



POLITECNICO
MILANO 1863

Erasmus+, TIME, Double Degree Programmes, Free Movers Master of Science in Biomedical Engineering

A.Y. 2024/2025

The recording of the presentation will be made available

ERASMUS+

(short term mobility)



- Does it focus on specific fields in biomedical engineering?
- Are courses from other tracks accessible?
- Are courses with limited spots?
- How about language requirements?
- Any constraint in the exchange agreement?

HOST OFFER
& POLICY

- In which semester are interesting courses available?
- Are semesters time-shifted vs. Polimi?

SEMESTER

STUDY PLAN

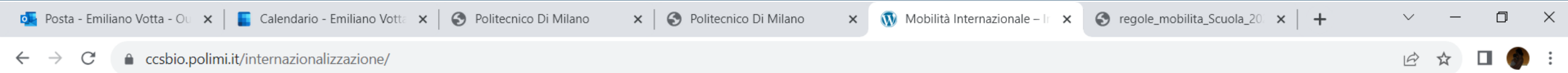
YOUR
ACADEMIC
INTEREST

- Will I need to define a customized study plan?
- Will I be allowed to tweak my study plan afterwards?

- Do courses match my interests/PSPA?
- Are there interesting courses I cannot map on Polimi courses?

WHERE TO FIND RELEVANT INFORMATION (in Italian)

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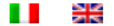


POLITECNICO MILANO 1863

WWW.CCSBIO.POLIMI.IT

LINK UTILI

PRIVACY



SCUOLA DI INGEGNERIA INDUSTRIALE E DELL'INFORMAZIONE

Corso di Ingegneria Biomedica

HOME

CORSO

STUDENTI FUTURI

STUDENTI ISCRITTI

LAVORO

MOBILITÀ INTERNAZIONALE

CONTATTI

AVVISI



Mobilità Internazionale

1. Informazioni utili per la mobilità internazionale
2. Doppia Laurea con l'University of Illinois a Chicago
3. Programma di Scambio con l'Università di Strasburgo
4. Materiale informativo aggiuntivo

Gli studenti del corso di studi in Ingegneria Biomedica possono accedere ai **programmi di studio internazionali** proposti dall'Ateneo, basati su accordi stipulati con numerose istituzioni partner. Gli studenti selezionati per un programma specifico possono pertanto arricchire il loro curriculum trascorrendo un periodo all'estero ed acquisendo crediti riconosciuti dal Politecnico di Milano.

Le opportunità offerte sono molteplici. Fra queste ricordiamo le seguenti:

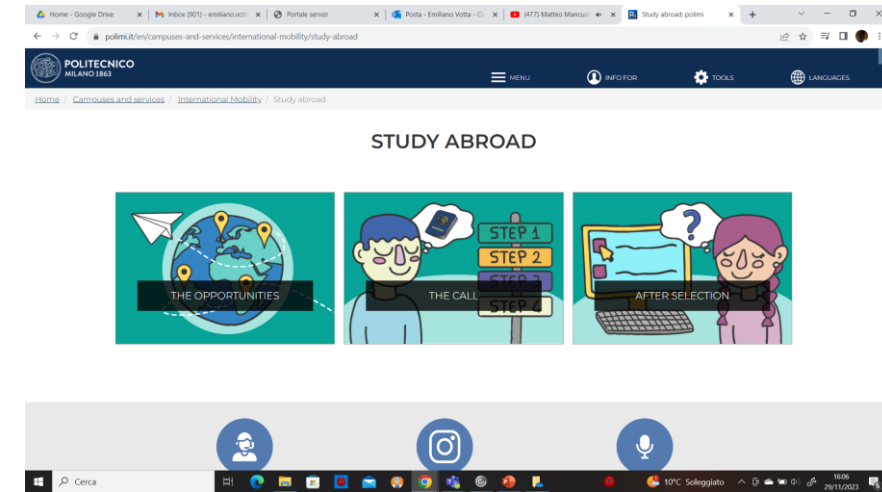
- un periodo di studio all'estero (Europa) nell'ambito del programma Erasmus, tipicamente di un semestre estendibile al massimo ad un anno
- un periodo di studio in programmi speciali extra-EU

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POLIMI WEBSITE HOME PAGE



**INFO Menu → EXCHANGE STUDENTS – OUTGOING
→ STUDY ABROAD**



WHERE TO FIND RELEVANT INFORMATION (in English)

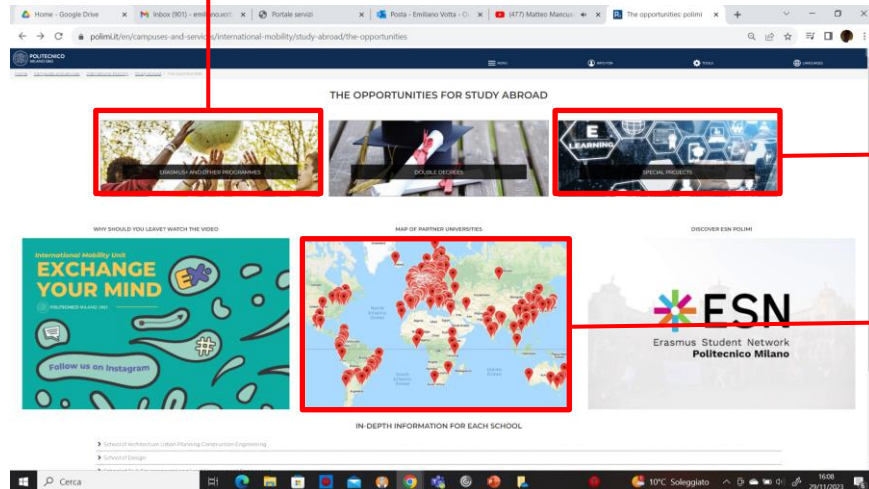
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POLIMI WEBSITE HOME PAGE



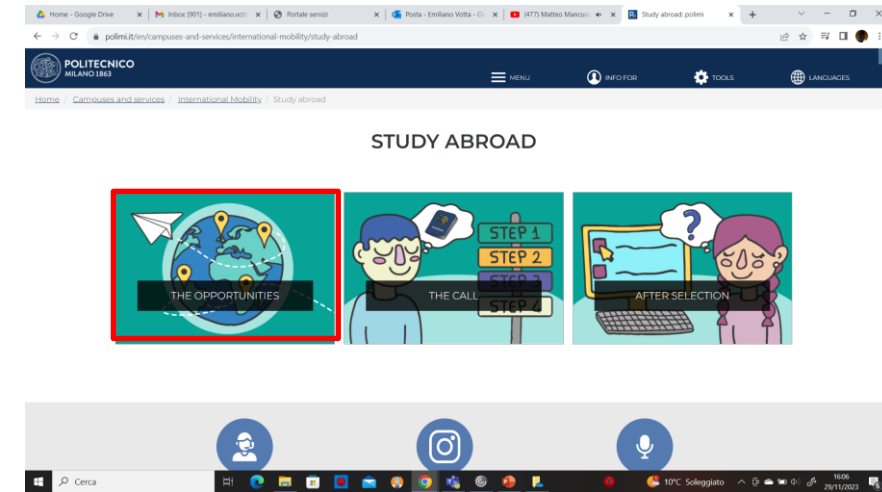
INFO Menu → **EXCHANGE STUDENTS – OUTGOING**
→ **STUDY ABROAD**

Link to pages with **detailed information** on the different exchange programmes, including **Free Movers**



Link to **UniTech**

Link to **Map of Partner Universities** and **detailed list of Partner Universities with hyperlinks**



POLIMI WEBSITE HOME PAGE



TOOLS Menu → **SEARCH FOR PROFESSORS** → **International context** (menu on the upper left side of the page)

www4.ceda.polimi.it/manifest/manifest/controller/ricerca/RicercaPerDocentiPublic.do?aa=2010&lang=EN&even_RICERCAINCARICHI=EVENTO&polij_device_category=DESKTOP&_pj0=08_...

POLITECNICO MILANO 1863

Search professors with at least one assignment

Search professors with assignments during 2004/2005 - 2020/2021

Academic Year: 2019/2021

School: Key school

Campus: All campuses

Professor Name: (3 characters minimum)

Search

No professor found.
Please select the school or insert the professor name (insert at least 3 characters).

Search Results

Search a Professor

Search a Course

Search a Course (contain prior D.M. n. 509)

Search Lessons taught in English

version 3.4.7.2 3.4.7

Area Server: 01

14/12/2020

Menu to select academic year, school and bachelor/master track, exchange programme type to access the **Map of Partner Universities** satisfying the criteria you selected

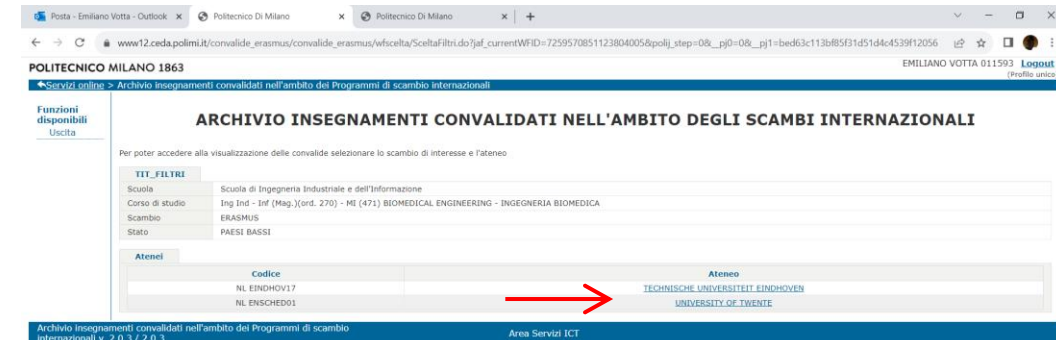
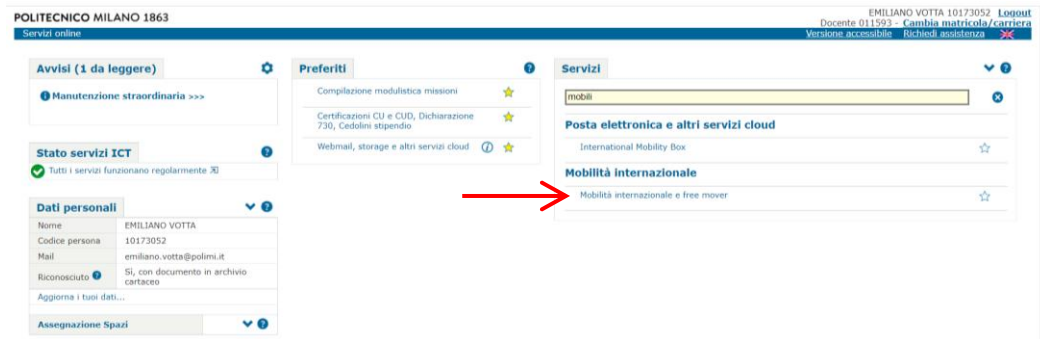
WHERE TO FIND RELEVANT INFORMATION (in English)

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POLIMI WEBSITE HOME PAGE



TOOLS Menu → ON-LINE SERVICES → Archivio insegnamenti convalidati nell'ambito dei Programmi di scambio internazionali



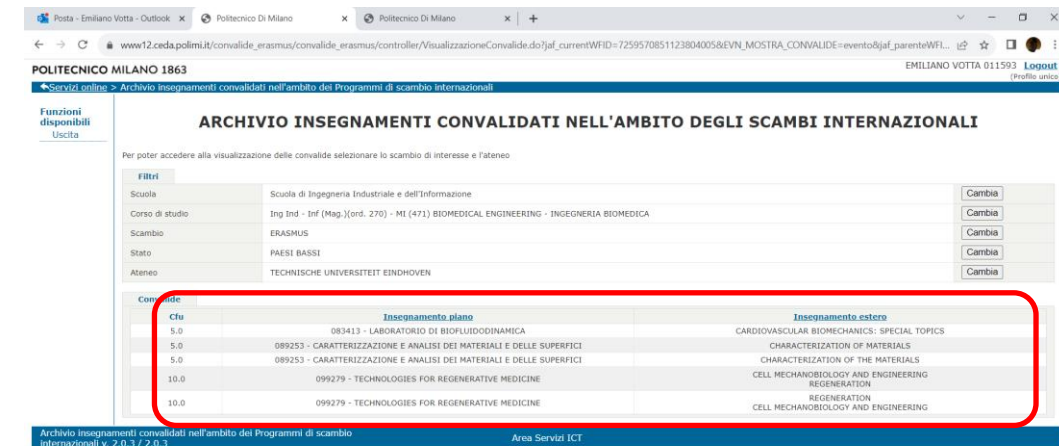
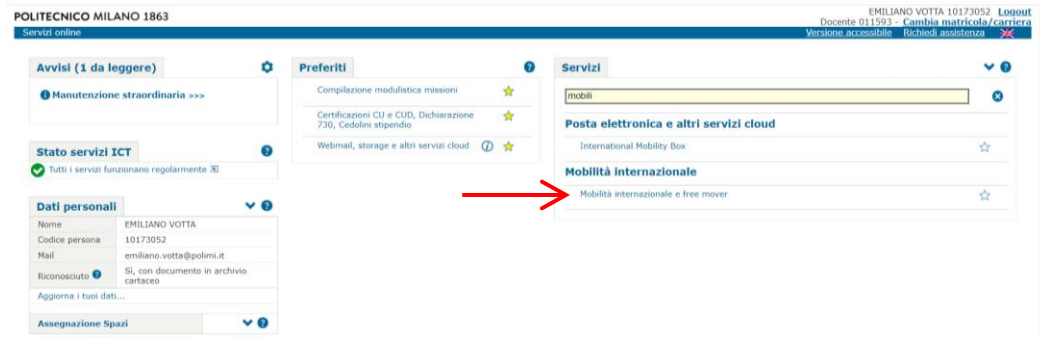
WHERE TO FIND RELEVANT INFORMATION (in English)

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POLIMI WEBSITE HOME PAGE



TOOLS Menu → ON-LINE SERVICES → Archivio insegnamenti convalidati nell'ambito dei Programmi di scambio internazionali



Watch out:

The available information refers only to recently approved courses (approximately last 2 years)

BIOMEDICAL ENGINEERING STUDENT OFFICE (@BUILDING 20)

- For information on less recent approval of courses, you can check the physical archive of the so-called “piani delle corrispondenze”
- Those are documents that report the same courses listed in the corresponding learning agreement, but with a clear description of the course-to-course matches



CORSO DI STUDIO IN INGEGNERIA BIOMEDICA
Mobilità all'Estero – Piano delle corrispondenze

Informazioni del richiedente

Studente

Nome	
Cognome	
Matricola	
Codice persona	
Email istituzionale	
Email alternativa	
Cellulare	

Corso di Studi attualmente frequentato

Corso di frequentazione	<input type="checkbox"/> Laurea <input type="checkbox"/> Laurea Magistrale
Tipo Piano degli studi	BND
Anno di frequentazione	<input type="checkbox"/> primo <input type="checkbox"/> secondo <input type="checkbox"/> terzo
Semestre di frequentazione	<input type="checkbox"/> primo <input type="checkbox"/> secondo

Mobilità all'estero

Nazione	
Nome dell'università	

Tabella corrispondenze esami

Esami sostenuti presso l'Università ospitante	ECTS	Esami corrispondenti presso il Politecnico	ECTS
TOTALE CREDITI:		TOTALE CREDITI:	

INTERNATIONAL MOBILITY UNIT (IMU)

- Files related to Erasmus/Time/Double Degree Programmes/Free Movers
- Selection of students and of partner Universities abroad
- Logistics and Scholarships
- You must provide the IMU with your **Learning Agreement (LA)**, i.e., your contract with the hosting foreign university

CCS AND BOARD FOR EXCHANGE MOBILITY

- Handling **teaching-related** aspects
- Approval of equivalences between courses at the hosting foreign university and courses at Polimi
- You must ask your academic responsible for **signing your LA**, and you must give him/her your **official list of correspondences** between the courses you'll attend at the hosting university and the courses at Polimi

	Chiara Veneroni Email: chiara.veneroni@polimi.it	Southern Europe: Portugal (A-L), Spain (A-L), Turkey, Greece, Malta, Cyprus		Alessandro Pellegata Email: alessandro.pellegata@polimi.it	Southern Europe: (Portugal M-Z, Spain M-Z)
	Bono Nina Email: nina.bono@polimi.it	Northern Europe: Denmark, Sweden (A-L), Norway (A-L), Finland, Latvia, Estonia, Lithuania		Elena Bianchi Email: elena1.bianchi@polimi.it	Central Europe: UK, Francia, Sweden (M-Z), Norway (M-Z)
	Emiliano Votta Email: emiliano.votta@polimi.it	Eastern Europe: Bulgaria, Russia, Poland, Romania, Slovakia, Hungary, Slovenia, Czech Republic, Serbia, Croatia Central & Northern Europe: Germany, Austria, Switzerland, Belgium, Netherlands Australia and Asia: South Korea, Japan, India, Israel, Lebanon, China, Singapore		Veronica Cimolin Email: veronica.cimolin@polimi.it	Canada Central America South America
	Enrico Caiani Email: enrico.caiani@polimi.it	United States Double Degree Programmes in extra-EU countries Global E3 Programme		José Félix Rodríguez Matas Email: josefelix.rodriguezmatas@polimi.it	Double Degree Programmes in EU countries Unitech Programme Idea League Programme

Reach out to the relevant member of the board based on your destination and your surname.

Always ask in advance for a meeting so that they can fit it into their agenda and ask you for documentation if needed.

The members of the board for the Erasmus/Time/Double degree programmes **support** students in the process of building their plan of study abroad and their LA.

Yet, **the initial selection of the courses to be attended at the host institution is a duty of the students**. To this aim, students can exploit the information available:

- On the official website of the host university
- In the on-line archive of previous resolutions on mobility applications available on Polimi website
- In the archive of previous study plans and resolutions available at the BIO Student Secretariat (building 20, ground floor).

- **Checking** the courses offered by the **host institution**
- **Obtaining consistency** between plan of studies, learning agreement, and rules set by the biomedical engineering ccs
- Respecting **deadlines** as described in the mobility call. remember that
 - From polimi's standpoint your **ola** must be ready and approved **before you leave**
 - The **host institution may** ask you to respect an **earlier deadline** and for extra documentation

Once you have identified a course you want to attend at the host institution during your mobility, you need to:

- **Verify** if **previous resolutions** exist for that course; if these exist, and if the content of the relevant courses has not meaningfully changed, you can add the course to your LA
- **If no** previous resolution exists
 - **Collect the details of the course** offered by the host institution (contents, ECTS credits, class hours and home assignments, organization into classes/activities in the lab/etc);
 - **Identify the courses offered at Polimi that could be equivalent** to the course you selected at the host university
 - **Based on contents and credits, discuss with your academic responsible** the correspondences you identified. He/she will give you a feedback
 - **In case of doubt, your academic responsible will reach out to the Professors** of the relevant Polimi courses and ask for their opinion

For your OLA to be approved, you need to provide your academic responsible with the description of the courses at the host institution and with previous resolutions/written approvals by Polimi Professors. Also, the **total** amount of ECTS credits you'll earn at the host institution has to be equivalent to the **total** amount of credits recognized at Polimi (+/- 10% tolerance). If the host university does not use ECTS credits, credits are scaled based on the semester workload reported in their official curricula.

FLEXIBILITY

- One course at the host university can be mapped on multiple Polimi courses, and *viceversa*.
- The constraint on ECTS credits applies to their total amount: you can have a lack of credits provided that it is compensated by an equivalent excess of credits in other courses.
- Respecting the curriculum of your PSPA at Polimi is not compulsory; you can build a customized study plan (verify if it's acceptable with the person in charge for the study plans)
- You can shift courses from semester to semester or from academic year to academic year. Also in this case, you need to build a customized study plan
- Integrations are possible once back at Polimi

- Courses at Polimi are linked to the so-called “**settori scientifico-disciplinari**” (**SSD**)
- At Biomedical Engineering, two SSDs are very important: **ing-ind/34** (biomaterials, biomechanics, motion analysis, ...) and **ing-inf/06** (signal and image processing, e-health, robotics, ...)
- If **courses scientifically/culturally relevant to these two SSDs** are available, you can add them to your OLA even **without a clear correspondence** to a Polimi course and obtain a generic CFU recognition
- You can exploit this opportunity for **up to two courses to obtain 5 CFUs in each SSD**

- The Polimi Project course can be equivalent to a **design/lab activity at the host university**.
- You must write a report on the activity and certify the corresponding amount of hours (**200 hours at least**).
- You must **agree with the Project course Professor at Polimi** on a strategy to allow him/her for monitoring your activity throughout the semester.
- You must take your **final defence at Polimi**, where you'll present your activity to a commission.
- Note: choose wisely the design/lab activity at the host institution. The quality of this activity is important.

- Provide the IMU with the certificate of the exams taken at the host institution (i.e., the **Transcript of Records** or **ToR**)
- The IMU will receive your ToR also from the host institution. When that happens, ask for your **return to Polimi to be registered**
- Once notified by the IMU via e-mail, ask your academic responsible for a meeting and go to him/her with
 - a) a copy of your ToR and LA
 - b) piano delle corrispondenze (originally stored at the BIO Student Secretariat)
 - c) a copy of the details of course attended at the host institution and added to your LA once you left Polimi in the first place
 - d) the corresponding previous resolutions/approvals by Polimi professors
- Together with you, your academic responsible will verify the consistency between the original study plan/LA with and the documentation you are presenting at your return, and he/she will **record the exams** passed at the host institution and **convert the corresponding grades**.

CONVERSIONE DEI VOTI OTTENUTI ALL'ESTERO

- I voti degli esami sostenuti all'estero fanno media se sono stati sostenuti nell'ambito di un programma di scambio riconosciuto dall'Ateneo.
- Gli studenti non devono chiedere la disponibilità al riconoscimento dei crediti acquisiti da parte dei singoli docenti interessati.
- Tutti gli esami riconosciuti devono avere associato un voto in trentesimi. Questo significa che la conversione avviene come segue:
 - Qualora il transcript of records riporti anche la distribuzione dei voti, questa potrà essere utilizzata per la conversione tenendo conto della omologa distribuzione dei voti al Politecnico di Milano.
 - Se l'università comunica la valutazione dello studente secondo la scala ECTS, si usa la seguente distribuzione: A = 10%, B = 35%, C = 65%, D = 90% e E = 100%.
 - Per alcune nazioni o singole Università le regole di conversione sono riportate nel documento allegato e verranno aggiornate periodicamente. Nel caso in cui una università utilizzi un sistema di valutazione diverso da quello nazionale, la conversione avviene attraverso una proporzione.
 - Per università di nazioni non riportate in allegato, la conversione avviene attraverso una proporzione.
 - Laddove sia fornito il voto in scala nazionale ed anche riportando la distribuzione dei voti, prevale la distribuzione dei voti.
- Se il voto preso all'estero/risultante non soddisfa lo studente, è possibile rifiutare la convalida di quel particolare esame e sostenere l'esame del Politecnico.
- Nella conversione dei voti, la Lode può essere assegnata nei seguenti casi:
 - se nel transcript viene riportata una indicazione "with honours" o "cum laude" o "A+" o simile, per gli esami che concorrono alla conversione di un esame del Politecnico;
 - se, da documentazione presentata in forma ufficiale, sia possibile dedurre che il voto ricade nel top 5% degli studenti iscritti al corso nell'anno accademico in esame.

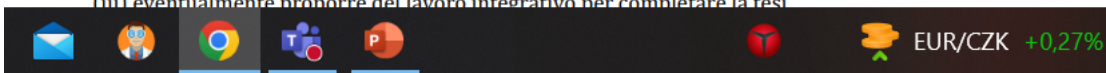
TESI ALL'ESTERO

Mobilità semplice (Erasmus): i crediti possono essere trasferiti, ma lo studente deve trovare un relatore al Politecnico che sia disposto a (i) fare da relatore, (ii) valutare il lavoro fatto all'estero e (iii) eventualmente proporre del lavoro integrativo per completare la tesi

EXTRACT FROM CURRENT MOBILITY RULES

WATCH OUT:

- Statistically meaningful data on the grades obtained by Polimi students in the past are not available for each host university. **When these data are missing, grades are converted also based on their statistical distribution, as indicated by European guidelines**
- The grades to be converted are those reported on the **Transcript of Records**
- Once back at Polimi, **you can drop those grades you feel you can improve and take the exam again at Polimi**



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EXTRACT FROM CURRENT MOBILITY RULES

WATCH OUT:

- The rules to obtain a *cum laude* mark are clear and strict.
- An email by a professor is not considered official documentation



In case of multiple exams at the host Institution mapped on a single exam at Polimi

- Did you pass all the relevant exams at the partner Institution?
 - **IF YES:** credits and marks can be assigned at Polimi; the mark at Polimi will be the weighed average of the marks at the host Institution, the weights being the credits
 - **IF NOT:** credits and marks cannot be assigned. Partial marks can be “saved” if the corresponding exam at the host Institution clearly corresponds to the module of an integrated course at Polimi

“SPECIAL” MOBILITY AGREEMENTS

Some specific mobility agreements can have peculiar features/conditions. For instance:

- **University of Strasbourg – HealthTech Track**
 - 1 full academic year (1 semester courses only, 1 semester thesis)
 - focused on AI, robotics, robot-assisted surgery
 - you cannot pick single courses, but clusters of courses
 - refer to Emiliano Votta to have information prior to applying
 - a specific presentation will be given by Prof. Florent Nageotte

Monday, December 9, 2024 at 17:30

<https://cnrs.zoom.us/j/94064248914?pwd=o9rUaxSU81HaBHlwwKE376LQJqfxQn.1>

DOUBLE DEGREE PROGRAMMES

(please refer to Prof. Caiani presentation on the topic)

FREE MOVERS

- Students that move to a foreign Institution to
 - i. attend **courses**/give exams **out of the standard Exchange Programmes**
 - ii. Develop their master **thesis**

Case i - exams

- You can only move to Institutions with no active Exchange Programme agreed upon with Polimi
- you still need to be enrolled at Polimi and to apply for mobility through the online system
- you still have to prepare a learning agreement
- you cannot have an Erasmus scholarship and all the expenses are up to you
- You do not need to cope with Erasmus calls deadlines (but still you have some deadlines)

Case ii - thesis

- you still need to be enrolled at Polimi and to apply for mobility through the online system
- you have to identify a Polimi Professor who'll be your official internal advisor
- The identified Professor will have to approve your application