Introduction

✓ Process engineering

Process engineering focuses on the design, operation, control, and optimization of chemical, physical, and biological processes through the help of systematic computer-based methods. Process engineering encompasses a vast range of industries, such as petrochemical, mineral processing, food, pharmaceutical and biotechnological industries.

✓ Environmental Process Engineering

Environmental Process Engineering is a multidisciplinary field combining aspects of mechanical, chemical, thermal and biotechnological process engineering. It focuses on the design and operation of industrial processes with minimum impacts on the environment (improve our planet by designing systems that treat water, air, and soil.

✓ Food engineering

Food engineering is a multidisciplinary field that interprets and applies principles of engineering, science, and mathematics to food manufacturing and operations, including the processing, production, storage, conservation, control, and distribution of food products. Due to the complex nature of food materials, food engineering also combines the study of more specific chemical and physical concepts such as biochemistry, microbiology, food chemistry, and heat transfer.

✓ Pharmaceutical engineering

Pharmaceutical engineering is a branch of pharmaceutical science and technology that involves development and manufacturing of products, processes, and components in pharmaceuticals industry. The specific field of « pharmaceutical engineering » has only emerged recently as a distinct engineering discipline. This now brings the problem-solving principles and quantitative training of engineering to complement the other scientific fields already involved in drug development.