



Gyanmanjari
Innovative University

Course Syllabus
Gyanmanjari Institute of Technology
Semester-2 (M. Tech)

Subject: Technical Report Writing- METXX10503

Type of course: Ability Enhancement Course (AEC)

Prerequisite: Basic knowledge of English communication and technical documentation.

Rationale:

This course aims to equip students with the skills necessary to produce clear, well-organized technical documents and research reports. Emphasis will be on practical skills in writing proposals, project reports, research papers, and technical documentation, meeting professional and academic standards.

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks			Total Marks
CI	T	P		C	SEE	CCE	
			MSE			ALA	
2	0	0	2	50	20	30	100

Legends: CI-Classroom Instructions; T – Tutorial; P - Practical; C – Credit; SEE - Semester End Evaluation; MSE- Mid Semester Examination; V – Viva; CCE-Continuous and Comprehensive Evaluation; ALA- Active Learning Activities.



Course Content:

Sr. No	Course content	Hrs.	% Weightage
1	<p>Fundamentals of Technical Writing Definition and nature of technical writing; Differences between technical and non-technical writing; Principles of clarity, conciseness, correctness; Elements of technical communication; Understanding audiences and tailoring content; Formal tone, passive voice, and professional style; Importance of language and grammar in technical communication</p>	07	25 %
2	<p>Organizing Technical Documents Structure and components of a technical report; Title page, table of contents, introduction, methodology, findings, conclusions, and recommendations; Writing proposals: structure, style, and examples; Writing feasibility and progress reports; Organizational techniques: headings, subheadings, bullet points, numbered lists</p>	08	25 %
3	<p>Visual Presentation and Ethics in Technical Writing Data collection and interpretation; Using visuals: tables, graphs, charts, and images; Guidelines for visual clarity and labeling; Formatting using MS Word and LaTeX (basics); Integrating text with visuals; Ethical and legal issues in technical writing—plagiarism, citation standards, proprietary content, and academic integrity</p>	07	25 %
4	<p>Advanced Technical Writing and Editing Writing abstracts and executive summaries; Composing research articles and white papers; Technical manuals and SOPs (Standard Operating Procedures); Conclusion and summary writing; Editing for coherence, clarity, and accuracy; Peer reviewing and collaborative writing; Referencing styles: APA and IEEE</p>	08	25 %



Continuous Assessment:

Sr. No	Active Learning Activities	Marks
1	Visual Documentation Challenge: Students will collect data from a real-world technical environment (lab, workshop, fieldwork) and create a 2-page illustrated technical report with tables, charts, or infographics using MS Word or LaTeX. Submit it independently to the GMIU Web Portal.	10
2	Independent Proposal Project: Each student selects a minor technical problem from their field and independently drafts a complete project proposal with objectives, feasibility, timeline, and deliverables. Peer feedback is optional, and submission is through the GMIU Web Portal.	10
3	Flipped Review Journal: Students will watch short expert talks on technical communication and write a reflective review (300–400 words) on how it applies to their engineering discipline. Upload the review on the GMIU Web Portal.	10
Total		30

Suggested Specification table with Marks (Theory):50

Distribution of Theory Marks (Revised Bloom’s Taxonomy)						
Level	Remembrance (R)	Understanding (U)	Application (A)	Analyze (N)	Evaluate (E)	Create (C)
Weightage	30%	30%	20%	00%	00%	20%

Course Outcome:

After learning the course, the students should be able to:	
CO1	Apply principles of technical writing for professional documents.
CO2	Draft structured project proposals, technical reports, and research articles.
CO3	Create professional data presentations using appropriate visual aids.
CO4	Edit, proofread, and format documents according to academic and industry standards.



Instructional Method:

The course delivery method will depend upon the requirement of content and need of students. The teacher in addition to conventional teaching method by black board, may also use any of tools such as demonstration, role play, Quiz, brainstorming, MOOCs etc.

From the content 10% topics are suggested for flipped mode instruction.

Students will use supplementary resources such as online videos, NPTEL/SWAYAM videos, e-courses, Virtual Laboratory.

The internal evaluation will be done on the basis of Active Learning Assignment.

Practical/Viva examination will be conducted at the end of semester for evaluation of performance of students in laboratory.

Reference Books:

- [1] Huckin, Thomas N., and Leslie A. Olsen. Technical Writing and Professional Communication. McGraw-Hill, 2003.
- [2] Anderson, Paul V. Technical Communication: A Reader-Centered Approach. Cengage Learning, 2016.
- [3] Alred, Gerald J., Charles T. Brusaw, and Walter E. Oliu. Handbook of Technical Writing. Bedford/St. Martin's, 2015.
- [4] Raman, Meenakshi, and Sangeeta Sharma. Technical Communication: Principles and Practice. Oxford University Press, 2015.
- [5] Chicago Manual of Style. 17th Edition.
- [6] IEEE Editorial Style Manual.
- [7] APA Publication Manual (7th Edition).

