

ICT Elementary for Embedded Systems

NSTDA, KU and SIIT, Thammasat University

Course	: ICT Elementary for Embedded Systems
Credit	: 0 credits
Semester	: Semester III / 2017 (for the ICTES 2018 students)
Period	: July 9-26, 2018
Coordinators	: Prof. Dr. Thanaruk Theeramunkong, Asst. Prof. Dr. Miti Ruchanurucks, Asst. Prof. Dr. Denchai Worasawate, Assoc. Prof. Dr. Waree Kongprawechnon
Assumption	: 20 Students
Class	: Monday-Friday 9:00-16:00 (TSP-CC ICTES Classroom)

Office hours: Wednesday, Thursday 12:00-14:20

Main Textbook and Reference:

1. www.cs.jhu.edu/~jason/advice/how-to-read-a-paper.html, www.engin.umd.umich.edu/~brahim/Potential05-reading.pdf
2. Probability and Statistics: Yates and Goodman, Probability and Stochastic Processes, John Wiley and Sons, 1999.
3. Vector and Matrix: Erwin Kreyszig, Advanced Engineering Mathematic, 9th edition, Wiley Information Edition
4. Fourier Transform: <http://www.amazon.com/Digital-Image-Processing-Rafael-Gonzalez/dp/013168728X> (Chapter 4 Filtering in the Frequency Domain)
5. Digital Circuits: <http://www.amazon.com/Digital-Fundamentals-10th-Thomas-Floyd/dp/0132359235>
6. Data compression: <http://www.amazon.com/Digital-Image-Processing-Rafael-Gonzalez/dp/013168728X> (Chapter 8 Image Compression)

Class Schedule:

Wk	Date		Time	Topics	Lecturer
1	July 9, 2018	(Mon.)	09:00-12:00	Introduction to ICTES/How to find read/write articles	Thanaruk Theeramunkong (thanaruk@siit.tu.ac.th)
2	July 10, 2018	(Tue.)	09:00-12:00	Mathematics Fundamental (Matrix)	Denchai Worasawate (fengdcw@ku.ac.th)
3	July 10, 2018	(Tue.)	13:00-16:00	Signal/Electronic Fundamental (Analog Circuit)	Denchai Worasawate (fengdcw@ku.ac.th)
4	July 11, 2018	(Wed)	13:00-16:00	Mathematics Fundamental (Discrete Mathematics)	Ekawit Nantajeewarawat (ekawit@siit.tu.ac.th)
5	July 11, 2018	(Wed)	09:00-12:00	Mathematics Fundamental (Vector)	Ekachai Phaisangittisagul (fengecp@ku.ac.th)
6	July 12, 2018	(Thu.)	09:00-12:00	Signal/Electronic Fundamental (Signal Processing)	Miti Ruchanurucks (fengmtr@ku.ac.th)
7	July 12, 2018	(Thu.)	13:00-16:00	Mathematics Fundamental (Information Theory)	Poonlap Lamsrichan (fengpll@ku.ac.th)
8	July 13, 2018	(Fri.)	09:00-12:00	Mathematics Fundamental (Probability)	Teerasit Kasetkasem (fengtsk@ku.ac.th)
9	July 13, 2018	(Fri.)	13:00-16:00	Mathematics Fundamental (Statistics)	Teerasit Kasetkasem (fengtsk@ku.ac.th)
10	July 16, 2018	(Mon.)	09:00-12:00	Signal/Electronic Fundamental (Data Communication)	Komwut Wipusitwarakun (komwut@siit.tu.ac.th)
11	July 17, 2018	(Tue.)	09:00-12:00	Creative Thinking	Virach Sortlertlamvanich (virach@siit.tu.ac.th)
12	July 17, 2018	(Tue.)	13:00-16:00	Signal/Electronic Fundamental (Microprocessors)	Itthisek Nilkhamhang (itthisek@siit.tu.ac.th)
13	July 18, 2018	(Wed)	09:00-12:00	Mathematics Fundamental (Permutation/Combination)	Ekawit Nantajeewarawat (ekawit@siit.tu.ac.th)
14	July 18, 2018	(Wed)	13:00-16:00	Signal/Electronic Fundamental (Fourier Transform)	Prapun Suksompong (prapun@siit.tu.ac.th)
15	July 19, 2018	(Thu.)	09:00-12:00	Signal/Electronic Fundamental (Principles of Communication)	Prapun Suksompong (prapun@siit.tu.ac.th)