

CONSTRUCTION MANAGEMENT (CMG)

CMG 110 OSHA 10 Hour for the Construction Trades (0.5 Credits)

7.5 lecture, 4.5 lab

Students will be trained on the requirements established by the federal Occupational Safety and Health Administration for the OSHA 10-hour Safety Certification. Level I Prerequisite: Academic Reading Level 3; Academic Writing Level 3

CMG 125 Introduction to Engineering Design Technology (4 Credits)

45 lecture, 30 lab, 4 total contact hours

In this course, students are introduced to various production and engineering drawings as well as modeling used in advanced technology fields such as automotive, manufacturing, prototyping and construction technology. Students will identify plan symbols and graphics and be introduced to several methods used in automated design software. Level I Prerequisite: Academic Reading and Writing Levels of 6; Academic Math Level 3

CMG 130 Construction Site Safety and OSHA Regulations (3 Credits)

45 lecture, 3 total contact hours

In this course students will learn about safe work practices required by the Michigan Occupational Safety and Health Act (MIOSHA) and the Federal Occupational Safety and Health Administration (OSHA) as they apply to construction site safety. Topics include personal protective equipment (PPE); hand, portable and stationary power tools and equipment; construction site safety; MIOSHA and OSHA standards; HAZMAT; and an investigation into the philosophical, social, economic, and technological basis for safety. Students who successfully complete the course can receive an OSHA-30 Hour card. Level I Prerequisite: Academic Reading and Writing Levels of 6

CMG 150 Introduction to Construction Management (3 Credits)

45 lecture, 3 total contact hours

In this course students will learn basic concepts of construction site management. The course will focus on effective project development, planning, and scheduling. Topics will include site development, material usage and specifications, cost estimates and management, contract compliance, and task scheduling. Level I Prerequisite: Academic Reading and Writing Levels of 6

CMG 170 Construction Graphics (3 Credits)

45 lecture, 3 total contact hours

In this course, students will be introduced to the graphics communication used in the construction industry. Topics include symbols and conventions, terminology, plan organizations, basic material take-off techniques, labor and equipment, and construction math techniques. Students will use prints, drawings and CAD and will be required to sketch small construction projects. Level I Prerequisite: Academic Reading and Writing Levels of 6; Academic Math Level 2

CMG 180 Application of Construction Materials (3 Credits)

30 lecture, 15 lab, 3 total contact hours

The purpose of this course is to give students an overview of the basic properties and use of construction materials. Students will be required to attend lecture and lab to analyze basic materials that include: soils, concrete, masonry, steel, wood, plastic, finishes, and thermal. Level I Prerequisite: Academic Reading and Writing Levels of 6; CMG 150 minimum grade "C"

CMG 200 Construction Systems (3 Credits)

45 lecture, 3 total contact hours

This course covers structural systems, associated non-structural components, and consideration appropriate to mechanical, electrical, plumbing, and support equipment. Level I Prerequisite: Academic Reading and Writing Levels of 6; CMG 170 minimum grade "C"

CMG 225 Construction Builders License (4 Credits)

60 lecture, 4 total contact hours

In this course, students will prepare for and practice taking the State of Michigan Builders License Exam. Topics such as building science, business management, construction law, and construction safety standards will be addressed. Students will estimate building materials and labor needed for a small project. This course contains material previously taught in CON 220. Level I Prerequisite: Academic Reading and Writing Levels of 6