# Programme : M.Sc Chemistry

| Programme Outcome | PO1: Demonstrate and apply the fundamental knowledge of the basic principles in various fields of Chemistry  
|                   | PO2: Create awareness and sense of responsibilities towards environment and apply knowledge to solve the issues related to Environmental pollution.  
|                   | PO3: Apply knowledge to build up small scale industry for developing endogenous product.  
|                   | PO4: Apply various aspects of chemistry in natural products isolations, pharmaceuticals, dyes, textiles, polymers, petroleum products, forensic etc. and also to develop interdisciplinary approach of the subject. |

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<th>Course Name</th>
<th>Course Outcome</th>
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| Chemistry   | CO1-To provide students with the skills required to succeed in teaching industry and to gain professionalism.  
|             | CO2-The students will acquire a knowledge of chemistry in depth and interpret the chemical literature.  
|             | CO3-The students will acquire ability to work in teams with scientific attitude and problem solving aptitude. |
| Inorganic chemistry | CO1-Students will be able to analyze the relation between oxidation state of metals and their biological behaviour.  
|             | CO2- Students will be able to understand the role of metals and chemicals in biological systems. |
| Biology for Chemists | CO1-Student will know about Whittaker system of classification, plant and animal tissue systems, genetic principles, structure and functional aspects of biomolecules.  
|             | CO2-To study the structure and organization of cell membrane and cell wall, process of membrane transport and membrane models.  
|             | CO3- To understand the DNA structural organization and biochemical composition of genetic material.  
|             | CO4-To understand the vascular tissues, structure of woods and anomalous secondary growth, anatomical variations and tissue systems in plant shoot system.  
|             | CO5-To know various tissue systems and understand the normal and anomalous secondary growth in plants |
| Mathematics for Chemists | CO1-Students will be able to know -Matrix and its types, Determinant and its properties.  
|             | CO2-Define the derivative and integral of the trigonometric, logarithmic and inverse trigonometric and rational functions  
|             | CO3-Recognize the different techniques of integration (by parts, trigonometric integrals, partial fractions). definite integrals |
| Physical Chemistry | **CO1**-The aim is to help the students to revise the basic principles of quantum mechanics. Introduction to new operators such as Hermitian and Hamiltonian and their use in the solution of Hydrogen and Hydrogen like atoms.  
**CO2**-Students will also be able to apply quantum postulates in solution of particles in one, two and three dimensional boxes |
| Computer for Chemists | **CO1**-Basic understanding about Computer Understanding the basic concept associated with C- Language and program designing  
**CO2**-Students will develop different programs, Run and Retrieve results. |