PURDUE UNIVERSITY FORT WAYNE | Department of Civil and Mechanical Engineering

Course	CE 48400 – Research in Civil Engineering
Type of Course	Technical Elective for Civil Engineering Program
Catalog Description	Individual research projects for students with honors classification. Requires approval of, and arrangement with, a faculty research advisor. Permission of department required. Typically offered in Fall, Spring and Summer
Credits	3
Contact Hours	3
Prerequisites by Topics	Honors classification for junior and senior students (accumulated GPA equal or greater than 3.0)
Course Objectives	To provide students hand-on research experience in a project of civil engineering. The students will be systematically trained with fundamental research methodology and skills.
Course Outcomes	• An ability to apply engineering research and design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors **[2]**. • An ability to communicate effectively with a range of audiences **[3]**. • An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgements, which must consider the impact of engineering solutions in global, economic, environmental, and social contexts **[4]**. • An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgement to draw conclusions **[6]**. • An ability to acquire and apply new knowledge as needed, using appropriate learning strategies **[7]**. **ABET Program Outcomes (shown in brackets) associated with this course are: 2, 3, 4, 6, 7**
Coordinator	Dong Chen, Ph.D.
Date	3 Dec. 2018