## **Programme outcome- Chemistry**

Chemistry advances on two feet. One is utility and one is curiosity.

- 1. Applications of chemical science have contributed significantly to the advancement of human civilization.
- 2. Chemistry is essential the study of materials & the development of new materials for the betterment of humanity.
- 3. Food additives such as preservation, sweetening agents, flavor, anti-oxidants and nutritional supplements are added to the food to make attractive, palatable and nutritive value.
- 4. The chemical industry has been vital sector for the modern industrialized economy. Several high technology industry based on chemical science are –
- i. Agricultural chemical
- ii. Electronic reagents
- iii. Paints & solvents
- iv. Petrochemical feed stocks.
- v. Soaps and detergents.
- 5. The production, processing and use of chemicals in modern society has been accomplished by global scale environment pollution, natural source depletion and health impacts.
- 6. The depletion of the stratospheric ozone layer by CFCs and the bioaccumulation of chlorinated organic pesticides in the food chain demonstrate the need for more comprehensive consideration of the potential impacts of chemical used in society.
- 7. Chemist and chemistry students are trained to design, optimize and evaluate chemical synthetic pathways based on the selectivity and/ or yield of a reaction step.
- 8. Chemical science provides innovation such as development of specific cements, mortars and later on, concrete glasses and plastics allowed urbanization on massive scale.
- Chemical synthesis process use organic and in-organic chemicals in batch operations to produce drugs substances with unique physical and pharma properties.
- 10. Chemical science plays a vital role in drug design, drug discovery, medicinal chemistry, process chemistry and pharmaceutical chemistry.
- 11. The students will understand the inter disciplinary nature of chemistry and integrate knowledge of mathematics, physics and other disciplines to a wide variety of chemical problems.
- 12. Chemistry is the study of every day life.