

慶應義塾 2017 年度 未来先導チェアシップ講座 案内

2017 年度経営管理研究科 1 学期科目「グランド・デザイン・プロジェクト III」

Technological Innovations in Global Perspectives

慶應義塾大学大学院経営管理研究科

姉川知史

2017 年 4 月 5 日

■科目履修案内

慶應義塾未来先導基金の補助を受けて、下記の講座を実施します。

1. 2017 年度大和証券未来先導チェアシップ講座

Grand Design of Technological Innovations in Global Perspectives – Crisis, Sustainability and Health

2. 経営管理研究科科目名 「グランド・デザイン・プロジェクト III」

Technological Innovations in Global Perspectives

履修申告期間・方法については所属研究科の学事担当者に確認してください。

講座詳細

http://www.dff.keio.ac.jp/activity/chairship/2017/01_detail.html

Grand Design by Japan Program

http://anegawa.kbs.keio.ac.jp/Grand_Design_Project/

■問い合わせ

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<Japanese Announcement>

2017 年度大和証券未来先導チェアシップ講座

Grand Design of Technological Innovations in Global Perspectives – Crisis, Sustainability and Health

経営管理研究科科目 「グランド・デザイン・プロジェクト III」

Technological Innovations in Global Perspectives

<形式> 集中講義, セミナー, フォーラムによる授業

<対象者> 経営管理研究科, 理工学研究科, 医学研究科等の修士課程学生, 他研究科学生, ならびに技術革新の実用化をめざす研究者・マネジャー, 政策担当者等の社会人

<実施期間> 授業日程 2017年7月–9月 土日祝日のうち下記日程

7/15(土), 7/16(日), 7/17(月, 祝), 7/22(土), 7/23(日), 8/5(土), 8/6(日)

フォローアップ・フォーラム日程 9/17(日) 9/18(月, 祝), 9/23(土), 9/24(日)

<企画実施責任者・科目担当者> 姉川知史

<目的> 科学・技術成果をどのように実用化して世界の直面する課題解決を図る技術マネジメントについて, 広域学際研究に基づく授業を行う。次の特徴を強調する。1.実際に自ら科学・技術を生み出して, その実用化と体系化を行っている研究者を招聘し, その体験を整理して課題解決を図る。2.諸外国の「科学・技術の Ecosystem」と比較して, 日本のそれを検討する。3.科学・技術の成果を実用化のための一連のマネジメント講義を行う。Project and Program Management を強調する。4.持続可能性, 環境, 医療, IT, その他に関する科学・技術領域を選択する。

<概要> 3つのモジュールを中心に実施する。第1部は Kenji Uchino 講師 (Penn State University, Professor)他を招聘し, イノベーションマネジメントの3日間連続集中講義を行う。第2部は田中弘講師(SKEMA Business School, Professor)を招聘し, Project and Program Management for the Grand Design の3日間集中セミナーを実施する。第3は参加者の Project 研究発表, 専門家による講演, 討議を行うフォーラムを主題別に実施する。

<実施組織> 経営管理研究科「マネジメント教育開発センター・ビジネス教育研究開発室」を拠点とする「Keio Grand Design by Japan Program」(実施責任者 姉川知史)に Kenji Uchino, 田中弘教授を含めた,数人の教員・専門家チームを編成し, その協議によって題材, 講義内容, 運営方法, 事例教材, 講師を選定して運営する。

<言語> 英語, 日本語 (講師は両言語を使用します)

<履修の利点>

1. 技術イノベーションについて国際的に著名な K. Uchino 教授の集中講義の聴講.
2. Project & Program Management 教育の創始者 H.Tanaka 教授の集中講義の聴講
3. 多様な背景の参加者と技術イノベーションの Project 演習
4. 危機, 持続可能性, 健康の3領域の技術イノベーションの著名な専門家 10 人によるフォーラム特別講義の聴講

2017 Keio Design the Future, Daiwa Securities Chairship Lecture

Grand Design Project III

Grand Design of Technological Innovations in Global Perspectives – Crisis, Sustainability and Health

Detailed Information

Course http://www.dff.keio.ac.jp/activity/chairship/2017/01_detail.html

Grand Design by Japan http://anegawa.kbs.keio.ac.jp/Grand_Design_Project/

<Objectives> How to solve important problems the world and Japan face based on science and technology. We provide a brand new summer course “Grand Design III-Technological Innovations in Global Perspectives.

<Advantages> This is a technology management with cross-section disciplines, cross-generation, and professional education

1. Intensive lectures by a world renowned professors in this fields
2. Intensive project and program management lectures and workshop by leading professor
3. Forum with more than ten renowned professors and professional
4. Main focus is on crisis, sustainability, and health

<Three Modules>

Module 1 3 Day lectures by Professor Kenji Uchino (Penn State University, Professor) based on his new text book.

Module 2 3 Day lecture and workshop of Project and Program Management by Professor Hiroshi Tanaka (SKEMA, Business School in France)

Module 3 Follow-up forum on technological innovation by more than ten professors, businessmen, and professionals.

<Organization> Keio University, Graduate School of Business Administration, Keio Grand Design by Japan Program, (directed by Professor Tomofumi Anegawa)

<Language> English and/or Japanese (Most of professors command both)

<Students and Participants> Those who are committed to create technology-based solution

<Schedule> July 15(Sat), 16(Sun), 17 (Mon,Holiday), 22(Sat), 23 (Sun),
August 5 (Sat), and 6(Sun)

<Follow-up Forum (Optional)> September 17(Sun), 18(Mon Holiday), 23 (Sat). 24(Sun)

1st session 9:00-10:30

2nd session 10:45-12:15

3rd session 13:00-14:30

4th session 14:45-16:15

5th session 16:30-18:00

Introduction and Overview of the Course

Professor: Tomofumi Anegawa (Keio University)

Schedule: July 15 Saturday, 9:00-10:30 Orientation no class count

Module 1 Three Day Intensive Lectures on Global Crisis/Sustainability Technologies Led by Professor Kenji Uchino (12 Sessions)

Invited Lecturer: Professor Kenji Uchino (State University of Pennsylvania)

Title of Lecture: Global Crisis/Sustainability Technologies

Textbook: Global Crisis/Sustainability Technologies (World Scientific 2017)

Content: Provide an overview of crisis, sustainability technologies based on his new book. It covers politics and technology, trend, risk management, and crisis technology and sustainability technology.

Schedule: July 15 Saturday 10:45- 18:00, 1st Day

Chap 1: Background of Politico Engineering – 2 hours

Chap 2: Japanese & Global Technology Trend Change – 1 hour

Chap 3: Global Politics in Engineering – 1.5 hours

Chap 4: Categorization of Politico Engineering – 1.5 hours

July 22 Saturday 10:45-18:00, 2nd Day

Chap 5: Crisis Technology – 2 hours

Chap 6: Sustainability Technology – 1 hour

Chap 7: Risk Management – 3 hours

July 23 Sunday 10:45-18:00, 3rd Day

Chap 7: Risk Management (Cont.) – 1 hour

Chap 8: Advanced Game Theory – global regime – 4 hours

Chap 9: Concluding Remark & Discussions with Students – 1 hour

Module 2. Project and Program Management Seminar for the Grand Design led by Professor Hiroshi Tanaka Jointly with Ms. Taeko Inoue (10 Sessions)

Textbook: Handout files

Module 2 Seminar participant status: In addition to registered students taking this course as credit, Module 2 is opened for students and the public as a seminar upon registration and seminar fee. Seminar fee is waived for students and the public with fulfilling conditions. The registered seminar participants can audit Module 1 and 3 by permission of a coordinator (Professor Anegawa) and an instructor (Professor Uchino).

Schedule, July 16th, Sunday, 1st Day 10:45-18:00

Onsite registration

Opening and Introduction

Session 1 Introduction to Projects

Session 2 Developing a Project for Innovation and Grand Design

Project development fundamentals

Four routes of conception of innovation projects:

1) Systems approaches – hard and soft

2) Program management

3) Brain-storming using common management theories

4) Service innovation

Financial analysis by the Net Present Value (NPV) method

Schedule, July 17th, Monday, Holiday, 2nd Day 10:45-18:00

Session 3 Project Management

Universal concept of project management

Project management work flow

Plain objectives of project management

Project scope planning and management

Quality in project management

Project time management

Project resources management

Project cost planning and management

Project risk analysis and management

Project formation and organization

Project integration management

Schedule, August 5th, Saturday. 3rd Day 13:00-16:15 (2 Sessions)

Session 4 Project Management Workshop

Strategy brainstorming on a group-selected project theme

Setting a project mission, value analysis, development of a project proposal

Stakeholder analysis, organization, work breakdown structure (WBS), project schedule, cost estimate, Finance planning, project execution strategy

Compiling & editing a result presentation file

Result presentation

Wrapping up the seminar

Module 3 Forum Series led by Professor Anegawa

One day forum on topics and projects held in Module 1 and 2. A forum consists of project presentation by participants and lectures by invited speakers.

Schedule August 6th, Sunday (3 Sessions)

13:00-18:00 Forum 1, Technology for Crisis and Sustainability

Invited lecturers including Helmut Prendinger (National Institute of Informatics)

Note: Grading will be made for students taking this course (Grand Design Project III) for credit as of Mid-August based on class participation, reports, presentations for Module 1, 2 and forum in August.

Schedule September Follow-up forum on Technological Innovations of Crisis, Sustainability, and Health

Forum A On Technologies of Crisis and Sustainability

September 17th Sunday-18th Monday Holiday 13:00-18:00

Forum B On Technologies of Health

September 23rd Saturday- 24th Sunday 13:00-18:00 (tentative plan)

<Technologies of Crisis and Sustainability>

Koji Kato(Emeritus Professor of Tohoku University, and Senior Researcher at Nippon University) (TBA)

And other renowned speakers

<Technologies for Health >

13:00-18:00

Invited lectures including Dr. Eiji Sasahara

And other renowned speakers

Presentation by students

The follow-up forum will be held for each issue covered in Module 1 and 2 in the above schedule and other additional occasions. Students and participants are expected to report their project results as a team.