

## Master of Pharmaceutical Sciences Program

### Graduation Requirements (33 Credit hours)

This study plan is effective as of first semester of the academic year 2022/2023

#### Credit Hours for Master of Pharmaceutical Sciences (Comprehensive and Thesis Tracks)

Track	Compulsory Courses	Elective Courses	Thesis	Total
Comprehensive	24	9	-	33
Thesis	15	9	9	33

#### Comprehensive Track

##### 1) Compulsory Courses (24 credit hours)

Course No.	Course Name	Credit hours	Theoretical	Practical	Teaching Method
7091013	Advanced Methods in Drug Delivery	3	3	-	Face to Face
7091014	Advanced Biopharmaceutics and Pharmacokinetics	2	2	-	Face to Face
7091016	Advanced Biostatistics	1	1	-	Electronic
7091019	Advanced Physical Pharmacy	3	3	-	Face to Face
7091020	Advanced Pharmaceutical Biotechnology	3	3	-	Blended
7091031	Advanced Research Methodology and Seminar	3	3	-	Electronic
7091032	Advanced Clinical Pharmacy and Therapeutics	3	3	-	Blended
7091033	Advanced Instrumental Analysis	3	2	1	Face to Face
7091036	Advanced Medicinal Chemistry and Pharmacology	3	3	-	Blended

##### 2) Elective Courses (9 credit hours) from the following courses:

7091011	Advanced Pharmaceutical Organic Chemistry	3	3	-	Face to Face
7091021	Advanced Aspects of Drug Discovery	3	3	-	Blended
7091023	Advanced Pharmaceutical Microbiology	3	3	-	Blended
7091024	Research Project in Pharmaceutical Sciences	3	3	-	Blended
7091025	Advanced Pharmaceutical Technology	3	3	-	Blended
7091026	Pharmaceutical Quality Assurance and Validation	3	3	-	Blended
7091027	Advanced Phytotherapy	3	3	-	Blended
7091028	Advanced Natural Products Chemistry	3	3	-	Blended
7091029	Advanced Cancer Biology	3	3	-	Blended
7091034	Production of Herbal Medicines	3	3	-	Blended
7091035	Gut Microbiome in Health and Disease	3	3	-	Blended

##### 3) Comprehensive Exam (7091030)

#### The Advisory Plan for Master in Pharmaceutical Sciences Program (Comprehensive Track)

First year ( first semester)			First year ( second semester)		
Course No.	Course Name	Credit hours	Course No.	Course Name	Credit hours
7091031	Advanced Research Methodology and Seminar	3	7091013	Advanced Methods in Drug Delivery	3
7091036	Advanced Medicinal Chemistry and Pharmacology	3	7091032	Advanced Clinical Pharmacy and Therapeutics	3
-	Elective Course	3	7091033	Advanced Instrumental Analysis	3
	Total	9		Total	9
Second year ( first semester)			Second year ( second semester)		
7091014	Advanced Biopharmaceutics and Pharmacokinetics	2	7091020	Advanced Pharmaceutical Biotechnology	3
7091016	Advanced Biostatistics	1	-	Elective Course	3
7091019	Advanced Physical Pharmacy	3			
-	Elective Course	3			
	Total	9		Total	6

**Summer semester: Comprehensive Exam**

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### Graduation Requirements (33 Credit hours)

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Thesis Track					
<b>1) Compulsory Courses (15 credit hours)</b>					
Course No.	Course Name	Credit hours	Theoretical	Practical	Teaching Method
7091013	Advanced Methods in Drug Delivery	3	3	-	Face to Face
7091014	Advanced Biopharmaceutics and Pharmacokinetics	2	2	-	Face to Face
7091016	Advanced Biostatistics	1	1	-	Electronic
7091031	Advanced Research Methodology and Seminar	3	3	-	Electronic
7091033	Advanced Instrumental Analysis	3	2	1	Face to Face
7091036	Advanced Medicinal Chemistry and Pharmacology	3	3	-	Blended
<b>2) Elective Courses (9 credit hours) from the following courses:</b>					
7091011	Advanced Pharmaceutical Organic Chemistry	3	3	-	Face to Face
7091019	Advanced Physical Pharmacy	3	3	-	Face to Face
7091020	Advanced Pharmaceutical Biotechnology	3	3	-	Blended
7091021	Advanced Aspects of Drug Discovery	3	3	-	Blended
7091023	Advanced Pharmaceutical Microbiology	3	3	-	Blended
7091024	Research Project in Pharmaceutical Sciences	3	3	-	Blended
7091025	Advanced Pharmaceutical Technology	3	3	-	Blended
7091026	Pharmaceutical Quality Assurance and Validation	3	3	-	Blended
7091027	Advanced Phytotherapy	3	3	-	Blended
7091028	Advanced Natural Products Chemistry	3	3	-	Blended
7091029	Advanced Cancer Biology	3	3	-	Blended
7091032	Advanced Clinical Pharmacy and Therapeutics	3	3	-	Blended
7091034	Production of Herbal Medicines	3	3	-	Blended
7091035	Gut Microbiome in Health and Disease	3	3	-	Blended
<b>3) Thesis (9 credit hours)</b>					
7091091	Thesis	6	-	6	Blended
7091092	Thesis	3	-	3	Blended
<b>The Advisory Plan for Master in Pharmaceutical Sciences Program ( Thesis Track)</b>					
<b>First year ( first semester)</b>			<b>First year ( second semester)</b>		
Course	Course Name	Credit	Course	Course Name	Credit
7091031	Advanced Research Methodology and Seminar	3	7091013	Advanced Methods in Drug Delivery	3
7091036	Advanced Medicinal Chemistry and Pharmacology	3	7091033	Advanced Instrumental Analysis	3
-	Elective Course	3	-	Elective Course	3
Total		9	Total		9
<b>Second year (first semester)</b>			<b>Second year (second semester)</b>		
7091014	Advanced Biopharmaceutics and Pharmacokinetics	2	7091091	Thesis	6
7091016	Advanced Biostatistics	1			
7091092	Thesis	3			
-	Elective Course	3			
Total		9	Total		6