

Improving Undergraduate STEM Education (IUSE)

Application Workbook

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Understanding this document

This application workbook is designed to help you organize your thoughts and ideas in one place as you **prepare your grant application**. The questions are structured to build on one another—starting broadly with an overview of your organization and project goals and then moving into more specific details that will ultimately support the development of a strong proposal.

This application workbook is customized to align with the specific Notice of Funding Opportunity (NOFO) for Improving Undergraduate STEM Education Grants. Grants Office consultants carefully review each NOFO to **identify the core elements you will be evaluated on**, the questions you'll need to address in the application, and any additional components—such as letters of support or required approvals—that you'll need to include. This way, you know the questions you're working on throughout this document are the same ones reviewers will be looking for in your application.

Keep in mind that this workbook is **meant to serve as a starting point**, not a final draft. It is a planning tool and should not be submitted as your application. You can add as much or as little information as makes sense for you right now. The more detail you provide early on, the stronger foundation you'll have for drafting narrative sections, engaging potential collaborators, and guiding discussions with your grant writer. Don't have a grant writer? We can help. Complete this workbook and email it to us: grantwriting@grantsoffice.com.

Think of this as a flexible tool: **a place to capture your ideas, shape your project framework, and set yourself up for success in the grant writing process!**

Improving Undergraduate STEM Education (IUSE) Grants

The Improving Undergraduate Science, Technology, Engineering, and Mathematics (STEM) Education is a collection of grant programs from the National Science Foundation (NSF), each of which aims to integrate innovative and transformative approaches to undergraduate STEM learning environments. The IUSE: Directorate for STEM Education is its core program open to all institutions of higher education and associated organizations.

Grants are available across two learning tracks, each with three different levels of scope, funding, and scale.

Engaged Student Learning (ESL) – The ESL program track funds projects that seek to develop, test, and use novel teaching practices and curricular innovations with the goal of better engaging students and improving learning, persistence, and retention in STEM fields.

1. *ESL Level One:* Maximum award of $400,000. Three-year project period. Supports early-stage or exploratory research on a small scale.
2. *ESL Level Two:* Award between $400,001 and $750,000. Three-year project period. Supports department-wide or multi-institutional partnerships on larger-scale projects.
3. *ESL Level Three:* Award between $750,001 and $2,000,000. Five-year project period. Supports large-scale projects that benefit many students or dispersed communities of faculty and instructors.

Institutional & Community Transformation (ICT) – The ICT program track funds projects that seek systemic changes in STEM learning and teaching measured across departments, institutions, or larger STEM communities.

1. *ICT Capacity Building:* Maximum award of $200,000 ($400,000 for institutional partnerships). Two-year project period. Enables institutions with no prior ICT funding to identify a future project.
2. *ICT Level One:* Maximum award of $400,000. Three-year project period. Supports early-stage exploratory projects on a small scale.
3. *ICT Level Two:* Award between $400,001 and $2,000,000. Five-year project period. Supports large-scale projects that impact broad communities across institutions, departments, and groups of STEM faculty researchers.





We hope this workbook helps your application land in the win column. **Need some help?** Grants Development Consultants are standing by to assist with anything from grant research, project development, proposal writing, and proposal review. Just complete this workbook and email us: grantwriting@grantsoffice.com

Improving Undergraduate STEM Education Grant Basics

The IUSE: Innovation in Two-Year College STEM Education Program is open to two-year colleges of higher education. Two-year colleges are eligible to apply for the General Directorate program, as well as the Two-Year Program.

Projects can be proposed in one of two tracks that mirror the general IUSE program tracks. Each aims to integrate innovative and transformative approaches to undergraduate STEM learning environments, with a maximum award of $500,000.

Focus on the Academic Experiences of Two-Year College Students – This program track funds projects that develop innovative teaching practices and curricular innovations with the goal of improving the student experience in STEM courses and pathways.

Find the Project Timeline worksheet on Page 14.

Leveraging Institutional Strengths And Innovations – This program track funds projects that builds capacity at two-year institutions that enables greater innovation and improved STEM learning and teaching.

Learn more about the **Improving Undergraduate STEM Education Grant Program** in Grants Office Communities:

Deadlines and Eligibility	Project Period and Maximum Award Sizes
July 15, 2026 ICT Level Two ESL Level Two and Three December 9, 2026 (projected) Two-Year, Track One and Two January 20, 2027 ICT Capacity Building and Level One ESL Level One Institutions of higher education and associated organizations are eligible to apply. Two-year institutions may also apply to the Two-Year program.	ICT Capacity Building: Two years. $200,000 Award ($400,000 for joint applications) ICT Level One, ESL Level One, ESL Level Two: Three years. Level One awards up to $400,000. Level Two awards up to $750,000. ICT Level Two and ESL Level Three: Five years. Awards up to $2,000,000 Two-Year Track One and Two: Three years. Awards up to $500,000 (with an extra $100,000 available for institutions with no NSF funding in last five years). Cost match is not required for any program.

Improving Undergraduate STEM Education Project Planning Guide

Before beginning your organization's application, work through the following questions to help your project take shape. These prompts will help you develop your project into a winnable proposal.

Organization Name

Organization's SAM/UEI

Organization's EIN



Important! You must have a Unique Entity Identifier to apply for IUSE. You can check your organization's status or register at sam.gov.

	Yes	No
Is your organization able to meet both of the following criteria: 1. Eligible to apply based on the eligibility criteria on Page 5? 2. PI(s) or co-PI(s) submitted no more than three IUSE proposals during this cycle?		
Have you connected with your institution's Authorized Organizational Representative (AOR) for submission in the Research.gov Portal?		
Will your project will be a joint submission with another institution?		

Program Track and Level:

- Engaged Student Learning Level One
- Engaged Student Learning Level Two
- Engaged Student Learning Level Three
- Institutional & Community Transformation Capacity Building
- Institutional & Community Transformation Level One
- Institutional & Community Transformation Level Two
- Two-Year: Academic Experiences of Students
- Two-Year: Leveraging Institutional Strengths

Applicant Information

The following pages contain application components to assist you in planning your project.

Please note that this workbook is a planning tool provided by Grants Office, LLC, and is not an official IUSE document. These pages should not be uploaded as part of your final application to NSF.

Project Title

Relevant NSF Directorate(s) (if known)



The NSF has eight different directorates. Projects can be submitted for review by multiple directorates.

Applicant Contact Name and Email Address

Applicant Financial Contact Name and Email Address

Organization Type

College or University

Associated Organization
(if so, elaborate further below)

Total Requested Budget

Projects do not require a cost match. If preparing a joint application, record the amount each institution is requesting.

Project Period

Anticipated length of project
(in months)

Project Summary

The project summary should highlight the purposes, goals, methods, and anticipated benefits of the proposed project. A statement on the intellectual merit and the broader impacts of the project is required. When you upload your final application, this section is limited to 1 page.



When writing your full NSF proposal, we suggest having separate subheadings for both the intellectual merit and broader impact of your proposed project. Provide just a two or three-sentence description of them here.

Application Components

Project Narrative

A project description must be submitted for all IUSE grants and may not be more than 15 pages. The following sections are suggested subheadings to enhance readability for NSF reviewers. Use these boxes to capture high-level details and succinctly state important aspects of your project. When writing your NSF proposal, each section will need to be expanded upon in greater detail.

Knowledge Base for the Project

Briefly cite and explain the research, area of scientific inquiry, or existing literature on which the proposed project is based. Explain if the project is based on previous work funded by the NSF.

Project Description and Objectives

A clear, concise statement of what the proposed project is intended to accomplish and how those objectives will be met. Include any relevant research questions, if applicable.



List key project objectives with proposed start dates and assigned personnel on the Project Timeline sheet on page 14.

Staff Capability and Organizational Capacity

Provide a brief biographical sketch of one or two sentences for each faculty member and other project contributors. A longer sketch will be submitted with the final application. Clearly identify who will be the Principal Investigator(s) for the project. Include any current or pending NSF support.

Dissemination Plan

Explain how and to whom the findings will be collected and disseminated. This should include how the findings will benefit STEM teaching and learning environments.

Evaluation Plan

Describe how the project will assessed for its effectiveness. Consider the impact and alignment of the proposed activities to the expected outcomes, as well as the validity and applicability of the research conducted, if applicable.

Sustainability Plan

Identify how will the project be sustained after IUSE assistance ends.

Budget Narrative

The budget narrative should provide the basis for the computation of all project-related costs, and should, at a minimum, clearly identify the costs mentioned below.

Budget

This budget worksheet will help you plan your project costs. If project period is longer than three years, include details broken out by year for the first three years with the overall request in the final column.

ITEM	YEAR 1	YEAR 2	YEAR 3 (if needed)	TOTAL REQUEST
Personnel				
Fringe Benefits				
Consultant/Contractual				
Travel				
Equipment				
Supplies				
Telephone				
Postage				
Printing/Photocopying				
Audit				
Other (specify)				
Subtotal, Direct Costs				
Indirect Costs				
Grant Total				

Project Timeline

Detail each project objective, activity, expected completion date, and responsible person or organization.

KEY OBJECTIVES, ACTIVITIES, & RESPONSIBLE PERSON	START DATE	COMPLETION DATE

Additional Considerations

This workbook is meant to help you being planning your project and compile many of the necessary elements for a competitive proposal. The previous pages are not exhaustive of all required components of IUSE applications. The National Science Foundation application requirements can be found in Proposal & Award Policies & Procedures Guide (PAPPG).

Supplementary Documentation may be required for your application, including:

- Postdoctoral Mentoring Plan (if postdoctoral research support is requested)
- Data Management Plan (limited to two pages)

Proposal Certifications may be required for your final application, including:

- Certification of Authorized Organizational Representative (AOR)
- Certification Regarding Conflict of Interest
- Certification of Responsible and Ethical Conduct of Research
- Certification Regarding Organizational Support
- Certification Regarding Dual Use Research of Concern
- Safe and Inclusive Working Environments for Off-Campus or Off-Site Research

The NSF requires applications to use:

- Arial, Courier New, or Palatino Linotype font (size 10), Times New Roman (size 11), or Computer Modern (size 11).
- One-inch margins in all directions with no more than six lines of text within a vertical space of one inch



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This free resource was created by the grants intelligence team at Grants Office, LLC.

Who is Grants Office?

Grants Office is the leading provider of strategic grant development services for **governments, nonprofit organizations, educational institutions, healthcare providers, and for-profit industries**.

Since 2000, Grants Office's focus has been on a collaborative approach to grantseeking with open communication to ensure successful outcomes.

Grants Office Services:

- Research and Consultation: Identify best-fit grants for upcoming projects and provide next steps.
- Project Building: Advise on project development and material gathering with a particular grant in mind.
- Grant Proposal Writing & Review: Write a competitive and engaging proposal or provide feedback on application materials, ensuring compliance with submission requirements
- Grants Office Communities: Our grant-search and collaboration platform, designed to streamline your organization's grantseeking efforts