

ENGINEERING THERAPEUTICS MANUFACTURING - CERTIFICATE

Program Requirements

Code	Title	Semester Credit Hours
Required Course		
Select one of the following:		3
BAEN 302	Biological and Agricultural Engineering Fundamentals II	
CHEN 482	Bioprocess Engineering	
ISEN 360	Lean Thinking and Lean Engineering	
VTPP 435	Physiology for Bioengineers II	
Prescribed Electives		
Select three of the following:		9
BAEN 431	Processes and Separations in Biopharmaceutical Manufacturing	
BAEN 471/ CHEN 471	Bioreactor Engineering	
BAEN 479	Biological and Agricultural Engineering Design I	
BMEN 404	FDA Good Laboratory and Clinical Practices	
BMEN 486	Biomedical Nanotechnology	
BMEN 487	Drug Delivery	
CHEN 364	Kinetics and Reactor Design	
CHEN 455/ SENG 455	Process Safety Engineering	
CHEN 461	Process Dynamics and Control	
CHEN 463	Systems Biology	
Total Semester Credit Hours		12