

“Praxis der Forschung | Practice of Reserach” (PdF) Winter 2026/27

Joint offer for student projects by the research group of the KIT Department of Informatics |
KIT Department of Informatics, 29 October, 2026

KASTEL

Practice of Research / Praxis der Forschung (PdF)

✨ Looking for more than just lectures?

🌍 Eager to connect your studies with the bigger picture?

🔬 Curious what research really looks like behind the scenes?

📚 Ready to go beyond memorizing facts and dive deeper?

🎓 Want to prepare for your Master's thesis *and* earn credits along the way?

🤝 Interested in personal coaching during your Master's journey?

👉 Then **Praxis der Forschung (Research Project)** is made for you!

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- Project-based on a current research topic
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- Future possible PhD project
- Challenges in your future job

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with:

- Structured project
- Design and realisation of YOUR research topic
- Critical handling of scientific literature
- Scientific communication

Learning Objectives

Learn the methodology of scientific work in a project and conduct perceptible research

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Sound knowledge within the respective field of work

Autonome Lernende Roboter, Computer Vision for Human-Computer Interaction Lab, Data-driven analysis of complex systems, Application-Oriented Formal Verification, Methods for Big Data, Modelling for Continuous Software Engineering, Privacy and Security, Socially Assistive Robotics with Artificial Intelligence, Scalable Algorithms, Test, Validation and Analysis of Software-Intensive Systems

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- Conduct of scientific publications

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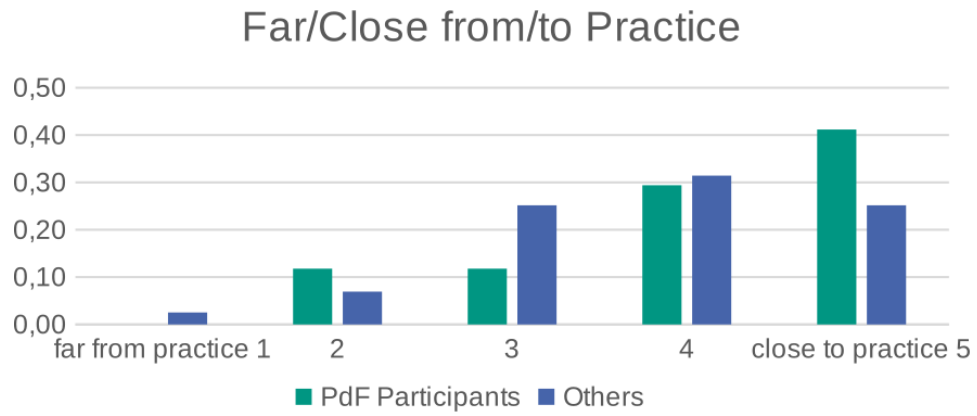
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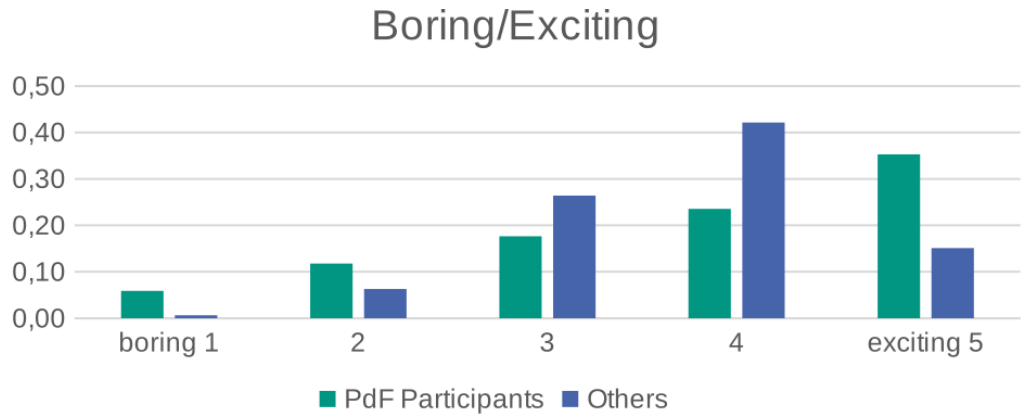
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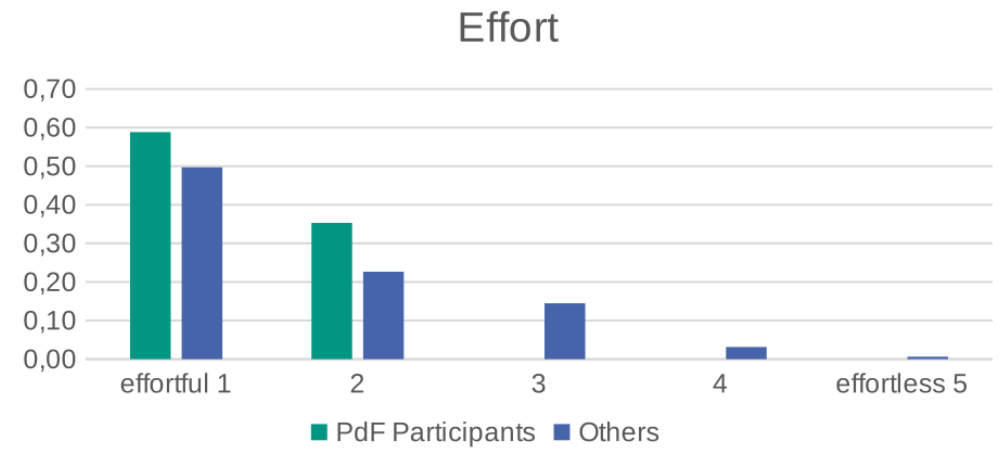
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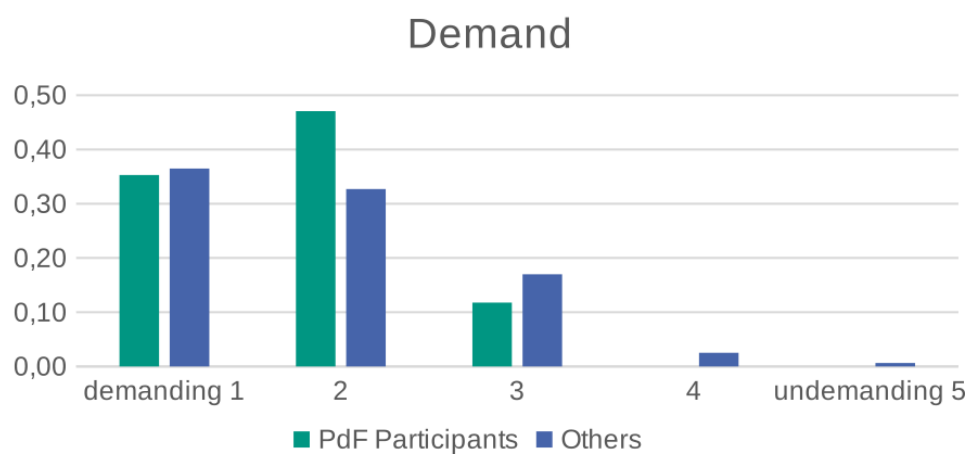
- Research methods
- Strategies for implementing projects and project planning
- Scientific literature research
- Conduct of scientific publications
- Presentation of scientific results

Assessment by Students*









*Survey in April 2018 among ca. 180 informatics students at KIT.

Organizational Matters

Target group

Master’s students within their first year

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- Alternative: Team consisting of student and scientist

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- 24 ECTS points (12 per semester) within 4 modules

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- 360 working hours per semester (300 hours in project, 60 hours in methods)

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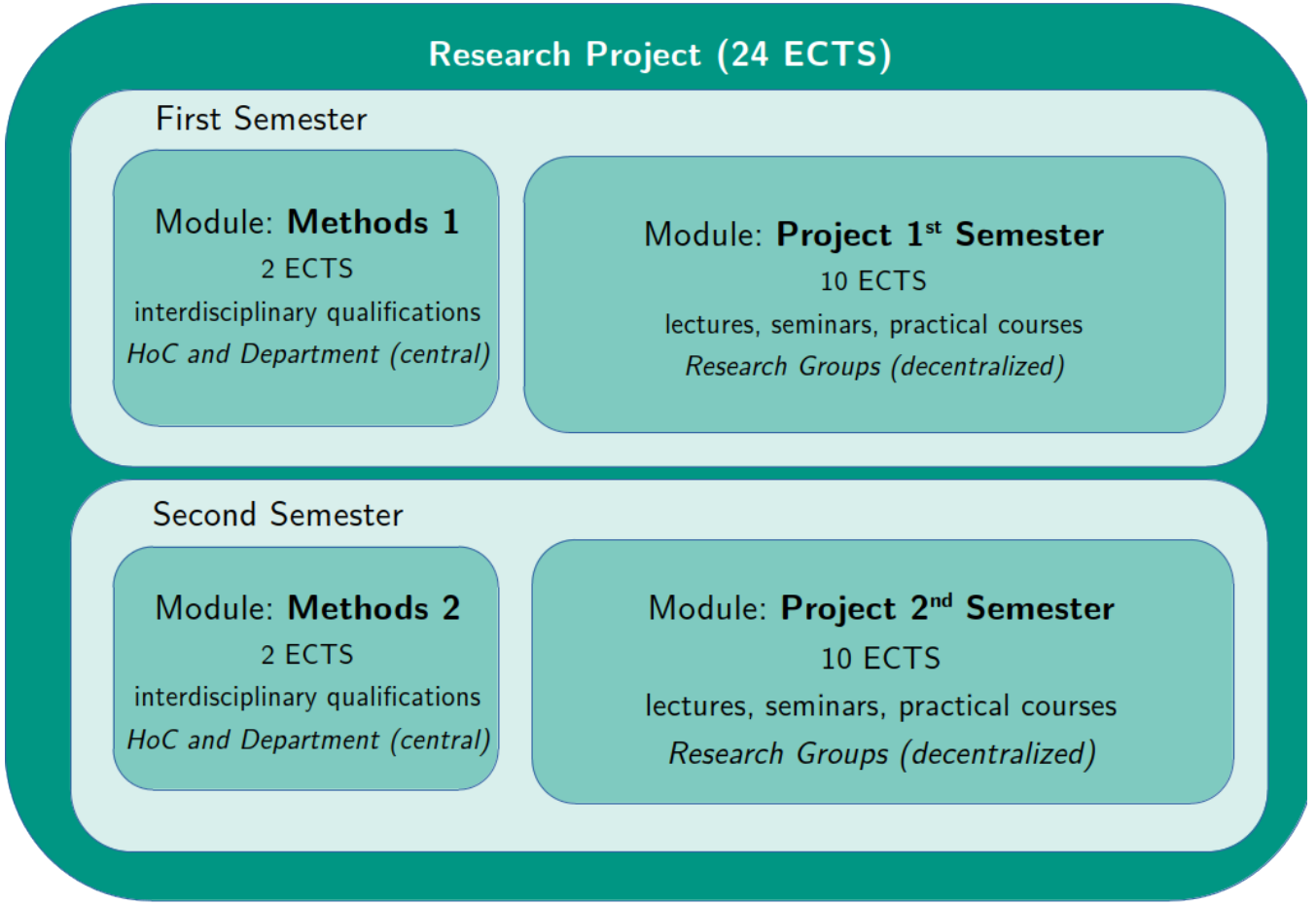
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Scope

- 24 ECTS points (12 per semester) within 4 modules
- 360 working hours per semester (300 hours in project, 60 hours in methods)
- Intensive and flexible supervision by academic employees
- Accompanying lectures on professional and methodical matters
  (seventeen events distributed over lecture time, (schedule on web page))

Organizational: In total four modules



Organizational: Allocation of Credit Points

Two project modules with credit points worth of seminars, lectures and practical courses (in total 20 ECTS)

- Between 5 and 8 ECTS worth of lectures (V)
- At least 3 ECTS worth of seminars (S)
- At least 3 ECTS worth of practical courses (P)

Exemptions can be made if there is a reason.
Allocation dependent on individual project.

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Share of lecture

Acquisition of content-related knowledge through reading, listening, etc.

Share of seminar

Independent development and (written and oral) presentation of other people's scientific works

Share of practical course

Practical scientific work under supervision

Examination Modalities per Project Module

- Multiple project presentations (5-20 min) with subsequent discussion
  (in total 1/3 of the module grade)
- Coordination meetings with the examiner
  (new, to guarantee continuing progress)
- One (individual) oral exam respectively at the end of the semesters
  (1/3 of the module grade)
- One (collective) written report
  (1/3 of the module grade)

IMPORTANT

The weighting of the various types of credit points (lecture, seminar, practical course) does **not** change the weighting of the particular exam grades!

Examination Modalities per Methods Module

The module is ungraded

- Examination of another type during the course of the semesters' achievements, in particular
  - written reports,
  - short presentations,
  - discussion and exercises relating to the contents of the courses.

The amount and content of the required achievements are announced at the beginning of the semester.

Rough Procedure in Phases

First Semester

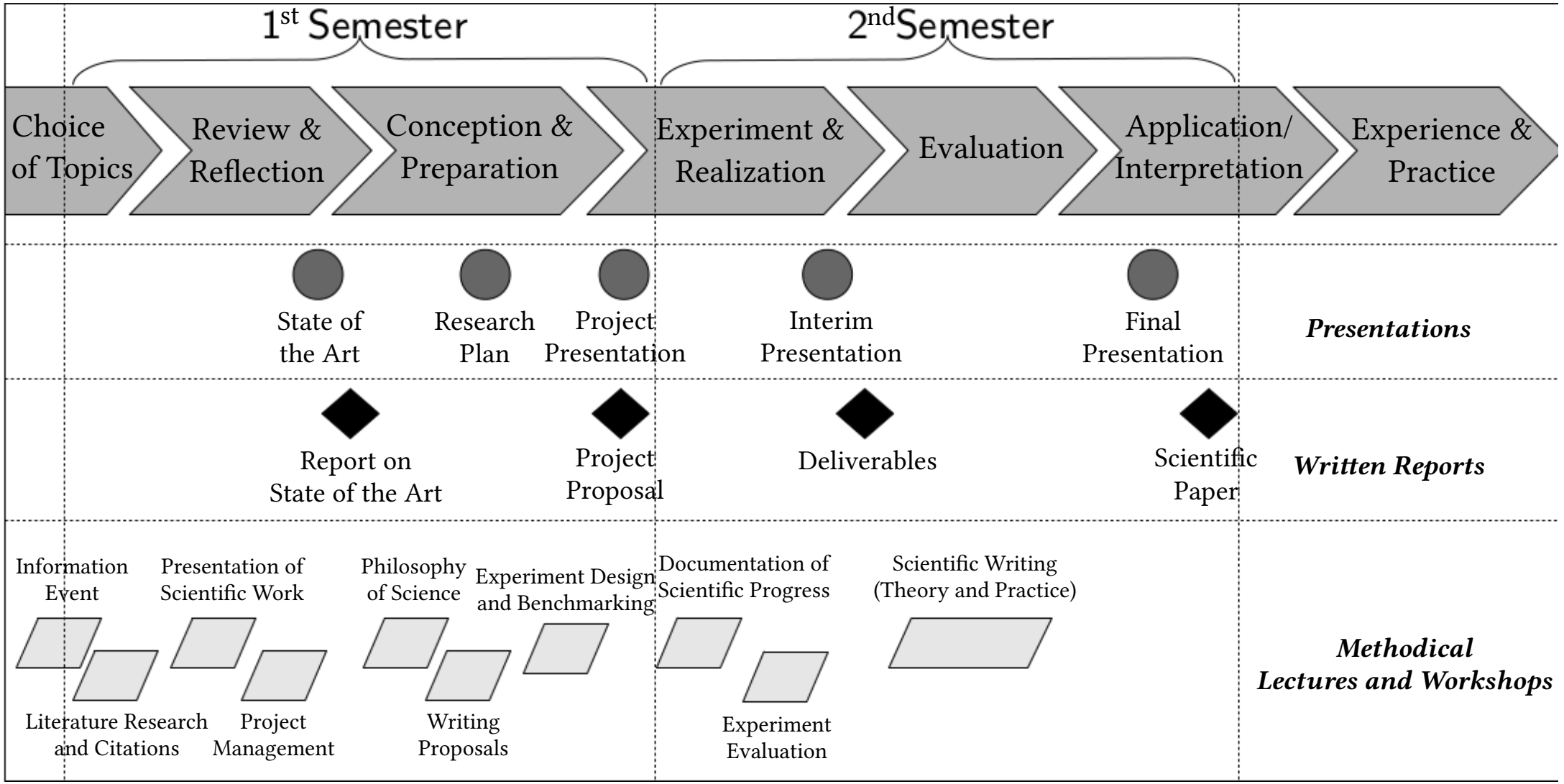
- Topic assignment
- Literature research / state of the art (6 weeks)
  Submission: Description of the state of the art
  Presentation (seminar)
- Project planning (2 weeks)
  Submission: Description of the project goals
  Planning of the preparatory works, short presentation about that
- Preparatory works (8 weeks)
  Submission: Conduct and documentation of the preparatory works
  (e.g., feasibility / preliminary studies,
  Familiarization in tools and techniques,
  Design of experiments, etc.)
  Project proposal (written)
- Presentation and Oral exam

Rough Procedure in Phases

Second Semester

- Implementation (12 weeks)
  Submisson: Dependent on project, according to project proposal
  Intermediate report presentation after 6 weeks
- Scientific paper (4 weeks)
  Submission: Scientific paper and presentation
- Oral exam

Rough Procedure: Overview



Application and Start

Application until **5 November 2026 at 6 p.m.** (all four tasks)

(A) If not already registered for a topic:
1. Talk to advisor(s) and clarify topic assignment
   ⇒ **Directly following:** Topic presentations in front of the library
2. Application for topic with the advisor(s)
3. Application with central PdF coordinator at `ulbrich@kit.edu`

(B) If already registered for a topic:
Double check with supervisor that actually registered (Topic listed under “Assigned Topic”)

(C) Application in ILIAS course (activation is done after confirmation by the advisor(s))

Important: For each application step, indicate your name, topic and matriculation number

First Events

Date	Time	Event
2026-10-29	12:30 – 14:00	Information Event + Topic Presentation
2026-11-09	09:00 – 09:45	Kickoff
2026-11-09	09:45 – 11:15	Literature Search in Informatics
2026-11-26	14:00 – 18:30	Presentation Training
2026-11-27	14:00 – 18:30	Presentation Training
2026-11-30	08:00 – 12:00	Project management I
2026-12-03	14:00 – 18:30	Presentation Training
2026-12-04	14:00 – 18:30	Presentation Training
2026-12-11	14:00 – 18:30	Presentation Training
2026-12-14 – 2026-12-22		Presentations "State-of-the-Art"
2026-12-14 – 2027-02-19		Seminar paper submission
2026-12-14	08:00 – 12:00	Project management II

Important Sources of Data and Information

Websites

`https://informatik.kit.edu/projektgruppe`

Schedule(s)

`https://informatik.kit.edu/projektgruppe/calendar.phtml`

ILIAS course

Praxis der Forschung / Practice of Research (Winter 2026/2027 and Summer 2027)

`https://ilias.studium.kit.edu/goto.php/crs/3070871`