Introduction to Metalcasting Modules

The following modules are translated in Spanish, where available.

English	Spanish
Big Picture of the Casting Process	Panorama General del Proceso de Fundición
This module identifies the primary casting	En este módulo se identifican los procesos
processes and post-casting production processes	primarios y los procesos de producción
that occur in a metalcasting facility. By the end of	posteriores al vaciado que se utilizan en una
this module, you will be able to define key	fundición de metales. Para el final del módulo,
industry terms; describe the major departments	usted podrá definir los términos clave de la
in a metalcasting facility; and chronologically,	industria, describir los principales departamentos
track a casting from the quotation process,	en una fundición de metales y realizar un
through casting production to casting shipment.	seguimiento, de manera cronológica, desde el
(0.2 CEU)	proceso de cotización, hasta la producción y el
(***= 3=3)	envío de partes vaciadas. (0,2 CEU)
Casting Design for Castability	(4)=
This module will focus on how to choose an	
appropriate casting process based on the	
complexity and manufacturability of a part.	
Topics will include defining the various casting	
processes available, tolerances, and the	
opportunity to complete a challenge. This module	
is designed for those who are involved in	
selecting, designing, and creating various types of	
molds and castings. By the end of this module,	
you will be able to choose a suitable casting	
process based on the complexity and	
manufacturability of a part. (0.1 CEU)	
Types of Casting Tooling	
This module will explore the different types	
tooling used in the metalcasting industry:	
permanent mold tooling, sand mold tooling, and	
investment pattern tooling. Common Tooling	
Department constraints will be described. By the	
end of this module, you will be able to identify	
and describe the types of tooling that are used	
with the major casting production processes. (0.1	
CEU)	
Casting Material Properties	
This module will cover the following topics: heat	
flow and cooling rates, mold materials and	
methods, voids, and irregularities, and	
postcasting treatments. These topics affect the	
final mechanical properties of a casting. By the	
end of this module, you will be able to identify	
and describe a variety of production	

characteristics that can influence the mechanical	
properties of a casting. (0.2 CEU)	