

Master of Science (M.Sc) Chemistry

Curriculum - 2024

| Semester | No. | Course | Credit | Nature |
|----------------------|-----|---|--------|-----------|
| Semester 1 | | | | |
| CY5001 | 1 | Principles in Chemistry | 3 | Core |
| CY5003 | 2 | Mathematics for Chemistry | 3 | Core |
| CY5015 | 3 | Atomic and Molecular Structure | 3 | Core |
| CY5005 | 4 | Symmetry, Group Theory and Spectroscopy | 3 | Core |
| CY5009 | 5 | Structure and Properties of Molecules | 3 | Core |
| CY5101 | 6 | Synthesis, Energetics and Dynamics Lab 1 | 2 | Core |
| IDXXXX | 7 | Communication and Technical Writing Skills | 2 | CWC |
| Total Credits | | | | 19 |
| Semester 2 | | | | |
| CY5002 | 1 | Chemistry of Materials | 3 | Core |
| CY5004 | 2 | Molecular Dynamics and Basic Statistical Thermodynamics | 3 | Core |
| CY5006 | 3 | Elucidation of Molecular Structure | 3 | Core |
| CY5008 | 4 | Reaction Mechanisms | 3 | Core |
| CY5102 | 5 | Synthesis, Energetics and Dynamics Lab 2 | 2 | Core |
| CY5104 | 6 | Synthesis, Energetics and Dynamics Lab 3 | 2 | Core |
| Total Credits | | | | 16 |
| Semester 3 | | | | |
| CY5011 | 1 | Dynamics of Charge Transport | 3 | Core |
| CY5013 | 2 | Synthetic Approaches in Chemistry | 3 | Core |
| CY5017 | 3 | Chemistry of Life | 3 | Core |
| CYXXXX | 4 | Elective 1 | 3 | Elective |
| CY5103 | 5 | Advanced Chemistry Laboratory | 2 | Core |
| CYXXXX | 6 | Mini Project | 3 | Core |

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|----------------------|---|--|-----------|----------|
| IDXXXX | 7 | Research Methodology and Professional Ethics | 0 | CWC |
| Total Credits | | | 17 | |
| Semester 4 | | | | |
| CYXXXX | 1 | Elective 2 | 3 | Elective |
| CYXXXX | 2 | Elective 3 | 3 | Elective |
| CYXXXX | 3 | Elective 4 | 3 | Elective |
| CYXXXX | 4 | Major Project | 9 | Core |
| | | Total Credits | 18 | |

Cumulative Credits (4 Semesters): 70

[Syllabus Link](#)