



University of Mosul
College of Science
Chemistry Department
Masters Degree Curriculum



First Semester				
Code	Numbers of Units	Number of hours	Subject	No.
604	2	2	Inorganic Chemistry	1
605	2	2	Organic Chemistry	2
601	2	2	Physical Chemistry	3
602	2	2	Analytical Chemistry	4
603	2	2	Biochemistry	5
606	2	2	Industrial Chemistry	6
Second Semester				
Physical Chemistry				
Code	Numbers of Units	Number of hours	Subject	No.
622	2	2	Electrochemical Methods of Analysis	1
619	2	2	Computational Chemistry	2
621	2	2	Molecular Interactions	3
646	2	2	Surface Chemistry	4
645	2	2	Nanotechnology	5



University of Mosul
College of Science
Chemistry Department
Masters Degree Curriculum



Analytical Chemistry				
Code	Numbers of Units	Number of hours	Subject	No.
637	2	2	Organic Functional Groups Analysis	1
625	2	2	Hyphenated Techniques	2
642	2	2	Molecular Emission & Atomic Absorbance & Laser	3
623	2	2	Kinetic Methods of Analysis	4
Organic Chemistry				
Code	Numbers of Units	Number of hours	Subject	No.
650	2	2	Named Reactions	1
612	2	2	Heterocyclic Chemistry	2
611	2	2	Organic Synthesis	3
609	2	2	Organic Spectrum	4
608	2	2	Stereo Chemistry	5
Inorganic Chemistry				
Code	Numbers of Units	Number of hours	Subject	No.
644	2	2	Transition Metals	1
617	2	2	X-Ray	2
614	2	2	Organometallics	3
609	2	2	Organic Spectrum	4
615	2	2	Coordination Chemistry	5



University of Mosul
College of Science
Chemistry Department
Masters Degree Curriculum



Biochemistry				
Code	Numbers of Units	Number of hours	Subject	No.
631	2	2	Enzymes & Hormones	1
629	2	2	Bio-Techniques	2
655	2	2	Nanoparticles in Biochemistry	3
661	2	2	Metabolic Pathways	4
630	2	2	Clinical Chemistry	5
Industrial Chemistry				
Code	Numbers of Units	Number of hours	Subject	No.
641	2	2	Biopolymer	1
626	2	2	Synthetic Fuel	2
627	2	2	Bituminous Materials	3
639	2	2	Material Science	4
649	2	2	Nano Materials	5
607	2	2	English	6
684	2	2	Research Methodology	7



University of Mosul
College of Science
Chemistry Department
Doctoral Degree Curriculum



First Semester				
Physical Chemistry				
Code	Numbers of Units	Number of hours	Subject	No.
738	2	2	Advanced Physical Spectroscopy	1
756	2	2	Biosensors	2
767	2	2	Supramolecular	3
709	2	2	Physical Organic Chemistry	4
732	2	2	Advanced Computational Chemistry	5
Analytical Chemistry				
Code	Numbers of Units	Number of hours	Subject	No.
719	2	2	Solvent Extraction	1
713	2	2	Electrochemical Analysis	2
722	2	2	Atomic Analysis	3
776	2	2	Drug Analysis	4
Organic Chemistry				
Code	Numbers of Units	Number of hours	Subject	No.
731	2	2	Advanced Heterocyclic Compounds	1
705	2	2	Advanced Organic Synthesis	2
704	2	2	Application of Organic Spectrum	3
703	2	2	Advanced Stereo Chemistry	4
608	2	2	Advanced Named Reaction	5



University of Mosul
College of Science
Chemistry Department
Doctoral Degree Curriculum



Inorganic Chemistry

Code	Numbers of Units	Number of hours	Subject	No.
768	2	2	Lanthanide & Actinide	1
758	2	2	Advanced Coordination Chemistry	2
762	2	2	Donor Acceptor & Theoretical Calculation	3
708	2	2	Magnetic & electronic spectra	4
707	2	2	Advanced X-ray	5

Biochemistry

Code	Numbers of Units	Number of hours	Subject	No.
744	2	2	Oxidant and Antioxidants	1
727	2	2	Molecular biology	2
743	2	2	Lipid metabolism	3
787	2	2	Advanced Enzymes	4
772	2	2	Advanced Hormones	5

Industrial Chemistry

Code	Numbers of Units	Number of hours	Subject	No.
718	2	2	Conversion Processes in Petroleum Industry	1
716	2	2	Advanced Polymer	2
749	2	2	Chromatography	3
765	2	2	Advanced Material Science1	4
704	2	2	Application of Organic Spectrum	5



University of Mosul
College of Science
Chemistry Department
Doctoral Degree Curriculum

