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
To realize “Learning 5.0” from the perspective of learning informatics, we will comprehensively design, develop, and evaluate integrated systems that encompass skill-learning support, self-directed learning support, edutainment, and distance learning.
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.
Based on Learning Informatics—which analyzes data, behavior, and environments related to human learning through information/knowledge science to explore theories and technologies for understanding, supporting, and optimizing learning—we aim for students to learn autonomously and creatively and grow as researchers and practitioners through research activities grounded in the “Learning 5.0” philosophy which enables humans and AI to collaborate autonomously to realize optimal learning. In the master's program, students are expected to acquire the following foundational skills as practitioners: ・Basic Knowledge: Understand how to define research topics, model research subjects, and investigate related research, and acquire the fundamental knowledge to apply new information technologies to their own research. ・Research Execution: Acquire the skills to execute the entire research process, from planning to designing, developing, evaluating, writing and presenting support systems. ・Proactive Attitude: Cultivate an attitude that connects research activities to personal career development, engages proactively in research, and persists tenaciously in tackling challenges. In the doctoral program, the goal is to acquire the following skills to excel as an independent researcher. ・Theory Construction: Grasp international research trends, critically reconstruct theories in learning informatics, and deeply understand cutting-edge information technologies to propose new research frameworks. ・Research Execution: Develop the skills to define original research questions, lead theoretical development, modeling, and empirical research, and disseminate findings through international conferences and peer-reviewed journals. ・Research Ethics: Establish an attitude that practices transparent and reproducible research while adhering to research ethics, recognizing academic and social responsibilities.
3. 研究指導方針 / Research Guiding Principle
Through the design, development, evaluation, operation, and systematization of learning support and information environments that help human intellectual information processing more comfortably and effectively, we aim to cultivate transferable skills demanded by society. Emphasizing the research activity process, we incorporate rubric-based self-achievement assessments and self-evaluations at each milestone, establishing a flow enabling students to objectively grasp their own growth and proactively deepen their learning. Furthermore, by accumulating records of meetings and discussions and utilizing research activities as portfolios, we promote the visualization of the learning process and

continuous improvement. Additionally, by actively engaging in laboratory management, we emphasize communication to foster a collaborative research environment that respects diversity.

4. 研究室活動の内容及び方法 / Content and Methods of Laboratory Activities

□日次活動 / Daily Activities：
■週次活動 / Weekly Activities： Laboratory Meeting (once a week, separate Japanese and English sessions)
□月次活動 / Monthly Activities：
■不定期活動 / Occasional Activities： Orientation, Individual Meetings (upon request), Seasonal Meetings (quarterly, doctoral program), Joint Laboratory Meetings, Conference Presentations, Collaborative Research Meetings

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)

・Lab Assignment Orientation (M1: June/December, D1: April/October)
・Research Topic Settings (M1: August–October)
・Literature Review (M1: November–December, D1: May–October, Systematic Review)
・Research Proposal Preparation (M1/D1: January–March)
・System Development and Evaluation (M2: April–November, D1: November–D2: March)
・Midterm Presentation Preparation (M2: June–August), Preliminary Defense Preparation (D3: August–November)
・Master's thesis preparation (M2: Dec–Jan), Doctoral dissertation preparation (D3: Dec–Jan)
・Workshop presentation (M2: Jan or Mar)/Learning Innovation Grand Prix submission (M2: Mar, D2: Mar)
・International conference presentation (D2: Nov, etc.), Journal submission (D2: Mar, etc.)