## **Pathway Rotational Program**

# Body of Knowledge: Operations

## **Engineering fundamentals**

Basic understanding of product/design engineering, manufacturing engineering, including multi-layered bills of materials (BOMs), routers, engineering systems, engineering changes and implementation.

#### **Process flow fundamentals**

Understanding the flow from order to delivery in a manufacturing environment including, routing, standard time, scheduling techniques, capacity management and queuing and simulation.

## Supply chain management

Understanding of supply chain functions including planning and purchasing functions, ERP and supply chain management tools including vendor management tools and metrics.

## **Standard costing**

Understand elements of standard costing and variances.

### Quality

Know all the elements of quality assurance and quality control including ISO and API, document control, quality tools including non-conformances, corrective and preventive actions, lean manufacturing and process improvement.

## Health, safety and environment

Have a working knowledge of NOV Safety Standards.

### **Resource planning**

Have a functional knowledge of MRP/ERP including backward scheduling, significance of dates, demand management and forecasting, distribution requirements planning and inventory.

#### **Organizational navigation**

Understand the various parts of the organization, how operations interfaces with them, and what they require from engineering.



