Data Science Course Development Program
2025 CALL FOR PROPOSALS

Program Overview

The **Texas A&M Institute of Data Science** (TAMIDS), in association with the **Texas A&M Center for Teaching Excellence** (CTE), solicits proposals for enhancing Data Science education at Texas A&M. The TAMIDS Data Science Course Development Program aims to support faculty to develop new courses in Data Science, Artificial Intelligence, and Machine Learning (DS/AI/ML) or to revamp existing courses to include DS/AI/ML components.

Support

The program supports the development of for-credit courses entailing at least three SCH for graduate or undergraduate Texas A&M students, training programs for Texas A&M communities, or external educational outreach that entails a similar participant effort. Possible proposed deliverables include but are not limited to, class notes, videos, labs, homework, and exam problem sets.

FUNDING: TAMIDS will provide up to **$15,000** in unrestricted funds deposited in the lead proposer's research account for accepted proposals. The funds are intended to support time for the proposer to design and develop the course curriculum and deliverables, and can also support associated faculty, researchers, or students engaged in the proposed development activities. The funding does not support the delivery of the proposed program when completed.

The funds will be deposited in two installments, the first **$10,000** at the start of the project, and the remaining **$5,000** when the proposed deliverables are completed and any new course submitted to the Curricular Approval Request System (CARS), by **December 31, 2026**.

RESOURCES: TAMIDS has developed resources for credit-bearing courses and non-credit-bearing training in Data Science and can assist awardees who wish to adapt or utilize these resources within their project.

Details concerning the *Course Development Program* and available resources are available at **tamids.tamu.edu** or contact the program manager, **Drew Casey**, at **drew.casey@tamu.edu**.

Criteria for 2025 Proposals

Since course development strengthens translation from related research activities, TAMIDS particularly encourages submissions related to one or more of the following:

- Rapidly growing and high-impact areas in AI, such as Generative AI and Large Language Models.

- Priority areas identified in national-level reports and initiatives, such as the US Presidential Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence.
- Major strategic initiatives within Texas A&M involving opportunities for Data Science, Machine Learning, and AI.
- Broadening knowledge of Data Science, Machine Learning, and AI in new Texas A&M communities.

ELIGIBILITY: Individual and team proposals are allowed. The lead proposer must be a full-time Tenured / Tenure Track or Instructional Track faculty of any level with a primary affiliation in Texas A&M University (including the Galveston and Qatar campuses), TEES, TEEX, AgriLife Research, AgriLife Extension, or TTI. Collaboration outside these organizations is permitted, but funds will only be available to personnel within these organizations.

LIMITATIONS: Each person may be a proposer (lead or otherwise) for only one proposal per review cycle.

Submission of Proposals

DEADLINE: Proposals will be accepted up to the deadline date of **March 3, 2025, 11:59 pm CST**.

Proposals should be uploaded through Qualtrics via https://u.tamu.edu/2024-Course-Proposal as a single PDF file containing the following information:

1) **Summary Cover-Page**, including:
   a) Heading: "TAMIDS Course Development Grant Program"
   b) Name, department, and email address of the lead proposer and any co-proposers
   c) The name and level of the course to be developed or revised (with the number for existing courses)
   d) Project summary, 200 words maximum
2) **Project Narrative**, including the following information (2000 words maximum, not counting figures)
   a) Intended audience, likely prerequisites, and estimated number of students, and frequency of offering the course.
   b) Description of the course development activity including development process and deliverables. Proposers must include information responsive to the review criteria listed above, where relevant.
3) **Support Letter** from the lead proposer's Department Head confirming the fit of the course within the expected academic program curriculum, and that the course is expected to be offered regularly using the developed content (for new courses) or updated content (for existing courses).
   Proposers are encouraged to discuss their proposal with their department before submission to establish fit within their program and to facilitate awareness of any related proposals.

4) **Resumes** for all proposers, a maximum of two pages for each resume.
5) **Optional Appendices**
   a) References to external literature and related programs (2 pages maximum).
   b) Current syllabus of any course for which revision is proposed, if applicable.
   c) Documentation of relation to high-impact areas, national priorities, or Texas A&M strategic initiatives. Possible formats include but are not limited to detailed references to external documents, graphs, and support letters (2 pages maximum).

Proposal Review Process

Proposals will be reviewed competitively by a committee established by TAMIDS's Director, with awards being communicated by *April 30, 2025*.

Review Criteria

Content, Positioning, & Deliverables:
- A. Demonstrating a substantial amount of new content or improvement of existing content.
- B. Specific project deliverables (such as class notes, videos, labs, homework, problem sets, etc.).
- C. Positioning of course within an academic program of the proposer's Department and/or College.
- D. Relation to high-impact areas, national priorities, or Texas A&M strategic initiatives

Reach, Impact, Partnership, & Community:
- E. Promotion of interdisciplinary Data Science education.
- F. Engagement of students with research activities facilitated by or coordinated with the course.
- G. Broader impact, reach, and generalization beyond the proposer's organization.
- H. Measures to create an impactful learning community through the course.

Approach & Metrics:
- I. Utilization of innovative approaches to Data Science education, with justification of approach.
- J. Demonstrated grounding within current educational theory and practice.
- K. Outline the metrics and evaluation methods that would be used in the proposed course.

Additional Considerations and Conditions

The following conditions apply to course development projects supported under the program:
1. The proposer's department confirms the fit of the course within the associated academic program curriculum and that the course is expected to be offered regularly at Texas A&M using the developed content;
2. Revised courses must have a substantial amount of new content compared with existing offerings;

3. In the case of two or more proposals having marked overlap, TAMIDS may require coordination of the proposed activities as a condition for support; and
4. The proposer will submit a brief report on outcomes at the end of the project. See specific requirements in "Submission of Proposals" above.