

THE NIGERIAN INSTITUTION OF STRUCTURAL ENGINEERS

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STUDENTS •GRADUATES •ASSOCIATES •CORPORATE MEMBERS •FELLOWS •HONOURARY FELLOWS •COMPANIONS

INTRODUCTION

The Nigerian Institution of Structural Engineers is the professional body empowered by Council for Regulation of Engineering in Nigeria (COREN) and Nigerian Society of Engineers (NSE) to promote the practice of Structural Engineering in Nigeria. The Institution is respected locally and internationally for the technical and professional competence of its members.

OBJECTIVES

- The objectives of the Institution include but not limited to the following:

 To provide a central organization for Structural Engineers in Nigeria and generally to do such things as may from time to time be necessary to maintain a strict standard of professional ethics amongst its members and to advance the interest of the Structural Engineering profession in Nigeria.
- To promote, protect, encourage and maintain a high standard of structural engineering study and practice and to encourage greater efficiency therein.
- To provide a body to which the Government or other official or un-official authority or organization in Nigeria can have recourse for advice, assistance or the expression of views on any subject of concern or interest to Structural Engineers in Nigeria.
- To facilitate the development and acquisition of technology by conducting visits to places of structural engineering interest, reading technical papers, holding meetings, conferences, publishing book, journals, and periodicals on structural engineering matters.
- To provide for the training and examination of students in structural engineering as well as the continuing professional update and development of its members.
- To promote and pursue research in structural engineering science and practice with particular reference to local conditions.

HISTORY AND STRUCTURE

The Nigerian Institution of Structural Engineers was formed in 1967 by qualified Nigerian Chartered Structural Engineers from Britain. At the formative period, the Institution was called "Nigerian Institute of Structural Engineers". The membership strength of the Institution grew with branches in other parts of the country. Consequently, on 18th June, 1982 the Institution was incorporated under the companies Act 1968 with Certificate of Incorporation No. RC 47865. Sequel to the Institution's registration, the maiden annual general meeting was held on October, 1984 at the conference hall of the Federal Ministry of Works and Housing on Awolowo road, South West Ikoyi, Lagos, Nigeria. At this general meeting, the first executive committee of the Institution was elected. On 29th August, 1996 the Institution merged with the Nigerian Society of Engineers to become the Structural Division of NSE. Also, the name of the Institution was changed to "The Nigerian Institution of Structural Engineers".

An elected Council of Members, chaired by the President, governs the Institution. Much of its work is delegated to Committees and Panels of Members who report to Council on matters of substance and in doing so contribute to the life and vitality of the Institution. Furthermore, because members are extensively involved in external bodies and the academics, the Institution is able to contribute to a wide range of Structural Engineering issues. At the same time, Government departments and public bodies regularly consult the Institutions as a source of informed, professional opinion on matters relating to Structural Engineering.

Members benefit from an exchange of learned society information and the Institution has a network of state Branches in Nigeria. These branches arrange technical meetings, seminars and workshops - enabling members to keep up to date with their professional knowledge - along with social events and visits to construction sites. In some States, the Institution appoints representatives to act as focal point for various activities.

The Institution is run from its National Secretariat, which is currently located at No. 5 Akinhanmi Street, Off Western Avenue, Surulere, Lagos, Nigeria. The Executive Secretary and staff of the Institution are ready to welcome members and deal with inquiries.

BENEFITS OF MEMBERSHIP OF THE NIGERIAN INSTITUTION OF STRUCTURAL ENGINEERS

Whether you are budding or practicing Structural Engineer, there are several good reasons for joining the Institution. To begin with, membership is a public acknowledgement of your education, qualifications and experience. On top of that, you gain access to a lifetime's programme of Continuous Professional Development (CPD) to further your carrier and become part of an international network of professionals. At same time, you are given the opportunity to play your part in extending the

boundaries of the Institution also as your key to the exciting world of Structural Engineering.

The earlier you join the Institution in your career, the sooner you can enjoy its full range of services. These will help you the support essential to achieve the Institution's core training objectives and the right experience during your Initial Professional Development(IPD) leading towards the professional examinations.

As a member, you will have full access to the excellent facilities of the Institution's library, with its records on various aspects of Structural Engineering. By virtue of Memorandum of Understanding (MOU) signed with the (British) Institution of Structural Engineers (IStructE), Members have access to unique collection of textbooks, reports, UK and US Standards/Codes, over 150 Journal titles and expanding range of audio/ visual materials.

As part of its role as a learned society, the Institution holds regular meetings, courses, seminars and conferences. These provide networking opportunities and help members and other professionals update their knowledge and understanding. Once a month, National Executive Council Meeting is held; while the Council Meeting is held every two months.

Finally, the Institution support Study Group where those interested in particular topics can meet to debate topical engineering issues. For young Engineers, the local branches provide an excellent opportunity to get to know local Engineers, Engineering Firms and prospective Employers.

The Nigerian Institution of Structural Engineers has a dual role and twin aims. Its roles are those of a learned society and as a qualifying body for the professional. Its aims are to promote the science and art of Structural Engineering and the achievement of excellence in construction, and to further the education and competence of its members'

Candidates are encouraged to qualify as early as possible in their careers. To achieve this, the Institution:

- Specifies the standards of academic qualifications and IPD that candidates must attain for each class of Membership.
- Holds its own examinations for those wishing to enter the profession as Corporate Structural Engineers and as Associate - Members.
- Fosters the exchange of ideas and information.
- Defines exacting standards of professional responsibility, ethics and
- Helps members solve problems in design and construction through the publication of technical reports and information.
- Contributes to guidance notes and codes of practice that play significant roles in the everyday works of structural Engineers.
- Initiates/monitors relevant legislations as they affect the practice of Structural Engineering.

Routes to Membership

What follows aims to give you enough information to identify which grade of Membership you should apply for and what you will have to do to achieve your goals, Additional information may be obtained from the Membership Department on +234(0) 8055960846; +234(0)8122095767. election to honorary membership or whose membership is considered by Council to be desirable in the interest of Structural Engineering or the Institution

Companion

The Companion grade of Membership was established to attract candidates in allied professions - such as Architecture, Building Technology and Materials Science- who are interested in Structural Engineering and who associate, or wish to associate, with the Nigerian Institution of Structural Engineers members, but who cannot meet the rules of entry to any of the Institution membership grade. Although candidates for Companion are normally invited to join, they may apply directly.

Routes to becoming Professionally Qualified

There are three basic steps to become professionally qualified with the Institution:

Satisfying the academic requirements

Satisfying the initial professional Development requirements passing the Professional Review (Interview and Examination) or equivalent requirements

Although most candidates progress through the Institution's standard routes, there are a number of other specialist routes including the Mature Candidate Route and Research Route, designed to cater for those with different academic and career backgrounds. The criteria for these routes are recorded later in this document.

Academic Requirements

Student Membership
To be admitted as a Student Member, you must be at least 17 years old and should be studying Structural Engineering. Usually, this will be via a Degree/HND or Higher Diploma/Certificate course in Civil/Structural Engineering leading to qualification as a Graduate Member or Associate-

Graduate Membership

Graduates seeking Corporate Membership will need either an accredited MEng in Civil and/or Structural Engineering or an accredited BEng (Hons) in Civil and/or Structural Engineering plus an appropriate 'Matching Section' equivalent to a further year of appropriate study. Advice will be given on suitable Meeting Sections.

The Institution recognizes degree in Civil and/or Structural Engineering accredited by either bodies as equivalent to an accredited MEng.

Further information is available from the Institution Membership Department. Graduate seeking Associate-Membership will need either a degree in Civil and/or Structural Engineering plus appropriate 'Matching Section (s)' equivalent to further year of appropriate study.

If you have a degree that is not accredited by the Institution or recognized as equivalent to an accredited degree, you should submit the relevant application form together with a credited copy of degree certificate and full details of its course subjects. The Institution's Qualification Panel will then consider your application and assess it against the content of an accredited course of study. The Panel will decide whether you must complete additional examinations – such as the NSE and COREN examinations – to meet the Institution's requirements. Whilst this is happening and until you have completed any additional examinations that may be necessary, you will be admitted to Student Membership, If you are not required to complete further academic study, you will automatically become a Graduate Member at the earliest opportunity.

Associate-Membership

To apply for Associate-Membership, you must have an accredited degree or an accredited. HND/Higher Diploma/Certificate plus appropriate Matching Section(s), i.e. appropriate academic study. Advice is available on Matching Sections.

Initial Professional Development

Before being eligible to apply to sit either of the Institution's examination -Associate-Membership or Corporate Membership (Part 3) – you must meet the 'Initial Professional Development (IPD) requirements of the Institution. There are number of ways in which you can satisfy the requirements and record your training and experience. Depending on your circumstances and the route you have followed you may demonstrate your compliance with the IPD regulations by submitting appropriate Report Forms, Statements of Experience and if necessary, a Portfolio of Work. This submission is assessed during your Professional Review Interview. Success in this Interview allows you to sit the appropriate examination.

Initial Professional Development is the acquisition and development of the specialist knowledge and skills – and their practical application – that you need to practice as a Corporate Structural Engineer or an Association-Member. It thus bridges the gap between the education base and attaining professional qualifications. The Institution defines IPD in terms of core objectives to minimum standards. Core objectives outline the basic competence required of those who wish to become members of the Institution

Core objectives relate to all types of Structural Engineering work and associated and permit flexibility. They fall under three headings:

- Personal effective communications and interpersonal skills, leadership and professional commitment.
- Engineering Identification of the solutions
- Management and Commercial Efficient procurement and management of resource within given constraints to achieve the engineering

Acquiring further learning and experience at work will develop your ability to carry responsibility and make independent judgment. Although there is no concept of 'time serving' within the institution's IPD scheme, you are unlikely to achieve an adequate range of further learning and work experience in less than four years. Summary Record Sheets/Log Books which are available from the Institution, provide a useful means of monitoring the achievement of core objectives and highlighting areas requiring review.

Further details of IPD requirements are contained in a separate document. available from the Professional Development Officer, Full documentation on the schemes will be sent to member immediately after election as a Graduate or alternatively, for those members pursuing Associate-Membership, immediately after completion of the minimum academic requirement.

Professional Review

All candidates wishing to progress to a professional grade of membership must first satisfy the Professional Review. This comprises an Interview to assess competence against the standards required and an examination.

Professional Review Interview

At the interview you will be expected to bring evidence of IPD by means of a portfolio of work (where required). The relevant Report Forms, Statements of Experience and completed Application Form must be submitted when applying for approval to sit the examination for Corporate Membership (Part Exam or Associated-Membership Exam.

During the hour - long interview, you will be questioned on the training and experience evidenced in your submission and your commitment to the profession. If successful, your application form to apply for the written examination will be so endorsed. If unsuccessful, you will be told where your IPD falls short and encouraged to re-apply once the gap has been filled.

There is no limit to the number of times you can apply for the Professional Review. However, as the full assessment fee is required each time, it is clearly in your interest to complete all the core objectives before applying.

Institution Examinations

Candidates successful in the Interview part of the Professional Review may apply to sit the appropriate examination. However, if you do not sit the examination following your interview but choose to postpone taking it for a year, you will be required to submit a further experience report before being allowed to sit the examination. If you postpone the examination for more than three years after the completion of your Interview, you will have to submit an experience report and attend a further Interview before being allowed to sit the examination. The Part 3 and Associate - Member examinations are held each August. To be considered for the examinations to be held in August, candidates holding accredited qualifications must submit their application forms – Form M for Corporate Membership (Part 3) or Form AM for Associate Membership - by 1 May. All applicants without an accredited qualification must submit Form M or AM at least one year (i.e. by 1st August) before the examination they intend taking.

Associate - Membership Examinations

There are presently two alternative examinations to gain Associate Membership:

Written examination - The Associate - Membership examination is a six -hour test of elemental design and practical competence in Structural Engineering. As a candidate you must answer one question from a choice of four on Structural Steal work, Reinforced Concrete, General Construction, and Bridges. You must be able to interpret instructions from a Structural Engineer and produce practical structural designs and

details. In addition, you must be able to carry our site surveys produce condition reports of existing and materials, inspect projects and supervise new works.

Oral Examination - If you are over 35, have at least 15 years' experience and hold an appropriate qualification, you can apply to take AM Oral Examination rather than the written paper. You will need to submit project work (three copies), the main paper of which should not exceed 5,000 words. The project is first assessed by the examinations Panel to decide whether the oral exam may take place. Two members of examination panel will conduct the Interview, which normally takes at least an hour.

Corporate Membership (Part 3) Examination
The Corporate Membership (Part 3) Examination tests the candidate's professional competence and conceptual design skills. It takes the form of a seven - hour paper on Structural Engineering Design and Practice.

Candidates must answer one question from a choice of five requiring solutions. in Steel, Corporate and other materials. The questions cover a range of different Structural Designs and include a Bridge Design question and a question about Transmission Masts or Towers.

To be Corporate Structural Engineer, you must be able not only to design but also to communicate your design intentions. In the examination, you will be required to list and discuss possible structural solutions, showing by brief, clear and logical presentation that you understand the design principles involved. In selecting and developing the chosen design, you should remember that the structure must be safe and of a competent and economic design.

The Institution runs courses to prepare candidates for the examinations and offers for sale past examination papers and examinations' reports.

Examination Prize

Presidential Award: This is one Prize for (Part 3) Examination and is awarded to the Candidate(s) with the highest aggregate of marks.

Membership via Research

Associate - Member

As a senior technician, or equivalent, in a university or research establishment, you may opt to offer research or development work for assessment for Associate - Membership. You should be responsible for designing test rigs and/or instruments to implement research projects conceived by a Corporate Structural Engineer. Although you would not normally have been responsible for the research or its conception, you will have played a significant role in its delivery. With this route, you must submit details of calculations, drawings, procurement, etc. associated with the research and/or development project/s. Your contribution to the project/s should be clearly identified and confirmed by the Corporate Structural Engineer (or equivalent) responsible for them.

Applicants with the necessary academic qualifications for Corporate Membership but who are carrying out research in Structural Engineering at a university, or other establishment approved by the Council, may submit evidence of their research published in referred journals. Council will look for evidence of important and original Structural Engineering research over several years.

If you choose this route, you must be the sole or principal author of at least some of the items submitted for assessment. Alternatively, you may produce evidence (normally signed by the sponsor) that you have played a principal part in and been responsible for the work described. Generally, all work submitted should have been published in referred journals. Conference papers are not usually acceptable and research for a higher degree or postgraduate research is not, in itself, sufficient

If you are offering development work for assessment for membership as a Corporate Structural Engineer, you must have played a major part in the activity. The work itself should be of a reasonably general applicability. There should be documentation in the form of studies, papers, and report, perhaps culminating in guides, codes or manuals with the candidate as a principal author. Leading the management of a development group or team will be taken into account.

Mature Candidate Route

The Mature Candidate route is designed for those candidate with considerable experience and responsibility who, with the basic academic qualifications, would be eligible for Corporate Membership or Associate - Membership of the Institution. Such candidates must demonstrate their experience before a Professional Interview Panel that is constituted by the Council for each candidate.

The criteria for applying through this route differ for Corporate Members and Associate - Members

Candidates are required to prepare a synopsis of a paper, which must be approved before the candidate can write the full detailed report.

Mature candidates seeking Associate - Membership must:

Be over 35 years at the time of application

Have at least 10 years' experience as a Technician Engineer in Structural Engineering appointments of increasing responsibility

Be in a post demonstrating proven competence that would provide acceptable evidence of training and experience had the normal academic requirements been satisfied.

Once the Institution has approved the synopsis, a candidate will have up to a year to submit the final paper, which must demonstrate special knowledge. It may be design study, a report original work, or a paper, based on the candidate's published works.

Candidates for this route of entry must complete and submit their Application Forms along with the details of the Proposed Paper.

Mature candidates seeking Corporate Membership must:

- Be over 45 years at the time of registration (35 if an Associate Member), although applications can be initiated up to two years earlier.
- Have at least 15 years' experience in appointments of increasing responsibility in Structural Engineering.
- Have attained a position demonstrating a level of competence that would have admitted the applicant to Corporate Membership even when the normal academic requirements had been satisfied.

The main aim of the Paper - which should be in English and 5,000 - 10,000 words long - is to demonstrate the author's knowledge and understanding of engineering principles. All candidates for this route of entry must complete and submit their Application Forms along with a synopsis of the Proposed

Once the synopsis has been approved, a candidate must submit the final Paper within one year, during which Branch Advisers will be available to offer quidance.

Member via International Directive

Candidates from any European Union member state, United States of America, Canada, Russia and Republic of China who are already registered Professional Engineers, in their countries will on submission of their applications be admitted as Corporate Members of the Institution after the verification of their credentials, followed by Professional Interview.

Membership Applications

On Admission and fulfillment of their financial obligations, members are entitled to use the following appellations after their names:

- Student MembersSNIStructE
- Graduate MembersGNIStructE
- Associate MembersAMNIStructE
- Corporate MembersMNIStructE
- FellowsFNIStructE
- Honorary FellowsFNIStructE (Hons)
- CompanionsCNIStructE

How to join

Further advice and Application Forms can be obtained from:

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5, Akinhanmi Street, Surulere, P. O. Box 7496, Marina, Lagos, Nigeria. Phone: +234(0)8055960846; +234(0)8122095767

e-mail:nistructeng@yahoo.comWebsite: www.nistructe-org.ng

Grades of Membership

There are five main grades of membership of the Institution-Student, Graduate, Member, and Fellow. Each requires a different combination of education, experience and professional qualifications. A fifth grade - Companion-is designed to attract candidates from other professionals in the Building Industry.

Student Membership

Student Membership of the Institution is open to anyone over 17 years of age and studying Civil or Structural Engineering. Usually, this will be via a Degree/HND (Higher Diploma) course in Civil/Structural Engineering leading to qualification as Graduate Member. There are no entrance fees for Students or any annual subscription for those studying for up to five years on a full-time accredited course. Those on accredited part-time study pay a reduced Student subscription

If you are pursuing the route to full Membership, depending upon your qualifications, you may require to remain a Graduate Member until you pass the required examination.

Graduate Membership

Graduate Membership of the Institution is open to those aged at least 21 years who have satisfied the Institution's academic requirements. As a Student Member, you can apply to transfer to Graduate Membership after obtaining an accredited degree, or equivalent. Graduates who were not Student Members must apply for direct election to Graduate Membership. Depending upon your degree and your career plans, matching programmes of study, if required, will be available for you to progress to Member.

Associate-Membership

There are three routes to Associate - Membership: in the first two, a minimum age limit of 23 applies. You are required to take a Professional Review. This involves an interview with senior Institution members and, if successful, you may then:

- Sit the Associate Membership written examination
- Have published research work assessed and accepted
- Take the Associate -member oral examination if you are aged 35 or over.

Corporate Membership

The Candidate must be at least 25 years of age and must have academic qualification(s) that is registrable with the Council for the Regulation of Engineering in Nigeria (COREN).

Such qualifications include B. Sc/B.Tech/B. Eng. And HND (with PGD) in Civil/Structural Engineering or any other cognate qualifications acceptable to COREN.

In addition the candidate required to take a Professional Review. This involves an interview with senior Institution members and, if successful, you may:

- Sit the Chartered Membership (Part 3) examination
- Have published research work assessed instead of sitting the examination one other special route to Corporate Membership is available.
- By entry via Membership of Institution of Structural Engineers of Great Britain.

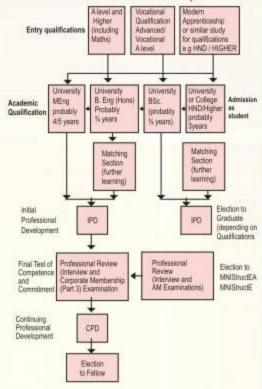
Election as a Member of the Institution confers the right to the title of Corporate

If you are over 35 years and a Graduate Member with at least 15 years' experience in appointments of increasing responsibility and if your competence is comparable to your Corporate Member contemporaries, you may apply to take the Corporate Membership Professional Review (Interview and Corporate Membership (Part 3) examination).

First, your application form along with details of experience will be assessed. If these are acceptable, you will be required to take a Professional Review Interview. If successful in the Interview, you will be eligible to sit the Corporate Membership (Part 3) examination. Upon passing the examination you will be transferred to Member and will be entitled to be called a Corporate Member of the Institution.

- Alternative Routes to Membership via Research and the Mature Candidate are available
- Associate Members over 35 who are able to demonstrate the IPD (Corporate Members) core objectives and evidence of CPD may apply for approval to sit the Corporate Membership (part 3) Examination.

Routes to Membership



Fellowship

Transferring from Memberto Fellow: Fellow is the highest membership status of the Institution. Election to fellowship of the Institution shall be either by invitation of the Executive Council of the Institution or by direct application by a member. A person to be invited to Fellowship of the Institution shall normally have had not less than twenty (20) years' experience in the practice of Structural Engineering Science. In addition, he shall have met one or all of the following conditions:

- Have rendered valuable and selfless service to the Institution over a period of time
- Have been outstanding in the field of structural engineering; by outstanding is meant that such a person must be a widely acknowledged authority in the field of Structural Engineering.
- A person seeking Fellowship of the Institution by application shall have had not less than fifteen (15) years' experience in the practice of Structural Engineering Science.
- In addition, he shall meet one or all the following conditions

 Submit a dissertation containing valuable statistics on Structural
- Engineering practice in this Country
 Submit a dissertation or thesis on original solution to a particular
- Structural Engineering problem in Nigeria. Submit a dissertation adjudged by Council to be a worthwhile contribution to Structural engineering knowledge in the Country.

Direct Admission

Applications for direct entry to Fellowship are normally by invitation. To qualify, you must be at least 45 and possess the academic qualifications for Corporate Membership. Furthermore, you must either have made some noteworthy contribution to the science of Structural Engineering or have materially advanced from technical viewpoint. You must also occupy such an eminent position in the profession of Structural Engineering that direct admission, as a Fellow would, in Council's opinion, advance the interest of the Institution.

Honorary Fellowship

Any eminent or distinguished person who shall have rendered or who may be in a position to render to Structural Engineering or to the Institution of