電気通信大学　平成19年度シラバス

授業科目名	Parallel Computation		
英文授業科目名	Parallel Computation		
開講年度	2007年度	開講年次	３，４年次
開講学期	６、８学期	開講コース・課程	昼間コース
授業の方法		単位数	2
科目区分	専門科目-学科専門科目-		
開講学科・専攻	情報通信工学科 情報工学科 電子工学科 量子・物質工学科 知能機械工学科 システム工学科 人間コミュニケーション学科		
担当教官名	渡邊　成良		
居室	総合研究棟８２５		

公開E-Mail	授業関連Webページ

【主題および達成目標】

Parallel Computer architecture and parallel processing are included. Well-known parallel algorithms are introduced and several programs to investigate important parallel techniques will be implemented using MIMD computer systems. The practice in parallel programming is prepared.

【前もって履修しておくべき科目】

【前もって履修しておくことが望ましい科目】

【教科書等】

Michael J. Quinn,"Designing Efficient Algorithms for Parallel Computers", McGRAW-HILL

【授業内容とその進め方】

The course includes two hours of lecture and three hours of homework per week. It will focus on the following topics :

1. The Parallel System: Divide and Conquer
2. A Programming Model for the Loosely-Coupled Parallel System
3. Working Smart, Not Hard: Parallel Software Engineering Principles
4. Decomposition Strategies
5. Domain Decomposition: Examples and Techniques
6. Control Decomposition: Examples and Techniques
7. Object-Oriented Techniques for Distributed-Memory Systems

But the topics will vary in accordance with the students' majoring.

【成績評価方法及び評価基準(最低達成基準を含む)】

The grade is based upon the student's accoplishment of three assignments and a final examination.

【オフィスアワー：授業相談】

The office is opened to the student who makes an appointment by telephone or e-Mail.

(Tel: 0424-43-5243 e-Mail: watanabe@ice.uec.ac.jp)

【学生へのメッセージ】

This course was designed for JUSST students who are exchange students from UEC sister universities. For the reason the class is opened to JUSST students and UEC students who are interesting to study together.

【その他】

To the students whose department is Information and Communication Engineering, the credit will be transfered to the course of Computer Systems. Please ask to Prof. Watanabe.