

北陸先端科学技術大学院大学研究室教育指針
Laboratory Education Guideline

研究室教育指針は、学則第30条の3に基づき、研究指導の方法及び内容並びに修了までの研究指導の計画をあらかじめ明示するものです。

Based on the Article 30-3 of the general academic rules, the Laboratory Education Guideline is intended to clearly outline the methods and content of research guidance, as well as the plan for research guidance until completion.

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1. 研究テーマ / Research Theme
Image processing, deep learning, video analysis, object detection and recognition, medical image processing, gaze analysis, cinematograph and editing support systems, affective information processing, user interface
2. 修得が期待される能力 / Competencies expected to be acquired 研究室教育は必修 A 科目（先端）又は研究支援科目（融合）の一部として単位化されており、この欄はそれら科目のシラバス上の達成目標の一部となります。 Laboratory Education is accredited as a part of the Required courses A (Division of Advanced Science and Technology) or Research Support Courses (Division of Transdisciplinary Sciences), and this section constitutes a part of the course goals stated in the syllabus for such subjects.
Students will acquire programming skills in object detection, object recognition, image generation, and user interface implementation with Python, C++, and other languages. Logical thinking skills for identifying and solving problems related to image analysis systems, including image processing through machine learning such as deep learning, and user interface design and implementation methods that consider human behavior and visual systems are also cultivated. Moreover, this process of research activity requires the survey and comprehension of journal papers in English as well as Japanese, and papers presented at major international conferences. Students are also expected to develop quick comprehension of English articles as well as research discussions with international students, that improve the English skills necessary for discussions in the field of science and technology. Additionally, regardless of one's research topic, logical thinking skills, problem recognition abilities, and problem-solving capabilities will be acquired.
3. 研究指導方針 / Research Guiding Principle
Each research topic is finalized by taking the fields and interests that a student wishes to pursue into account. In seminars, students are prompted to join lively discussions about challenges related to each other's research topics. Furthermore, students are expected to recognize their own research approaches and summarize their research content from the third person's point of view. They are continuously encouraged to refine the substance and quality of their research while also aspiring continuous improvement in organizing presentation materials that are easily understandable to others. For students who set higher goals, we actively provide guidance worth for their aspirations. For example, we encourage submissions to international journals or conferences, and supervise them in achieving the goal of being fully capable of presenting research findings and joining discussions in English.
4. 研究室活動の内容及び方法 / Content and Methods of Laboratory Activities
<input type="checkbox"/> 日次活動 / Daily Activities : Core hours: 10a.m. to 6p.m. <input type="checkbox"/> 週次活動 / Weekly Activities : Research Progress Reports and Discussions (once a week), Research paper sharing and Discussions (once a week), Individual Meetings (as needed based on individual circumstances) <input type="checkbox"/> 月次活動 / Monthly Activities : Final report and discussion aligned with the completion period of a student <input type="checkbox"/> 不定期活動 / Occasional Activities : Guidance on papers and presentations for academic conferences, research activities related to industry-academia collaboration, etc.

5. 年間スケジュール / Annual Schedule

本学の全学共通の年間スケジュールは「履修案内」の「学位取得に至るスケジュール」を参照してください。(本学HP 参照：ホーム>教育>履修関係>履修案内)

Please refer to the “Degree conferment schedule for the master’s program/doctoral program” in the “Degree Completion Guide” for university-wide common schedule (JAIST website: Home >Education>Taking Courses>Degree Completion Guide)

Immediately after assignment for both April and October entrants, we conduct tutorials covering common knowledge about academic papers, how to determine research topics, research methodology, planning experiments and analyzing results, data storage, publishing research findings, and research ethics as the new student orientation. About one month before the midterm defense, students will present a summary of their research progress to date and participate in an intensive seminar focused on resolving remaining issues. About one month before the due of submitting their master's thesis or research project report, students will attend another intensive seminar to reconfirm key points for thesis writing. Depending on their research outcomes, students will present their work at domestic or international conferences by the time of receiving degree.