

# Master's degree program in DATA SCIENCE

A.Y. 2023-2024

***Study plan and useful information***

# University account and tools

- ▶ The University email address ([username@campus.unimib.it](mailto:username@campus.unimib.it)) is usually activated a few days after the payment of the first installment.
- ▶ Students will have to use the university email for every communication with the University offices.
- ▶ To access the University mailbox:  
Italian: <https://www.unimib.it/> > Accedi a (comando in alto a destra) > Webmail  
English: <https://en.unimib.it/> > Acces to (on the top right) > Webmail
- ▶ University badge is sent by post to the home address (*indirizzo di domicilio*) entered by the student. In case of problems please write to the address: [segr.studenti.scienze@unimib.it](mailto:segr.studenti.scienze@unimib.it)


## IMPORTANT TOOLS:

- ▶ **1) Personal page on “Segreterie Online”:**  
Italian: <https://s3w.si.unimib.it/Home.do>  
English: [https://s3w.si.unimib.it/Home.do;jsessionid=7F874ABC4258358934FF978CB848F0EF.esse3-unimib-prod-02?cod\\_lingua=eng](https://s3w.si.unimib.it/Home.do;jsessionid=7F874ABC4258358934FF978CB848F0EF.esse3-unimib-prod-02?cod_lingua=eng)  
After authentication, you can access from the menu to check the status of your career, manage and change your study plan, ISEE declaration, 150 hours, scholarships. From this page, it is also possible to register for the exam sessions.
- ▶ **2) University Portal** (<https://en.unimib.it/>). Here you will find the general information common to all the degree courses offered by the University and the specific information of the degree courses, as well as the most frequently used online services and much information about several issues.
- ▶ **3) E-learning platform of Data Science** (see next page).

## E-learning webpage of the program

<https://elearning.unimib.it/course/index.php?categoryid=9172&lang=en>

All students regularly enrolled in the study program can take advantage of the services offered on the E-learning platform. In order to access you must authenticate with the University e-mail credential (only some general sections are open access).




Home

English (en) Log in

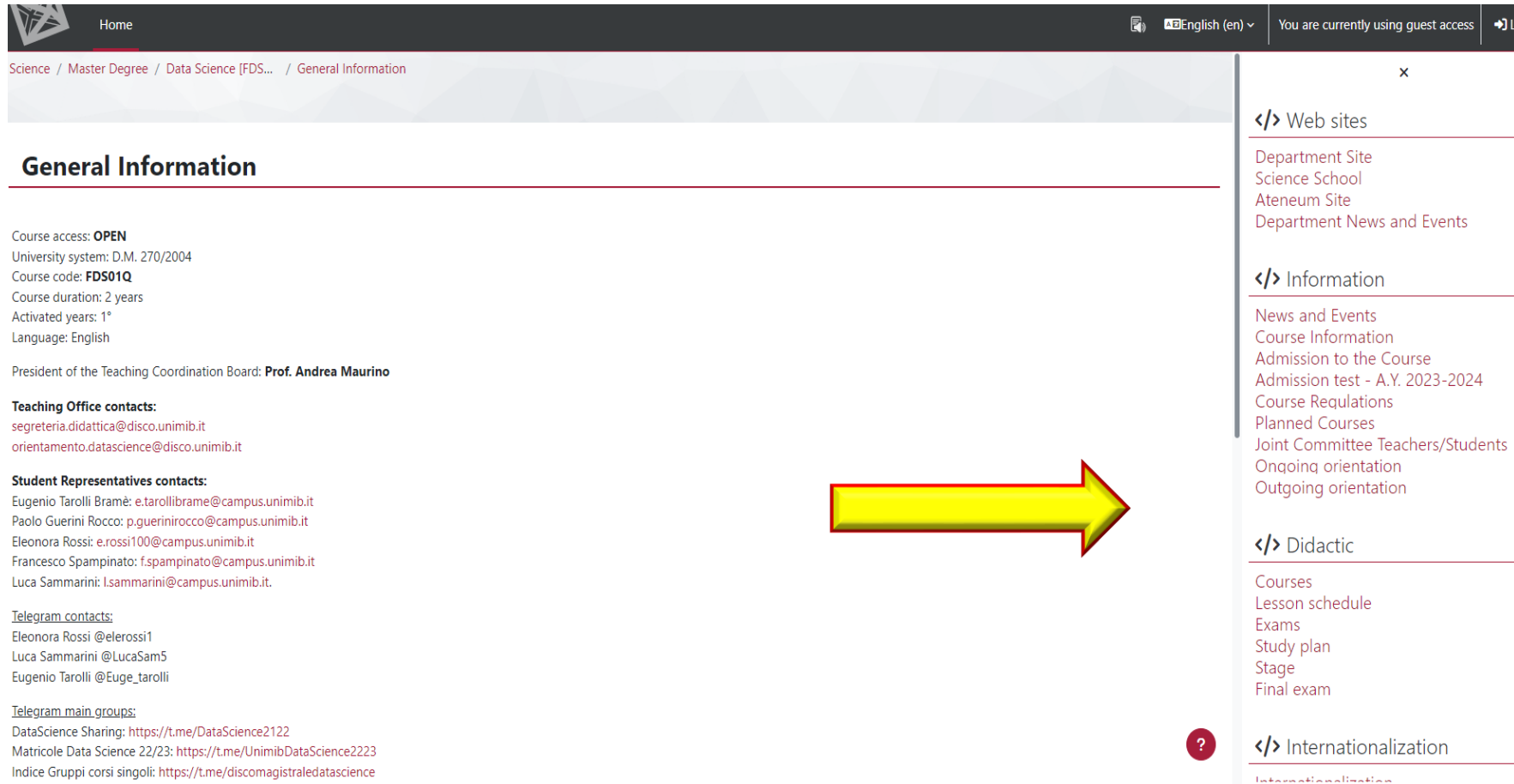
Science / Master Degree / Data Science [FDS0...

### Data Science [FDS01Q]

- GENERAL INFORMATION
- COURSES



The «General information» section provides much useful information (such as [News and Events](#), Didactic Regulation, classes schedule webpage, traineeship, final thesis...). Its pages are periodically updated.



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Science / Master Degree / Data Science [FDS... / General Information

## General Information

Course access: **OPEN**  
University system: D.M. 270/2004  
Course code: **FDS01Q**  
Course duration: 2 years  
Activated years: 1\*  
Language: English

President of the Teaching Coordination Board: **Prof. Andrea Maurino**

**Teaching Office contacts:**  
segreteria.didattica@disco.unimib.it  
orientamento.datascience@disco.unimib.it

**Student Representatives contacts:**  
Eugenio Tarolli Bramè: e.tarolli@campus.unimib.it  
Paolo Guerini Rocco: p.guerinirocco@campus.unimib.it  
Eleonora Rossi: e.rossi100@campus.unimib.it  
Francesco Spampinato: f.spampinato@campus.unimib.it  
Luca Sammarini: l.sammarini@campus.unimib.it

**Telegram contacts:**  
Eleonora Rossi @elerossi1  
Luca Sammarini @LucaSam5  
Eugenio Tarolli @Euge\_tarolli

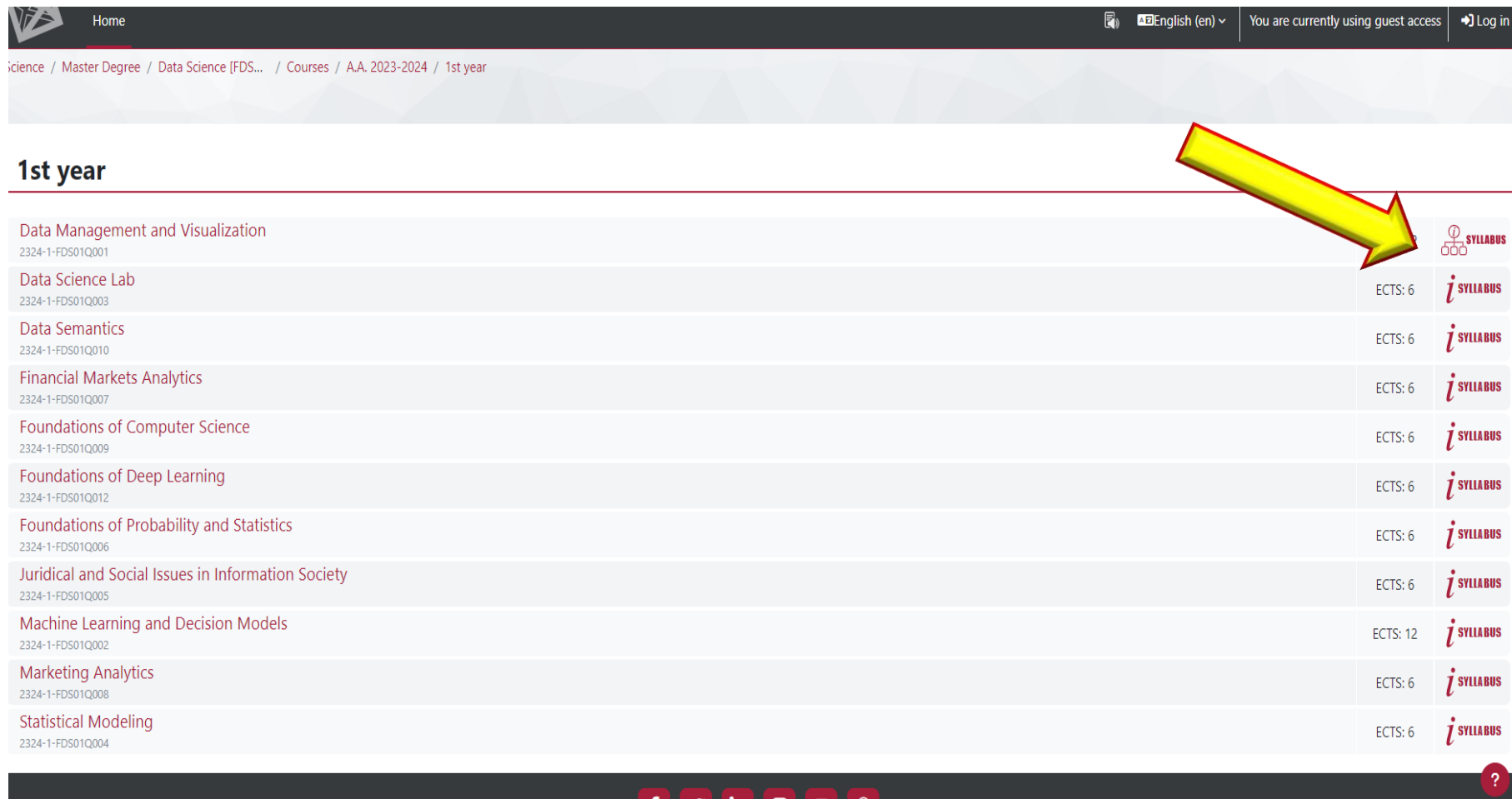
**Telegram main groups:**  
DataScience Sharing: <https://t.me/DataScience2122>  
Matricole Data Science 22/23: <https://t.me/UnimibDataScience2223>  
Indice Gruppi corsi singoli: <https://t.me/discomagistraledatascience>

- Web sites
  - Department Site
  - Science School
  - Ateneum Site
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- Information
  - News and Events
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  - Course Regulations
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# The “Courses” section provides details such as professor names, syllabus and exam modalities.

**PLEASE REMEMBER TO SUBSCRIBE THE E-LEARNING PAGE OF THE COURSES YOU FOLLOW!**












In this way you can receive the information and contents shared by lecturers. In order not to lose any of this information, it is therefore important to enrol as soon as possible and subscribe those course pages.



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science / Master Degree / Data Science [FDS... / Courses / A.A. 2023-2024 / 1st year

## 1st year

Data Management and Visualization 2324-1-FDS01Q001		
Data Science Lab 2324-1-FDS01Q003	ECTS: 6	
Data Semantics 2324-1-FDS01Q010	ECTS: 6	
Financial Markets Analytics 2324-1-FDS01Q007	ECTS: 6	
Foundations of Computer Science 2324-1-FDS01Q009	ECTS: 6	
Foundations of Deep Learning 2324-1-FDS01Q012	ECTS: 6	
Foundations of Probability and Statistics 2324-1-FDS01Q006	ECTS: 6	
Juridical and Social Issues in Information Society 2324-1-FDS01Q005	ECTS: 6	
Machine Learning and Decision Models 2324-1-FDS01Q002	ECTS: 12	
Marketing Analytics 2324-1-FDS01Q008	ECTS: 6	
Statistical Modeling 2324-1-FDS01Q004	ECTS: 6	

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# WHAT IS MY STUDY PLAN?



**1 YEAR**  
**(A.Y. 2023-2024)**

**1 group - Compulsory courses:**

<b>42 CFU <u>MANDATORY</u> ACTIVITIES:</b>	<b>CFU</b>	<b>Semester</b>
<b>DATA MANAGEMENT AND VISUALIZATION FDS01Q001</b>	12	1
<b>JURIDICAL AND SOCIAL ISSUES IN INFORMATION SOCIETY FDS01Q005</b>	6	1
<b>MACHINE LEARNING AND DECISION MODELS FDS01Q002</b>	12	1 and 2
<b>STATISTICAL MODELLING FDS01Q004</b>	6	2
<b>DATA SCIENCE LAB FDS01Q003</b>	6	2

## 2 group - Compulsory course to be chosen:

<u>6 CFU TO BE CHOSEN BY THE STUDENT</u>		
Students have to choose one among the courses below:	CFU	Semester
<b>FOUNDATIONS OF PROBABILITY AND STATISTICS</b> FDS01Q006	6	1
<b>MARKETING ANALYTICS</b> FDS01Q008	6	2
<b>FINANCIAL MARKETS ANALYTICS</b> FDS01Q007	6	2

## 3 group - Compulsory course to be chosen:

<u>6 CFU TO BE CHOSEN BY THE STUDENT</u>		
Students have to choose one among the courses below:	CFU	Semester
<b>FOUNDATIONS OF COMPUTER SCIENCE</b> FDS01Q009	6	1
<b>DATA SEMANTICS</b> FDS01Q010	6	2
<b>FOUNDATIONS OF DEEP LEARNING</b> FDS01Q012	6	2



# 2 YEAR (A.Y. 2024-2025)

**1 group - Compulsory course:**

<b>6 CFU MANDATORY ACTIVITY:</b>	<b>CFU</b>	<b>Semester (hypothesis)</b>
<b>TEXT MINING AND SEARCH FDS01Q013</b>	<b>6</b>	<b>1</b>

## 2 group - Compulsory course to be chosen:

<b>6 CFU TO BE CHOSEN BY THE STUDENT</b>	<b>CFU</b>	<b>Semester (hypothesis)</b>
<b>Students have to choose one among the courses below:</b>		
<b>CYBERSECURITY FOR DATA SCIENCE FDS01Q015</b>	6	1
<b>TECHNOLOGICAL INFRASTRUCTURES FOR DATA SCIENCE FDS01Q016</b>	6	1
<b>DIGITAL SIGNAL AND IMAGE MANAGEMENT FDS01Q017</b>	6	1
<b>SOCIAL MEDIA ANALYTICS FDS01Q018</b>	6	1
<b>SERVICE SCIENCE FDS01Q019</b>	6	1
<b>BUSINESS INTELLIGENCE AND BIG DATA ANALYTICS FDS01Q037</b>	6	1
<b>NATURAL LANGUAGE PROCESSING FDS01Q011</b>	6	2

### 3 group - Compulsory course to be chosen:

<b>6 CFU TO BE CHOSEN BY THE STUDENT</b>	<b>CFU</b>	<b>Semester (hypothesis)</b>
<b>Students have to choose one among the courses below:</b>		
<b>ECONOMICS FOR DATA SCIENCE FDS01Q021</b>	6	2
<b>HIGH DIMENSIONAL DATA ANALYSIS FDS01Q022</b>	6	1
<b>STREAMING DATA MANAGEMENT AND TIME SERIES ANALYSIS FDS01Q023</b>	6	1

## 4 group - Compulsory course to be chosen:

<b>6 CFU TO BE CHOSEN BY THE STUDENT</b>	<b>CFU</b>	<b>Semester (hypothesis)</b>
<b>Students have to choose one among the courses below:</b>		
<b>DATA SCIENCE LAB IN ENVIRONMENT AND PHYSICS FDS01Q024</b>	6	2
<b>DATA SCIENCE LAB IN BIOSCIENCES FDS01Q025</b>	6	2
<b>DATA SCIENCE LAB IN MEDICINE FDS01Q026</b>	6	2
<b>DATA SCIENCE LAB IN BUSINESS AND MARKETING FDS01Q027</b>	6	2
<b>DATA SCIENCE LAB IN PUBLIC POLICIES AND SERVICES FDS01Q028</b>	6	2
<b>DATA SCIENCE LAB ON SMART CITIES FDS01Q029</b>	6	2

## 5 group - Other compulsory activities:

OTHER MANDATORY ACTIVITIES:	CFU	NOTES
<b>ACTIVITIES TO BE FREELY CHOSEN BY THE STUDENT</b>	12	Students can choose among the compulsory courses to be chosen (not previously selected) within Data Science, or other courses offered by the University.
<b>FURTHER DIDACTIC ACTIVITIES:</b>	3	FOREIGN students have to choose «Further language skills» only: Italian proficiency (A2 level) by University test or certification accredited by the University.
<b>FURTHER LANGUAGE SKILLS /</b>		ITALIAN students can choose between a) «Further language skills»: English proficiency (C1 level) or French, Spanish, German (B2 level) by University test or certification accredited by the University.
<b>OTHER ACTIVITIES USEFUL FOR JOB PLACEMENT</b>		b)«Other activities useful for job placement»: i-Bicocca project (I-Bicocca Silver 1 CFU, I-Bicocca Gold 2 CFU, I-Bicocca Platinum 3 CFU) or other specific activities that will be described in the E-learning page.
<b>STAGE/TRAINEESHIP</b>	6	Requirement to start the traineeship: at least 54 CFU. It can be carried out 1) externally at a Company/Institution; b) internally at a university laboratory; c) Project Work solution for working students.
<b>FINAL THESIS</b>	21	Requirement to start the final thesis: at least 54 CFU.

# STUDY PLAN ON «SEGRETERIE ONLINE»

- ▶ A statutory study plan is conferred to all enrolled students at the beginning, which includes mandatory activities only (please see slide no. 7).
- ▶ Students are required to submit their own study plan, setting out all activities. The study plan will be approved by the Didactic body.
- ▶ Until the implementation of the modified study plan, students are bound to the submitted and approved plan and cannot sign up for other exams not included in it.
- ▶ The study plan can be submitted within the established deadlines (the dates below are to be confirmed):
  - ❑ **First period: 7-29 November 2023**
  - ❑ **Second period: 1-27 March 2024**
  - ❑ **Special period: 9-31 January 2024 (ONLY for students enrolled in the first year who in the previous November month had not yet achieved the bachelor's degree)**
- ▶ We will inform students by Forum when the dates are official, together with the instructions to submit the study plan.

# MAIN EMAIL ADDRESSES AND LINKS

- ▶ Data Science President prof. Andrea Maurino: [andrea.maurino@unimib.it](mailto:andrea.maurino@unimib.it)
- ▶ Data Science Teaching Services office: [segreteria.didattica@disco.unimib.it](mailto:segreteria.didattica@disco.unimib.it)
- ▶ Students Secretariat (all procedures on "Segreterie Online" and career actions):  
[segr.studenti.scienze@unimib.it](mailto:segr.studenti.scienze@unimib.it)
- ▶ Welcome Desk (administrative/bureaucratic procedures for extra-EU students/University):  
[visa.applicationforstudy@unimib.it](mailto:visa.applicationforstudy@unimib.it) and [welcome.desk@unimib.it](mailto:welcome.desk@unimib.it)  
Webpage: <https://en.unimib.it/education/teaching/how-enrol-information-international-students>
- ▶ Taxes, scholarships, accommodation: [segr.studenti.tasse@unimib.it](mailto:segr.studenti.tasse@unimib.it) and [dsu@unimib.it](mailto:dsu@unimib.it)  
Webpage: <https://en.unimib.it/services/offices-and-facilities/fees-and-funding> and  
<https://www.unimib.it/servizi/studenti-e-laureati/diritto-allo-studio-tasse-150-ore>
- ▶ Erasmus/International mobility: [outgoing.erasmus@unimib.it](mailto:outgoing.erasmus@unimib.it) and [Bicocca University Angels: info.erasmus@unimib.it](https://www.unimib.it/internazionalizzazione/bicocca-international/mobilita-internazionale)  
Webpage: <https://www.unimib.it/internazionalizzazione/bicocca-international/mobilita-internazionale>  
Data Science Erasmus coordinator prof. Elisabetta Fersini: [elisabetta.fersini@unimib.it](mailto:elisabetta.fersini@unimib.it)
- ▶ Stage office: [stage@unimib.it](mailto:stage@unimib.it)  
Webpage: <https://www.unimib.it/servizi/stage-e-tirocini>
- ▶ B-Inclusion office (for students with disabilities and specific learning disabilities):  
[helpdesk.binclusion@unimib.it](mailto:helpdesk.binclusion@unimib.it) and [info.binclusion@unimib.it](mailto:info.binclusion@unimib.it)  
Webpage: <https://en.unimib.it/services/offices-and-facilities/disability-sld-binclusion-space>