PROGRAM SPECIFIC OUTCOME (PSO)

M. Sc. in Chemistry

❖ **PSO-1:**

Vertical progression in the specialized interdisciplinary subjects in the academic career like Post M. Sc and Ph. D in overseas and in India..

❖ PSO-2:

Eligible professions in Teaching, Industries like Chemistry, Medicine, Pharmaceutical, Agricultural Chemistry, Oil industries, Biochemical, Mineral, Hydroelectric, Paint and Dyes industries, etc.

❖ **PSO -3**

Global leaders with profound outlook and trustworthiness convert the top achievers like scientists, industrialists, and international scholars.

Course Code	Course Name	Course Outcome
CEM101	Physical chrmistry 1	Vast knowledge about quantum mechanics, statistical thermodynamics. Conceptual idea about principal of molecular spectroscopy
CEM102	Organic Chemistry 1	A vast knowledge abour organic reagents, synthesis, trasformation and retrosynthesis. Special information about alcaloyed and terpinoyed
CEM103	Inorganic Chemistry 1	First step information about group theory and a vast cenceptual knowledge of solid state, crystalography and bioinorganic chemistry.
CEM104	Food Processing and preservationand computer basics	prely idea abour food constituent and food pigments and knowledge abour food microbiology and food preservation. Introductory knowledge about computer
CEM195	Inorganic Chemistry practical	practical knowledge about gravimetric estimation of metal ions.
CEM196	Food preservation practical	Preparation knowledge about jan jeley with reservatives.
CEM201	Physical chrmistry II	Vast knowledge about quantum mechanics, chemical kinetics, electro chemistry and molecular spectroscopy
CEM202	Organic Chemistry II	Vast knowledge about organic reagents, retro synthesis, and perycyclic reaction. Ceonceptual idea about sterio chemistry.
CEM203	Inorganic Chemistry II	Knowledge about group theory, organometalic compoun,s preparation application, and p, d block elements chemistry.
CEM204	Nanotechnology principal and practical	A conceptual idea about the nano technology principle and practical knowledge related to this.
CEM295	Oranic chemistry Practical	Practical idea abot boiling point determination, use of TLC, and 1H, 13C NMR to identify an organic compounds and some organic compounds preparation.
CEM296	Physical chemistry practical	practical knowledge about the determination of standar potential, dissociation constant, rate constant, CMC of a surfactance liquid, composition of complex. Pactical experience about fluorecence quenching.
CEM301	Advance spectroscopy-I	Vast knowledge about photophysical process, laser and its application, EPR, PES and NQR spectro scopy.

CEM302	Advanced physical chemistry I	Vast knowledge about Stationary perturbation theory, quentam mechanics and semiclasical treatement of radiation matter interaction
CEM303	Advance physical chemistry II	A deep knowledge about solid state chenistry, statistical mechanics and nonequilibrium thermodynamics.
CEM302	Advance Inorganic Chemistry I	A deep knowledge about Organometalic chemistry and catalysis and chemical application of group theory.
CEM303	Advance Inorganic Chemistry II	Gathering of a lots of knowledge about bioinorganic chemistry and inorganic photovhemistry
CEM302	Advanced organic Chemistry I	A deep knowledge about Organometalic chemistry and catalysis and chemical application of group theory.

CEM303	Advanced organic Chemistry II	a knowledge of bioorganic chemistry, supramolecular chemistry, nuclic acid and green chemistry.
C-CEM304	Introduction to Pharmaceutical chemistry	concept of knowledge about defination and clasification of drugs, an idea about antimaleria drug.
CEM395	Chemistry Project II	First step knowledge of chemistry research through project.
CEM401	Advanced spectroscopy II	A broad idea about NMR, mass, UV, IR spectroscopy.
CEM402	Advance physical chemistry III	A lots of knowledge about atomic spectroscopy, and application of perturbation theory.
CEM403	Advance physical chemistry IV	A knowledge about chemical kinetics, macromolecules, biopolymers and electrochemistry.
CEM404	Chemistry in Technology	knowledge about structure and function of biomolecules, practical uses of electron microscopy, CD, fluorescence microscopy, and going to familiar with corrotion technology
CEM402	Advanced inorganic Chemistry III	A deep knowledge about magnetomemistry and metal carbonyl and clusture.
CEM403	Advanced inorganic Chemistry IV	knowledge about inorganic reaction mechanism, basic principle of CV and coulometry
CEM404	Chemistry in Technology	knowledge about structure and function of biomolecules, practical uses of electron microscopy, CD, fluorescence microscopy, and going to familiar with corrotion technology
CEM402	Advanced Organic ChemistryIII	Knowledge about organic photochemistry, property of some biological active molecules, vitamins and coenzymes.
CEM403	Advanced organic chemistryIV	A large knowledge about steriochemistry
CEM404	Chemical principles in food science and technology	A concept developed about science and technology of diary processing, cereal processing, fats and oil processing, quality control and food sefty.
CEM495	Chemistry Project II	First learning of chemical research