

- Mechanical Engineering:** Design, development, modification, implementation or use of mechanical devices, machinery, or tools.
- Industrial Engineering:** Managing and improving the economical use of people and equipment through application of cost and work standards and enhancement of the working environment.
- Materials Engineering:** Analysis, selection, and utilization of materials including metals, ceramics, polymers, and semiconductors.
- Structural Engineering:** The application of engineering principles to civil engineering problems, including selection of construction materials for structures.
- Chemical Engineering:** Design and manufacture of products, processes, and operations involving basic chemical materials or chemical change.
- Electrical Engineering:** Design, construction, and operation of electrical systems and equipment.
- Environmental Engineering:** Using technology to reduce or prevent the pollution or degradation of the environment.

## Areas of Expertise:

The kinds of problems SATOP can address include, *but are not limited to*:

- Manufacturing and Assembly
- Machinery
- Precision Machining
- Production Processes
- Robotics and Automation
- Logistics
- Fluidics, Pneumatics and Hydraulics
- Sensors and Detectors
- Controllers and Control Systems
- Actuators, Regulators, Motion Control
- Measurement and Testing
- Statistical Analysis
- Instrumentation
- Fiber Optics
- Optical
- Image Processing
- Electronics
- Electrical Circuitry
- Facilities Design, Maintenance & Operation
- Power Systems
- Fuel Cells
- Chemical or Material Selection and Use
- Chemical Analysis
- Physical Testing of Materials

Please note that SATOP does not accept computer related requests, this includes software engineering or information technology.