ISTANBUL TECHNICAL UNIVERSITY

GRADUATE SCHOOL of SCIENCE, ENGINEERING and TECHNOLOGY

**PROJECT AND CONSTRUCTION MANAGEMENT PhD PROGRAM**

**INFORMATION SYSTEMS in CONSTRUCTION PROJECTS’ MANAGEMENT**

**2016-2017 SPRING SEMESTRE**

Credit/Hours : 3 (3,0)

Prerequisite : None

C/E : Elective

Days and Hours : Tuesday, 13:30-16:30

Class : 119A

Instructor : Alaattin KANOGLU, PhD, Professor

**SCHEDULE**

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| **DATE** | **CONTENT** |
| 07 FEB 17 | Introduction, Syllabus, Schedule, Assignment and Term Project |
| 14 FEB 17 | Introduction, Building Production Process, The participants of BPP, their roles, responsibilities, and interrelations, Information requirements of the participants in BPP, Information systems, components of information systems |
| 21 FEB 17 | Data processing systems and their function in information systems, Basic database concepts, Theoretical bases of databases, Relational, hierarchical and net type database architectures. Relational database structure and components, database development process in practical dimension.  Microsoft Access: *Understanding relational database architecture; tables and relationships* |
| 28 FEB 17 | Basic concepts; Interoperability and its levels, ODBC, Classification of information and basic models for information classification in construction projects.  Microsoft Access: *Understanding relational database architecture; Queries and their functions* |
| 07 MAR 17 | Databases that are needed by architects in various organizations in construction industry, i.e., design offices, consultant companies and constructor firms, ERP solutions and Integrated Database Models for construction industry.  Microsoft Access: *Understanding relational database architecture; Forms/Reports and their functions* |
| 14 MAR 17 | Introduction to term projects; Submission of the students’ project proposals  System Modeling: Approaches, Tools and Modeling Languages  Microsoft Access: *Understanding relational database architecture; Macros and their functions* |
| 21 MAR 17 | Criticizing the proposals, System analysis studies for term project |
| 28 MAR 17 | Spring Break |
| 04 APR 17 | Developing the conceptual models of projects |
| 11 APR 17 | Developing the practical model on MS Access Environment; Tables and relationships |
| 18 APR 17 | Developing the practical model on MS Access Environment; Queries |
| 25 APR 17 | Developing the practical model on MS Access Environment; Forms |
| 02 MAY 17 | Developing the practical model on MS Access Environment; Reports  Submission of the Assignments |
| 05 MAY 17 | Developing the practical model on MS Access Environment; Macros |
| 12 MAY 17 | Developing the practical model on MS Access Environment; Navigations |
| 19 MAY 17 | Developing the practical model on MS Access Environment; Compiling and Finalizing the model |