TECHNICAL REPORT WRITING

INCLUDING THE USE OF
ARTIFICIAL INTELLIGENCE FOR REPORTS

FOR ENGINEERS & TECHNICAL PROFESSIONALS

Effective
Human
Intervention
LEADERS IN TRAINING

Recognised for Continuing
Professional Development
(CPD) by SAAMA in accordance
with ECSA guidelines

SAAMA

ELIGIBLE FOR
2 CPD
CPD POINTS

Technical Report Writing

COURSE SUMMARY

The purpose of a technical report is to communicate technical information about a project, product, or process to a specific audience in a clear, concise, and organized manner. Technical reports serve as a means of documenting the design, development, testing, and evaluation of engineering projects, as well as providing recommendations for future improvements. This course enables the learners to share findings or results of a research project or experiment, document the design and development of a product or system and provide instructions or procedures for the operation or maintenance of a product or system. Furthermore, it focuses on the ability to evaluate performance, make recommendations for improvements or modifications, and communicate technical information to stakeholders, such as clients, colleagues, or regulatory agencies.

In a radical new development in training, this course makes use of artificial intelligence techniques for the development of clear argument, focused recommendations, and effective executive summaries. Over 22 years, the course has honed methodologies ensuring the inculcation of skills for well-organized reports that are logically structured and clearly written to ensure that the information is easily understood by the intended audience.

LEARNING OUTCOMES:

- Teaches both the generic format and specific formats for reports, including the six main sections of any report.
- Teaches how to create an effective introduction.
- Provides the best practices for compiling technical reports.
- Provides critical skills and confidence for non-English speakers
- Shows the critical difference between scope, need and purpose in the introduction.
- Teaches ways of brainstorming and categorizing to achieve the best structure.
- Details the different sections of the introduction, body and executive summary.
- Teaches the newest formats and styles.
- Provides models for constructing the body of the report.
- Teaches how to justify the conclusions of the report through use of example, statistics, facts and information.
- Shows the correct and most appropriate use of tense and grammar in a report.
- Teaches how construct an effective title for a technical report.
- Shows how to avoid the pitfalls of poor punctuation.
- Corrects all existing errors in punctuation.
- Shows effective and acceptable ways of using bullets and numbers in reports.

ABOUT YOUR FACILITATOR:

Karl von Buddenbrock is a highly experienced trainer in the corporate environment, qualified in educational theory and methodology. He has trained in the corporate sphere for 25 years, and prior to that, lectured degree programmes for the University of the Witwatersrand. With a master's in education, he has facilitated Technical Report Writing, MS Projects & Project Management very successfully over the years for EHI. His excellent reviews speak for themselves. He has also run projects for the National Department of Health, lectured to high-ranking judges in the judiciary and President Mbeki's secretaries. He has delivered training in 7 countries in Africa.

WHO SHOULD ATTEND?

- Engineering Professionals
- Technical Managers
- Project Team Members
- Researchers
- Team Leaders
- Strategists
- Assistants
- Any personnel who deal with documentation

CUSTOMISED VIRTUAL TRAINING AND/OR IN-HOUSE TRAINING

If you wish to organize a Virtual Instructor Led Training session or In-House session for your organization, we will custom design a session that will help you achieve your desired learning goal. The main advantage of custom designed VILT, in addition to being significantly cost effective, is that they address topics specifically related to the needs of your organization. C**ontact us on 021 979 5891 or callie@ehiafrica.co.za for a comprehensive quotation.**

BENEFITS INCLUDE:

- ✓ Participation in an interactive workshop
- ✓ Learn from a recognised expert with cross industry experience
- ✓ Practical exercises and case examples
- ✓ Comprehensive course documentation
- ✓ **Immediate implementation in the workplace**
- ✓ **Accredited to gain 2 CPD points by SAAMA**

Technical Report Writing

COURSE CONTENT – 2 DAYS

Report formats and structures - best practices
- Establishing the title, introduction, and body of the report
- Formulating an executive summary
- Establishing premises, sections and flow of the argument
- Compiling conclusions and recommendations
- The difference between a glossary and definition of terms

The Use of Artificial Intelligence in Report Writing
- A tool to use, not to fear.
- Framing the questions to get the best out of ChatGPT language model.
- How to create your purpose statement using ChatGPT language model.
- How to derive the best format for the report using ChatGPT language model.
- Getting ChatGPT to make recommendations for your best charts and processed data.
- Using ChatGPT to formulate the best executive summary for your report.
- Using ChatGPT to suggest the best structure for your argument.
- Public Domain – ChatGPT and citations.

First impressions - the six subsections of a powerful introduction
- Background, context and method – what should you write?
- The critical difference between purpose and need
- Specifying how you got your information and how you analysed it

How to construct an effective title for the report
- First impression of any report - few people realise how important this is
- Effective power words to use in your title
- The use of a subtitle - when to use it
- Abstracts and synopses

Using the technical data in the report
- The essential elements of using data to support the main premises
- How to refer to data
- Where and how to embed the tables, graphs or matrices and other tools
- The power of scope

Working with statistics – the art of justification
- How to use statistics optimally to make sure that they support the main premises
- When less is more – selectivity with data
- Referencing techniques - how to cite and reference statistics
- Formats – where to put the graphs, charts and tables
- Matching the data with the flow of the report

The three phases in compiling a report
- Planning – making your information make sense with brainstorming technique
- First draft – putting the pieces together

Unpacking the body - thud factors
- Different models: problem, cause solution, chronology, advantages and disadvantages, etc.
- Correct writing techniques
- One statement, one bullet - when to bullet and when not to bullet
- Survival kits – the 13 errors all South African business writers make
- Development of the argument – writing with effect
- Audience profiles

Final touches – editing and proofreading
- Body beautiful - some effective models to help you construct a good body
- Learn to choose the correct model and then apply it – make your report look good
- Appropriate formats – latest trends

Knitting it all together
- Cleaning up all the pitfalls of poor punctuation – using punctuation correctly and creatively
- List of best practices in the formulation of an executive summary
- Measuring the temperature of your writing – using an effective readability index to improve your text flow
- Nasty conventions – punctuation, white space, listing technique and others – address it once and for all.

Includes Pre & Post Assessment Exercises