

POSMAT I Programa de Pós-graduação em Engenharia de Materiais



Course: Materials Physics

Code: MEM.003

Credits: 03

Module: General formation

Contents:

Electronic structure of materials and atomic interactions. Crystalline and amorphous solids. Crystal defects. Phase transformations in materials. Electrical, magnetic and optical properties. Thermal properties and energy band theory. Superconductors. Semiconductors. Surfaces and interfaces.

References:

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4. KINGERY, W. D.; BOWEN, H. K.; UHLMANN, D. R. **Introduction to ceramics**. 2th Edition. New York: John Wiley & Sons, 1976.
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