



UNIVERSITAT DE
BARCELONA

MASTER in CANCER RESEARCH

**Official master;
60 ECTS**

Presential

All courses in English

The master's program involves professors from the Faculty of Medicine and Health Sciences, Biology, and Pharmacy and Food Sciences.

- The master's program aims to **provide advanced training and the appropriate tools to future researchers and professionals in basic, translational, and clinical research in the field of cancer.**
- **Addressed** to students that have finished a degree in the field of **health sciences, biological sciences:**
 - Degree in Biomedical Sciences, Human Biology, or equivalent
 - Degree in Biology or equivalent
 - Degree in Biochemistry or equivalent
 - Degree in Medicine
 - Degree in Pharmacy
 - Depending on the specific curriculum of each student (specific subjects taken in the degree), degrees such as Biotechnology, Nanosciences, Veterinary Medicine, Biomedical Engineering, among others, will also be considered.

Compulsory 21ECTS

1st semester morning

Materia 1 Mandatory : Advances in the Molecular and Cellular Mechanisms of tumorigenesis. 9ECTS

- Molecular and Cellular Mechanisms of Tumorigenesis (I): cell transformation 3ECTS
- Molecular and cellular Mechanisms of Tumorigenesis (II): Stroma interaction 3ECTS
- Molecular and cellular Mechanisms of Tumorigenesis (III): systemic interactions 3ECTS

Materia 2 Mandatory: Translational and clinical research in Cancer. 9ECTS

- Traslational research in cancer 3ECTS
- Therapies in hemato/oncology 3ECTS
- Basic principles in clinical trials design in cancer 3 ECTS

2nd semester morning (15 days)

Materia 3 Mandatory: “How to conduct a research project in cancer (3ECTS).

- Writting a proposal and open science 3ECTS
(if you do the TFM aborad this subject is online)

2nd semester

Final Master Thesis 24 ECTS

Optatives 15 ECTS

(choose 5 of 3 ECTS)

Mainly 1st semester afternoon

Materia 4: Methodologic Optatives (choose 3 : 9 ECTS)

- Genomics and proteomics 3ECTS
- Cell Cultures and Cell Engineering 3ECTS
- Advanced Fluorescence Microscopy Techniques 3ECTS
- High content screening: image and data analysis of cell populations 3ECTS
- Bioinformatics applied to Cancer 3ECTS

Materia 5: Non methodologic optatives (choose 2: 6 ECTS)

- Scientific seminars (3ECTS) (all course)
- Epigenetics applied to Biomedicine (3ECTS)
- Scientific communication 3ECTS
- Regenerative Medicina and Stem cells research (3ECTS)
- Ageing and Senescence (3 ECTS)
- Immunooncology (3 ECTS)

Full time work in laboratories of different institution.

You can already start to look for groups if you are decided to do this master

Where should I do the final master thesis (TFM)?

- Choose a group in the list offered in the master web (*placements* link in the web page)

There are almost 100 offers of research groups to perform the TFM (look at the master's WEB page).

They belong to the following Faculties or Institutes.

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|--|---|
| ✓ Facultat de Medicina i Ciències de la Salut; Campus Clínic, UB | ✓ Josep Carreras Leukaemia Research Institute (IJC) |
| ✓ Facultat de Medicina i Ciències de la Salut Campus Bellvitge, UB | ✓ Institut de Recerca Sant Joan de Déu (IRSJD). |
| ✓ Facultat de Biologia, UB | ✓ Vall d'Hebron Institut de Recerca – VHIR. |
| ✓ Facultat de Farmàcia, UB | ✓ ICO Institut Català d'Oncologia |
| ✓ IDIBAPS Research Institut | ✓ Germans Trias i Pujol Research Intitute – IGTP |
| ✓ IDIBELL Research Institut | ✓ |

- Search and propose yourself to us a group labs in any the research institution in Barcelona, Catalunya, Spain
- Search and propose a group in Europe (Erasmus + Programme link in the web page)
- Choose a group between the list of Coimbra associated universities (web page)

When should I choose the group for the TFM?

- Having a group admission already during the application to the master give you some points
- If you have very good grades of the degree, you will be accepted without having a group and you have time to choose the group after enrolling the master (but is better if you start searching now)

IMPORTANT ASPECTS FOR THE PREINSCRIPTION

Attach:

Mandatory:

-Transcript grades. If your university is not Spanish you need to attach the Spanish equivalence from ANECA

-CV

-Optional:

Letter of a group accepting you in the lab to do the TFM. Recommended if your grades are lower of 7.5