An understanding of wood supply management is a prerequisite for efficient forest operations. We present a practice-based component to the curriculum currently used in Sweden to train masters-level foresters for industrial wood supply. Based on a simplified framework of professional tasks, eight key learning outcomes are targeted; one focuses on raw material requirements, three on securing supply, three on enabling delivery and one on control and coordination of supply operations. Sixteen exercises are presented to meet the eight learning outcomes. They are described as well as the pedagogical approach used. Current training is focused on developing student understanding of the industrial context as well as competences and skills required to solve the common professional tasks. The learning outcomes are also coupled with different operations research areas. The match between current tasks and applicable OR-methodology including both models and methods are therefore addressed.