

Scientific and Technical Writing, B.S.

Degree Offered

- Bachelor of Arts in Professional Writing and Editing
- Bachelor of Sciences in Scientific and Technical Writing

Students may not earn both a B.A. and a B.S. in Writing Studies.

Nature of the Program

With a BA or BS degree in Writing Studies, you will learn to translate complex information into clear prose for diverse audiences and analyze how information flows through organizational structures. As you apply these skills in a capstone internship with a local business, non-profit, or government agency, you will see your writing come alive.

Regardless of what subjects you're interested in and what careers you're considering post-graduation, the BA degree in Professional Writing and Editing or the BS degree in Scientific and Technical Writing will improve the writing and communication skills that employers value.

When choosing between the BA degree in Professional Writing and Editing or the BS degree in Scientific and Technical Writing, individuals typically consider the path that most closely matches their future plans. The BA degree is well suited to students who are interested in the needs of an increasingly global society and want to make a difference as writers or editors for nonprofits, government agencies, and other professions. The BA's emphasis on rhetorical, cultural, and linguistic competencies also prepares students for advanced academic work in a range of fields, including the humanities and legal studies. The BS degree is well suited to students who have an interest in science, healthcare, or technology and want to pursue professional careers where they convey complex topics clearly to the public. The BS degree also prepares students for the writing and research skills they need for advanced academic work.

Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements. Both the BA in Professional Writing and Editing and the BS in Scientific and Technical Writing are SpeakWrite (<https://speakwrite.wvu.edu/>) certified programs.

Minors

All students have the possibility of earning one or more minors; follow the link for a list of all available minors and their requirements (<http://catalog.wvu.edu/undergraduate/minors/>). Please note that students may not earn a minor in their major field.

Publications

Calliope, a publication of WVU student writing, is sponsored by the Department of English and the English Honorary and Club.

Mountaineer Undergraduate Research Review, publishes outstanding research articles, literature reviews, and policy briefs principally authored by undergraduates of any major at West Virginia University. MURR is a student-led publication housed within the West Virginia University Office of Undergraduate Research.

Resilience is a digital, peer-reviewed journal of the Environmental Humanities. It provides a forum for scholars from across the humanities disciplines to speak to one another about their shared interest in environmental issues and to engage in an evolving conversation about what the humanities contributes to living and thinking sustainably in a world of dwindling resources.

Admissions for 2026-2027

- First Time Freshmen are admitted directly to the major.
- Students transferring from another WVU major or from another institution with fewer than 24 credits and at least a 2.0 overall GPA are admitted directly to the major.
- Students transferring from another WVU major or from another institution with 24 credits or more and at least a 2.0 overall GPA must meet the following requirement prior to being admitted to the major: a 2.0 GPA in all ENGL classes taken.

Major Codes:

B.S. Scientific and Technical Writing = **14F5**

B.A. Professional Writing and Editing = **14F4**

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. (<http://registrar.wvu.edu/gef/>)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102 or ENGL 103	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, Eberly Edge Program requirements, major requirements, and electives to total a minimum 120 hours.

Departmental Requirements for the B.S. in Scientific and Technical Writing

- **Calculation of GPA in the major:** Students must earn a grade of C- or better in all courses that are counted toward the STW Major Requirement plus. If a course is repeated, all attempts will be included in the calculation of the GPA unless the course is eligible for a D/F repeat.
- **Writing and Communication Requirement:** The Scientific and Technical Writing B.S. students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and two additional **SpeakWrite Certified Courses™**.
- **Capstone Requirement:** The university requires the successful completion of a Capstone course. Scientific and Technical Writing majors must complete three credits of WRIT 491A to meet this requirement.

Curriculum Requirements

Code	Title	Hours
	University Requirements	56
	Eberly Edge Requirements	15
	Scientific and Technical Writing Requirements	49
Total Hours		120

University Requirements

Code	Title	Hours
	General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)	
	Outstanding GEF Requirements 1, 4, 5, 6 and 7	18
	WRIT 191	1
	General Electives	37
Total Hours		56

Eberly Edge Program Requirements

Code	Title	Hours
	EDG 1: Data and Society	3
	EDG 2: Effective and Civil Communication	3
	EDG 3: Ethics and Civil Responsibility	3

EDG 4: Global and Regional Perspectives	3
EDG 5: Practicing Arts & Sciences (ARSC 380)	3
EDG 6: EEDG High Impact Experience (WRIT 480)	
Total Hours	15

Scientific and Technical Writing Major Requirements

Code	Title	Hours
STEM FOUNDATIONS*		19
Mathematics:		
MATH 150 or MATH 155	Applied Calculus Calculus 1	
Life and Natural Sciences:		
Select 2 pairs:		
BIOL 115 & 115L & BIOL 117 & BIOL 117L	Principles of Biology and Principles of Biology Laboratory and Introductory Physiology and Introductory Physiology Laboratory	
CHEM 111 & 111L & CHEM 112 & CHEM 112L or CHEM 115 & 115L & CHEM 116 & CHEM 116L	Survey of General, Organic, and Biological Chemistry 1 and Survey of Chemistry 1 Laboratory and Survey of General Organic Biological Chemistry 2 and Survey of Chemistry 2 Laboratory Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory and Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	
PHYS 101 & 101L & PHYS 102 & PHYS 102L or PHYS 111 & 111L & PHYS 112 & PHYS 112L	Introductory Physics 1 and Introductory Physics 1 Laboratory and Introductory Physics 2 and Introductory Physics 2 Laboratory General Physics 1 and General Physics 1 Laboratory and General Physics 2 and General Physics 2 Laboratory	
SUST 101 & 101L & SUST 201 & SUST 201L or SUST 101L & SUST 207 & SUST 207L	Sustainable Earth and Sustainable Earth Laboratory and Earth System Science and Earth System Science Laboratory Sustainable Earth Laboratory and Climate System Science and Climate System Science Laboratory	
CORE COURSES		12
WRIT 202	Introduction to Writing Studies	
WRIT 301	Writing Theory and Practice	
WRIT 302	Editing	
WRIT 304 or WRIT 305	Business and Professional Writing Technical Writing	
TOPICAL AREA		6
Select one area		
Science and Health		
WRIT 407	The Writing of Health and Medicine	
Public Writing		
ENGL 403 & WRIT 450	Proposal and Grant Writing and Intro to Forensic Linguistics	
Personalized Topic		
Select 2 ENGL or WRIT courses in consultation with an adviser		

UPPER-DIVISION ELECTIVES ***9**

Select three ENGL or WRIT courses at the 300 level not taken for the Core or Topical requirements

WRIT 303	Multimedia Writing
WRIT 304	Business and Professional Writing
WRIT 305	Technical Writing
WRIT 306	Topics in Digital Humanities
ENGL 309	Approaches to Teaching Composition
ENGL 312	Creative Writing Workshop: Fiction
ENGL 314	Creative Writing Workshop: Non-Fiction
ENGL 321	History of the English Language
ENGL 329	Topics in English Language
ENGL 331	Topics in Genre
ENGL 338	Environmental Criticism
ENGL 383	Introduction to Cultural Studies
WRIT 407	The Writing of Health and Medicine
WRIT 408	Rhetoric and Science
WRIT 450	Intro to Forensic Linguistics
WRIT 460	Appalachian Englishes
CAPSTONE	
WRIT 480	Capstone Internship

3

Total Hours

49

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STEM foundation courses are common to most STEM majors and excluded from the calculation of the percentage of upper-division courses.

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Students may select up to 3 credits outside ENGL or WRIT courses with permission from a WRIT adviser.

Plan of Study**First Year**

Fall	Hours	Spring	Hours
ENGL 101 (F1 Course 1)		3 ENGL 102 (F1 Course 2)	3
ENGL 191		1 Science Course 2	4
EDG 1: Data and Society		3 EDG 2: Effective and Civil Communication	3
SCIENCE COURSE 1		4 MATH 150 (F3)	3
GEF 4		3 General Elective	2
General Elective		1	
		15	15

Second Year

Fall	Hours	Spring	Hours
WRIT 202		3 WRIT 301	3
WRIT 305 or 304		3 WRIT 302	3
EDG 3: Ethics and Civil Responsibility		3 EDG 4: Global and Regional Perspectives	3
Science Course 3		4 Science Course 4	4
General Elective		2 General Elective	2
		15	15

Third Year

Fall	Hours	Spring	Hours
ARSC 380 (EDG 5)		3 WRIT 480 (EDG 6)	3
Topical Area Course 1		3 Topical Area Course 2	3
Upper-Division Elective Course 1		3 Upper-Division Elective Course 3	3
Upper-Division Elective Course 2		3 GEF 6	3

GEF 5		3 General Elective	3
		15	15
Fourth Year			
Fall	Hours	Spring	Hours
General Elective		3 GEF 7	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Total credit hours: 120

Degree Progress

- At the end of their second semester in the program, students will have completed ENGL 101, 102, 191, 199, and WRIT 202.
- After three semesters students will have completed 9 additional credits of WRIT courses above WRIT 202.
- After four semesters in the program, students will have completed 12 additional credits in WRIT.
- All majors must meet with an English department adviser each semester
- All majors must meet with an English department adviser to select electives appropriate for their degree and career interests.

Major Learning Outcomes

SCIENTIFIC AND TECHNICAL WRITING

Upon successful completion of the BS degree in Scientific and Technical Writing, majors will be able to demonstrate the following learning outcomes.

- Students will identify, understand, and explain the major concepts of Scientific and Technical Writing.
- Students will develop rhetorical literacies and apply these to linguistic structures and genre conventions across diverse cultures and contexts.
- Students will develop the functional literacies related to digital and print writing and editing and apply them to contexts and audiences appropriately.
- Students will understand scientific principles relevant to the field as they locate, evaluate, and appropriately apply primary and secondary research materials from a variety of sources (e.g., scholarly and professional sources as well as informal print, visual, or digital sources).
- Students will demonstrate the critical literacies, problem-solving skills, and professional behaviors that make a strong scientific and technical writer across genres and media (print, visual, aural, digital).