

Bachelor of Diagnostic Medical Sonography (DMS)

Curriculum Plan and Model

DMS Course Distribution		
UM for University Mandatory	9	17+9=26
Core Courses	8	21+1=22
Discipline related courses	27	52+30=82
Total Credit Hours		136

Semester Plan

Semester 1

Code	Course title	CrHr	Pre-Requisite
DMS-101	English-I (Functional English)	3+0	-
DMS-102	Introduction to Computer Science	2+1	-
DMS-103	Pakistan Studies	2+0	-
DMS-104	Anatomy-I	2+1	-
DMS-105	Physiology-I	2+1	-
DMS-106	Pathology-I	2+1	-
	Total	13+4	

Semester 2

Code	Course title	CrHr	Pre-Requisite
DMS-107	Mathematics (Calculus)	3+0	-
DMS-108	Islamic Studies	2+0	-
DMS-109	English-II (Communication Skills)	3+0	English-I (Functional English)
DMS-110	Anatomy-II	2+1	Anatomy-I
DMS-111	Physiology-II	2+1	Physiology-I
DMS-112	Pathology-II	2+1	Pathology-I
	Total	14+3	

Semester 3

Code	Course title	CrHr	Pre-Requisite
DMS-201	Data Base Management Systems	3+0	-
DMS-202	Introduction to Diagnostic Medical Sonography	3+0	-
DMS-203	Applications of Medical Sonography	3+0	-
DMS-204	Scanning Techniques	3+0	-
DMS-205	Sonography Physics And Instrumentation-I	2+1	-
DMS-212	Radiation Sciences & Technology	2+1	-
	Total	16+2	

Semester 4

Code	Course title	CrHr	Pre-Requisite
DMS-206	Basic Obstetrical and Gynecological Sonography	2+1	-
DMS-207	Fundamental Understanding of Sonography Technology	3+0	-
DMS-208	Sonography Physics and Instrumentation-II	2+1	Sonography Physics And Instrumentation-I
DMS-209	Basic Abdominal Sonography	2+1	-
DMS-210	Medical Ethics and Principles	3+0	-
DMS-313	Computed Tomography (CT)-I	2+1	-
	Total	14+4	

Semester 5

Code	Course title	CrHr	Pre-Requisite
DMS-301	Advanced Abdominal Sonography	2+1	None
DMS-302	Sonography Clinical Practicum-I	0+3	-
DMS-303	Research Methods In Sonography	3+0	-
DMS-304	Basic Vascular Technology/Doppler Sonography	2+1	-
DMS-305	Patient Care	2+0	-
DMS-306	Report Writing Skills	3+0	-
	Total	12+5	

Semester 6

Code	Course title	CrHr	Pre-Requisite
DMS-307	Sonography Clinical Practicum-II	0+3	Sonography Clinical Practicum-I
DMS-308	Health Care Data Analysis	2+1	-
DMS-309	Advanced Vascular Technology/Doppler Sonography	2+1	-
DMS-310	PACS and DICOM Implementation	3+0	-
DMS-311	Quality Assurance in Sonography	3+0	-
DMS-414	Echocardiography	1+1	-
	Total	11+6	

Semester 7

Code	Course title	CrHr	Pre-Requisite
DMS-401	Advanced Obstetrical and Gynecological Sonography	2+1	-
DMS-402	Sonography Clinical Practicum-III	0+3	Sonography Clinical Practicum-II
DMS-403	Clinical Practice in Obstetrics and Gynecological Sonography-I	0+3	-
DMS-404	Sonography of Small Parts/Musculoskeletal System	2+1	-
DMS-405	Safety in Healthcare Settings	3+0	-
	Total	7+8	

Semester 8

Code	Course title	CrHr	Pre-Requisite
DMS-406	Clinical Practice in Vascular Ultrasound	0+4	-
DMS-407	Clinical Practice in Small Parts/Musculoskeletal System	0+4	-
DMS-408	Clinical Practice in Abdominal Sonography	0+4	-
DMS-409	Clinical Practice in Obstetrics And Gynecological Sonography-II	0+3	Clinical Practice in Obstetrics and Gynecological Sonography-I
	Total	0+15	

Compulsory Courses

Code	Course title	Type	CrHr	Pre-Requisite
DMS101	English-I (Functional English)	core	3+0	
DMS102	Introduction to Computer Science	core	2+1	
DMS103	Pakistan Studies	core	2+0	
DMS107	Mathematics (Calculus)	core	3+0	
DMS108	Islamic Studies	core	2+0	
DMS109	English-II (Communication Skills)	core	3+0	English-I (Functional English)
DMS303	Research Methods In Sonography	core	3+0	
DMS306	Report Writing Skills	core	3+0	
	Credit Hours		21+1	

University Mandatory Courses

Code	Course title	Type	CrHr	Pre-Requisite
DMS104	Anatomy-I		2+1	
DMS105	Physiology-I		2+1	
DMS106	Pathology-I		2+1	
DMS110	Anatomy-II		2+1	Anatomy-I
DMS111	Physiology-II		2+1	Physiology-I
DMS112	Pathology-II		2+1	Pathology-I
DMS212	Radiation Sciences & Technology		2+1	
DMS313	Computed Tomography (CT)-I		2+1	
DMS414	Echocardiography		1+1	
	Credit Hours		17+9	

Discipline Related Courses

Code	Course title	Type	CrHr	Pre-Requisite
DMS201	Data Base Management Systems		3+0	
DMS202	Introduction to Diagnostic Medical Sonography		3+0	
DMS203	Applications of Medical Sonography		3+0	
DMS204	Scanning Techniques		3+0	
DMS205	Sonography Physics And Instrumentation-I		2+1	

DMS206	Basic Obstetrical and Gynecological Sonography		2+1	
DMS207	Fundamental Understanding of Sonography Technology		3+0	
DMS208	Sonography Physics and Instrumentation-II		2+1	Sonography Physics And Instrumentation-I
DMS209	Basic Abdominal Sonography		2+1	
DMS210	Medical Ethics and Principles		3+0	
DMS301	Advanced Abdominal Sonography		2+1	
DMS302	Sonography Clinical Practicum-I		0+3	
DMS303	Research Methods In Sonography		3+0	
DMS304	Basic Vascular Technology/Doppler Sonography		2+1	
DMS305	Patient Care		2+0	
DMS307	Sonography Clinical Practicum-II		0+3	Sonography Clinical Practicum-I
DMS308	Health Care Data Analysis		2+1	
DMS309	Advanced Vascular Technology/Doppler Sonography		2+1	
DMS310	PACS and DICOM Implementation		3+0	
DMS311	Quality Assurance in Sonography		3+0	
DMS401	Advanced Obstetrical and Gynecological Sonography		2+1	
DMS402	Sonography Clinical Practicum-III		0+3	Sonography Clinical Practicum-II
DMS403	Clinical Practice in Obstetrics and Gynecological Sonography-I		0+3	
DMS404	Sonography of Small Parts/Musculoskeletal System		2+1	
DMS405	Safety in Healthcare Settings		3+0	
DMS406	Clinical Practice in Vascular Ultrasound		0+4	
DMS409	Clinical Practice in Small Parts/Musculoskeletal System		0+4	Clinical Practice in Obstetrics and Gynecological Sonography-I

	Credit Hours		52+30	
	Total Credit Hours		82	