

Code	IIN304	Prerequisites	120 approved credits
Name	Plastic Materials I	Co-requisites	None

Credits	Contact Hours
04	44
Categorization of credits	
Math and basic science	
Engineering topic	X
Other	

Coordinator's name	Simón Pascual
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Text book
<p>Brent Strong, A. (2006). Plastic Materials and Processing. (Third Edition). New Jersey: Pearson Prentice Hall</p> <p>Bryce M, D. (1999). Plastic Injection Molding. (First Edition). United States of America: Society of Manufacturing Engineer (SME)</p> <p>Driver, W. E. (1982). Química y Tecnología de los Plásticos. (First Edition) México: Compañía Editorial Continental</p> <p>Kulkarni, Suhas. (2016). Robust Process Development and Scientific Molding. (Third Edition). United States of America. Hanser Publication</p> <p>Lerma Valero, J. R. (2015). Manual Avanzado de Transformación de Termoplástico Por Inyección. (First Edition). Spain. Plástico Universales Interempresa</p> <p>Natti S. Rao. (2012). Understanding Plastics Engineering Calculations. (First Edition). United States of America. Hanser Publication</p>
Other supplemental materials
<p>Rubín, I. I. (2008). Materiales Plásticos, Propiedades y Aplicaciones. México: Limusa Noriega Editors</p>

Description	
Materials I, within the polymers concentration, is the starting point for acquiring basic knowledge in the world of plastics. Through the presentation of the teacher, the reading of bibliography, visits to facilities, observations, product/process evaluations and academic discussion, it seeks to provide the knowledge and concerns that guide the path of an unstoppable growth interest.	
Type of course	<input type="checkbox"/> Required <input checked="" type="checkbox"/> Elective

Specific goals for the course

Outcomes of instruction	<p>1. Recognize how the global economy affects the polymer market by establishing a relationship between the context (time and space) and its state.</p> <p>2. Responsible for staying current on the new world of polymers by reviewing industry best practices.</p>
Student outcomes	<p>SO4. Recognize ethical and professional responsibilities in engineering situations and makes informed judgments considering the impact of engineering solutions in global, economic, environmental, and social contexts.</p> <p>SO7. Acquire and apply new knowledge using appropriate learning strategies.</p>

Topics
<p>Unit I. Introduction to Polymers</p> <p>Unit II. Division, Characteristics and Properties</p> <p>Unit III. Thermoplastic (Commodity) I</p> <p>Unit IV. Thermoplastic (Commodity) II</p>