TÉCNICO

Master in Data Science and Engineering

2026/2027 Welcome Session

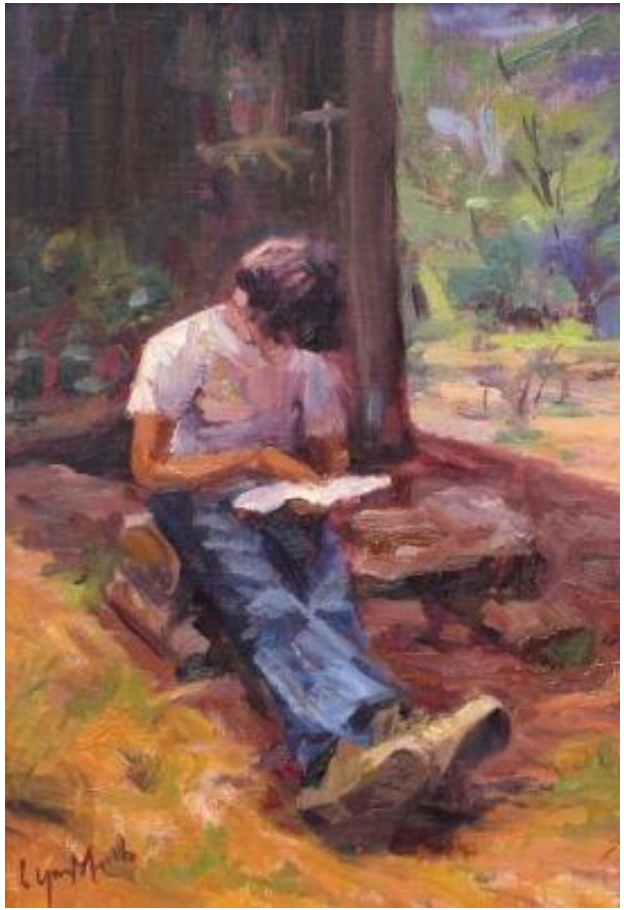
MECD Coordination, coordmecd@tecnico.ulisboa.pt
Instituto Superior Técnico, Universidade de Lisboa

Today

1. **Welcome** by the Coordination team
   - MECD curriculum
   - students' representative and tutors

2. **Invited talk by Sword Health**, Catarina Botelho

3. **Closing words** and **snacks together**



Data avalanche ahead

https://fenix.tecnico.ulisboa.pt/cursos/mecd

Take a breath and enjoy: slides available **online**

and we are available at **coordmecd@tecnico.ulisboa**

Welcome

Footing

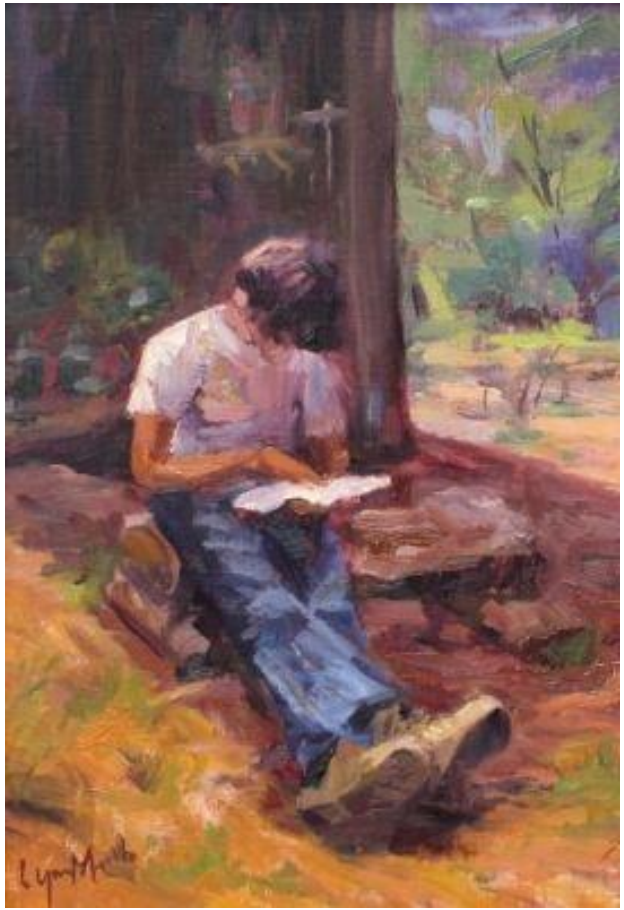
- 2026/2027 class
- coordination

MECD curriculum

- structure, free options, paths
- AEs, mobility, PhD fast track
- AECD, dissertation

Stay informed

- students' representative
- Técnico's values
- tutors



Welcome

Welcome

Congratulations on your admission!

demanding call this year

- **Living at Técnico**
  - get to know Lisbon
  - wide range of cultural, ludic and sport activities
  - set of services that are essential for academic life
    - transports, health services, social services
    - halls of residence (limited availability 😐)
- Take time to know each other!

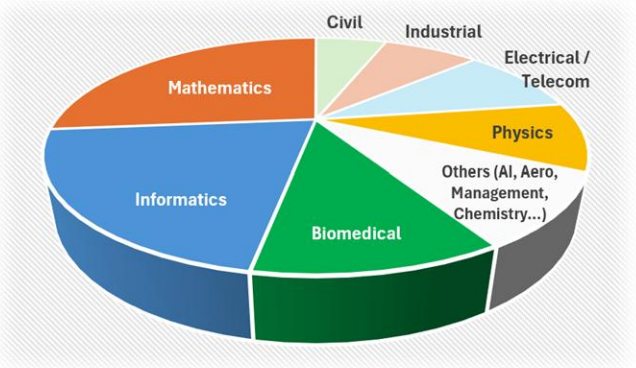
scan me later

NAPE: Student Support Unit

- student peers that can help you with initials "*how to?*"
  - campus tours, Fenix navigation
  - you can find NAPE team at the central/main building reception or via nape.acim@tecnico.ulisboa.pt
- *recall*: student groups and associations, such as AEIST (https://aeist.pt/), can further boost your life at Técnico (e.g., sport activities, festivities, study groups, job fairs ...)

Your profiles

- **Background** of our **2026/2027 class**
  - 50 new students
  - engineering, mathematics, science backgrounds
  - 36% female, 20% international (Italy, Germany, EUA, China…)
  - 10 national schools, 10 international schools
  - ~50% students outside IST



Data Science and Engineering

Data Science

- **Artificial Intelligence** taps into experience – learning from ***data*** records
- **Data Science** is the *principled application* of AI to solve data-rich problems
- Data is at the core of many breakthroughs
    - **smart assistants**
    - **robot intelligence**
    - **intelligent care**
    - **cybersecurity**
    - personalized **recommenders** (content, products, services)
    - **self-driving vehicles**

Data Science

- Data is everywhere!
- Monitor **systems' behavior** via sensorization
  - *astrophysical* systems
  - *societal* systems
  - *biological* systems
  - *ecosystems*
  - *mechanical* systems
  - *digital* systems
  - *quantum* systems
- Learn patterns for *decision support* and *knowledge acquisition*

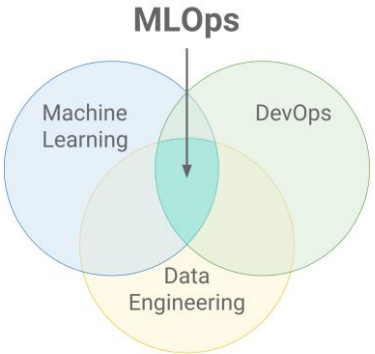
Data Scientist

- evolution of the data/business analyst role
  - solid foundation on **computer science**, **statistics** and **machine learning**
  - 4 profiles in one: *scientist*, *statistician*, *systems engineer*, *politician*
- strong business/academic acumen
  - pick the **right problems** (most valuable)
  - **listen to the data** to draw sound solutions (*do not use a sledgehammer to crack a nut*)
  - **validate** and **communicate findings**

https://www.kdnuggets.com/2021/01/four-jobs-data-scientist.html

Data Scientist Flavors

- **Industry specialist**: **apply** data science in **verticals** such as *health, finance, retail, security, media*
- **AI specialist**: **develop theory** and **new algorithms** rather than solving everyday problems
- **AI engineer**: **optimize ML** algorithms and **pipelines** up to (near) production
  - AI generalists or specialists on *Natural Language Processing*, *Computer Vision, Robotics …*
- **Data engineer**: design and manage **Big Data** and **high-performance** platforms, handling aspects of **acceleration**, **distribution** and **virtualization**
- **Data scientist**: concerned primarily with the value hidden behind data for decision support and **knowledge acquisition**, and stories it can tell
- **Analytics developer**: **software development** specialists who handle federated data-rich pipelines along the full life-cycle (MLOps)
- **Generalist**



Most In-demand Tech Careers for 2026: LSE

THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

1. **AI and ML engineers:** £80,000-£130,000+ salary
2. **Data scientists** and data analysts**:** average £53,000 up to £100,000+
3. **Data governance** and **AI ethics** specialists**:** average £52,000 (gov) and £41,000-£76,000 (ethics)
4. **AI product managers:** average £59,000 up to £120,000+
5. **Cybersecurity analysts** and engineers**:** average £49,000 up to £200,000+
6. **Cloud engineers:** average £57,000 up to £100,000+
7. **DevOps engineers:** average £59,000 up to £100,000+

https://www.lse.ac.uk/study-at-lse/executive-education/insights/articles/the-10-most-in-demand-tech-careers-of-2026

FIREBRAND Part of the BPP Education Group

1. AI
2. Cybersecurity
3. Data analysis
4. IT management
5. Cloud

Prospects full of opportunities…

- From **academic-scientific** towards **entrepreneurial career paths**!
- **Domains**:
  - **technology** (e.g., *Google*, *NVIDIA, Anthropic, OpenAI, Meta, Apple*)
  - **healthcare** (e.g., *Sword, GUIMM, Champalimaud, Luz, Roche*)
  - **retail**, mobility (e.g., *Amazon, Uber, Sonae, Jerónimo*)
  - **customer** experience (e.g., *Salesforce*, *Zendesk*, *Talkdesk*)
  - **government**, **defense**, security (e.g., *public sector, Palantir, Tekever*)
  - **financial** services and fraud prevention (e.g., *Feedzai, Stripe, banks*)
  - **astrophysics**, deep tech (e.g., *ESA, CERN, NASA)*
  - **media**, IoT-enabled systems, agriculture, energy many others…

Your Faculty Hosts

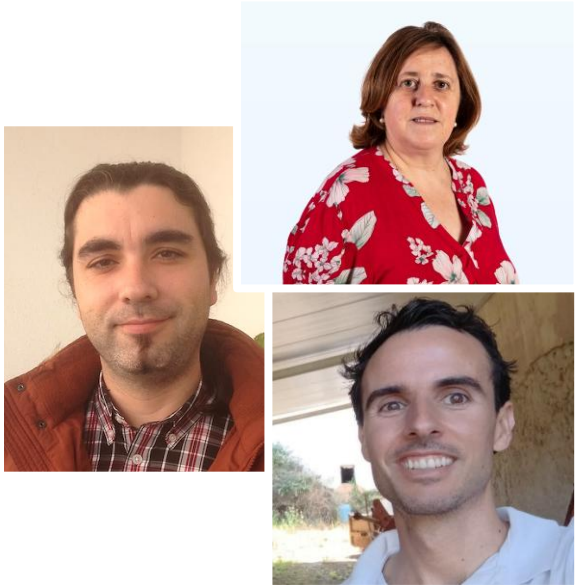
Coordination Team

Faculty

– Conceição Amado (DM)

– Bruno Martins (DEEC)

– Rui Henriques (DEI)



Staff

– Lucília Abreu (DEI)

MECD Scientific Comission

Role: scientific advice and oversight of MECD

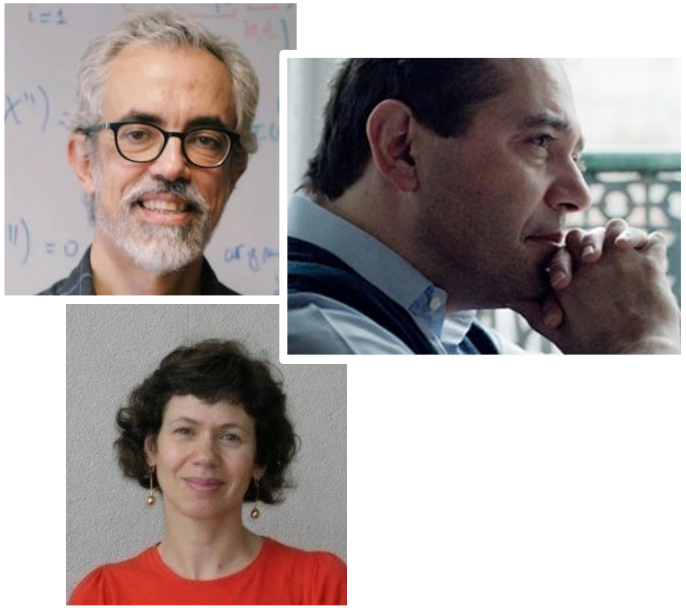
Members

– Mário Figueiredo (DEEC)

– Mário Gaspar (DEI)

– Rosário Oliveira (DM)

– MECD coordinators



Contacts

as the primary contact channel – traceable, official, timely

- queries on mobility (exchange programs)
  mobilidade-mecd@tecnico.ulisboa.pt
- curricular inquiries to your coordinators
  coordmecd@tecnico.ulisboa.pt
- queries on daily academic affairs (e.g., registrations, declarations) to Graduate Area
  ag@tecnico.ulisboa.pt or AG desk @ Alameda
- queries on technical support and Fenix to IT Services
  si@tecnico.ulisboa.pt or SI desk @ Alameda
- any other business:
  dei@tecnico.ulisboa.pt

Newsletters with key info (e.g., events, internships) shared periodically – check your inbox!

Welcome

Footing

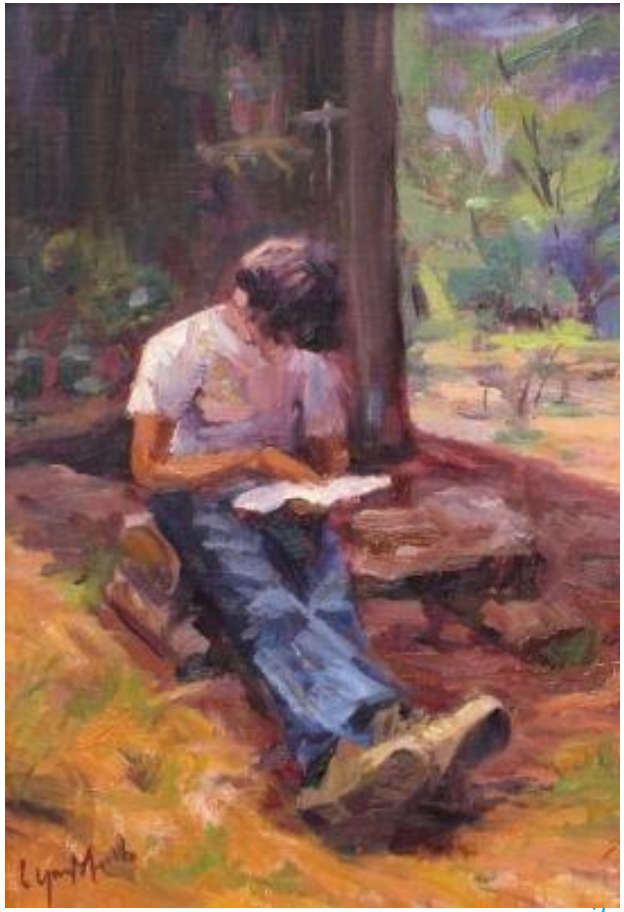
- 2026/2027 class
- coordination

MECD curriculum ⇐

- structure, free options, paths
- AEs, mobility, PhD fast track
- AECD, dissertation

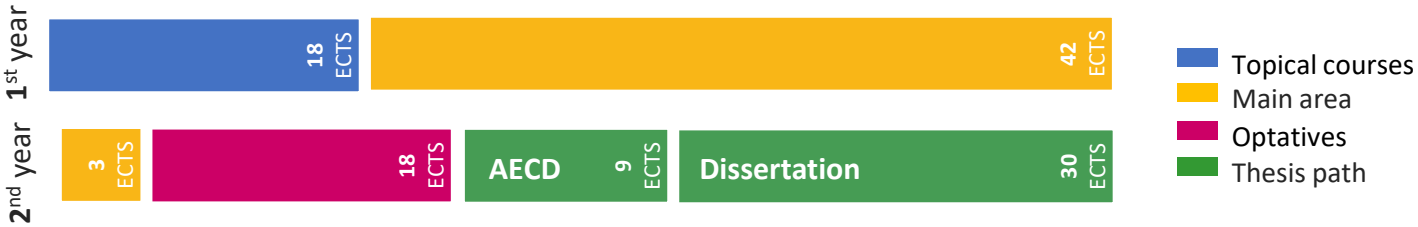
Stay informed

- students' representative
- Técnico's values
- tutors



MECD Curriculum

MECD program



Total credits: 120 ECTs

- **Topical courses** (18 ECTs)
- **Main area**: UCs from the listed *Options* (minimum 45 ECTs)
- **Optatives**: free options, including other UL schools (maximum 18 ECTs)
- **MSc thesis path**: AECD (9 ECTs) + Dissertation (30 ECTs)

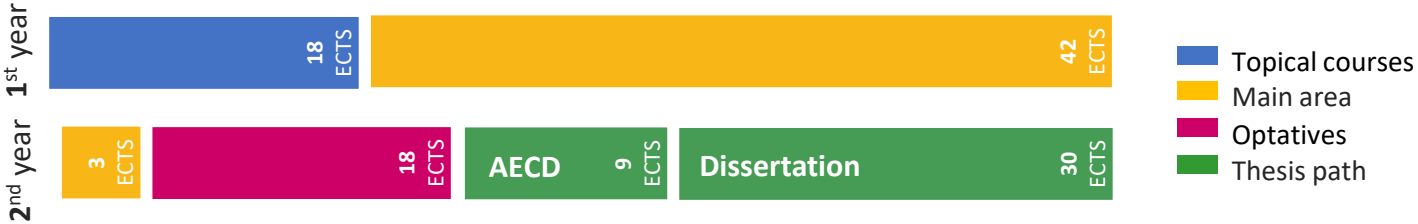
https://tecnico.ulisboa.pt/en/education/courses/masters-programmes/data-science-and-engineering/

Topical courses (18 ECTs)

- Goal: master essential concepts on machine learning, informatics and statistics
- Selection of $3 \times 6 = 18$ ECTs
  - 1 subject from *Electrical and computer engineering* group (6 ECTs)
    - **Machine Learning**
    - **Optimization and Algorithms**
  - 1 subject from *Informatics* group (6 ECTs)
    - **Information Systems and Databases**
    - **Information Visualization**
  - 1 subject from the *Mathematics* group (6 ECTs)
    - **Multivariate Analysis**
    - **Computational Statistics**

Topical courses (18 ECTs)

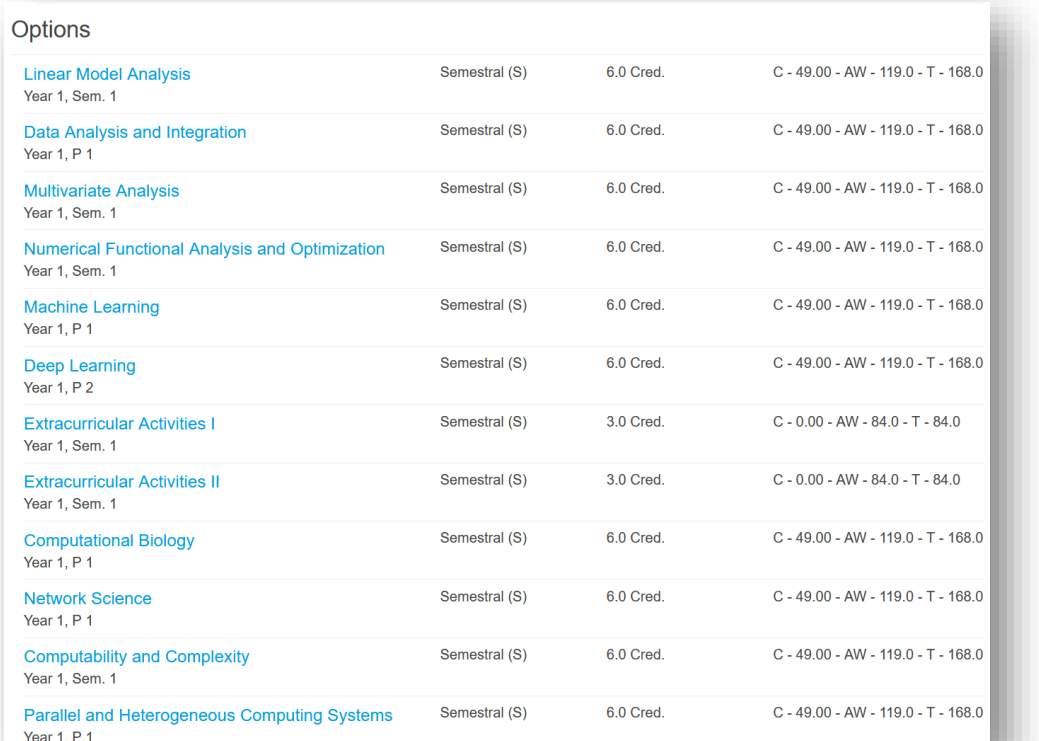
- you can also do **AND**s: one course will be selected as a course in the *Main Area*



- students must not repeat highly analogous courses from previous degrees (e.g., LEIC students already have concluded UCs on Machine Learning and Databases)
- previous knowledge on all UCs from a topical group?
  - request alternative UCs near the coordination for approval (coordmecd@tecnico.ulisboa.pt)

Main Area (45 ECTs)

Anything from the list of Options from MECD curriculum: https://fenix.tecnico.ulisboa.pt/cursos/mecd/curriculo



Options

Linear Model Analysis Year 1, Sem. 1	Semestral (S)	6.0 Cred.	C - 49.00 - AW - 119.0 - T - 168.0
Data Analysis and Integration Year 1, P 1	Semestral (S)	6.0 Cred.	C - 49.00 - AW - 119.0 - T - 168.0
Multivariate Analysis Year 1, Sem. 1	Semestral (S)	6.0 Cred.	C - 49.00 - AW - 119.0 - T - 168.0
Numerical Functional Analysis and Optimization Year 1, Sem. 1	Semestral (S)	6.0 Cred.	C - 49.00 - AW - 119.0 - T - 168.0
Machine Learning Year 1, P 1	Semestral (S)	6.0 Cred.	C - 49.00 - AW - 119.0 - T - 168.0
Deep Learning Year 1, P 2	Semestral (S)	6.0 Cred.	C - 49.00 - AW - 119.0 - T - 168.0
Extracurricular Activities I Year 1, Sem. 1	Semestral (S)	3.0 Cred.	C - 0.00 - AW - 84.0 - T - 84.0
Extracurricular Activities II Year 1, Sem. 1	Semestral (S)	3.0 Cred.	C - 0.00 - AW - 84.0 - T - 84.0
Computational Biology Year 1, P 1	Semestral (S)	6.0 Cred.	C - 49.00 - AW - 119.0 - T - 168.0
Network Science Year 1, P 1	Semestral (S)	6.0 Cred.	C - 49.00 - AW - 119.0 - T - 168.0
Computability and Complexity Year 1, Sem. 1	Semestral (S)	6.0 Cred.	C - 49.00 - AW - 119.0 - T - 168.0
Parallel and Heterogeneous Computing Systems Year 1, P 1	Semestral (S)	6.0 Cred.	C - 49.00 - AW - 119.0 - T - 168.0

TÉCNICO

Main Area (45 ECTs)

		Sem 1		Sem 2	
		P1	P2	P3	P4
Thesis Path		Applications of Data Science and Engineering (9 ECTs)		Master Dissertation in Data Science and Engineering (30 ECTs)	
Common Branch	DEEC	Machine Learning		Optimization and Algorithms	
	DEI	Information Visualization**	Information Systems and Databases		
	DM	Multivariate Analysis			
		Computational Statistics			
Options	DEEC		Deep Learning	Communications Security	
		Image Processing and Vision		Learning-Based Multimedia Processing	
		Parallel Heterogeneous Computing Systems		Data Analytics for Smart Grids	
		Multimedia Communication		Spoken Language Processing	
		Information and Communication Theory			
		Big-Data Measuring Systems			-
		~~Applied Computational Intelligence~~***			-
		Artificial Intelligence and Decision Systems			-
	DEI	Natural Language*	-	Parallel and Distributed Computing*	Cloud Computing Virtualization*
		~~Network Science~~***	-	Planning, Learning & Int. Dec. Making*	Enterprise Integration*
		Data Analysis and Integration*		Advanced Algorithms*	
		Computational Biology*		Information Processing and Retrieval*	
				Data and Info. Systems Management*	
	DM	Introduction to Mathematical Finance		Applied Bayesian Statistics (9 ECTs)	
		Linear Model Analysis		Biostatistics	
		Mathematical Statistics (9ECTs)		Computational Methods in Finance	
		Numerical Functional Analysis and Optimization		Cryptography and Security Protocols	
		Computability and Complexity		Introduction to Stochastic Processes	
		Statistical Methods in Data Mining		Mathematics for Machine Learning	
				Time Series Analysis (9 ETCs)	
	DEG	Logistics and Operations Management	Decision Support Models		
	DER	Remote Sensing			
		Geostatistcs			

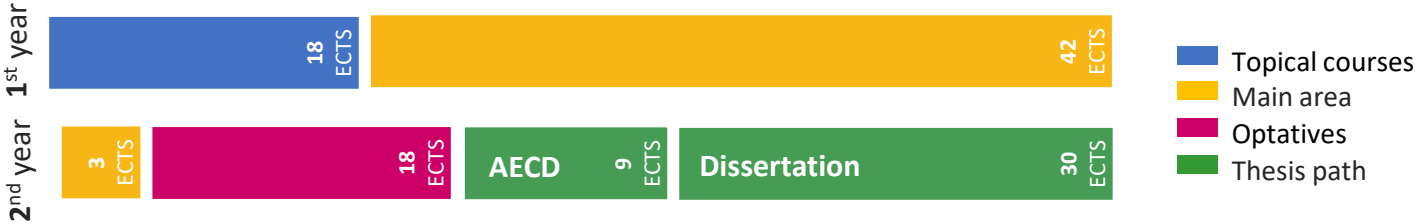
Enrolments

- Check the academic calendar for all relevant dates: https://tinyurl.com/ms7d876k
  - course registration and shift selection until September 4th
- Some courses offered by DEI (green courses in previous slide) have capacity limits
  - secure your seat today: not only for the 1st semester but also 2nd semester

Free Options

Optatives (up to 18 ECTs)

- *Options* listed on the MECD curriculum: no frills!
- {0..3} master courses offered by University of Lisbon (*Free Options 1, 2* and *3*)
  - outside MECD curriculum: requires coordination approval and R13 form submission



Optatives (up to 18 ECTs)

- Suggestions:
  - courses from the *Master in Data Science* from the Sciences Faculty of UL (FCUL)
  - specialized courses on **AI** (e.g., MEIC or MEEC), **economics** (e.g., ISEG school), **bioengineering** (e.g., MBiom), **cybersecurity** (e.g., MEIC), data- and AI-related formation on **law** (e.g., Faculdade de Direito), **management** and **entrepreneurship** (e.g., MEGI, MEGIE) …

- Subjected to the approval by the coordinators. How?
  - send an e-mail to coordmecd@tecnico.ulisboa.pt to notify and ensure eligibility

Minors

Minors

You can use the optatives (18 ECTs) to do a **Minor specialization**

- the specialization will be recognized on your CV
- *many cool options*: Ciências e Tecnologias do Espaço, Computação de Elevado Desempenho, Design Thinking, Empreendedorismo e Inovação, Engenharia Humanitária, Nanoengenharia, Robótica, Smart Cities, Spatial Data Science, Tecnologias Biológicas...

check the full list of Minors and **entry requirements** here:

Paths

Many possible paths…

What are your passions? Qualities of intelligence?

- AI with a focus on learning from experience => **deep learning**, **reinforcement learning** …
- AI with a focus on rationality => planning, reasoning, **optimization** …
- AI with a focus on social intelligence => **human-agent interaction**, **social robots**, multi-agent systems…
- AI with a focus on curiosity => autonomous agents, affective computing, …

Explore offers and Free Options to master your capacities on **AI** engineering,
as well other important domains such as *High-Performance Platforms* and *Virtualization*!

Many possible paths…

Recall the previously listed flavors:

- **AI engineers**: popular beyond common branch include *Deep Learning, Natural Language, PADI* (RL)…
- **data engineers**: *Platforms for AI Systems, Parallel and Heterogeneous Computing*, *ADSI*, *CVN*…
- **industry specialists**: applied courses on *computational biology, quantitative finance, speech*…
- **analytics developers**: optatives on software engineering (e.g., *Software Architectures*, *Platforms for AI*)
- **specialists**: units from *mathematics* for theory, *informatics* for algorithms, *electrical* for communication…

According to your flavor, you can freely **customize your MECD path**!

Many possible paths…

- Each flavor is accompanied by **natural paths** (sequences of UCs)

Example of a specialized path

"*I aspire to establish a vertical career on (AI-powered)* ***Quantitative Finance****! Any advise?"*

- topical UCs and other essential UCs, including *Deep Learning* (key for every data scientist)
- *Introduction to Mathematical Finance* (Sem 1) + *Computational Methods in Finance* (Sem 2)
- 3 strategic Free Options from ISEG, MEGI (Financial Management specialization), FCUL

- Concentration of courses in P1! Remember you can select P1 courses on your second year

Extracurricular Activities

Extracurricular Activities (up to 6 ECTs)

- Are you undertaking **relevant extracurricular roles** during your master degree?
  - submit them for appreciation to acknowledge the exercised **soft** and/or **technical skills**!
  - you can submit up to 2 Extracurricular Activities (AEs): 2×3 ECTs

1. Precursor step:
   - carefully read the full **regulation** to guarantee that your AE meets *all* the listed criteria

     EN: https://tinyurl.com/3yejwsk3 and PT: https://tinyurl.com/yhtbxd25
   - obtain the necessary documentation and ensure your peers are contactable

Extracurricular Activities (up to 6 ECTs)

2. make sure your AE further satisfies *all* the following **additional rules** for the MECD course:
   - **online courses** are generally ineligible. If you still opt to do one: it should not overlap with MECD courses and have sound assessment (MOOCs without solid evaluation moments not accepted)
   - a **single activity** can only be submitted to credit *one* AE (3 ECTs), only rare allowances considered (e.g., proof to attest a high skill diversity, pivotal leadership roles, student's delegate)
   - **timeline**: your AE should overlap (close proximity) with MECD attendance (old activities not eligible)
3. in case you satisfy the rules:
   - register in Fenix (late registration near AG)
   - e-mail your coordinators (coordmecd@tecnico.ulisboa.pt) with due antecedence for **pre-approval**
     - attach the documentation
     - we may ask for additional documentation and clarifications if something is not compliant or clear
4. once you have approval, **submit the documentation** in *Connect* to be credited by the end of the semester!

Mobility

Mobility

- Many opportunities! Programs:
  - **short-duration courses**: week of training abroad (e.g., summer and winter schools)
    - ATHENS+ initiatives (https://tinyurl.com/6pe48t2r)
    - some opportunities are shared by us periodically via e-mail
    - you can use the credits of short-term mobility programs as AEs!
  - **internships**: Erasmus+, IAESTE, VULCANUS
  - **studies**: complete one semester abroad (next slides)
- *Recall*: questions to mobilidade-mecd@tecnico.ulisboa.pt

Studies Mobility

Several destinations to do a semester abroad

- ERASMUS, including:
  - DTU @ **Denmark**
  - TU Munich, FU Berlin, Univ. Kaiserlautern, Univ. Kassel, Univ. Munster @ **Germany**
  - TU Eindhoven, University of Twente @ **Netherlands**
  - Universidad de Sevilla, Univ. Barcelona, Univ. Salamanca @ **Spain**
  - Univ.f Campania Luigi Vanvitelli, Univ. Padova, Univ. Udine, Univ. Cagliari, Univ. Catania @ **Italy**
  - Politechnika Wroclawska @ **Poland**
  - FH Tecknikum Wien @ **Austria**
  - University of Zurich @ **Switzerland**
  - Chalmers, Karlstand University **@ Sweeden**
  - among others (Aalto @ **Finland,** Univ. Ljubljana @ **Slovenia**, EFREI **@ France**...)
- Outside Europe: **Brasil** (19 destinations), India, Azerbaijão, South Africa …
- SMILE: **México**, Brasil

Studies Mobility

- Essential information: https://tinyurl.com/4k3mj4j8
  - *Important*: consult in advance the curriculum in eligible destinations to mitigate risks
- Application **deadlines**
  - **2nd** semester 2026/2027: September 18 (4PM), 2026
  - **1st** semester 2027/2028: January 2027
  - details of the **applications**: https://tinyurl.com/2xy5n7um
- FAQs: https://tinyurl.com/mtbj6nsu

PhD Fast Track

PhD Fast Track

- If you were an excelling bachelor student and have a clear **ambition to pursue PhD** studies, take advantage of the *PhD Fast Track* route (MSc+PhD in 5 years)

BE INITIATED

at the MSc level in the development of scientifically supervised research towards the PhD.

BE INVOLVED

from an early stage, in a scientific project and take part of the rich environment of one of Técnico's research units.

IMPROVE THE CHANCE

of being financially supported by national and international scientific agencies.

COMPLETE

both a MSc and a PhD degrees in just 5 years (10 semesters), immediately after the Bachelor's degree.

Stay alert to this opportunity from day one: if eligible, apply asap (first year of your MSc)

Applications in ECD

Applications in ECD (9 ECTs)

- consolidate all acquired knowledge for the principled approach to a data science challenge
  - proposed by a company OR research center from another scientific area
- expected amount of effort to work on your challenge: 1 day/week for a semester

Applications in ECD (9 ECTs)

- *How can I select my challenge*?
  - we will provide a list with several challenges (until the end of September).
    You're also invited to independently source a challenge and redirect it to us for approval
  - allocation process (first half of October): contact the proponents of your preferred challenges; secure one challenge; notify your coordinators to confirm association

- *Expected outcomes*?
  - report and slides (methodological choices, validation, critical discussion) by mid January
  - workshop presentation and (*tentative*) peer review of reports until mid February

Applications in ECD (9 ECTs)

Entity	**Illustrative proposals** (2023-2025)
Banco de Portugal	ML for credit default prediction; economic data visualization; error detection
Baseform	Big data to estimate precision, degradation, costs of water meters
BNP Paribas (Cetelem)	NLP applied on Credit Scores modelling
Capgemini	Automatização de processos de recrutamento
CEiiA	Critical infrastructure monitoring; Automated high-resolution Earth observation
CIAFEL	Frailty risk prediction from a longitudinal active cohort to aid geriatric health
DareData	Generative AI-driven workflows
DGPJ	Enhancing judicial efficiency through descriptive statistics
Equall	Information retrieval techniques for legal corpora
EDP	Optimization of real-world offshore wind site locations in Portugal
FIEB	Mass storage data analytics for energy efficiency
Feedzai	Rule set interpretability with LLMs; Interpretable models for fraud detection; Entity resolution from smartphone sensors; Handling large data streams via event filtering
Fund. Champalimaud	Data augmentation in medical imaging; volumetric correction to align 3D anatomy
GAIPS Lab	Explainability approaches in human-AI collaboration
GovWise	Tender recommendations; Public contract renewal patterns
Hospital da Luz	Synthetic data for enhanced healthcare analytics

Applications in ECD (9 ECTs)

Entity	Illustrative proposals (2023-2025)
GIMM	Modelling multi-omics data for precision medicine setups
Inst. Tec. Aeronáutica	Predict mortality in infectious disease outbreaks
IPMA	Prediction of extreme event impacts; Satellite-derived surface temperature
IT Clinical	Audit Trail – optimizing high-volume read/write table performance
Labelec	Technical condition assessment of electrical assets based on failure records
LOKA	Spatial transcriptomics prediction from histology; DNA foundation models
MARETEC	Association between human activity and environmental impacts in Portugal
Nova SBE	Next-gen LLM apps via multi-agent conversation
OPNOVA	Prompt injection detection; Automatic annotation of actions in agent workflows
Priberam	News story classification and tracking through smart tags
Social Data Lab	Data-driven dashboard creation with Power BI
SPAC Lab	Medical prescribing patterns in Portugal
Talka	Robust painpoint detection in conversational videos;
TEKEVER	UAV camera autocalibration with uncertainty estimation via deep learning
Truewind	Train arrival time series analysis
YData	Synthetic document generation; LLM-as-a-judge for synthetic data quality
Unbabel	Enhancing Communication for ALS Patients
Vodafone	Social Media Listening; Chatbots for customer support

Dissertation

Dissertation (also known as Master thesis)

- Two major options:
  1. wait for the R&D topics to be released in Fenix for your association
     i. students register their topic preferences
     ii. students contact the supervisors of the selected topics (express your interest and commitment!)
     iii. the supervisor confirms in Fenix the candidate assigned to each topic
  2. proactively seek custom R&D topics near your faculty hosts and companies in advance
     - all theses must have an IST professor as a (co)advisor
     - supervisors should still submit the topic in Fenix (with a note of pre-allocation) for association
- Remember: ***follow your passion***!
  - assess R&D preferences (e.g., ML applications *versus* advancing ML)
  - the MSc thesis lasts for 10 months and precedes your professional life

Dissertation: deadlines

Normative semester provisory **timeline**

- (*optional*) October 2026: reaching professors for customized themes
- November 2026: submission of proposals by professors
- December 2026: candidancies and association
- January–October 2027: dissertation

Alternative semester provisory **timeline**

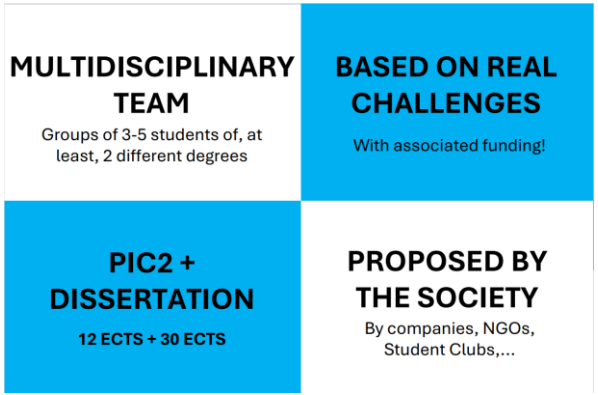
- (*optional*) April 2027: reaching professors for customized themes
- May 2027: submission of proposals by professors
- June 2027: candidancies and association
- September 2027–April 2028: PIC + dissertation

Questions? All relevant info (*templates, guidelines*) in the **course's webpage**

− be patient with your certificate (few weeks for homologation after defence)

Capstone project

- Grab the chance to do your master thesis in the new CAPSTONE format
  - multidisciplinary, collaborative, entrepreneurial project
  - dedicated evaluation committee
  - integrated project of 12 ECTs (equivalence to AECD 9 ECTs + Empreendedorismo em ECD 3 ECTs)



Stay alert to this opportunity:

Index

Footing

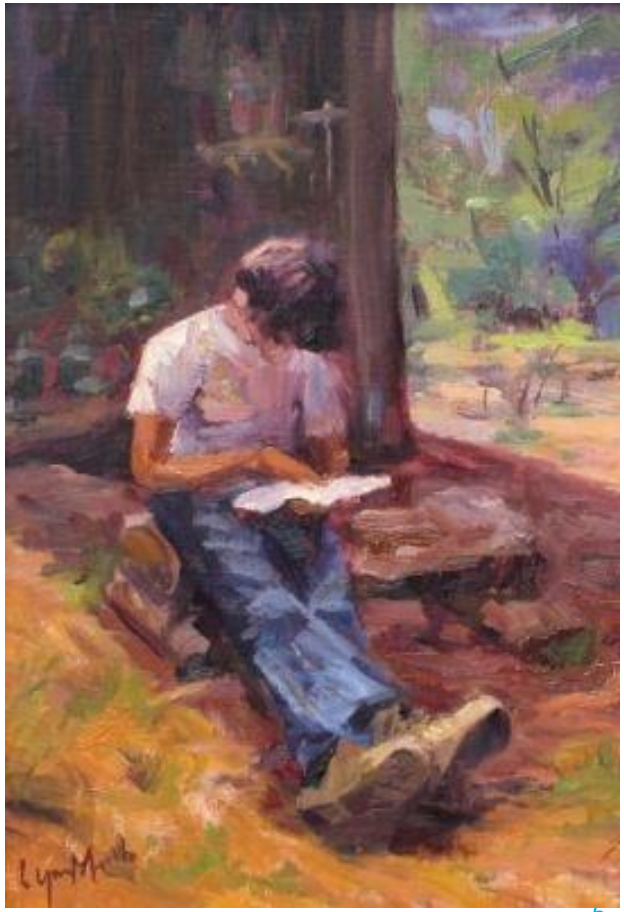
- 2026/2027 class
- coordination

MECD curriculum

- structure, free options, paths
- AEs, mobility, PhD fast track
- AECD, dissertation

Stay informed ⇐

- students' representative
- Técnico's values
- tutors



Students Representative

Students Representative

Pedro Santos

pedro.filipe.santos@tecnico.ulisboa.pt

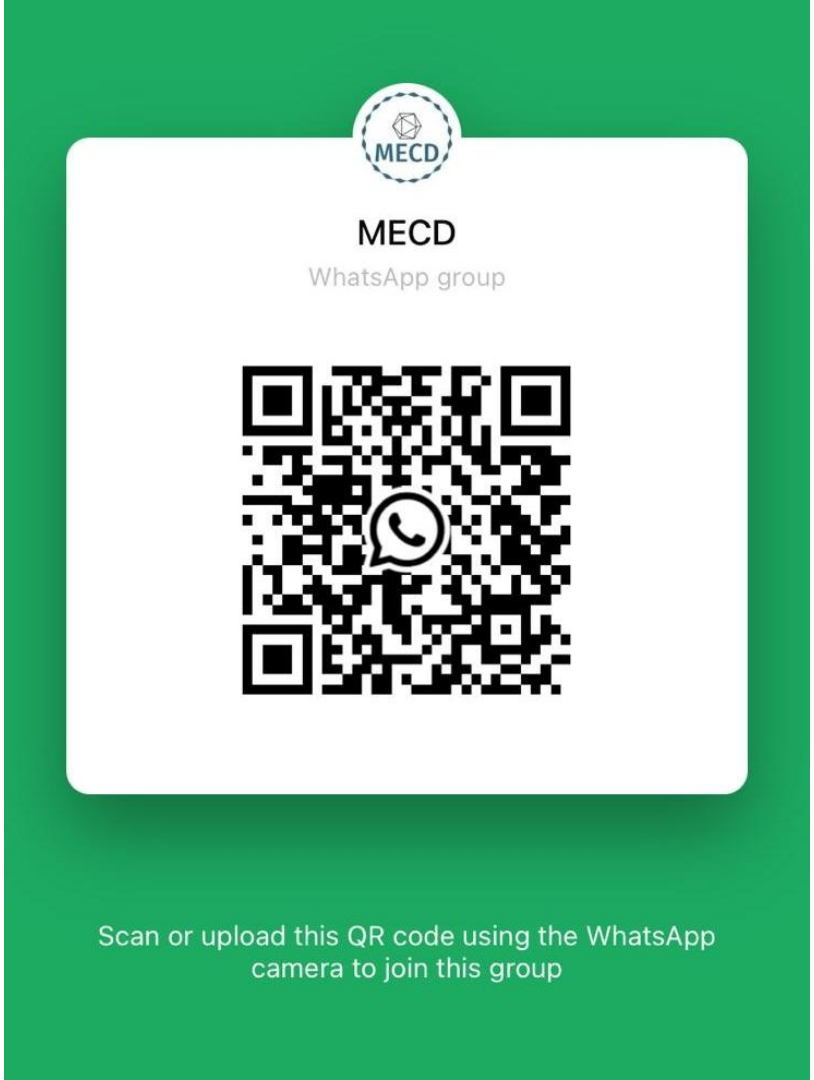
Our **gratitude** to Pedro, Tiago Santos (2nd year delegate) and Liane Nóbrega (previous MECD delegate)

Would you like to be the next MECD delegate?

- spending a few time with us validating decisions (coordinators)
- bonus crediting of 6 ECTs

WhatsApp Group

- students only
  (faculty not allowed!)
- promote a safe, positive, constructive space



Técnico Guiding Values

Fostering an *open* and *welcoming environment*

Being Técnico

Being Técnico is more than just belonging to this recognized and respected community within and beyond Portugal. It is about embodying and experiencing the values that unite and empower us to achieve excellence, seek innovative solutions, and make a positive impact on society.

Being Técnico means being part of a community that values diversity, promotes dialogue and teamwork, and provides opportunities for growth and development. It means committing to ethical and respectful behaviors, contributing to an open and welcoming environment where everyone feels valued and empowered to reach their full potential.

Being Técnico is embracing a collective identity that drives us to be agents of change and leaders of the future.

The values that unite us

INTEGRIDADE
INTEGRITY

We act with principles, honesty, transparency, and openness, analyzing, challenging, and changing our behaviors whenever necessary

RESPEITO
RESPECT

We relate to others fairly, with kindness and respect, valuing diversity and the uniqueness of individual experiences, as well as the different perspectives and contributions of each person.

INOVAÇÃO
INNOVATION

We venture outside our comfort zone, with an open mind and the courage to embrace change, promoting the exchange of ideas and the freedom to take risks and do things differently.

COLABORAÇÃO
COLLABORATION

We work together, fostering an inclusive and supportive community that recognizes and values everyone's contributions, assuming the goodwill and good faith of individuals.

EXCELÊNCIA
EXCELLENCE

We strive for quality in everything we do, take pride in our work, and commit to balancing high standards with support, safeguarding the well-being of the community.

Tutors

Tutors

- Broad experience on Data Science
- Personalized guidance to boost your choices (curricular, life prospects…)

Margarida Silveira (DEEC)
msilveira@isr.tecnico.ulisboa.pt

Miguel Couceiro (DM/DEI)
miguel.j.couceiro@tecnico.ulisboa.pt

NDA: Academic Development Unit

- **Special educational needs**
- **Scholarships** (https://tinyurl.com/3wdebutd)
- **Coaching**: sessions to remove obstacles towards academic success
- **Training programs**: ethics for students, communicate in public…

- How? https://nda.tecnico.ulisboa.pt/en/contactos/
  NDA spaces at Civil building

Index

Welcome

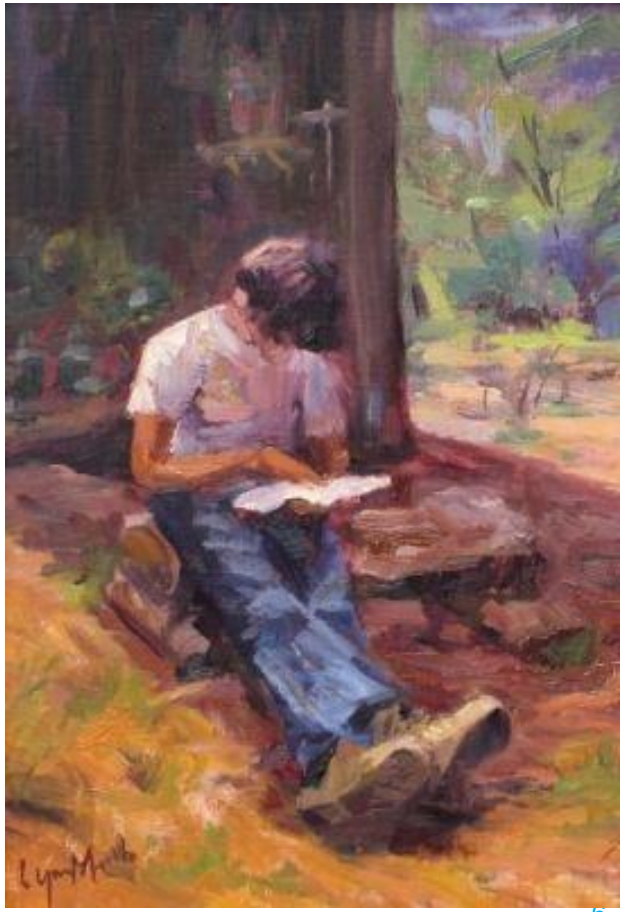
- 2026/2027 class
- coordination

MECD curriculum

- structure, free options, paths
- AEs, mobility, PhD fast track
- AECD, dissertation

Stay informed

- students' representative
- Técnico's values
- tutors



Thank you!

coordmecd@tecnico.ulisboa.pt

APPENDIX

Guiding values: Integrity

Being Técnico means **HAVING INTEGRITY**

- I listen attentively to others and respond honestly and professionally.
- I challenge myself to change my practices and behaviors based on the feedback I receive.
- I trust in the integrity of community members and assess performances based on concrete results rather than subjective impressions.
- I am proactive in identifying and changing ethically inappropriate situations and behaviors.
- I take responsibility for my actions and perform my duties with transparency.

Being Técnico means **NOT TOLERATING LACK OF INTEGRITY:**

- I take responsibility for my behaviors and do not blame others.
- I am prepared to change my practices and behaviors, and not perpetuating incorrect behaviors
- I intervene or report situations where undesirable, disrespectful, and/or untimely behaviors occur, , not ignoring their occurrence.
- I am transparent in my actions, not withholding relevant information

Guiding values: Respect

Being Técnico means **RESPECTING:**

- I treat people fairly, respectfully, and courteously.
- I report situations of harassment, abuse, mobbing, bullying, or any other form of physical or psychological aggression.
- I embrace differences of opinion and seek to manage potential conflicts in a constructive and empathetic manner.
- I acknowledge/take responsibility for the impact of my behaviors on others.

Being Técnico means **NOT TOLERATING LACK OF RESPECT**:

- I am not arrogant. I do not impose my ideas or thoughts on others. I treat people respectfully, refraining from using my power or position.
- I do not allow discrimination or disrespect and I address these situations at the right time.
- I do not make judgments about others' lives or speak about them in their absence.
- I do not engage in or tolerate acts of physical or psychological violence against members of the community.

Guiding values: Innovation

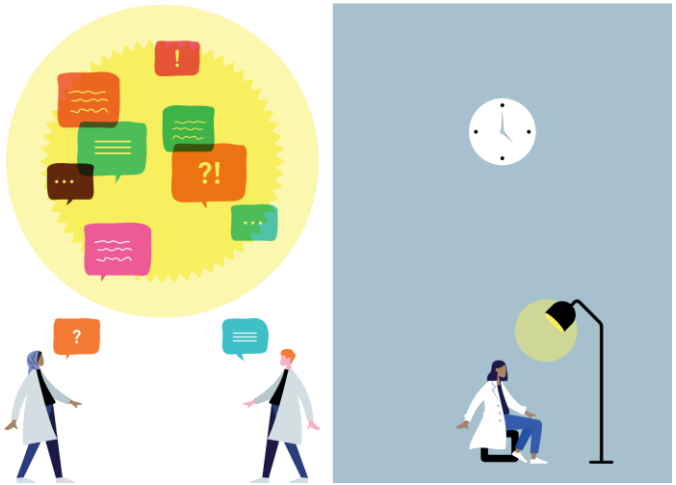
Being Técnico means **INNOVATING:**

- I approach my work with a positive, constructive, and optimistic attitude.
- I value creativity and critical thinking, actively seeking solutions that have an impact and thinking “outside the box.”
- I embrace the need for change and create conditions and a sense of safety that foster the development of new solutions.
- I am open-minded and resilient, accepting mistakes as an integral part of the learning process.

Being Técnico means **NOT BEING AFRAID TO MAKE MISTAKES**:

- I am not pessimistic or complacent and I believe that change brings new opportunities and successes.
- I make decisions and take risks in new processes without fear of making mistakes.
- I am open to new ideas or solutions and do not create obstacles for those who propose them.
- I do not perceive feedback as personal criticism and I value its constructive potential for development.

Guiding values: Collaboration



Being Técnico means **COLLABORATING**:

- I cooperate and share information, plans, and progress openly, in a spirit of cohesion and mutual trust.
- I recognize and appreciate the contributions of others, showing solidarity and assuming the goodwill and good faith of all community members.
- I promote teamwork and collaborative, interdisciplinary work, valuing the contributions of each individual.
- I listen to people and promote dialogue, involving them in decisions. I invest time and effort in building virtuous relationships and mutual development.

Being Técnico means **NOT WORKING ALONE:**

- I work in a team by listening to the arguments of others and not imposing my own opinion.
- I value and recognize the efforts and dedication of others, considering their difficulties and needs.
- I do not keep information for myself; I promote transparency in processes and the circulation of relevant information.
- I do not appropriate the work of others and give proper credit to their contributions. I do not work alone and overcome communication challenges.

Guiding values: Excellence

Being Técnico means **PURSUE FOR EXCELLENCE**:

- I take personal responsibility for my goals and the quality of my work, making the best use of my time and that of others, planning and prioritizing tasks.
- I demonstrate a willingness to improve and surpass myself, challenging both myself and my peers to make a positive difference.
- I promote academic freedom, embracing and fostering ambition and debate.
- I strive for excellence and value the dedication and rigor put into this journey.

Being Técnico means **NOT CEASING TO PURSUE EXCELLENCE:**

- Not to stop learning from mistakes.
- Not to cease taking pride in my work.
- Not to limit myself to just doing what is asked of me.
- Not to neglect setting individual goals that align with the organization's objectives.