

The IDSC Fellows Program prepares undergraduate and graduate students to become interdisciplinary leaders in data science. Through faculty mentorship and access to the University of Miami's advanced computing resources, Fellows learn to apply computational methods to research questions that cross traditional disciplinary boundaries.

Eligibility Each year, the IDSC Fellows Program awards this prestigious designation to six University of Miami students: graduate students and undergraduates at the sophomore level or above. Applicants may come from any school or college and must be in good standing.

Program Overview IDSC Fellows develop computational skills and expand their research experience under the guidance of two mentors: the student's Academic or Research Advisor and an IDSC Mentor identified by the IDSC Fellows Selection Committee.

All IDSC Fellows will have the opportunity to use the University's Advanced Computing facilities for their research and to work closely with IDSC faculty and staff. No stipend is offered, but a small cash prize is awarded.

Competitive applicants should have some experience in a computational setting and be able to outline an interdisciplinary project they would like to pursue. Project details do not need to be fully defined at the time of application; however, applicants should clearly state the disciplines that would come together in the project. At the close of the academic year, the Fellows present their work at a spring symposium.

For the 2026-2027 session, the application deadline is **Monday, September 21, 2026**, by 5:00 PM EST.

The guidelines below define key program terms, explain the structure of the fellowship year, and outline the responsibilities of the Fellows, Research Advisors, IDSC Mentors, and applicants.

Terminology

- **Student Finalists:** Students selected as finalists proceed to phase I of the Program. In this phase, each finalist meets with their faculty research advisor and potential IDSC mentor to discuss project needs and develop a plan of action.
- **IDSC Fellows:** Students selected as IDSC Fellows proceed to phase II of the Program. In this phase, they formally begin their projects with guidance from their Research Advisor and IDSC Mentor.
- **Research Advisor:** A faculty member, often from the student's home department, who serves as the domain expert. For undergraduates, this is often a faculty member with whom the student has previously worked. For graduate students, this is the dissertation research mentor (a.k.a. Academic Mentor).
- **IDSC Mentor:** The IDSC Mentor is an IDSC-affiliated faculty member or staff member who serves as the computational expert. IDSC Mentors provide more than technical advice: they help the Fellows strengthen the project's conceptual and computational foundation, refine the analytical approach, and identify an appropriate direction.

Program Structure

The Program proceeds through finalist selection, mentor matching, project development, midpoint engagement, and a closing symposium. The sections below describe each stage and then outline expectations for Fellows, advisors, and applicants.

1. Selection of Finalists

The Steering Committee reviews student applications, selects Student Finalists, and identifies potential IDSC Mentors.

2. Selection of IDSC Fellows

Student Finalists and their Research Advisors meet with potential IDSC Mentors to discuss project needs and develop a plan of action; this constitutes phase I of the project. If a strong match is identified between the project's needs and an IDSC Mentor's expertise, the student is selected as an IDSC Fellow, moves to phase II, and formally begins the project.

3. IDSC Fellows Launch Event

IDSC will host a launch event to introduce the Fellows to IDSC faculty and staff, and to give the IDSC community an overview of their projects. The event will provide background on each project and summarize the plan of action developed by the Fellow, Research Advisor, and IDSC Mentor. Fellows will give a 5-minute slide presentation outlining their prospective project.

4. Checkpoints and Fellow Gatherings

IDSC will contact the Fellows every few weeks to confirm that their projects are progressing as planned. IDSC will also invite the current cohort to at least two informal IDSC Fellows Program gatherings during the year. These gatherings are designed to help the Fellows build connections across the cohort, expand their networks beyond their home disciplines, and strengthen their engagement with the broader IDSC community.

5. Workshops and Other Training Opportunities

As they make progress on their projects, the IDSC Fellows will be invited to attend IDSC-hosted workshops, Lunch & Learn Seminars, invited-speaker seminars, symposia, and conferences as they arise. Attendance is encouraged, particularly when the opportunity directly benefits the project, but it is not compulsory.

6. IDSC Fellows Symposium (Closing Event)

Fellows will be expected to present their work progress at an IDSC Fellows Capstone Symposium in April. Further details will be provided at least two weeks before the symposium. A networking reception will follow, with invited guests from across the University and beyond. Cash prizes will be awarded.

7. Continued Engagement

IDSC Fellows remain part of the IDSC community after the Program concludes. Although no formal mechanism is in place, IDSC hopes to maintain contact with and support Fellows as they enter the next phase of their careers.

Program Guidelines and Roles

IDSC Fellow Guidelines Fellows are expected to:

- Conduct a research project for the duration of the Program;
- Enroll in appropriate courses, when applicable;
- Coordinate regularly with both mentors; and
- Contact IDSC faculty and staff as needed for access to software, HPC facilities, or other computational resources.

During phase I, when the student is a finalist, the Student Finalist, Research Advisor, and IDSC Mentor should all attend the first meeting. The goal of this meeting is to:

- Refine the definition of the project;
- Lay out a plan of research action;
- Explicitly outline the specific contributions of each party to the project.

If any missing pieces are identified (skills, resources, etc.), a plan should be made for how to resolve them. IDSC will provide any computational resources that the project needs.

Undergraduate Fellows are encouraged to ask their department whether their IDSC Fellows project can be used for research or writing credits. These credits may help them become eligible for *summa cum laude* honors or fulfill research requirements in their major. Undergraduate Fellows conclude the Program at the end of the academic year's spring term.

Graduate-level IDSC Fellows are expected to work on a defined project within the scope of their graduate thesis research. Their research advisor or principal investigator must serve as one of the mentors, and an IDSC Mentor will be assigned according to the Fellow's cross-disciplinary interests and research needs. Graduate-level Fellows conclude the Program at the end of the spring semester, with the opportunity to continue their work over the summer if needed.

All Fellows are responsible for setting up regular, recurring meetings with both advisors, and devoting the time needed for the project to succeed. The expected workload is equivalent to one 3-credit course, with an appropriate amount of time dedicated to the project each week.

Applicants are encouraged to suggest an IDSC Mentor—either from our website or by previously having met an IDSC faculty member—but the final decision of IDSC Mentor assignment will rest with the Steering Committee. Appointment of the IDSC Fellow is contingent upon the success of finding an IDSC Mentor. The Committee has strategies in place to ensure that an IDSC Mentor is successfully identified.

Advisor Guidelines The IDSC Mentors will guide the Fellows through the design, management, analysis, interpretation, and communication of their research. It is the responsibility of the Fellow to use that guidance in pushing the project forward. The intention of the Program is to train the Fellow in *research*, and thus the program is designed to be soft-directed. The Fellow will develop the ability to: problem-solve, self-motivate, and develop their critical and creative thinking.

Either advisor (i.e. the Research Advisor or the IDSC Mentor) has the freedom to limit the scope of the project as they see fit. It is extremely important that both advisors ensure that *all parties* are acknowledged and credited appropriately for their contribution, particularly in the case where they meet authorship criteria for publication.

In terms of tangential skill development for the IDSC Fellow outside of the Program, the IDSC Mentors will consult with the Research Advisors to direct the Fellows towards any training opportunities that might help them, and to involve them in lab meetings and other activities of their research groups. The Research Advisor is responsible for guiding the Fellow towards research or writing credit courses that might be applicable.

Application Process, Materials, and Timeline Applicants are required to complete an online [Application Form](#) accompanied by a transcript, a CV, and, a support letter from their Academic Mentor.

The Steering Committee will meet within two weeks after the closing of applications to choose the IDSC Fellows. An announcement detailing selected finalists will be delivered to applicants no later than **Monday, October 23, 2026**. Additionally, the announcement will be emailed to offices of Undergraduate Research, Graduate Office (UM, Med Sch, RSMAS, CoE, CAS), and to student groups at CoE, CAS, Med School, and RSMAS. Media Relations will help publicize it internally (NEWS@TheU, etc.), and via IDSC social media.

Selection Criteria The selection criteria are:

- Applicants must have sufficient computational skills to get started on the proposed project.
- The proposed project integrates ideas from *more than two* disciplines, one of which must be new to the applicant.
- Applicants need a support letter from their Academic Advisor or PI.
- Applicants should have a well-formulated, achievable research question that is in line with their Academic Mentor's letter of support.
- The Application must be complete, well written, well organized, and thoroughly thought out. Preference will be given to projects where the data is available and ready for analysis.
- Previous research experience is not requisite, but is an advantage.
- Student must be in good standing with the University.