

Code	BENG509
Name	Introduction to Nanobiotechnology
Hour per week	3 (3 + 0)
Credit	3
ECTS	10
Level/Year	Graduate / Anytime
Semester	Fall and Spring
Type	Elective
Prerequisites	-
Content	Bionanotechnology is an emerging field, in which the fundamental nanotechnologies are applied to biological and chemical problems as well as to new devices and tools for medicine and energy. This course is designed to introduce biological background and modern applications of nanoscience in biotechnology, with the emphasis on how to monitor and control biological phenomena via the structure and functionality of nanomaterials. Topics include biomimetic molecules, nanoparticles, carbon nanotubes, scanning probe microscopy, and nanosensors.