



Code	TBD	Prerequisites	INM-377
Name	Molds	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>Kamer, David O. (2016). Injection Mold Design Engineering. (2E). United States of America. Hanser Publication.</p> <p>Bryce M, Douglas. (1998). Plastic Injection Molding: Mold Design and Construction. (First Edition). United States of America. Society of Manufacturing Engineer (SME).</p> <p>Shahzad Ali, Muhammad. (2011). Plastic Injection Molds: Cooling System Design. (1E). Pakistan. Lap Lambert Academic Publishing.</p> <p>Unger, Peter. (2006). Gastrow Injection Molds. (4E). United States of America. Hanser Publication.</p> <p>Herbert, Rees. (2002). Mold Engineering. (2E). United States of America. Hanser Publication.</p>
Other supplemental materials

Description	
It is a subject designed with the purpose of introducing future engineers to the broad and interesting topic of molds. It starts from the introduction to the basic concepts, design considerations, materials, costs, to the delivery of the product. We will try to approach the local mold manufacturers, with the intention of identifying their productive capacities, strengths and weaknesses, etc.	
Type of course	<input type="checkbox"/> Required <input checked="" type="checkbox"/> Elective

Specific goals for the course	
Outcomes of instruction	<p>1. Responsibly assume their academic role during the teaching-learning process, participating in discussions and respecting the established work schedule.</p>

	<p>2. Show receptivity to group collaboration in the development of improvement, modification and mold construction solutions.</p> <p>3. Define and distinguish industry trends by participating in updating processes, in order to propose solutions that reflect those available in the market.</p>
Student outcomes	<p>1. Recognize the need and are able to participate in initiatives and spaces for continuous learning and updating in both professional and academic contexts.</p>

Topics
<p>Unit I. Molds: Introduction</p> <p>Unit II. Design and Cost of the Piece.</p> <p>Unit III. Mold Architecture</p> <p>Unit IV. Analysis and design of the filling system</p> <p>Unit V. Feeding System</p> <p>Unit VI. Gates and Venting</p> <p>Unit VII. Cooling System Design</p> <p>Unit VIII. Contraction, Ejection System and Maintenance Topics</p>