ph.D. Scholarship 2017/2018 Rankings” of http://www.dottorato.polimi.it/en/

Art. 7
(Obligations after Publication of the Rankings)

Candidates admitted are bound to specifically accept the scholarship by October 16th, 2017 by sending an email to phd-sten@polimi.it.

Failure to comply with the obligations and deadlines identified above shall incur the irrevocable loss of the scholarship.

Candidates who accept the scholarship may proceed immediately with enrolment by following the procedures identified in Art. 9 below.

All candidates, where they no longer intend to enrol on the Ph.D. programme, shall refuse enrolment irrevocably in order to make the places available to other candidates in accordance with the procedures for replacement identified in Art. 8 below.
Art. 8  
(Replacements)
In the case of refusal of a scholarship by a candidate, the Department will offer the scholarship to the next candidate in the same cycle in accordance with the ranking, until it reaches the end.

Art. 9  
(Methods of Enrolment)
Before the beginning of the course, the selected candidates will receive from the Ph.D. Students Registrar’s Office an email which will have the enrolment form and instructions attached. By the deadline indicated in the email, the candidate must return the enrolment form properly completed, signed and attaching:
- a photocopy of an Identification document (if the document is not in Italian or English, a legal translation has to be provided).
- a self-certification or the degree certificate necessary for admission to the Ph.D. programme
- certificate attesting to knowledge of the English language.

If an applicant has foreign qualifications, the applicant must submit the originals of the following documents to the Secretary by the enrolment closing date (only for the academic qualification required for admission to the PhD programme).

**Academic qualification awarded by a non-EU nation:**
Declaration of equivalence issued by the diplomatic representation of the Country to which the national education system of the awarded qualification refers or Diploma Supplement in English or suitable documentation in Italian or English, assessed as suitable by the Selection Committees and by the PhD administration.

**Academic qualification awarded by a EU nation:**
Diploma Supplement in English or suitable documentation in Italian or English, assessed as suitable by the Selection Committees and by the PhD administration.

For PhD candidates with a scholarship, the regional fee, the stamp duties and insurance costs will be withheld each year, from the first monthly grant. This amount is established on a yearly basis. For the academic year 2017-2018, this amount is equal to Euro 160.00, unless there are changes in national and regional legislation. PhD students without a scholarship, for the first enrolment and for enrolment in the following years, will be required to pay the amount mentioned above.

The method of award of a PhD is indicated in the Politecnico di Milano PhD Regulations.

Art. 10  
(Reference Rules)
For anything not expressly set out by this notice, reference is made to the rules contained in Italian Law dated 30.11.1989 no. 398, Law dated 30.12.2010 no. 240, Ministerial Decree dated 08.02.2013 no. 45, in the
Regulations of the Politecnico di Milano in relation to Ph.D. programmes, in the Regulations on industrial property of the University, along with the other provisions imparted in this regard by the regulations in force.

In accordance with Article 5 of the Law n. 241 dated 7 August 1990, as amended and supplemented, the Manager of the Procedure for this call is Ester Dall’Aglio.

For further information, interested parties may contact the Energy and Nuclear Science and Technology (STEN) PhD Programme Department Secretary in the Department of Energy (Mrs Ester Dall’Aglio - Via Lambruschini, 4/A – 20156 Milano - phd-sten@polimi.it).

This call will be published on the web page “33rd Cycle of Ph.D. Courses – 2017/2018” http://www.dottorato.polimi.it/en/ and on the system ‘Euraxess’.

Milan 28/07/2017

THE RECTOR
Signed Prof. Ferruccio Resta

Attached:
1 - minimum average score in exams for qualifications obtained abroad
2- Research topic description
3- Application form
4- Research proposal form
5- C.V. form

Attachment 1 - MINIMUM AVERAGE SCORE IN EXAMS FOR QUALIFICATIONS OBTAINED ABROAD

<table>
<thead>
<tr>
<th>Country</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>6/10</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>3.1/4.0</td>
</tr>
<tr>
<td>Bolivia</td>
<td>64/100</td>
</tr>
<tr>
<td>Country</td>
<td>Grade/Score</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Chile</td>
<td>4.5/7</td>
</tr>
<tr>
<td>China</td>
<td>70/100</td>
</tr>
<tr>
<td>Colombia</td>
<td>3.5/5</td>
</tr>
<tr>
<td>Egypt</td>
<td>65/100</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>3/4</td>
</tr>
<tr>
<td>European Countries</td>
<td>C+</td>
</tr>
<tr>
<td>(ECTS grading system)</td>
<td></td>
</tr>
<tr>
<td>Ghana</td>
<td>62/100</td>
</tr>
<tr>
<td>India</td>
<td>60/100 or 4.5/7</td>
</tr>
<tr>
<td>Indonesia</td>
<td>2.5/4</td>
</tr>
<tr>
<td>Iran</td>
<td>14/20</td>
</tr>
<tr>
<td>Iraq</td>
<td>65/100</td>
</tr>
<tr>
<td>Jordan</td>
<td>70/100</td>
</tr>
<tr>
<td>Lebanon</td>
<td>13/20 or GPA 2.5</td>
</tr>
<tr>
<td>Libya</td>
<td>65%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>2.33/4 (CGPA)</td>
</tr>
<tr>
<td>Mexico</td>
<td>7/10</td>
</tr>
<tr>
<td>Morocco</td>
<td>13/20</td>
</tr>
<tr>
<td>Nigeria</td>
<td>50/100 or 3/5</td>
</tr>
<tr>
<td>Pakistan</td>
<td>3/4</td>
</tr>
<tr>
<td>Palestine</td>
<td>75/100</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>3.9/5</td>
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<tr>
<td>Serbia</td>
<td>7.5/10</td>
</tr>
<tr>
<td>South Africa</td>
<td>60%</td>
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<tr>
<td>Switzerland</td>
<td>5.5/10</td>
</tr>
<tr>
<td>Syria</td>
<td>60%</td>
</tr>
<tr>
<td>Thailand</td>
<td>2.5/4</td>
</tr>
<tr>
<td>Turkey</td>
<td>2.6/4</td>
</tr>
<tr>
<td>Venezuela</td>
<td>13/20 or 61%</td>
</tr>
<tr>
<td>Vietnam</td>
<td>7/10</td>
</tr>
</tbody>
</table>

These values are the minimum values accepted, except as otherwise indicated in the Table.
Other Countries not included in the Table or scoring systems that are different from those indicated in the Table: the Judging Panel will assess the qualifications submitted by the applicant.