

PSYCHOLOGY: DATA SCIENCE IN HUMAN BEHAVIOR, MS

This is a named option within the Psychology, MS. (<https://guide.wisc.edu/graduate/psychology/psychology-ms/>)

This program is designed to train students who have an undergraduate degree in a core behavioral science (e.g., Psychology, Economics, Sociology) to use modern data-science tools to address questions regarding human behavior. These skills are highly in demand by business, government and non-profit organizations to better understand how people act and interact with products, advertisement and societal policies. The program is designed to be completed in four semesters of full-time study. It culminates in one semester of placement with companies or other organizations to conduct an applied capstone project.

Graduate students in this program are not permitted to accept any research, project, or teaching assistantship positions that would waive tuition or provide tuition remission.

ADMISSIONS

ADMISSIONS

Please consult the table below for key information about this degree program's admissions requirements. The program may have more detailed admissions requirements, which can be found below the table or on the program's website.

Graduate admissions is a two-step process between academic programs and the Graduate School. **Applicants must meet the minimum requirements (<https://grad.wisc.edu/apply/requirements/>) of the Graduate School as well as the program(s).** Once you have researched the graduate program(s) you are interested in, apply online (<https://grad.wisc.edu/apply/>).

Requirements	Detail
Fall Deadline	March 31
Spring Deadline	This program does not admit in the spring.
Summer Deadline	This program does not admit in the spring.
GRE (Graduate Record Examinations)	Not required.
English Proficiency Test	Refer to the Graduate School: Minimum Requirements for Admission policy: https://policy.wisc.edu/library/UW-1241 (https://policy.wisc.edu/library/UW-1241/).
Other Test(s) (e.g., GMAT, MCAT)	n/a
Letters of Recommendation Required	0

Applicants holding a bachelor's degree in the social sciences, a strong statistics, and behavioral science research background are encouraged to apply for admission to the graduate program in data science in human

behavior. Previous computational experience will enhance your application, but is not required.

Apply via the Graduate School online application (<https://grad.wisc.edu/apply/>).

APPLICATION CHECKLIST

A complete application includes the following items:

1. Statement of purpose: Your essay should be a concise description of your reasons for choosing Data Science in Human Behavior at the University of Wisconsin-Madison (not to exceed two pages). Please include your behavioral data science interests and career goals as well as a description of your preparation for graduate study including relevant coursework, related employment, research experience, publications, presentations, awards, honors as well as any demonstrated interest in computational techniques and computational experience. For more information about the statement of purpose and application process, see the program website (<https://datascience.psych.wisc.edu/admissions/>).
2. Supplementary application: You will be asked to provide any previous research experiences; provide course details (grade earned, semester completed, course title(s)) for any math and statistics courses, research methods courses, and any computational courses. For additional information about the supplemental application, see the program website (<https://datascience.psych.wisc.edu/admissions/>).
3. Unofficial transcripts (<https://datascience.psych.wisc.edu/admissions/>): Unofficial transcripts from all previous postsecondary studies are required. International academic records must be submitted in the original language and accompanied by an English translation. If an applicant is recommended for admission, the Graduate School will ask applicants to request official transcripts be sent to the Graduate School from the undergraduate institution.

FUNDING

FUNDING

GRADUATE SCHOOL RESOURCES

[The Bursar's Office provides information about tuition and fees associated with being a graduate student.](#) [Resources to help you afford graduate study might include assistantships, fellowships, traineeships, and financial aid.](#) [Further funding information is available from the Graduate School.](#) Be sure to check with your program for individual policies and restrictions related to funding.

PROGRAM INFORMATION

Students enrolled in this program are not eligible to receive tuition remission from graduate assistantship appointments at this institution.

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum degree requirements (<https://guide.wisc.edu/graduate/#requirements-text>) and policies (<https://guide.wisc.edu/graduate/#policies-text>), in addition to the program requirements listed below.

NAMED OPTION REQUIREMENTS

MODE OF INSTRUCTION

Face to Face	Evening/ Weekend	Online	Hybrid	Accelerated
Yes	No	No	No	Yes

Mode of Instruction Definitions

Accelerated: Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

Evening/Weekend: Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

Face-to-Face: Courses typically meet during weekdays on the UW–Madison Campus.

Hybrid: These programs combine face-to-face and online learning formats. Contact the program for more specific information.

Online: These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

CURRICULAR REQUIREMENTS

Requirement Detail

Minimum Credit Requirement

Minimum Credit Requirement

Minimum Graduate Coursework Requirement

Overall Graduate GPA Requirement

Other Grade Requirements

Assessments and Examinations

Language Requirements

REQUIRED COURSES

Code	Title	Credits
Design and Analysis		
PSYCH 610	Design and Analysis of Psychological Experiments I	4
PSYCH 710	Design and Analysis of Psychological Experiments II	4

Proseminar

Students must complete the following course in their first two semesters (Fall and Spring). 2

PSYCH 709	Proseminar in Data Science in Human Behavior	
-----------	--	--

Tools and Application

PSYCH 750	Programming for Human Behavioral Data Science	3
PSYCH 752	Applied Machine Learning for Behavioral Data Science	3
PSYCH 755	Environments and Tools for Large-Scale Behavioral Data Science	3

Capstone

PSYCH 790	Capstone I	5
PSYCH 791	Capstone II	3

Electives

Students must complete at least 6 credits from the following courses: 6

PSYCH 711	Current Topics in Psychology	
PSYCH 704	Proseminar in Clinical Psychology	
PSYCH 701	Proseminar in Perception, Cognition, and Cognitive Neuroscience	
PSYCH 720	Essentials of Cognitive Neuroscience	
PSYCH/ COMP SCI/ ED PSYCH 770	Human-Computer Interaction	
PSYCH/B M I/ COMP SCI 841	Computational Cognitive Science	
COMP SCI 564	Database Management Systems: Design and Implementation	
COMP SCI 744	Big Data Systems	
COMP SCI/ E C E 763	Trustworthy Artificial Intelligence	
COMP SCI 765	Data Visualization	
COMP SCI 784	Foundations of Data Management	
COMP SCI 838	Topics in Computing	
ECON 410	Introductory Econometrics	
E C E 379	Special Topics in Electrical and Computer Engineering (Topic: Data Science and Engineering)	

Total Credits 33

Other Policy

Students in this program may not take courses outside the prescribed curriculum without faculty advisor and program director approval. Students in this program cannot enroll concurrently in other undergraduate or graduate degree programs.

POLICIES

GRADUATE SCHOOL POLICIES

The Graduate School's Academic Policies and Procedures (<https://grad.wisc.edu/acadpolicy/>) serve as the official document of record for Graduate School academic and administrative policies and procedures and are updated continuously. Note some policies redirect to entries in the

official UW–Madison Policy Library (<https://policy.wisc.edu/>). Programs may set more stringent policies than the Graduate School. Policies set by the academic degree program can be found below.

NAMED OPTION-SPECIFIC POLICIES

PRIOR COURSEWORK

Graduate Credits Earned at Other Institutions

Students are not allowed to transfer credits of graduate coursework from other institutions.

Undergraduate Credits Earned at Other Institutions or UW–Madison

With program approval, no more than 3 credits of coursework numbered 300 or above from a UW–Madison undergraduate degree are allowed to transfer in fulfillment of the 6 credit elective course requirement. These credits are not allowed to count toward the 50% graduate coursework minimum unless numbered 700 or above from UW–Madison. Coursework earned ten or more years prior to admission to a master's degree is not allowed to satisfy requirements. Credits from other undergraduate institutions will not be allowed to transfer.

Credits Earned as a Professional Student at UW–Madison (Law, Medicine, Pharmacy, and Veterinary careers)

Refer to the Graduate School: Transfer Credits for Prior Coursework (<https://policy.wisc.edu/library/UW-1216/>) policy.

Credits Earned as a University Special Student at UW–Madison

With program approval, students are allowed to transfer up to 3 credits of coursework numbered 300 or above taken as a University Special student that can be applied towards the 6 credit elective course requirement. These credits are not allowed to count toward the 50% graduate coursework minimum unless numbered 700 or above or are taken to meet the requirements of a capstone certificate and has the “Grad 50%” attribute. Credits earned ten or more years prior to admission to a master's degree is not allowed to satisfy requirements.

PROBATION

Refer to the Graduate School: Probation (<https://policy.wisc.edu/library/UW-1217/>) policy.

ADVISOR / COMMITTEE

Every graduate student is required to have an advisor. To ensure that students are making satisfactory progress toward a degree, the Graduate School expects them to meet with their advisor on a regular basis.

In many cases, an advisor is assigned to incoming students. Students can be suspended from the Graduate School if they do not have an advisor. An advisor is a faculty member, or sometimes a committee, from the major department responsible for providing advice regarding graduate studies.

A committee often accomplishes advising for the students in the early stages of their studies.

CREDITS PER TERM ALLOWED

15 credit maximum. Refer to the Graduate School: Maximum Credit Loads and Overload Requests (<https://policy.wisc.edu/library/UW-1228/>) policy.

TIME LIMITS

Refer to the Graduate School: Time Limits (<https://policy.wisc.edu/library/UW-1221/>) policy.

GRIEVANCES AND APPEALS

These resources may be helpful in addressing your concerns:

- Bias or Hate Reporting (<https://doso.students.wisc.edu/bias-or-hate-reporting/>)
- Graduate Assistantship Policies and Procedures (<https://hr.wisc.edu/policies/gapp/#grievance-procedure>)
- Hostile and Intimidating Behavior Policies and Procedures (<https://hr.wisc.edu/hib/>)
 - Office of the Provost for Faculty and Staff Affairs (<https://facstaff.provost.wisc.edu/>)
- Employee Assistance (<http://www.eao.wisc.edu/>) (for personal counseling and workplace consultation around communication and conflict involving graduate assistants and other employees, post-doctoral students, faculty and staff)
- Employee Disability Resource Office (<https://employeeabilities.wisc.edu/>) (for qualified employees or applicants with disabilities to have equal employment opportunities)
- Graduate School (<https://grad.wisc.edu/>) (for informal advice at any level of review and for official appeals of program/departmental or school/college grievance decisions)
- Office of Compliance (<https://compliance.wisc.edu/>) (for class harassment and discrimination, including sexual harassment and sexual violence)
- Office Student Assistance and Support (OSAS) (<https://osas.wisc.edu/>) (for all students to seek grievance assistance and support)
- Office of Student Conduct and Community Standards (<https://conduct.students.wisc.edu/>) (for conflicts involving students)
- Ombuds Office for Faculty and Staff (<http://www.ombuds.wisc.edu/>) (for employed graduate students and post-docs, as well as faculty and staff)
- Title IX (<https://compliance.wisc.edu/titleix/>) (for concerns about discrimination)

L&S POLICY FOR GRADUATE STUDENT ACADEMIC APPEALS

Graduate students have the right to appeal an academic decision related to an L&S graduate program if the student believes that the decision is inconsistent with published policy.

Academic decisions that may be appealed include:

- Dismissal from the graduate program
- Failure to pass a qualifying or preliminary examination
- Failure to achieve satisfactory academic progress
- Academic disciplinary action related to failure to meet professional conduct standards

Issues such as the following cannot be appealed using this process:

- A faculty member declining to serve as a graduate student's advisor.
- Decisions regarding the student's disciplinary knowledge, evaluation of the quality of work, or similar judgements. These are the domain of the department faculty.

- Course grades. These can be appealed instead using the L&S Policy for Grade Appeal (<https://kb.wisc.edu/lis/22258/>).
- Incidents of bias or hate, hostile and intimidating behavior (<https://hr.wisc.edu/hib/>), or discrimination (Title IX (<https://compliance.wisc.edu/titleix/>), Office of Compliance (<https://compliance.wisc.edu/eo-complaint/formal-investigations/>)). Direct these to the linked campus offices appropriate for the incident(s).

Appeal Process for Graduate Students

A graduate student wishing to appeal an academic decision must follow the process in the order listed below. Note time limits within each step.

1. The student should first seek informal resolution, if possible, by discussing the concern with their academic advisor, the department's Director of Graduate Studies, and/or the department chair.
2. If the program has an appeal policy listed in their graduate program handbook, the student should follow the policy as written, including adhering to any indicated deadlines. In the absence of a specific departmental process, the chair or designee will be the reviewer and decision maker, and the student should submit a written appeal to the chair within 15 business days of the academic decision. The chair or designee will notify the student in writing of their decision.
3. If the departmental process upholds the original decision, the graduate student may next initiate an appeal to L&S. To do so, the student must submit a written appeal to the L&S Assistant Dean for Graduate Student Academic Affairs within 15 business days of notification of the department's decision.
 - a. To the fullest extent possible, the written appeal should include, in a single document: a clear and concise statement of the academic decision being appealed, any relevant background on what led to the decision, the specific policies involved, the relief sought, any relevant documentation related to the departmental appeal, and the names and titles of any individuals contributing to or involved in the decision.
 - b. The Assistant Dean will work with the Academic Associate Dean of the appropriate division to consider the appeal. They may seek additional information and/or meetings related to the case.
 - c. The Assistant Dean and Academic Associate Dean will provide a written decision within 20 business days.
4. If L&S upholds the original decision, the graduate student may appeal to the Graduate School. More information can be found on their website: Grievances and Appeals (<https://grad.wisc.edu/documents/grievances-and-appeals/>) (see: Graduate School Appeal Process).

OTHER

n/a

PROFESSIONAL DEVELOPMENT

PROFESSIONAL DEVELOPMENT GRADUATE SCHOOL RESOURCES

Take advantage of the Graduate School's professional development resources (<https://grad.wisc.edu/pd/>) to build skills, thrive academically, and launch your career.