

CONSTRUCTION AND TRADE MGMT (CTM)

CTM 2000. Codes and Compliance in Construction and Trades. (3 Credits)

This course addresses building codes, safety codes, protocol, best practices, training, and permitting. Regulatory agencies, such as International Code Council, ADA, MSHA, and OSHA and how to interpret and work within these codes and regulations are also addressed.

CTM 2100. Intro to Construction Methods, Materials, and Systems. (3 Credits)

This course is an introduction to design and construction methods, materials, systems, processes will be addressed. Building technical construction and trades knowledge for commercial and residential projects. Site selection process, competing resources in vicinity, civil issues. Students will tailor this to their specific area of interest (residential construction, commercial construction, plumbing, carpentry, electrician, aggregates, etc.) in a self-directed project. Students will research, apply, and report on specific methods, materials, and systems used in the field.

CTM 2200. Architectural Design and Technology. (3 Credits)

This course introduces students to the fundamentals of construction documentation. Students will learn to read and interpret the complex 'design-intent' construction drawings and material specification sections produced by the architect, engineers, and designers. Students will learn basic proficiency of Bluebeam PDF Revu software to navigate, comment, and track within the construction documents.

CTM 3000. Legal & Ethical Issues in Construction and Trades. (3 Credits)

This course covers legal issues, especially with contracts. Insurance and managing risk and liability will be covered. Risks to the project budget, schedule, and quality. Hiring and firing of workers. Working with unions, worker populations, and diverse others. Tax rates, incentives. Code(s) of ethics for practitioners and how a Christian, ethical framework applies as the Christian worldview is our imperative for acting ethically.

CTM 3100. Advanced Construction Methods, Materials, and Systems. (3 Credits)

This course covers advanced design and construction methods, materials, systems, processes will be addressed. Mechanical, electrical, and plumbing applications and systems. Field work (i.e. coop or internship) will be required in this capstone course.