

DOCTOR OF PHILOSOPHY (PHD) DEGREE IN THE FIELD OF PSYCHOLOGY AND A MAJOR CONCENTRATION IN HUMAN-COMPUTER INTERACTION AND HUMAN FACTORS

Program Learning Outcomes for the PhD Degree in the field of Psychology and a Major Concentration in Human-Computer Interaction and Human Factors

Upon completing the PhD degree in the field of Psychology and a major concentration in Human-Computer Interaction and Human Factors, students will be able to:

1. Apply theoretical and methodological tools to carry out independent research in human-computer interaction and human factors.
2. Write an independent and original thesis that is of sufficient quality to merit publication in a top human factors/human-computer interaction journal.
3. Conduct a focused review of the literature and develop a research design to carry out independent research.
4. Communicate and defend their research design and modeling choices when presenting their papers and/or presentations.
5. Communicate their research effectively by writing clearly, concisely, and cogently.
6. Read critically and assess research manuscripts related to their field of study and in other fields.

Requirements for the MA and PhD Degrees in the field of Psychology

MA Degree Program

The MA degree is a thesis master's degree. For general university requirements, please see [Thesis Master's Degrees \(https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-thesis-masters-degrees/\)](https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-thesis-masters-degrees/). For additional requirements, regulations, and procedures for all graduate programs, please see [All Graduate Students \(https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-all-degrees/\)](https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-all-degrees/). Although students are not normally admitted to study for an MA in Psychology, graduate students may earn the MA degree after obtaining approval of their candidacy for the PhD. For general university requirements for PhD degrees, please see [Doctoral Degrees \(https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-doctoral-degrees/\)](https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-doctoral-degrees/). For both MA and PhD degrees, students must complete a research thesis, including a public oral defense. Required coursework is determined by the student's major concentration. Students must complete an admission-to-candidacy procedure to establish their

expertise in their chosen major concentration. Competence in a foreign language is not required.

The requirements listed in the General Announcements (GA) satisfy the minimum requirements for this degree program. In certain instances, courses (or requirements) not officially listed here may be substituted upon approval of the program's academic advisor, or where applicable, the department or program's Director of Graduate Studies. Course substitutions or any exceptions to the stated official curricular requirements must be approved by the [Office of Graduate and Postdoctoral Studies \(https://graduate.rice.edu/\)](https://graduate.rice.edu/). Students and their academic advisors should identify and clearly document the courses to be taken.

Summary

| Code | Title | Credit Hours |
|--|-------|--------------|
| Total Credit Hours Required for the MA Degree in the field of Psychology | | 30 |

Requirements for the PhD Degree in the field of Psychology

PhD Degree Program

For general university requirements, please see [Doctoral Degrees \(https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-doctoral-degrees/\)](https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-doctoral-degrees/). For additional requirements, regulations, and procedures for all graduate programs, please see [All Graduate Students \(https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-all-degrees/\)](https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-all-degrees/). In addition, students pursuing the PhD degree in the field of Psychology must:

- Complete all coursework with a minimum grade of B- (2.67 grade points) in each required course.
- Complete all of the course requirements in their major concentration.
- Successfully complete and present the first-year project in May of the first year.
- Successfully complete and present the second-year project in May of the second year.
- Write and defend a thesis. The thesis committee must be in the area of Human-Computer Interaction and Human Factors and be overseen by a Psychology faculty member affiliated with the Human-Computer Interaction and Human Factors Major Concentration.

Students who have not previously completed a master's degree in Psychology or a related field, must successfully defend a master's thesis and earn the MA degree in Psychology. Students who come to Rice with a master's degree in a related field can be exempted from this requirement.

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Summary

| Code | Title | Credit Hours |
|---|-------|--------------|
| Total Credit Hours Required for the PhD Degree in the field of Psychology and a Major Concentration in Human-Computer Interaction and Human Factors | | 90 |

Degree Requirements for the PhD Degree in the field of Psychology and a Major Concentration in Human-Computer Interaction and Human Factors

| Code | Title | Credit Hours |
|--------------------------------------|---|--------------|
| Core Requirements | | |
| PSYC 502 / STAT 509 | ADVANCED PSYCHOLOGICAL STATISTICS I | 4 |
| PSYC 503 / STAT 510 | ADVANCED PSYCHOLOGICAL STATISTICS II | 3 |
| PSYC 520 | FOUNDATIONS OF COGNITIVE PSYCHOLOGY | 3 |
| PSYC 531 | HF/HCI RESEARCH SEMINAR | 1-3 |
| PSYC 540 | FOUNDATIONS OF ENGINEERING PSYCHOLOGY | 3 |
| PSYC 541 | HUMAN-COMPUTER INTERACTION | 3 |
| PSYC 609 | METHODS IN HUMAN-COMPUTER INTERACTION | 3 |
| PSYC 660 | PROFESSIONAL ISSUES | 3 |
| Elective Requirements | | |
| Select 5 courses from the following: | | 15 |
| PSYC 504 | COMPUTER APPLICATIONS IN PSYCHOLOGY | |
| PSYC 521 | PSYCHOLOGY OF PERCEPTION | |
| PSYC 522 | INFORMATION PROCESSING AND ATTENTION | |
| PSYC 524 | MEMORY | |
| PSYC 525 | PSYCHOLINGUISTICS | |
| PSYC 527 | REASONING, DECISION MAKING, PROBLEM SOLVING | |
| PSYC 530 | FOUNDATIONS OF I-O PSYCHOLOGY | |
| PSYC 535 | HUMAN FACTORS/ERGONOMICS | |
| PSYC 543 | COMPUTATIONAL MODELING OF COGNITIVE PROCESSES | |
| PSYC 581 | VISION SCIENCE | |
| PSYC 601 | MULTIVARIATE STATISTICS | |
| PSYC 602 | PSYCHOMETRICS | |
| PSYC 630 | ADVANCED TOPICS IN I/O | |
| PSYC 634 | PERSONNEL PSYCHOLOGY | |
| PSYC 640 | TOPICS IN HUMAN-COMPUTER INTERACTION | |
| PSYC 662 | NON-TRADITIONAL INTERFACES | |
| PSYC 663 | MEDICAL HUMAN FACTORS | |
| PSYC 664 | USABILITY ASSESSMENT | |
| PSYC 667 | HUMAN FACTORS IN CYBERSECURITY | |

| |
|---------------------|
| First-Year Project |
| Second-Year Project |

| | |
|---|---------------|
| Thesis Requirement | |
| Completion and public defense of thesis | |
| Additional Coursework as Approved by Department | |
| Total Credit Hours | Minimum of 90 |

Policies for the PhD Degree in the field of Psychology

Department of Psychological Sciences Graduate Program Handbook

The General Announcements (GA) is the official Rice curriculum. As an additional resource for students, the department of Psychological Sciences publishes a graduate program handbook, which can be found here: https://gradhandbooks.rice.edu/2023_24/Psychological_Sciences_PhD_Graduate_Handbook.pdf

Transfer Credit

For Rice University's policy regarding transfer credit, see [Transfer Credit \(https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-all-degrees/#transfer\)](https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-all-degrees/#transfer). Some departments and programs have additional restrictions on transfer credit. Students are encouraged to meet with their academic program's advisor when considering transfer credit possibilities.

Departmental Transfer Credit Guidelines

Students pursuing the PhD degree in the field of Psychology should be aware of the following departmental transfer credit guidelines:

- Requests for transfer credit will be considered by the program director on an individual case-by-case basis.

Additional Information

For additional information, please see the Psychological Sciences website: <https://psychology.rice.edu/>

Opportunities for the PhD Degree in the field of Psychology

Additional Information

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