

# Màster Innovació i Emprenedoria en Enginyeria Biomèdica

12 Abril 2023



UNIVERSITAT DE  
BARCELONA

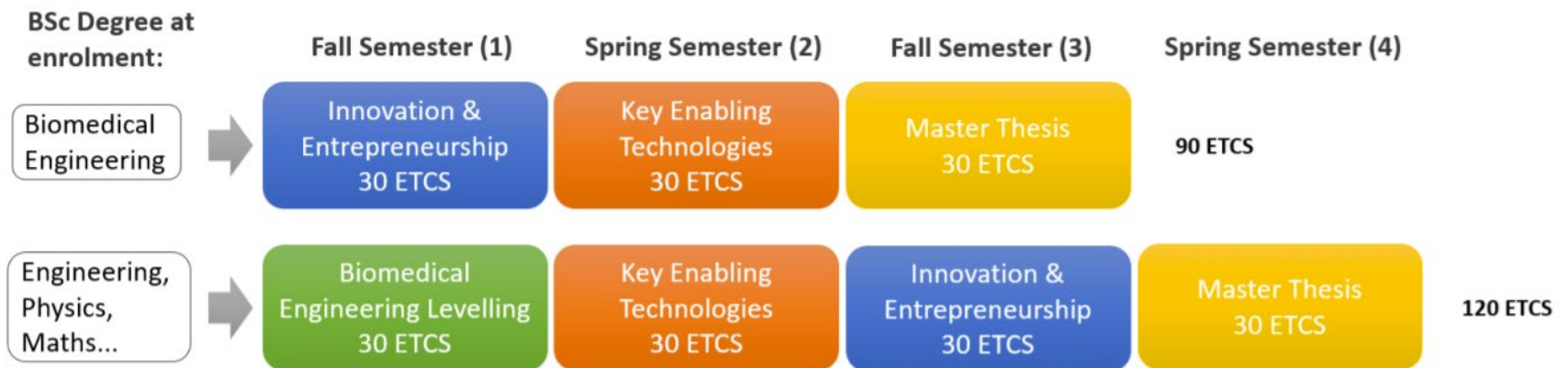
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EIT Health is supported by the EIT,  
a body of the European Union

# Informació General

- Màster **Interfacultatiu** (Física, Medicina i Economia i Empresa)



- Acreditat positivament davant l'AQU (Març 2021)



# Master Currículum

## Curriculum at UB

### Departments and Schools:

Dept. of Economics. School of Economics and Business  
 Dept. of Business. School of Economics and Business  
 Dept. of Econometrics, Statistics and Applied Economy. School of Economics and Business  
 Dept. of Biomedicine. School of Medicine and Health Sciences  
 Dept. of Medicine. School of Medicine and Health Sciences  
 Dept. of Electronics and Biomedical Engineering. School of Physics

## Facultat d'Economia i Empresa

MODULE: INNOVATION, ECONOMY AND ENTREPRENEURSHIP – 1 semester 30 ECTS	
<b>Mandatory courses</b>	
Health economics	6 ECTS
Management of innovation and entrepreneurship in MedTech firms	6 ECTS
<b>Elective courses – Economy of Innovation and Public Policy in the Biomedical Industry</b>	
Microeconomic foundations of competitiveness	3 ECTS
Empirical Industrial Organization and Pharmaeconomics	3 ECTS
Public Policies and Health	3 ECTS
<b>Elective courses – Creation of Companies, Organization and Strategy in the Biomedical Sector</b>	
Creating and sustaining successful biomedical companies	3 ECTS
Strategy and biomedical technology	3 ECTS
Organization and management systems	3 ECTS
<b>Elective courses – Commercialization and financing of Biomedical Innovation</b>	
Business marketing and sales in the biomedical industry	3 ECTS
Financial management of biomedical firms	3 ECTS

## Facultats de Física i Medicina

MODULE: KEY ENABLING TECHNOLOGIES FOR BIOMEDICAL ENGINEERING – 2 semester 30 ECTS	
<b>Mandatory courses</b>	
New frontiers in medical technology	6 ECTS
Medical devices: design and market regulations	6 ECTS
<b>Elective courses – Data Science for Health</b>	
Advanced biomedical signal processing	3 ECTS
Data processing for analytical instrumentation	3 ECTS
Advanced biomedical imaging	3 ECTS
Neuroimaging	3 ECTS
ICT and data science for personalized medicine	3 ECTS
<b>Elective courses – Innovation in Tissue Engineering and Regenerative Medicine</b>	
Advanced technologies for tissue engineering	3 ECTS
Advanced biomaterials for tissue engineering	3 ECTS
Organ-on-a-chip	3 ECTS
Organ biofabrication and regenerative medicine	3 ECTS
<b>Elective courses – Design of Advanced Medical Technologies</b>	
Wireless biodevices and systems	3 ECTS
Technologies for point of care	3 ECTS
Nanomedicine	3 ECTS
Machine learning	3 ECTS

# Complements formatius

<b>MODULE: BIOMEDICAL ENGINEERING – 1 semester 30 ECTS</b>	
<b>Optional leveling courses – BSc in Biomedical Engineering</b>	
Chemistry	6 ETCS
Cellular Biology	6 ETCS
Informatics	6 ETCS
Structure and Functions of Systems: Musculoskeletal, Cardiovascular and Respiratory	6 ETCS
Structure and Functions of Systems: Nervous, Endocrine, Digestive and Immune	6 ETCS
Biostatistics	6 ETCS
Instrumentation and Biomedical signals	9 ETCS
Materials and Biomaterials Engineering	9 ETCS
Biomechanics	6 ETCS
Medical Informatics and Telemedicine	6 ETCS
<b>Optional leveling courses – BSc in Electronics and Communications Engineering</b>	
Informatics	6 ETCS
Mathematical Tools for Engineering	6 ETCS
Electronic Circuitry Analysis	6 ETCS
Communications Fundamentals	6 ETCS
Electronic Instrumentation	6 ETCS
Projects	6 ETCS
<b>Optional leveling courses – BSc in Informatics Engineering</b>	
Electronics	6 ETCS

# Caràcter Innovador

- Caràcter Innovació i Emprenedoria ben marcat i amb resultats:

 benesit

<https://benesit.es/esp/>



<https://lucihs.com/>

 Laia

<https://www.laiacontigo.com/>



<https://qualud.com/<>

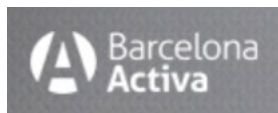
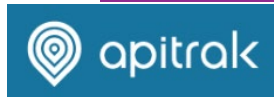
 karis

<https://www.karisdigital.com/>

- Forta component de Internacionalització (40 empreses TFM, 10 estrangeres)

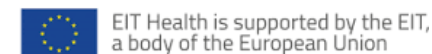
# Caràcter Internacional

- o Forta component de Internacionalització (40 empreses TFM's, 10 estrangeres)



# Màster impulsat en col·laboració amb EIT-Health

- Màster Technological Innovation in Health (MTIH): U. Sorbonne, U. Grenoble-Alpes, U. Lisboa, U. Polit. Madrid, U. Barcelona
- Label EIT-Health 2017-2022
- **Programa d'èxit**, label actualment renovat de forma permanent



## Erasmus Call Masters

<http://www.ub.edu/uri/estudiantsUB/erasmus.htm>



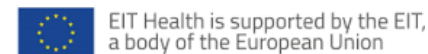


# Màster impulsat en col·laboració amb EIT-Health



🕒 Application is now open!  
Deadline: 30 June

Info Session on 19 April  
EIT Label: Master in  
Technological Innovation in  
Health (MTIH)



Join us on **19 April 2023 at 01:00 p.m. CEST** to learn how you can revolutionize healthcare and become a leader in this field. To register for the **webinar** and learn more about the Master program, visit our website: <https://lnkd.in/eMB52kd2>

[https://www.linkedin.com/posts/mariana-mejica-a2639b22b\\_innovation-health-healthcare-activity-7049272972682911745-01-Z?utm\\_source=share&utm\\_medium=member\\_desktop](https://www.linkedin.com/posts/mariana-mejica-a2639b22b_innovation-health-healthcare-activity-7049272972682911745-01-Z?utm_source=share&utm_medium=member_desktop)



# Innovation Days



## Innovation Days

El iDay (Innovation Days) és una **iniciativa de EIT Health** dirigida per la **Universitat de Barcelona**.

Durant el programa els participants buscaran solucions a desafiaments de la indústria de la salut, proposats per **Bayer**, **Siemens Healthcare**, **Aigües de Barcelona** i **Qualud**.

Compartiran l'experiència amb participants de diferents disciplines, orígens i antecedents, i disposaran de les eines i l'assessorament necessaris per a desenvolupar propostes innovadores.

A més, les millors propostes del iDay podran optar al:

- 1r premi: 400€
- 2a, 3er, 4t premi: 200€

**22 octubre (12 a 14h), 28 octubre (16 a 18h)**

**ONLINE**

**Dedicació prevista per dia: 1h (horari flexible)**

**\*Per a inscripcions en grup:** registrar-se individualment en el formulari d'inscripció i enviar un email a [idaybarcelona@ub.edu](mailto:idaybarcelona@ub.edu) indicant els noms del membres de l'equip.



An initiative of:



Organized by:



Partners:



EIT Health is supported by the EIT, a body of the European Union