

Master/Diploma of Science in Drug Discovery and Development Study Plan - DMU

Year	Semester	Course Name	Total CH		
			CH	Theory	Practical
Year I	Semester 1	Ethics in Scientific Research	1	1	–
		Biostatistics and Data Analysis in Drug Research	2	1	1
		Drug Discovery and Development (Life Cycle of a Medication)	3	3	–
		Instrumental Analysis	3	2	1
		AI in Drug Discovery	2	1	1
		Seminar I/ Journal Club	1	–	1
		Total	12	8	4
	Semester 2	Research Project	2	–	2
		Elective course I	3	3	–
		Elective course II	3	2	1
		Elective course III	3	3	–
		Seminar II/ Journal Club	1	–	1
		Total	12	8	4
Early Exit “Post Graduate Higher Diploma in Drug Discovery and Development” (PGD-DD)			24	16	8
Year II	Semester 1	Thesis I	4	–	4
		Seminar III/ Journal Club	1	–	1
		Total	5	–	5
	Semester 2	Thesis II	5	–	5
		Seminar IV	1	–	1
		Total	6	–	6
Master in Drug Discovery and Development” (MSc-DD)			35		19

CH: Number of credit hours. Each 1 CH Practical equals 2 contact hours.

Total Credit Hours for PGD-DD: 24.

Total Credit Hours for MDD: 35.

Elective Courses

A student shall take three elective courses from three different areas after discussing them with the supervisor and obtaining approval from the program director.

Course Name	CH	Theory	Practical
Nanotechnology in Drug Targeting	3	2	1
Biopharmaceuticals and Biosimilars Development	3	3	-
Advanced Cosmetics Technology	3	2	1
Pharmaceutical Quality Assurance and Quality Control	3	2	1
Recent Advances in Medicinal Chemistry	3	3	-
Spectrometric Identification of Organic Compounds	3	2	1
Drug Discovery from Nature	3	2	1
Molecular and In Vivo Pharmacology	3	3	-
Recent Advances in Pharmacology	3	3	
Pharmacogenomics and Personalized Medicine	3	3	-
Advanced Toxicology	3	2	1

CH: Number of credit hours. Each 1 CH Practical equals 2 contact hours.

Total Credit Hours: 9

Bridging Courses:

Graduates from colleges besides pharmacy college, who lack basic knowledge in organic chemistry, pharmacology, or pharmaceuticals may have to take a non-credit bridging course(s). Students may take one or more bridge courses based on the program committee's decision. Non-credit bridging courses are shown in the table below:

Bridging Course	CH	Theory	Practical
Medicinal Chemistry	0	3	–
Pharmacology	0	3	–
Pharmaceutical Dosage Forms	0	3	–

CH: Number of credit hours. Each 1 CH Practical equals 2 contact hours.

Total Credit Hours: 0