

## ENGINEERING MANAGEMENT

<https://www.uvm.edu/cems> (<https://www.uvm.edu/cems/>)

### OVERVIEW

The Master of Science in Engineering Management (M.S. in EM) is a professional degree with optional disciplinary tracks, and is available as a regular coursework only M.S., and project-based M.S., as well as an Accelerated Master's Program for undergraduates majoring in Engineering, Engineering Management, or Computer Science. Students may have a B.S. in Engineering from an ABET-accredited institution, a B.S. in Engineering Management or Computer Science, an unaccredited B.S. in Engineering, or physical sciences. Those without an accredited degree may have to take additional courses to achieve equivalency of background.

### DEGREES

Engineering Management AMP (<http://catalogue.uvm.edu/graduate/engineeringmanagement/engineeringmanagementamp/>)  
 Engineering Management M.S. (<http://catalogue.uvm.edu/graduate/engineeringmanagement/engineeringmanagements/>)

### FACULTY

**Burkman, Kenneth<sup>P</sup>**; Senior Lecturer, Department of Engineering Management; MS, Naval Postgraduate School

**Buzas, Jeff Sandor**; Professor, Department of Mathematics and Statistics; PHD, North Carolina State University Raleigh

**Dewoolkar, Mandar M.**; Professor, Civil and Environmental Engineering; PHD, University of Colorado Boulder

**Dubief, Yves C.**; Associate Professor Department of Mechanical Engineering; PHD, Institut National Polytechnique de Grenoble

**Frolik, Jeff L.**; Professor, Department of Electrical and Biomedical Engineering; PHD, University of Michigan Ann Arbor

**Huston, Dryver R.**; Professor, Department of Mechanical Engineering; PHD, Princeton University

**Lucas, Marilyn T.**; Associate Professor, Grossman School of Business; PHD, University of Illinois Urbana-Champaign

**Monsen, Erik**; Associate Professor, Grossman School of Business; PHD, University of Colorado at Boulder

<sup>P</sup> Practitioner-based appointment

### Courses

#### **EMGT 201. Engineering Project Management. 3 Credits.**

Principles of project management on designing, building/manufacturing engineering facilities, processes, products and structures; metrics for managing quality, schedule, and financial performance of projects; services and product procurement; project financial management; legal and insurance aspects. Prerequisites: Minimum Senior standing in Engineering.

#### **EMGT 254. Optimization in Ops Research. 3 Credits.**

Students develop and refine their ability to build optimization models for a wide range of business and engineering decisions. Provides a sound conceptual understanding of mathematical optimization and learn techniques used for solving real-world problems. Emphasizes model formulation and the mathematics of commonly used algorithms. Prerequisites: MATH 121; MATH 122 or MATH 124.

#### **EMGT 391. Master's Thesis Research. 1-18 Credits.**

#### **EMGT 392. Independent Study. 1-18 Credits.**

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

#### **EMGT 396. Advanced Special Topics. 1-18 Credits.**

See Schedule of Courses for specific titles.