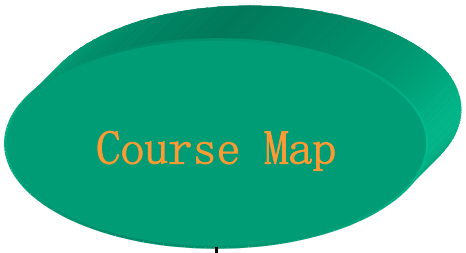
PRODUCTION EXECUTION

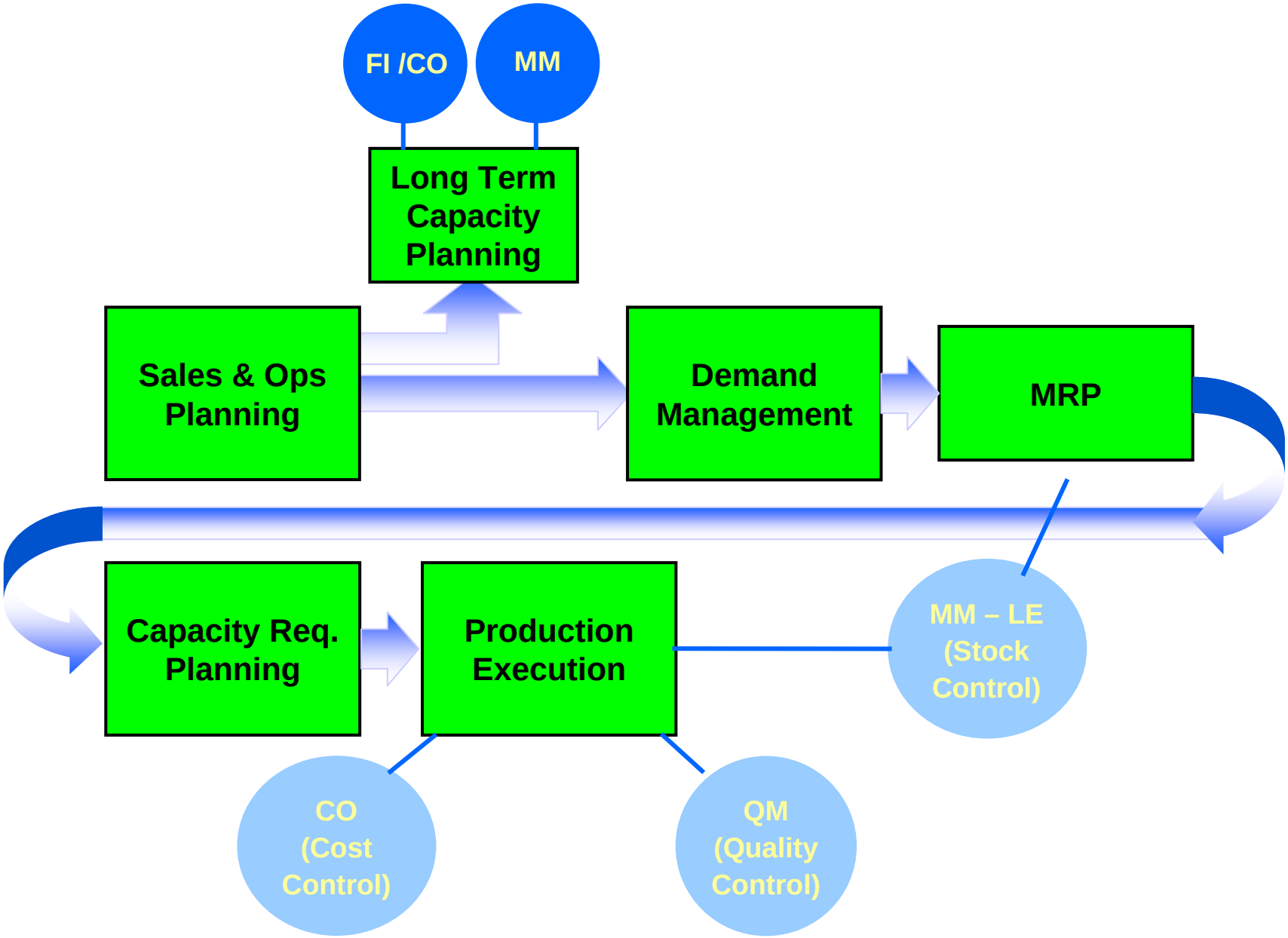
Table of contents



What is Production Planning?

- Production Planning is the process of aligning forecasts with manufacturing capability to create production and procurement schedules for finished products and component materials.
- It also tracks and records the detail of the manufacturing process, for example, the planned and actual costs and material flows
- It is fully integrated with the other SAP modules: SD, MM, LE, QM, CO

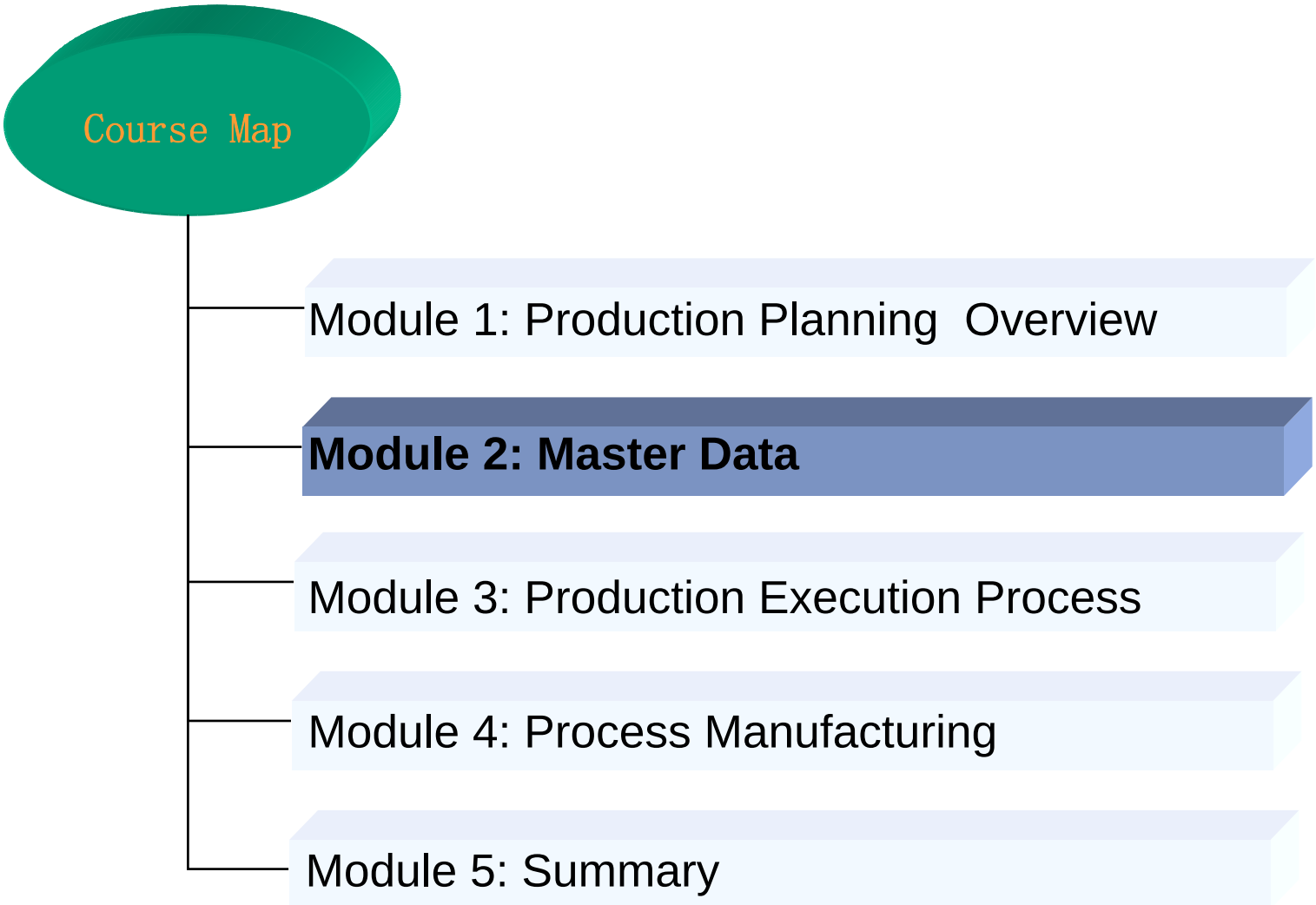
PP flow & Integration



Course Objectives

- Understand the principles of Production Execution
- Define the material staging process
- Describe how to confirm operations in orders
- Explain now to back flush components
- Describe how to deal with failed backflushes and make manual corrections
- Perform Production Execution transactions

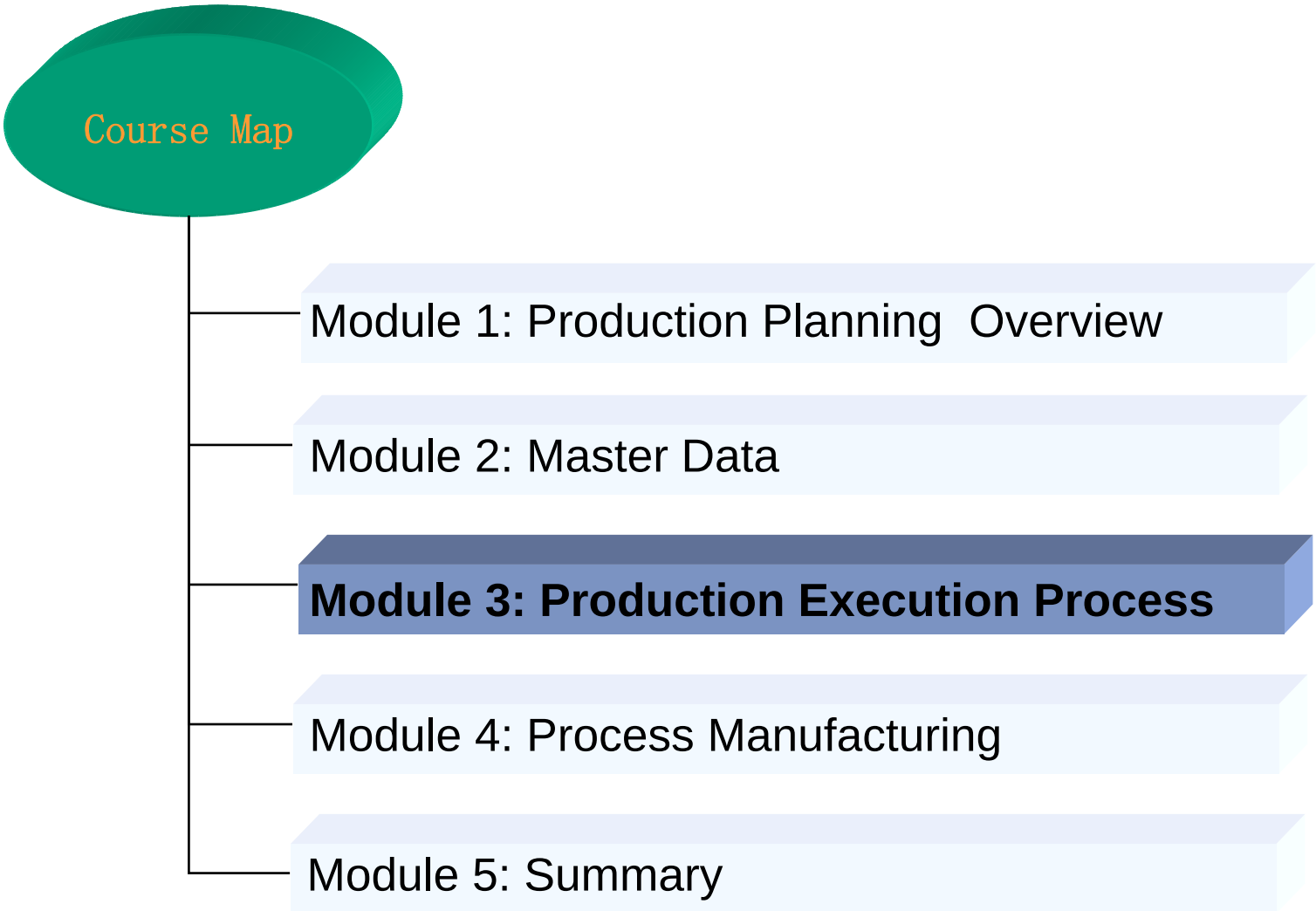
Table of contents



Master Data Related Transactions

- Practice the following transactions
  - MM03 – Display Material Master
  - C203 – Display Master Recipe
  - CRC3 – Display Resource
  - CR03 – Display Work Center

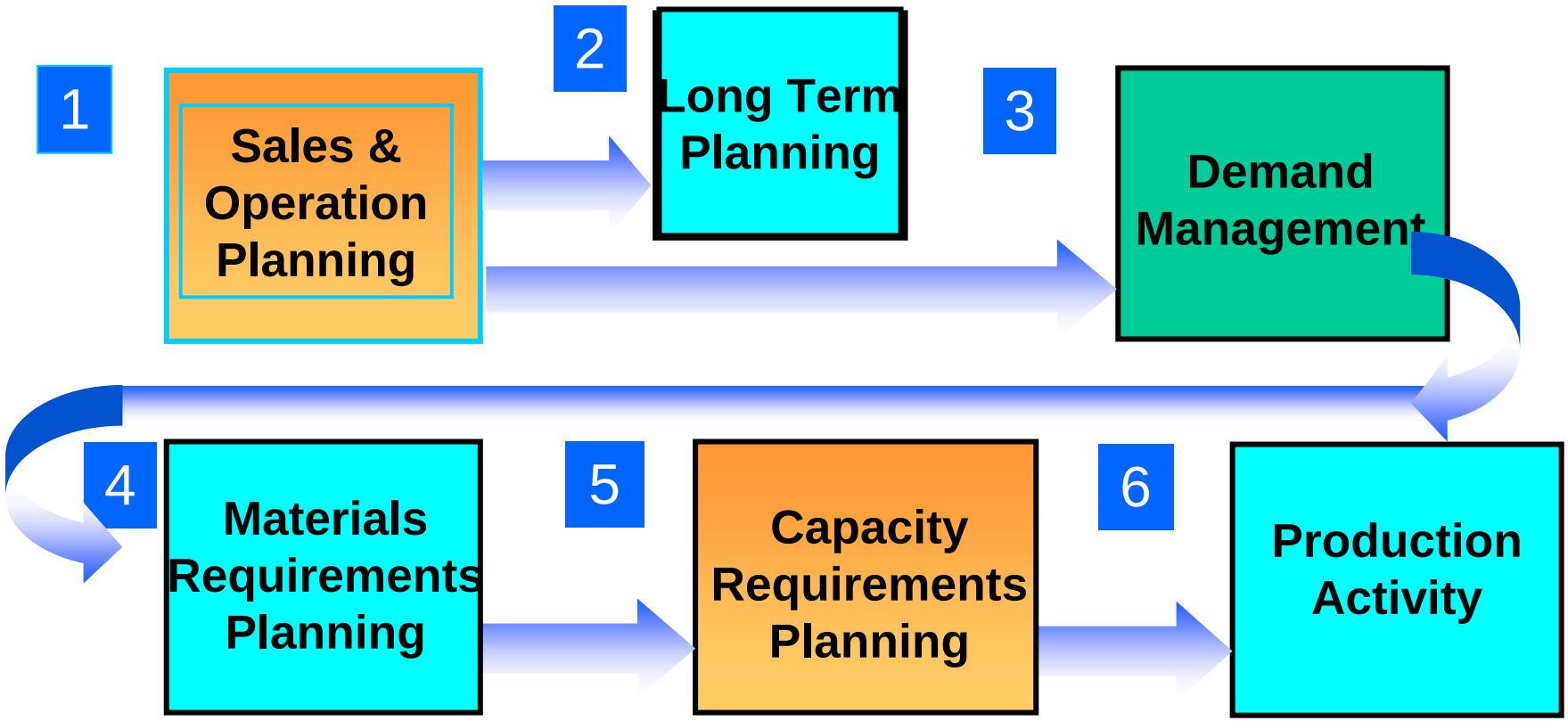
Table of contents



What is Production Execution?

- Production Execution is the final part of the Production Planning process
- The availability of materials for production is checked in the production location. The transfer of any shortages is requested using the staging transaction.
- As orders are completed, order operations are confirmed. Material and utility usage is recorded by ‘back-flush’

Production Planning Processes



Production Execution Process Flow

PRODUCTION EXECUTION

PLANNING

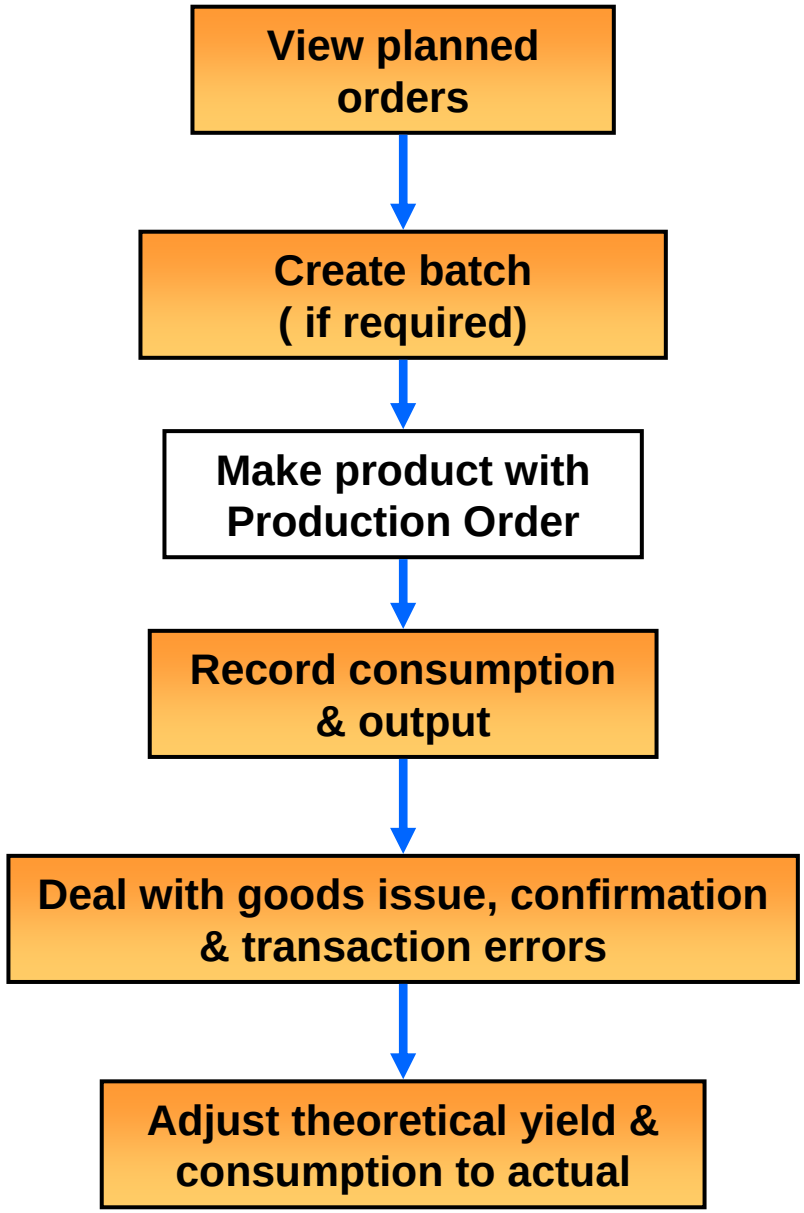
PRODUCT

INPUTS

PROCESS

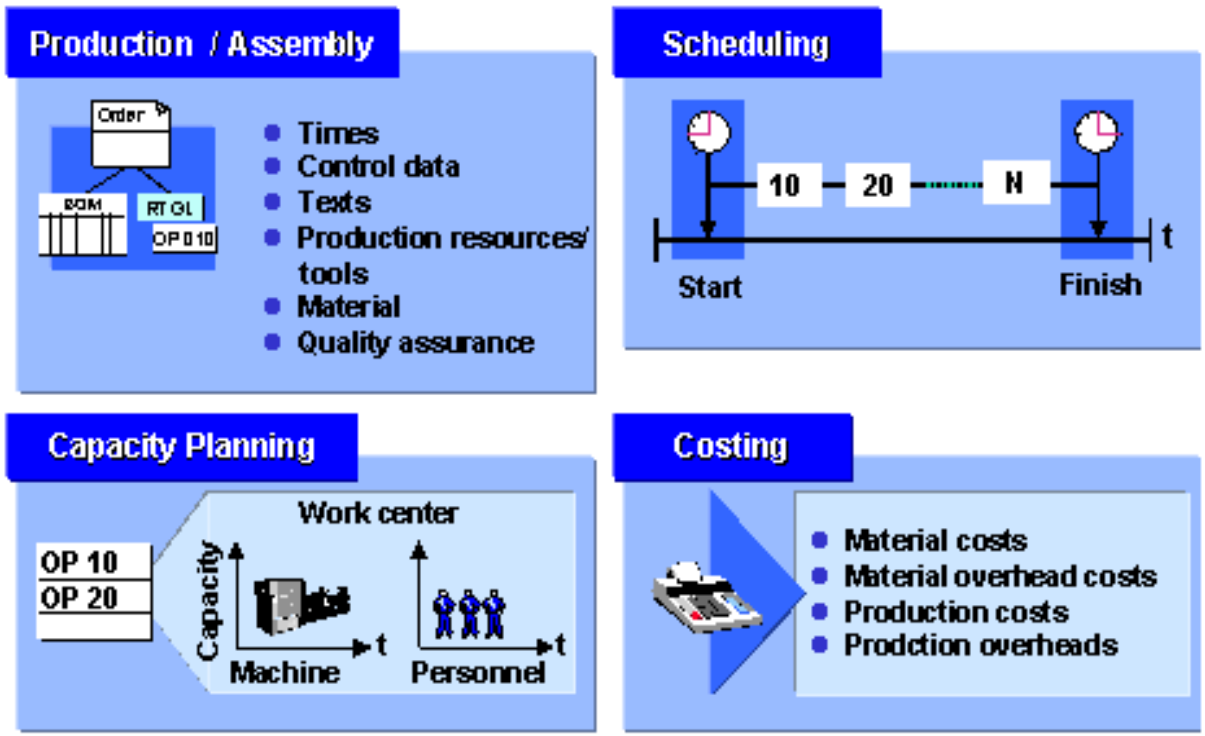
OUTPUTS

Production Execution Process



Production order

A production order defines which material is to be processed, at which location, at what time and how much work is required. It also defines which resources are to be used and how the order costs are to be settled.



Order Status

- **Created** – Order is created and changes can be made
- **Released** – Order released, suggested not to make any change
- **Partially confirmed** – Production qty/activity partially confirmed
- **Fully confirmed** – Production qty/activity fully confirmed
- **Delivery completed** – Entire order quantity has been received
- **Technically completed** – Order processing is over, ready for month end processing by accounts

Confirmation of Production Orders

- **Confirmation for operation** – Reporting of yield quantity and consumed activities and utilities for specific order and at specific operation.
- **Milestone confirmation** – Reporting of yield quantity and consumed activities and utilities for a specific order and specific operation. This confirms of all the previous operations in the order.
- **Collective confirmation** - Reporting of yield quantity and consumed activities and utilities for many orders.

Manufacturing Month End Process

- **WIP calculation**
  - Work in progress are the items which are issued from the stores and the process is not completed and lying in the shop floor. WIP is calculated by costing and reported in the inventory value.
- **Variance calculation**
  - Variance is the difference between planned and actual consumption of material, activity and utilities. It is calculated at the end of the month.
- **Settlement of order**
  - Calculated variance for each order are settled to the costing objects according to the costing methodology and procedures.

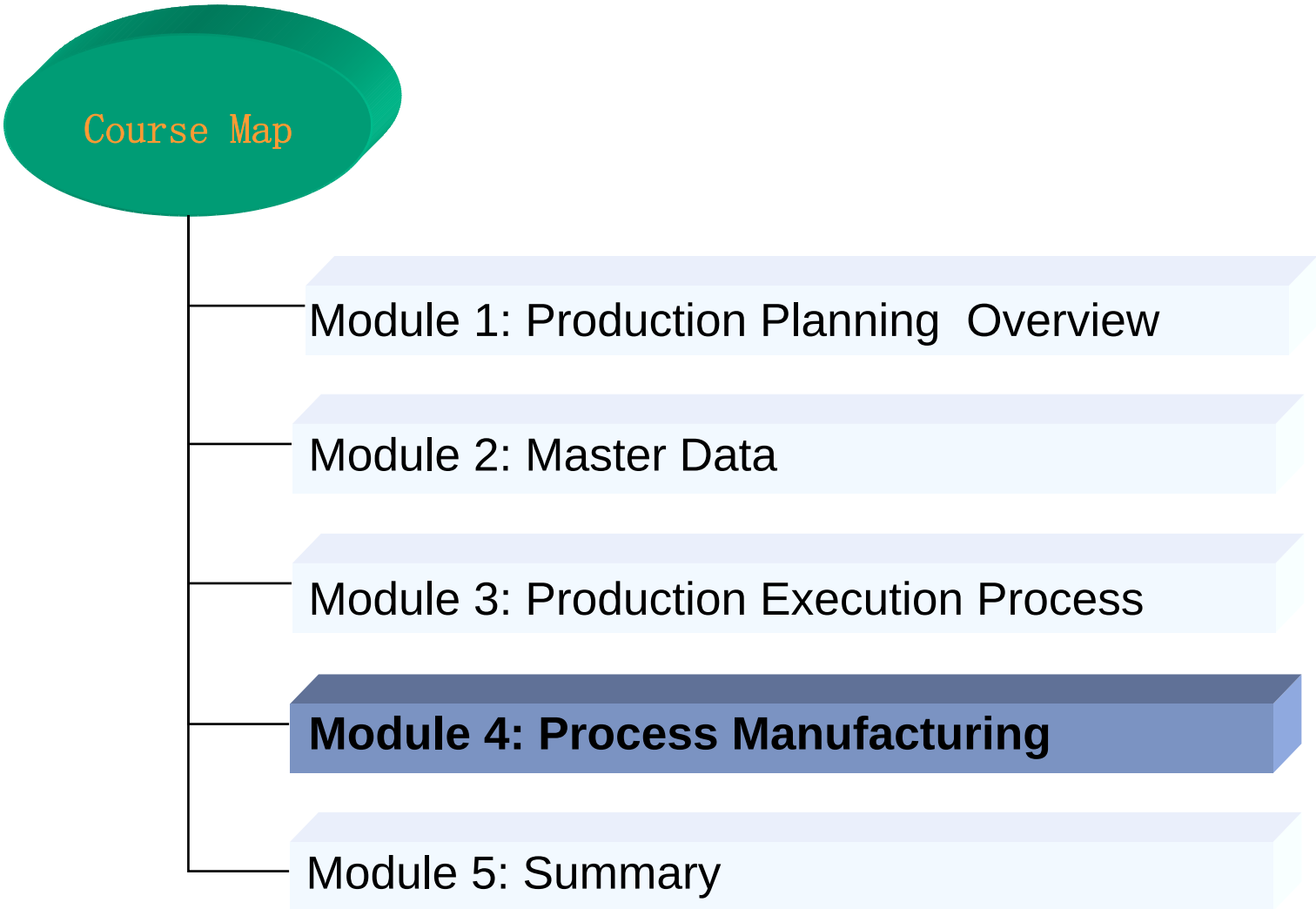
Demonstration and Exercises

- Practice the following transactions
  - MMBE – Stock overview
  - MD16 – Display planned orders
  - MD04 – Stock requirement list and convert planned order to production order
  - MIGO – Goods issue to production order
  - MIGO – Goods receipt for production order
  - CO15 – Confirmation for order

Who is Responsible for Production Execution?

- **Plant Operations**
  - Responsible for the detailed control of manufacturing orders, including material staging, printing of any shop floor documents and recording of produced quantities. These quantities will also cause the issue of the appropriate quantities of raw materials and components via backflushing

Table of contents

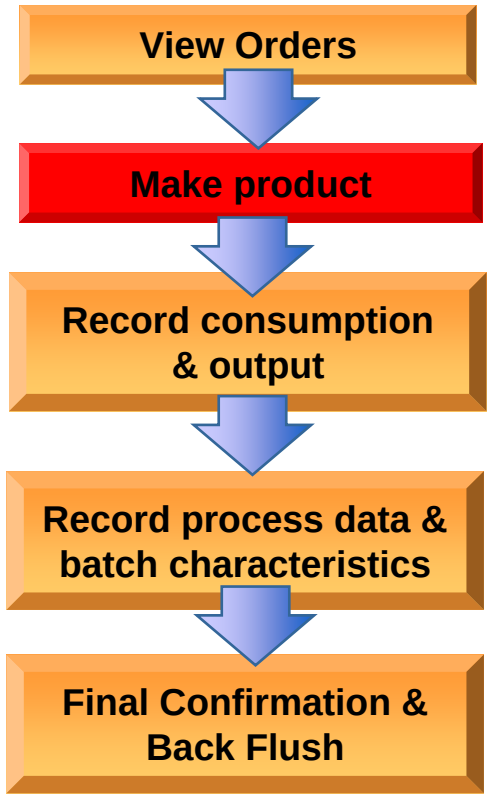


Process manufacturing

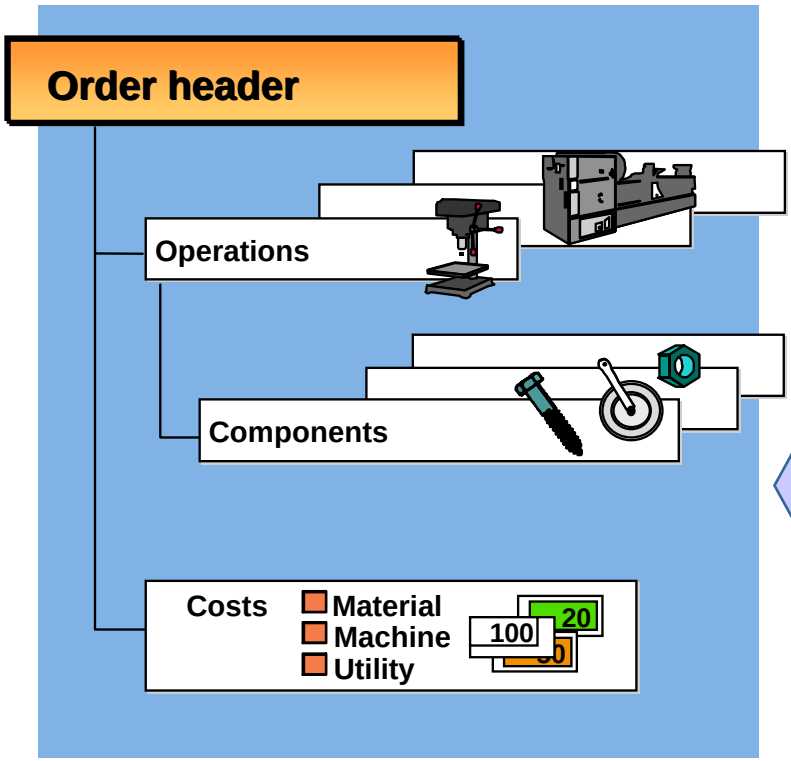
- Process manufacturing is used in processing areas as it gives greater control over very complex processes

- Process manufacturing allows the end user to input very specific information across multi steps easily.

Process - Manufacturing Procedures



Confirmation – Production / Process Orders



Confirmation functions

- Output goods receipt
- Backflush components
- Backflush utilities
- Reduce capacity requirements
- Determine actual costs

Confirmation status

- Partial confirmation
- Final confirmation

Transactions

- Practice the following Transactions

  - MMBE – Stock Overview
  - COID – Display Process Order
  - MSC1N – Create Batch
  - CORK – Process order confirmation

Transactions

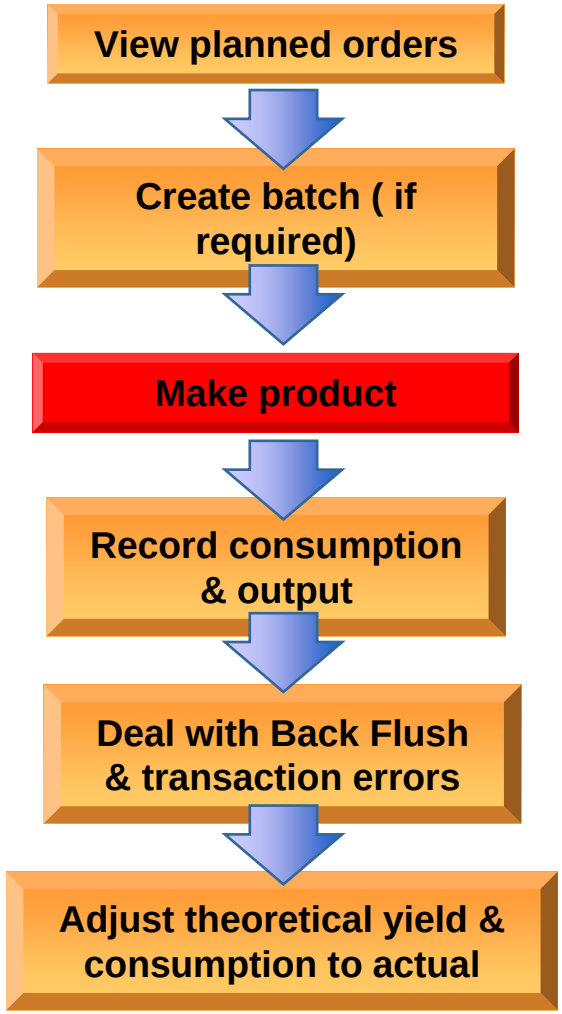
- Practice the following Transactions
  - COR2 – Process Order change
  - CORS – Cancel Process Order
  - COIO – Process Order Report
  - MCRV – Process Order
  - MCRE – Material Usage
  - KKBC-HOE – Product Cost analysis

Repetitive manufacturing

- Repetitive manufacturing is used for materials that are produced in a repetitive environment, where the process is ongoing

- Repetitive manufacturing is very flexible in its application and is an excellent tool for repetitive processes

Repetitive manufacturing Procedures



Rep.Mfg.Related Transactions

- Practice the following Transactions

  - MMBE – Stock Overview
  - MF51 – Production list report
  - MSC1N – Create Batch
  - MFBF – Back Flushes

Report Related Transactions

- Practice the following Transactions

  - COGI – Post processing components
  - MF41 – Month-End Corrections
  - MCRE – Material Usage
  - MCP6 – Goods Receipt
  - KKBC-HOE – Product Cost analysis