TCM Construction Management

TCM 5330G  Green Building and Sustainable Construction  
3 Credit Hours.  3 Lecture Hours.  0 Lab Hours.  
This course is a study of advanced topics in green construction beginning  
with the philosophy behind sustainability related technology and its  
implementation. The course provides a thorough expansion on LEED  
(Leadership in Energy and Environmental Design) core concepts including  
construction and design for sustainable sites, water efficiency, energy  
& atmosphere, materials & resources, indoor environmental quality  
and innovation and design. The course also examines sustainable  
construction methodologies and their associated environmental impacts.  
Graduate students will be required to complete individual advanced level  
research in an area beyond the scope of the undergraduate requirements  
that demonstrates a higher level of mastery in the subject matter with  
additional required deliverables representative of graduate level work, as  
determined by the instructor.  
Prerequisite(s): A minimum grade of "C" in TCM 1131 and TCM 2234  
or permission of instructor.  
Cross Listing(s): TCM 5330.

TCM 5333G  Building Information Modeling  
3 Credit Hours.  2 Lecture Hours.  2 Lab Hours.  
This course is an introduction to building information modeling (BIM). It  
highlights the strength of BIM in promoting productivity and profitability in  
civil engineering and construction. Topics include the history of information  
modeling technology and its impacts on civil engineering and construction;  
popular software applications and basic modeling techniques; and  
implementation of BIM authoring and analysis tools for project delivery.  
Emphasis is placed on hands-on modeling techniques, and problem-  
solving using modern BIM technologies. Graduate students will be  
required to complete additional advanced level study beyond the scope of  
the undergraduate requirements of the course, demonstrating a higher  
level of mastery of the subject matter and including additional deliverables  
as determined by the instructor.  
Prerequisite(s): A minimum grade of "C" in TCM 1232 or ENGR 1133.  
Cross Listing(s): TCM 5333.

TCM 5431G  Construction Cost Estimating  
3 Credit Hours.  3 Lecture Hours.  1 Lab Hour.  
This course includes methods and procedures for estimating costs  
of construction projects. Topics include types and purposes of  
estimates, direct and indirect costs, labor and equipment cost analysis,  
the CSI Masterformat, approximate estimates, and computerized  
estimating methods. Graduate students will be required to complete  
individual advanced level research in an area beyond the scope of the  
undergraduate requirements that demonstrates a higher level of mastery  
in the subject matter with additional required deliverables representative of  
graduate level work, as determined by the instructor.  
Prerequisite(s): A minimum grade of "C" in TCM 3330 and TCM 3331  
or permission of instructor.  
Cross Listing(s): TCM 5431.