



**Guidance Curriculum for MSc. in pharmaceutical Manufacturing program  
Thesis Track**

**First Academic year**

Second semester			
Course No.	Course Name	Credit hours	Type of learning
1102701	Pharmaceutical development and manufacturing (1)	3	Direct
1102706	Quality control	3	Direct
1102703	Pharmaceutical quality system	2	Direct
Total		8	

First semester			
Course No.	Course Name	Credit hours	Type of learning
1102704	Regulatory affairs and intellectual property	2	Online
1102705	Good manufacturing practice	2	Online
1102730	Development and manufacturing of biological drugs	2	Online
Total		6	

Summer semester			
Course No.	Course Name	Credit hours	Type of learning
1102731	Practical applications in pharmaceutical manufacturing	1	Direct
Total		1	

**Second Academic year**

First semester			
Course No.	Course Name	Credit hours	Type of learning
1102702	Pharmaceutical development and manufacturing (2)	3	Blended
	Elective course	2	Blended
	Elective course	2	Blended
Total		7	

Second semester			
Course No.	Course Name	Credit hours	Type of learning
	Elective course	2	Blended
	Thesis in progress	0	Direct
	Thesis	9	Direct
Total		9	