

List of Courses having focus on local, national, regional and global developmental needs offered by the Department of Chemistry (UG)

DEPARTMENT OF CHEMISTRY (UG)						
PROGRAMME: B.Sc., CHEMISTRY						
Course Code	Course Title	Need				Rationale
		Local	National	Regional	Global	
2021 BATCH - V AND VI SEMESTERS						
21UCY507	Core - V : Coordination and Bioinorganic Chemistry		✓	✓	✓	Higher Education, Research & Employment
21UCY508	Core - VI : Organic Chemistry – I					
21UCY509	Core - VII : Electrochemistry				✓	Higher Education, Research & Employment in Electrical sector
21UCY510	Core - VIII : Dye Chemistry				✓	Teaching, Higher Education & Industry
21UCY5E1	Core Elective - I : / Analytical Chemistry – I		✓	✓	✓	Higher education, Research and employment in the Industry
21UCY5E2	Core Elective - I : / Pharmaceutical Chemistry - I				✓	Higher education, Research and employment in the Industry

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21UCY5E3	Core Elective - I : Leather Chemistry				✓	Higher Education, Research & Employment in Industry
21UCY5AL	Advanced Learner Course - I: Environmental Chemistry (Optional) Self Study				✓	Teaching, Higher Education & Industry
21UCY5S1	Skill Based Elective - I : Network and Information Security		✓			Higher Education & Industry
21UCY5S2	Skill Based Elective - I : Cyber security and Ethical Hacking		✓			Higher Education & Industry
21UCY611	Core - IX : Physical Methods and Chemical Structure		✓			Teaching, Higher Education & Industry
21UCY612	Core - X : Organic Chemistry – II				✓	Higher Education, Research & Employment in Textile Industry
21UCY613	Core - XI : Chemical Kinetics and Quantum Mechanics			✓	✓	Higher Education, Research & Employment
21UCY614	Core - XII : Polymer Chemistry				✓	Teaching, Higher education and Industry

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21UCY6E1	Core Elective - II : Analytical Chemistry – II		✓	✓	✓	Higher education, Research and analysis based employment
21UCY6E2	Core Elective - II : Pharmaceutical Chemistry II		✓	✓		Higher Education & Employment in Industry
21UCY6E3	Core Elective - II : Agricultural Chemistry and Analytical Techniques for Agrochemicals		✓	✓		Higher Education & Employment in Industry
21UCY615	Core Lab - III : Gravimetric Analysis and Physical Chemistry Experiments		✓	✓	✓	Higher Education & Employment in Industry
21UCY616	Summer internship			✓	✓	Higher Education & Employment in Industry
21UCY6AL	Advanced Learner Course - II: Applications of Spectroscopy (Optional) Self Study		✓		✓	Higher Education & Employment in Industry
21UCY6S1	Skill Based Elective - II : Green Chemistry				✓	Higher Education & Employment in Industry
21UCY6S2	Skill Based Elective - II : Clean energy		✓		✓	Higher Education & Employment in Industry

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2022 BATCH - III AND IV SEMESTERS						
22UCY304	Core - III : Inorganic and Physical Chemistry				✓	Teaching , Higher Education & Industry
22UCY3N1	Non Major Elective - I : Introduction to Nanotechnology				✓	Teaching & Higher Education
22UCY3N2	Non Major Elective - I : Chemistry of Consumer Products				✓	Teaching & Higher Education
22UCY405	Core - IV : Inorganic, Organic and Physical Chemistry				✓	Teaching , Higher Education & Industry
22UCY406	Core Practical II: Volumetric, Organic Qualitative Analysis and Organic Preparations				✓	Teaching & Higher Education
22UCY4N1	Non Major Elective - II : Textile Chemistry				✓	Teaching & Higher Education
22UCY4N2	Non Major Elective - II : Food Science and Technology				✓	Teaching & Higher Education
22UPS3A4/ 22UBY3A4/ 22UZY3A4	Allied Chemistry Paper - I : Inorganic, Organic and Physical Chemistry				✓	Teaching, Higher Education & Industry
22UPS3A5/	Allied Chemistry Paper - II :				✓	Teaching & Higher

22UBY3A5/ 22UZY3A5	Inorganic, Organic and Physical Chemistry					Education
22UPS3A6/ 22UBY3A6/ 22UZY3A6	Allied Chemistry Practical				✓	Teaching, Higher Education & Industry
2023 BATCH - I AND II SEMESTERS						
23UCY101	CC I : Inorganic and Organic Chemistry				✓	Teaching & Higher Education
23UCY202	CC II : Organic and Physical Chemistry				✓	Higher Education
23UCY203	CC Lab – I : Inorganic Qualitative Analysis				✓	Higher Education

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