



21世紀COEプログラム (機械、土木、建築、その他工学分野)  
**知能化から生命化へのシステムデザイン**

[Home](#)

- [お知らせ](#)
- [実施計画](#)
- [教育プログラム](#)
- [スケジュール](#)
- [研究成果報告](#)
- [担当者一覧](#)
- [リンク集](#)
- [お問い合わせ](#)

HOME > 教育プログラム > 先端デザインスクールプログラム > 宇宙システムデザインコース

## 教育プログラム

先端デザインスクール:宇宙システムデザインコース  
 Cost Engineering for Space Transportation Systems

The 21st Century COE program provides a lecture called COST ENGINEERING FOR SPACE TRANSPORTATION SYSTEMS by Dr R. A. Goehlich. The motivation for this topic is to increase the awareness of aerospace students for economical optimization of launch vehicles concerning development, production and operation. Economical optimization of expendable and reusable launch vehicles will be an essential key point for a future growing space market. The goal of Cost Engineering is to determine a vehicle design and its operation for minimum life-cycle costs. This means that costs have to be taken into account as a main decision criterion for the whole program duration. If applied all strategies, the cost of projects could be reduced drastically of the traditional Business as Usual costs.

■Date: Starting April,2004

■Instructor: Robert A. Goehlich(Ph.D.)

■Schedule:

1. Introduction
2. Cost Engineering Methods
3. Cost Engineering Tools
4. Strategies to Reduce Cost
5. Basics about Rocket Science
6. Basics about Space Transportation Systems
7. Basics about Space Tourism
8. Case Study for a Typical Suborbital Rocket for Space Tourists
9. Case Study for a Typical Orbital Rocket for Space Tourists
10. Benefit Estimation
11. Conclusion
12. Special1 Improve Space Organizational Effectiveness
13. Special2 Improve Marketing of Space Transportation Systems
14. Special3 Improve Program Planning for Space Industry or organization

■NOTE: Schedule is based on 90 min. lecture/week. Lecture will be provided in English. For special arrangements can be made such as translating part of PPT slides into Japanese.

■本件に関するお問い合わせ: 狼 嘉彰 E-mail: ohkami@sd.keio.ac.jp

