



การปรับปรุงหลักสูตร วศ.บ. (คอมพิวเตอร์)

3 กรกฎาคม 2543



เนื้อหา

- ◆ IEEE/ACM Curricula 1991
- ◆ IEEE/ACM Curricula 2001 (draft)
- ◆ CP Curricula 2001



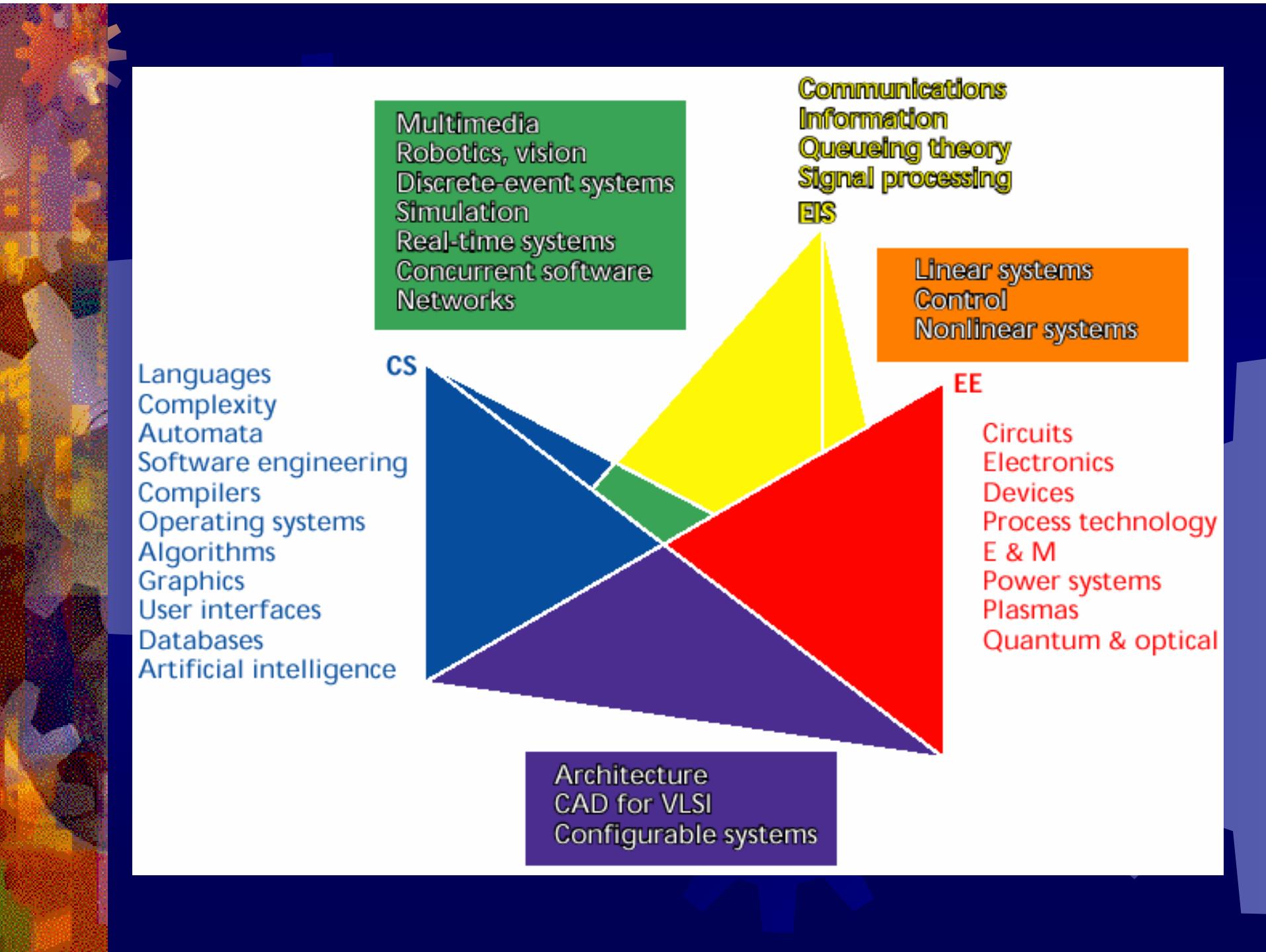
Historical Background

Computing = Computer Science

Mathematics

Electrical Engineering







Computing Curricula 1991

- ◆ Disciplines

- ◆ Mathematical
- ◆ Scientific
- ◆ Engineering

- ◆ Processes

- ◆ Theory
- ◆ Abstraction
- ◆ Design



CC1991 : Nine Subject Areas

- ◆ Algorithms & Data Structures (47)
- ◆ Architecture (59)
- ◆ AI & Robotics (9)
- ◆ Database & IR (9)
- ◆ Human-Computer Communication (8)
- ◆ Numerical & Symbolic Computation (7)
- ◆ Operating System (31)
- ◆ Prog. Languages (46)
- ◆ Software Methodology & Engineering (44)

Social Ethical and Professional Issues (11)



CC1991 vs. CP2000

- ◆ Algorithms & Data Structures
- ◆ Architecture
- ◆ AI & Robotics
- ◆ Database & IR
- ◆ Human-Computer Communication
- ◆ Numerical & Symbolic Computation
- ◆ Operating System
- ◆ Prog. Languages
- ◆ Software Methodology & Engineering

Social Ethical and Professional Issues



Computing Curricula 2001

- ◆ Technological Changes
 - ◆ Network, Internet, WWW
 - ◆ Graphics & Multimedia
 - ◆ Embedded System
 - ◆ Relational Database
 - ◆ OOP
 - ◆ API
 - ◆ Security & Cryptography
 - ◆ ...



CC2001 : Body of Knowledge

- ◆ Discrete structures
- ◆ Prog. fundamentals
- ◆ Algorithm and complexity
- ◆ Programming Lang.
- ◆ Architecture
- ◆ Operating System
- ◆ Human-computer interaction
- ◆ Intelligent System
- ◆ Graphics, Visualization & Multimedia
- ◆ Info. Management
- ◆ Net-centric computing
- ◆ Software engineering
- ◆ Computational Sci.
- ◆ Social, Ethical, Professional Issues



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CC2001 : Body of Knowledge

- ◆ Discrete structures 37
- ◆ Prog. fundamentals 65
- ◆ Algorithm and complexity 31
- ◆ Programming Lang. 5
- ◆ Architecture 33
- ◆ Operating system 22
- ◆ Human computer interaction 3
- ◆ Intelligent system 10
- ◆ Graphics, Visualization & Multimedia 40
- ◆ Info. Management 10
- ◆ Networks 15
- ◆ Fuzzy computing
- ◆ Software engineering 30
- ◆ Computational Sci. 20
- ◆ Social, Ethical, Professional Issues 16



CC2001 vs. CP2000

- ◆ Discrete structures
- ◆ Prog. fundamentals
- ◆ Algorithm and complexity
- ◆ Programming Lang.
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- ◆ Human-computer interaction
- ◆ Intelligent System
- ◆ Graphics, Visualization & Multimedia
- ◆ Info. Management
- ◆ Net-centric computing
- ◆ Software engineering
- ◆ Computational Sci.
- ◆ Social, Ethical, Professional Issues



CP2001 == CC2001

- ◆ Programming Fundamental

21102XX : Prog. Fundamentals

- ◆ Human-Computer Interaction

- ◆ Intelligent System

21103XX : Intelligent System

- ◆ Information Systems

2110422 : DBMS Design

- ◆ Net-Centric Computing

21103XX : Net-Centric Computing

- ◆ Social, Ethical & Professional Issues

21101XX : Fund. of Computing

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CP2001

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Net. Comp.

SE.

DBMS

OOx

Em. Sys

AI

Comp. Network

OS.

VLSI

Algorithms

Compiler

Sys. Prog.

Comp. Arch

Formal Lang.

Data Structures

Logic Design

Discrete Math.

Prog. Fundamental

Comp. Org.

Fundamental of Computing

