

Course Information

CM 665 Construction Equipment Management

- Instructor:** Scott J. Amos, PhD, PE, CPC
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- Description:** Course addresses equipment and methods used in building, heavy-highway and utility construction; equipment and crew productivity; ownership and operating costs; production rates and operating characteristics of major construction equipment and operations. Critical thinking, leadership and management skills, written and verbal communication, and listening skills vital to the role and responsibilities of a professional constructor are developed and enhanced.
- Objectives:** This course is designed to give you
- an introduction to equipment management and productivity;
 - detailed information on the cost of owning and operating construction equipment; and
 - detailed information about equipment productivity and the scheduling of equipment-intensive construction operations.
- Prerequisite:** CM prerequisites are graduate standing or permission of instructor. The ability developed through undergraduate training to analyze cases, think critically, and express yourself in writing.
- Text:** *Construction Equipment Management for Engineers, Estimators, and Owners*, by Gransberg, Popescu, and Ryan; CRC Press, 2006. ISBN 0-8493-4037-3
Note: Text is subject to change as new texts and/or versions become available.
- Course Site:** <https://d2l.sdbor.edu/>
All course materials, schedules, learning objectives, assignments, and supplementary materials are posted to a D2L course site that is accessible to enrolled students beginning the first day of the semester.
- Topical Coverage:**
1. Equipment ownership and operating costs.
 2. Economic life and replacement policy
 3. Optimize mix of equipment
 4. Equipment productivity
 5. Maximize profit
 6. Linear and precedence scheduling methods
 7. Equipment selection
 8. OSHA job safety analysis
 9. Major equipment fleet management issues.
 10. Emerging technologies that relate to equipment fleet management.

**Onsite or
Distance?**

All CM course offerings serve both onsite and distance learners simultaneously in a common section (M840T).

**Course
Delivery:**

This course will be delivered in the HyFlex format. HyFlex represents an approach to creating and managing blended courses that provides students even greater choices when trying to manage their time. Hyflex, (Hybrid/Flexible), allows a student to choose whether they will attend a face-to-face class, or complete the required work online for any particular class date. Hybrid – combines both online and face-to-face teaching and learning activities. Flexible – students may choose whether or not to attend face-to-face sessions ... with no “learning deficit.”