



University of Pretoria Yearbook 2020

Operational management 310 (BOB 310)

Qualification Undergraduate

Faculty [Faculty of Engineering, Built Environment and Information Technology](#)

Module content Introduction to operations management, operations strategy and competitiveness. World-class and agile manufacturing. Operations planning in the service industries. The manufacturing management environment. Batching principles (EOQ and DEL). Manufacturing planning and control systems. Sales and operations planning. Capacity planning and control. Demand management. Master production scheduling. Materials requirements planning (MRP). Distribution requirements planning. Just-in-time (JIT) manufacturing. Synchronous manufacturing (Theory of constraints). Comparing MRP, JIT and TOC. Shop-floor scheduling and control. Integration and implementation of manufacturing planning and control systems. Enterprise Resource Planning (ERP) systems. Business process transformation.

Module credits 16.00

Programmes [BEng Industrial Engineering](#)

[BEng Industrial Engineering ENGAGE](#)

Prerequisites No prerequisites.

Contact time 2 practicals per week, 4 lectures per week

Language of tuition Module is presented in English

Department Industrial and Systems Engineering

Period of presentation Semester 1

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