

平成26年度研究科横断型教育プログラム（Aタイプ）授業科目

| | | | | | | | | | |
|---|---|------|-------|----------------|--|-----------|--|------|----------------------------------|
| 開講方式 | Aタイプ (研究科開講型) | 研究科名 | 農学研究科 | | カテゴリー | 自然科学総合科目群 | | 横断区分 | 理系横断型 |
| 授業科目名 (英訳) | Seminar I on Bio-Sensing Engineering (生物センシング工学演習 I) | | | 講義担当者 所属・氏名 | Naoshi KONDO, Yuichi OGAWA, Tetsuhito SUZUKI and Company men | | | 開講場所 | Yoshida Campus (North Campus) |
| 配当学年 | Master course | 単位数 | 2 | 開講期 | Apr-Sep | 曜時限 | Tuesday 1 st period (8:45-10:15) | 授業形態 | Lecture and Practice |
| 〔授業の概要・目的〕 | | | | | | | | | |
| <p>Lectures on cutting-edge technologies are conducted by 14 company men who are invited to this class. Main topics of the lectures are “Food”, “Energy”, and “Environment” issues. Purposes of this class are to learn superior Japanese technologies on the three issues, to discuss how to collaborate to produce “Foods and Energy” for increasing people on the earth and to conserve “Environment.” It is desirable for students to actively discuss with the lecturers in English. Not only foreign MS students but also Japanese students, Ph.D students, research students, and faculties are welcome.</p> <p>【研究科横断型教育の概要・目的】</p> <p>Since this class is conducted by professional engineers who are working in various companies, students can learn problem solving skills based on multi-discipline subjects from them. Students also learn a wide view for future healthy and affluent life as well as discuss how to collaborate among Asian countries from them, because most companies are spreading their branches and products in Asian countries which are very much growing economically and technologically. This class may be fitted the purpose of companies’ recruitments, because many companies are seeking various students who study in many different faculties and graduate schools.</p> | | | | | | | | | |
| 〔授業計画と内容〕 | | | | | | | | | |
| <p>An example of company lists is shown below: Detail schedule and titles are announced later. Company list is changed from year to year.</p> <ol style="list-style-type: none"> Guidance Caterpillar Japan “Caterpillar products” Panasonic Corporation.”Panasonic ideas for living: Energy solutions ideas” NEC Corporation “Fundamentals and Application on Infrared and THz sensors” Toshiba Corporation “Hydro Turbine” Espec Co., Ltd. “Green Plant Factory of ESPEC” Yanmar Co., Ltd. “Combine harvesters” Satake Japan “Grain sorting and processing machines” Nabel Company “Auto Egg Packing and Grading System” Kubota Corporation “Tractors” Shibuya Seiki Co., Ltd. “Fruit grading and robot vision technologies” Ishida Co., Ltd. “Factory Automation for the food industry” Omi Weighing Machine Inc. “Grading systems for fruits and vegetables” Komatsu Ltd., “Komatsu Innovative Technologies” Iseki Co., Ltd. “Agricultural Machineries especially on Rice Transplanters” | | | | | | | | | |
| 〔履修要件〕 | | | | | | | | | |
| It is desirable to take undergraduate courses “Physical and Biological Properties of Agricultural Products” and “Measurement Science.” | | | | | | | | | |

〔成績評価の方法・基準〕

Reports and attitude to each subject are evaluated synthetically.

〔教科書〕

Handouts will be distributed. (depends on company)

〔参考書等〕

〔その他(授業外学習の指示・オフィスアワー等)〕

Office hour: 10:30-12:00 on Tuesday at S250. (Just after this class)

It is desirable that students learn about the activities and products of companies which provide these classes.