ZIE Training and Experience & Technical Project Report Guidelines (2018 Version)

Contents

1.0 Preamble

For purposes of ZIE Membership admission into either the Technician/Technologist or Member Grade, applicants are advised to submit Training and Experience Report, plus a Technical Project, where applicable. Exemption is only extended to applicants who are certificated members of engineering institutions that are recognised by ZIE. In essence the membership thereof should have been conferred upon submission of a technical project, and member subjected to an interview. This thus implies that all online membership is not recognised by ZIE. If one is a member of a recognized engineering institution, attach certified copy of membership certificate as evidence thereof. In cases where the two reports are not required, as outlined above, provide a detailed CV, reporting your work experience in retrospect, which is, chronologically, starting with your current position.

1.2. TRAINING & EXPERIENCE REPORT GENERIC REQUIREMENTS

Applicants should refer to the booklet "General Requirements for the Training of Engineering Graduates". A comprehensive training report of 2000 words is required. The report must include the following:

a. Work experience from the first working day to time of application.

b. Description of projects/works that you have been involve with during your working life.

c. If a project is not required expand on at least one recent project in technical detail. Describe the background for the project, assumptions made, design principles (if

applicable), technical details (include sketches or photographs, as necessary, for better understanding), problems encountered and their solutions. This description should be in addition to the report on Training and Experience of 1500 to 2000 words mentioned above.

d. If a project is required refer to the requisite guidelines.

State clearly the extent of your involvement, your responsibilities (technical and managerial), who was your supervising engineer/tutor, mistakes made and what you learned from them, problems encountered and their solution.

e. Your work experience should be listed, together with the projects/work undertaken, in chronological order with the most recent experience first.

f. In this report you should also include any details of courses attended and how these helped you in your working experience.

g. If you have registered with the Institution as a Graduate under training, your training diary summaries signed by your supervising engineer/tutor) should be submitted with your application and you should bring your diary along with you to the interview.

h. If you are in the teaching profession, information about the level of responsibility in the department, the level of the course and perhaps a summary syllabus would be helpful.

i. Published papers, reports and patents should be listed.

1.2 ZIE TECHNICAL PROJECT REPORT GUIDELINES

1.2.1 Preamble
Most applicants for the positions of Member or Technician will be expected to attend an interview and submit a Project Report. This section offers guidelines to the applicant on the form and content of the Project Report. All applicants must bear in mind that the Project Report is probably the most important component of their application in that it proves the applicant's general engineering suitability for acceptance by the institution.

During the interview the applicant will be questioned on the report and be expected to describe in detail any matters arising from the report. There will inevitably be a difference in reports submitted by academic applicants, such as those working in tertiary educational establishments, and those submitted by non-academic applicants. Where appropriate the different requirements are outlined in the specific sections below.

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It cannot be over-emphasised enough that the report must be the work of the applicant and be technical in nature. Documents that have been downloaded from the internet or are general company documents relating to a specific commission or task will not be accepted. In general the Project Reports should be approximately 2000 words in length and can be supported by drawings, sketches and supporting documentation and photographs. The applicant should feel free to ask for assistance from either existing members or ZIE with regards to the drafting of the report.

The report must be written in the English language.

1.2.2 Type of Project

The project can be of the applicant's choice but must indicative and illustrative of the current or recent engineering work undertaken by the applicant. For this reason it is not acceptable to reproduce a report or thesis that was written whilst attending full time education or training. The project described in the report can be either entirely the work of the applicant, in the case of a smaller project, or be a larger project in which the applicant played a significant role.

1.2.3 Role and Position of the Applicant in the Project

It is important that the project as a whole is described from the point of view and written in the first person singular. In the case where the project is relatively large and where the applicant was part of a team the report must make clear where the applicant stood in terms of the team hierarchy. Examples of this would be descriptions of who the applicant reported to, such as the senior engineer, and who reported in turn to the applicant, such as technicians, draughtsmen, site staff and the like. Although the report is to be technical the applicant should demonstrate managerial, administrative and financial responsibilities where appropriate. In the case of published papers submitted by academic applicants who are co-authored, the applicant should describe which elements of the report was primarily their responsibility. This can take the form of a simple description outside of the main body of the paper.

1.2.4 Contents

Obviously the actual contents of the report will vary. However there are a number of common features that should be included. A useful guideline for both contents and format would be the final year thesis paper that under-graduates produce. As a guideline the applicant should consider the bullet points below although it must be remembered that this list is not exhaustive.

1.2.4.1. Cover page with the names of the applicant and the title of the project.

1.2.4.2 Contents page.

1.2.4.3 Abbreviations.

1.2.4.4 Executive summary.

1.2.4.5 Introduction with a general description of the project.

1.2.4.6 Description of the other parties that were involved such as clients, contractors, colleagues etc.

1.2.4.7 General technical contents including calculations, graphs, drawings, photos etc. This will be the main body of the report and demonstrate the applicant's engineering capability.

1.2.4.8 Problems encountered and the solutions to them. Very few engineering commissions go exactly to plan and it is important that the applicant demonstrates their ability to overcome adversity.

1.2.4.9 Lessons that have been learnt. The applicant should sit back and review what happened during the course of the project and how it could have been done differently and why.

1.2.5 Conclusion.

It may help for the applicant to put himself in the position of the interviewer. You will be interviewed by engineers who have some experience in your field and a genuine professional interest in your project. They will want to know more about what you learned, how you overcame the inevitable problems that arose and how you exhibited applying your engineering expertise. The interview will not be an interrogation in the aggressive sense of the word but will want to dig deeper in order to assess your engineering capabilities.