

Teaching plan - PhD programme in Materials Science and Nanotechnology

38°Cycle a.y. 2022/2023

| Course | SSD | hrs | credits | Educational form* | Type of activity** | Mandatory/ Chosen activity |
|---|---|------------|-----------|-------------------|--------------------|----------------------------|
| Principles of Electron Microscopy and Applications to Nanomaterials Research | FIS/03, FIS/01 | 8 | 1 | lecture | curricular | chosen activity |
| Theory and modelling of epitaxy | FIS/03, FIS/01 | 16 | 2 | lecture | curricular | chosen activity |
| Technologies for production and conversion of green hydrogen | CHIM/02, CHIM/03, CHIM/04, | 8 | 1 | lecture | curricular | chosen activity |
| Principles and applications of nanobiotechnologies | BIO/10, BIO/12, FIS/07 | 8 | 1 | lecture | curricular | chosen activity |
| Neuromorphic computing: materials and devices | FIS/03, FIS/01 | 8 | 1 | lecture | curricular | chosen activity |
| Surface Analytical Methods: Applications to Materials Science | CHIM/02, CHIM/03 | 8 | 1 | Lecture | curricular | chosen activity |
| Supramolecular Chemistry, Crystal Engineering, and Solid-State Reactions | CHIM/02, CHIM/04, CHIM/06 | 8 | 1 | Lecture | curricular | chosen activities |
| Nanotechnology with Organic Matter: Where have we been? Where are we going? | CHIM/04, CHIM/06, CHIM/02 | 16 | 2 | Lecture | curricular | chosen activities |
| PCAM School (subject to be defined) | FIS/01, FIS/03, CHIM/02, CHIM/03 | 24 | 2 | seminars | curricular | Chosen activity |
| Seminars on Materials Science | FIS03, FIS01, CHIM03,CHIM02 ,CHIM04,CHIM06, BIO12 | 12 | 1 | seminars | curricular | Chosen activity |
| Total hrs/credits | | 116 | 13 | | | |

Educational form*

 lecture
 laboratory training
 seminar

Type of activity**

 curricular
 cross-curricular