NOTICE FOR ADMISSION TO THE MASTERS DEGREE PROGRAM IN
DATA SCIENCE AND SCIENTIFIC COMPUTING

The English version of this call for applications is for information only. Course requirements, etc are covered by prevailing Italian legislation.

1. SCOPE OF APPLICATION

This notice governs admission for the 2022/2023 academic year to the inter-university Master’s Degree Program in Data Science and Scientific Computing (http://dssc.units.it/).

The Master's Degree in Data Science and Scientific Computing is established under the Italian Ministerial Decree No. 270 of 22 October 2004, and relates to the Master's Degree in Mathematical-Physical Modeling for LM-44 engineering, pursuant to Italian ministerial decree of 16 March 2007.

The above-mentioned programme takes place at the following departments of the University of Trieste:

- Department of Mathematics and Geosciences,
- Department of Engineering and Architecture,
- Department of Economics, Actuarial, Mathematics, and Statistics,
- Department of Physics,
- Department of Chemical and Pharmaceutical Sciences,

And at the at the:

- Department of Mathematical, Computer and Physical Sciences of the University of Udine, and is organized in collaboration with:
  - Scuola Internazionale di Studi Superiori Avanzati – SISSA,
  - International Centre for Theoretical Physics – ICTP.

The course is bi-annual and all the lessons are provided in English. Access is programmed in accordance with Art. 2 of Italian Law No. 264 of 2 August 1999. Admission takes place following the selection procedures described in the following Article 5, according to the ranking order and within the limit of available positions.

2. ADMISSION REQUIREMENTS

Admission is subject to meeting the following requirements:

- having a Bachelor's degree (or a graduate degree from the former university system) or a three-year university diploma, or an equivalent degree obtained abroad with a final grade of at least 80/110;
- at least 60 university degree credits (ECTS) acquired in one or more of the following scientific disciplinary sectors (SSDs):
  - mathematics (MAT/),
  - computer science (INF/ 01),
  - information engineering (ING-INF / *),
○ industrial engineering (ING-IND /*),
○ civil engineering (ICAR / 01-09),
○ physics (FIS/*),
○ statistics and mathematical methods for decisions (SECS-S / *),
○ economy and finance (SECS-P / 01, 05, 08, 11),
○ chemistry (CHIM / *),
○ molecular biology and genetics (BIO / 10, 11, 18),
○ geophysics and earth physics (GEO / 10, GEO / 12),
of which at least 9 in mathematics (MAT/ *, SECS-S / 06).

* All sectors of the same area apply (e.g. MAT / 01, MAT / 02, MAT / 03 etc.)

- adequate knowledge of the English language, certified either by the internationally recognized B2 certification level or by passing a test equivalent to the B2 certification level.

Candidates must meet admission requirements according to the modalities and within the deadlines specified in the following Art.5 and Art.6.

3. AVAILABLE POSITIONS

There are 65 positions available for the first year of the course and these are split as follows:

<table>
<thead>
<tr>
<th>TOTAL POSITIONS</th>
<th>1st SELECTION</th>
<th>2nd SELECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>For European Union citizens and those of equal status</td>
<td>For non-EU citizens residing abroad</td>
</tr>
<tr>
<td>60</td>
<td>25</td>
<td>20 (2 of them reserved for the Marco Polo project)</td>
</tr>
</tbody>
</table>

* plus unassigned positions of the 1st selection.

Up to 4 of the available positions will be reserved to the winners of the scholarships awarded by Scuola Internazionale di Studi Superiori Avanzati – S.I.S.S.A. for the enrolment in the Master’s Degree in Data Science and Scientific Computing in the academic year 2022/23.

If some of the positions remain unassigned after the 2nd selection, a further call will be published.

For purposes of this notice, the following are treated as European Union citizens:
- Citizens of Norway, Iceland, Lichtenstein, the Swiss Confederation, the Republic of San Marino and the Vatican,

A candidate who holds dual citizenship, one of which is Italian or from another EU country, is treated as a member of the European Union, pursuant to Italian Law no. 218, Art. 19 Paragraph (2).

Any unassigned positions in the ranking of foreign nationals/internationals residing abroad will be used for the benefit of EU citizens and those of equal status. The positions reserved for the
Marco Polo project, if not covered, will be used primarily for the benefit of foreign nationals residing abroad and therefore of EU citizens and those of equal status. The procedures for entry, residence, and enrollment of foreign/international students in university courses for the 2022/23 academic year will be available at [www.studiare-in-italia.it/studentistranieri/](http://www.studiare-in-italia.it/studentistranieri/). For any piece of information about them, please, write to [international.students@amm.units.it](mailto:international.students@amm.units.it).

### 4. HOW TO SUBMIT APPLICATIONS

The application for admission must be filed online, within the deadlines reported into the following table:

<table>
<thead>
<tr>
<th>SELECTION</th>
<th>TIMELINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>from March 23 to May 19, 2022 before 12:00 PM CEST</td>
</tr>
<tr>
<td>2nd</td>
<td>from June 13 to August 25, 2022 before 12:00 PM CEST</td>
</tr>
</tbody>
</table>

In order to submit the application, the candidates must already be a graduate or, if they are not, they must have acquired an adequate number of university degree credits (ECTS) which, for three years bachelors, corresponds to at least 130 ECTS. The threshold for master students will be evaluated on a case by case basis by the Admission Committee. In addition, applicants who are not in possession of an English-language certification can apply and participate in the selection process, under the conditions described in Art. 5.

In order to submit the application, interested parties, within the indicated deadline, must:

1. connect to [https://esse3.units.it/Home.do](https://esse3.units.it/Home.do), in the event they do not already hold university credentials, sign up, and proceed with authentication,
2. from the menu, select the voice “Home>>Competitive Admission” (“Home>>Ammissione/Selezione”), and sign up for the selection procedure;
3. upload the following documents in PDF format:
   a. self-certification of the degree and taken exams
   OR, in the case of **students who have not yet graduated in an Italian University**, self-certification of enrolment and study plan, complete with exams taken and to be taken
   OR, in case of **students graduated abroad**, a degree certificate containing the list of taken exams and the scale of values to which the score refers final and the scores of the exams, with the specified minimum positive scores. The certificate, if possible, must be legalized or have an Apostille (except for the countries adhering to agreements on legalization exemption) and it must also be officially translated in either Italian or English;
   b. a brief description of the program of courses taken, as listed in the previous point;
   c. curriculum vitae;
   d. other qualifications deemed useful for purposes of the evaluation (taken courses, relevant professional experience, etc.);
   e. English language certification (level B2 or equivalent), if available;
   f. a valid identity document.
Candidates, coming from this University are exempted from sending the self-certification referred to in point 1 as details of their career are sent to the Commission by the Office. However, graduates are required to verify that all the taken exams and credits obtained are in their online booklets and to report in a timely manner areatecnoscientifica.ammissioni@amm.units.it exams/credits have not yet been recorded; in the absence of reports, exams and credits transmitted to the Commission are those that will be present in the booklet by the application deadline of the selection.

5. PROCEDURE AND EVALUATION CRITERIA

The evaluation of candidates is made by the Admission Committee, which is appointed by the Board of the Master’s Degree in Data Science and Scientific Computing, consisting of three members of the Board itself, according to the Educational Regulations of the Program. The evaluation procedure takes place in two stages. The first stage involves the verification and evaluation of the curricular requirements described under Section 2. Successful candidates will be eligible for the second phase, which consists in an individual interview. During the interview, the English language competence of candidates who are not in possession of the B2 certification is verified.

The procedure ends with the assignment of a score expressed in hundredths, consisting of the sum of the partial scores, which take into account:

A. The final grade, for a maximum of 10 points or, if not yet graduated, the average of exam grades, weighted with the corresponding credits, up to a maximum of 8 points;
B. The curriculum studiorum, in particular credits obtained and the assessments of exams in characterizing sectors, for a maximum of 25 points;
C. Additional certificates and titles deemed congruent with the disciplinary areas of the course for up to 15 points;
D. The result of the individual interview, for a maximum of 50 points. The interview can take place in person or by means of video-conferencing (using appropriate and popular software tools). During the interview, in addition to the curriculum vitae, actual basic knowledge in mathematical, informatics and probabilistic disciplines will be evaluated. The course website provides a syllabus that briefly describes the required knowledge. The interview will be conducted in English.

The selection process will take place according to the following schedule:

<table>
<thead>
<tr>
<th>SELECTION</th>
<th>DATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>from May 24 to June 10, 2022</td>
</tr>
<tr>
<td>2nd</td>
<td>from August 30 to September 9, 2022</td>
</tr>
</tbody>
</table>

The calendar or the interviews will be timely published on the website http://dssc.units.it/.

Eligible candidates who are not admitted during the 1st selection can apply to participate in the 2nd selection and keep the score assigned in the previous one. Alternatively, they can take a new individual interview: in this case, within the appropriate deadline, they must request a new interview by sending an e-mail to dssc@units.it and, in carbon copy, to areatecnoscientifica.ammissioni@amm.units.it.
6. FINAL RANKING

The ranking of the selection will be formulated on the basis of the score assigned according to the criteria described in Art. 5. A minimum score of 60 (sixty) on 100 is required to be admitted to the program.

In the event of equal scores, graduate candidates are given precedence over undergraduates. In the event of further parity, the candidate with the highest final degree grade or, for graduates, with the highest average of exams, is weighted with the corresponding credits. Where further parity occurs the younger age candidate takes priority.

The holders of S.I.S.S.A. scholarships, described in Art. 3, are entitled to the 4 reserved positions on the basis of the ranking of the scholarships themselves.

The ranking will be published on both the Official University Register, which can be accessed at http://www.units.it/ateneo/albo, and the Master Degree Course web page, accessible from the home page www.units.it > Futuri studenti>>Come iscriversi according to the following schedule:

<table>
<thead>
<tr>
<th>SELECTION</th>
<th>DATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>By June 16, 2022</td>
</tr>
<tr>
<td>2nd</td>
<td>By September 15, 2022</td>
</tr>
</tbody>
</table>

Candidates who are not yet in possession of the Bachelor's degree will be included in the ranking on a reserve list. The reserve list will be released on obtaining the degree, which must happen by March 31, 2023.

The above publications have official reporting value in all respects. Personal communications are not given.

7. ENROLMENT

Enrollments will be accepted until all available positions are filled, according to the ranking order. Candidates admitted, including those admitted on the reserve list, must register according to the procedure described below within the following deadlines.

<table>
<thead>
<tr>
<th>SELECTION</th>
<th>DATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>August 25, 2022</td>
</tr>
<tr>
<td></td>
<td>Before 12.00 PM CEST</td>
</tr>
<tr>
<td>2nd</td>
<td>September 29, 2022</td>
</tr>
<tr>
<td></td>
<td>Before 12.00 PM CEST</td>
</tr>
</tbody>
</table>

After September 29, 2022, if some positions are still unassigned, a new selection may be performed, according to modalities and deadlines to be published in a further notice. If some positions are still unassigned at the end of all selection procedures, all the accepted or eligible candidates that are not enrolled yet, and all the students who wish to transfer from another
University or master program, may apply for permission to enroll by March 31, 2023. The details will be published in a subsequent notice on the program web site.

**ENROLLMENT PROCEDURE**

The application for enrollment must be filed online only, by 12:00 CEST on the expiry date, and must be completed with the payment of the first installment of taxes and contributions by the same date.

To enroll, candidates who are admitted must:

1. access the procedure from the home page [http://www.units.it](http://www.units.it) and log in using the credentials (username and password) received when signing up for the selection process;
2. proceed with the enrollment by providing the required data and attachments;
3. pay the first installment of fees and contributions exclusively by using PagoPA. More details about PagoPA and its use can be found at [the webpage](http://www.units.it/ > Studenti >> Tasse e agevolazioni >> Modalità di pagamento e rimborsi). The payment status can be verified by clicking on "pagamenti" from the online service: a green traffic light indicates that accreditation has taken place. **No other payment methods are allowed.**

The fee notice for the academic year 2022/23 will be published on [http://www.units.it](http://www.units.it) at Studenti >> Tasse e agevolazioni.

Students with a foreign degree must deliver the required documentation to the University of Trieste as specified at [https://www2.units.it/international-students/](https://www2.units.it/international-students/) within the terms of their enrollment. Under penalty of canceling the enrollment itself, this documentation must be consistent with that already submitted during the application.

Candidates who are not European Union citizens, but live in Italy by the enrollment date, must exhibit a valid residence permit to the Admission Office within the terms of their enrollment.

Candidates who are not European Union citizens and do not live in Italy by the enrollment date must have pre-enrolled through the Universitaly portal. The enrollment procedure will be fulfilled when residence permit will be available.

By April 14, 2023, candidates coming from other universities, that are admitted to the reserve list due to the lack of a graduate degree, must access online to the site [http://www.units.it/studenti/servizi-online-agli-studenti/](http://www.units.it/studenti/servizi-online-agli-studenti/) by using their own credentials, open the "Academic certificates" link and complete their matriculation by entering the date and final grade of their degree. For graduates of this University, the above data will be obtained by the office.

Candidates who have not completed the registration, due to failure in meeting the requirements, are eligible for the repayment of the first installment of taxes and contributions paid.

**8. ENROLLMENT TO THE SECOND YEAR**

Admitted candidates having further academic titles, different from those required for the admission, (e.g., master degree) can ask for a reduction of the program duration by the
enrollment terms. For any piece of information about this last topic, please, write to areatecnoscientifica.ammissioni@amm.units.it.

9. ACCESS TO RECORDS, PROCESSING OF DATA, HEAD OF THE ADMINISTRATIVE PROCEDURE

The collected personal data will be processed, within the institutional aims of the University and this particular competition procedure, in particular with computer tools, pursuant to Art. 13 of Italian Legislative Decree 196/2003. The University may process personal data relating to the performance of its institutional functions without the prior consent of the person concerned within the limits of the applicable law.

The above data may also be used, in aggregate form and for statistical purposes, also by the Ministry of Education, University and Research.

The provision of data is mandatory for purposes of defining the ranking, under penalty of being excluded from the competition.

Students can exercise their right of access to the data provided in accordance with Art. 7 of Italian Legislative Decree 196/2003.

Candidates are granted access to the documentation of the competition procedure, according to the current law (Law 241/90 and Italian Presidential Decree 184/2006).

The data controller is the University of Trieste - P. le Europa, 1 - 34127 Trieste.

Pursuant to Italian Law 241/90, the Head of the Administrative Procedure is the Head of the Secretarial Office of the Scientific Technology Area - Life and Health Sciences of the University of Trieste.

Trieste, 19 march 2022

Main Deadlines

<table>
<thead>
<tr>
<th>SELECTION</th>
<th>APPLICATION</th>
<th>EVALUATION PROCEDURE</th>
<th>RANKING</th>
<th>ENROLLMENT DEADLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>March 23 - May 19 Before 12 PM CEST</td>
<td>May 24 - June 10</td>
<td>By June 16</td>
<td>By August 25 Before 12 PM CEST</td>
</tr>
<tr>
<td>2nd</td>
<td>June 13 - August 25 Before 12 PM CEST</td>
<td>August 30 - September 9</td>
<td>By September 15</td>
<td>By September 29 Before 12 PM CEST</td>
</tr>
</tbody>
</table>

Info & Contact

Information on how to submit applications and on the selection process can be obtained from the following offices:

- Enrolment Office
e-mail: areatecnoscientifica.ammissioni@amm.units.it
- International Students
e-mail: international.students@amm.units.it
- Program Coordinator
e-mail: dssc@units.it
The Offices are located in the right wing of the central building of the University, in piazzale Europa, 1 - Trieste. The location of information points/windows, access methods and opening times to the public can be found on Orari segreterie.

All notices, including the calendar of individual interviews, and other related acts will be posted on the course website, dssc.units.it, and in the "Additional Programme Specific Information" page, accessible at www.units.it > Futuri studenti>>Come iscriversi. This announcement will also be published at the same address and the form will be available for download.