ITM THEORY AND TECHNOLOGY (ITMT)

ITMT 430
System Integration
In this capstone course, students will identify, gather, analyze, and write requirements based on user needs and will then design, construct, integrate, and implement an information system as a solution to a business problem. Students will document integration requirements using business process models and will learn and apply key systems integration architecture, methodologies, and technologies using industry best practices. User needs and user centered design will be applied in the selection, creation, evaluation, and administration of the resulting system. The system design process will take into account professional, ethical, legal, security, and social issues and responsibilities and stress the local and global impact of computing on individuals, organizations, and society. Discussion will also cover the need to engage in continuing professional development.
Prerequisite(s): ITMD 411 and ITMD 321 and ITMM 471 and ITMO 356 and ITMD 362 and ITMO 340
Lecture: 2 Lab: 2 Credits: 3
Satisfies: Communications (C), Ethics (E)

ITMT 491
Undergraduate Research
Undergraduate research. Written consent of instructor is required.
Credit: Variable

ITMT 492
Introduction to Smart Technologies
This course covers reconfigurable intelligent devices programmed with modern high level languages focusing on design and integration to modern environments. The course will also cover the topic and deployment of wireless sensor networks and the use of rapid prototyping for commercial application. Students will discover hardware, software and firmware design trade-offs as well as best practices in current embedded systems development. A final project will integrate course topics into a system using an embeddable single-board microcontroller.
Prerequisite(s): ITM 311 or ITM 312
Lecture: 2 Lab: 2 Credits: 3

ITMT 495
Topics in Information Technology
This course will cover a particular topic varying from semester to semester in which there is particular student or staff interest.
Credit: Variable