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|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|-------|--------|--------------------------------------|---------|
| 登録コード                                                    | HS210100                                                                                                                                                                                                                                                                                                                          | 開講年度 | 2026   |       |        |                                      |         |
| 授業題目                                                     | アクチュエータ工学特論                                                                                                                                                                                                                                                                                                                       |      |        |       |        | 担当教員                                 | 田代 晋久 他 |
| 英文授業名                                                    | Actuator Engineering                                                                                                                                                                                                                                                                                                              |      |        |       |        | 副担当                                  | 佐藤 光秀   |
| 単位数                                                      | 2                                                                                                                                                                                                                                                                                                                                 | 講義期間 | 通年(集中) | 曜日・時限 | 集中・不定期 | 対象学生                                 | D1 3    |
|                                                          |                                                                                                                                                                                                                                                                                                                                   |      |        | 授業形態  | 講義     | 備考                                   |         |
| 信大コンピテンシー                                                | 非該当                                                                                                                                                                                                                                                                                                                               |      |        |       |        |                                      |         |
| (1)授業の達成目標/Course objectives                             | ディプロマポリシー・授業で得られる「学位授与の方針」要素                                                                                                                                                                                                                                                                                                      |      |        |       |        | ( 授業の達成目標 )                          |         |
|                                                          | 2026HS加, 2025HS加, 2024HS加, 2023HS加                                                                                                                                                                                                                                                                                                |      |        |       |        |                                      |         |
|                                                          | 【専攻】理工学系の専門分野における深い知識・卓越した技能                                                                                                                                                                                                                                                                                                      |      |        |       |        | ・アクチュエータを含む磁気デバイスに関する技術動向を俯瞰できるようにする |         |
| (2)詳細<br>/Detailed<br>information                        | Magnetic fields are usually used as an energy medium in magnetic device. The purpose of this lecture is to cultivate the research skill related to magnetic device including actuator. It is required to present the recent technology by simple explanation.                                                                     |      |        |       |        |                                      |         |
| (3)授業の概要<br>/Overview of<br>course                       | According to the own theme for a doctorate, one topic related to magnetic device should be defined. Magnetic energy harvesting, wireless power transmission, actuator without permanent magnets are good examples which are required to sustainable modern life. The simple explanation of the investigation results is required. |      |        |       |        |                                      |         |
| (4)授業計画<br>/Course plan                                  | At the first interview, an up-to-date topic will be provided. Through the topic, it will be required to investigate the origin and recent research from academic papers. The summary should be presented by a short report.                                                                                                       |      |        |       |        |                                      |         |
| (5)成績評価の方法<br>/Grading/evaluation<br>on method           | The final report will be used for the evaluation.                                                                                                                                                                                                                                                                                 |      |        |       |        |                                      |         |
| (6)成績評価の基準<br>/Grading/evaluation<br>on criteria         | C: Not well-organized report<br>B: Well-organized report<br>A: Well-organized report, and presented by a simple explanation<br>S: Well-organized report, presented by simple explanations and prospective view points                                                                                                             |      |        |       |        |                                      |         |
| (7)事前事後学習<br>の内容/Prep and<br>review work                 | Because the number of credit for this class is two , it is required ninety hour for the study including the making report.                                                                                                                                                                                                        |      |        |       |        |                                      |         |
| (8)履修上の注意<br>/Notes                                      | Conversation skill of both English and Japanese is desired.<br>The own theme for a doctorate should be related to electromagnetics.                                                                                                                                                                                               |      |        |       |        |                                      |         |
| (9)質問,相談への<br>対応/Questions<br>and requests<br>for advice | Contact us by e-mail.                                                                                                                                                                                                                                                                                                             |      |        |       |        |                                      |         |
| (10)授業の形式<br>/Course format                              | According to first interview, we will decide the lecture style.                                                                                                                                                                                                                                                                   |      |        |       |        |                                      |         |
| 【教科書<br>/Textbook(s)】                                    | Not specified                                                                                                                                                                                                                                                                                                                     |      |        |       |        |                                      |         |
| 【参考書<br>/Reference<br>work(s)】                           | Not specified                                                                                                                                                                                                                                                                                                                     |      |        |       |        |                                      |         |