



University POLITEHNICA of Bucharest

Faculty of Medical Engineering  
Smart Biomaterials and Applications

Second cycle degree – 2 years Master Programme (4 semesters, 120 ECTS);



## COURSE AND LABORATORY DIAGRAM

### First Year – First Semester

Smart Biomaterials  
Smart and Biomimetic Biomaterials  
Active Nanobiostructured Surfaces and Interfaces Engineering  
Settings of Biomaterials  
Dental Cements  
Scientific Research and Practice

Proiectarea și managementul programelor educaționale\*

### First Year – Second Semester

Artificial Tissues and Organs  
Radiation Interactions with Nanobiomaterials and Living Tissue  
Advanced Technologies for Biomaterials Processing 2  
Advanced Technologies for Biomaterials Processing  
Carbon-based Polymeric Biomaterials for Bioengineering  
Tissue Regeneration Engineering with Stem Cells(C)  
Scientific Research and Practice 2

Psihopedagogia adolescenților, tinerilor și adulților\*  
Multimedia în educație\*

### Second Year – First Semester

Advanced bioceramics  
Protein engineering  
(Bio)Functionalized polymers-scaffolds for regenerative and personalized medicine  
Medical analyses and evaluation advanced techniques  
Scientific research and practice

Didactica domeniului și dezvoltării în didactica specializării  
(învățământ liceal, postliceal)\*  
Sociologia educației / educație interculturală\*

### Second Year – Second Semester

Ethics  
Research practice / Prepare dissertation

Practică pedagogică (învățământ liceal, postliceal)\*  
Examen de absolvire psihopedagogie, nivelul 2\*