This course deals with the quantitative aspects of design and analysis of production operations management. Emphasis is on identification, analysis, and solution implementation of production problems using applied quantitative techniques within each of the four phases of the Systems Decision Process (SDP). Practical exercises reinforce the problem-solving techniques necessary for today’s successful military and civilian engineering managers and systems engineers. Specific methods and techniques taught and applied are operations strategy, product design and selection, supply chain management, total quality management, forecasting, capacity planning, facility location, facility layout, work system design, inventory management, material requirements planning, and scheduling. This course is required for those pursuing the Engineering Management major, the Systems Engineering major, and the Systems Management major. Cadets will spend two to four lessons in a computer lab environment.

**Lessons:** 40 @ 55 min (2.500 Att/wk)  
**Labs:** 0 @ 0 min

**Special Requirements:**  
None

**Prerequisite(s):**  
MA206