



CENTRO DE INVESTIGACIÓN
DEL CÁNCER

**Máster en Biología y Clínica
del Cáncer**



Centro de Investigación del Cáncer
Instituto de Biología Molecular y Celular del Cáncer
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General Master's Program 2021/2022

Type of subject	Credits (ECTS)
Mandatories (M)	27
Optionals (O)	21
Master's Thesis (TFM)	12
TOTAL	60

Program organization by semester, number of ECTS and type of subject

1 st SEMESTER	ECTS	Tipo	2 nd SEMESTER	ECTS	Type
Practicum " <i>Biology and Clinic of Cancer</i> "	9	M	Practicum " <i>Biology and Clinic of Cancer</i> "	9	M
Introduction to the molecular biology of cancer (*)	3	M	Communication strategies for cancer research (*)	3	M
Introduction to the molecular medicine of cancer	3	M	Optional 4	3	O
Optional 1	3	O	Optional 5	3	O
Optional 2	3	O	Optional 6	3	O
Optional 3	3	O	Optional 7	3	O
			Master's Thesis	12	M
Total ECTS	24		Total ECTS	36	

Optional Subjects to choose

First Semester	ECTS	Second Semester	ECTS
Protein analysis by cytoxic approaches: applications on cancer biology and clinics (*)	3	Molecular bases of tumor variability: Modifier genes of the susceptibility and evolution of cancer (*)	3
Chromosomal instability, cancer, aging and cohesinopathies (*)	3	Bioinformatics and computational genomics in cancer research (*)	3
Molecular cytogenetics in oncology (*)	3	Angiogenesis regulatory mechanisms: role in the development of tumors (*)	3
Mouse models in cancer research	3	Cell growth, cell division and cancer	3
Regulation of mitosis, checkpoints and cancer (*)	3	New treatments in hemopathies: from the laboratory to the clinic	3
Biophysical and molecular bases of metastasis and cell migration (*)	3	Intracellular signaling in cancer (*)	3
Clinical pharmacokinetics of anticancer drugs (*)	3	Signaling by growth factor receptors in cancer (*)	3
Structural, epigenetic and post-transcriptional alterations in cancer (*)	3	Bone marrow-derived stem cells. Biological characteristics and potential role in the development of hematological malignancies	3
		Anti-tumor immunotherapy: from biology to clinical applications (*)	3

(*) Subject taught in English