

# The Zimbabwe Institution of Engineers



**Membership Services & Training Department**

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## ZIE 2016 CPD CALENDAR

Item No	Course /Date/Time	Date	Content Summary	Facilitator	Cost/ Delegate USD	ZIE/ECZ Credits	Duration (hrs)
1.	<b>Course:</b> Team Building and Development  <b>Venue:</b> ZIE Headquarters-Conquerar House  <b>Time:</b> 0800-1600	2 March	The course details the key skills required by anyone expected to lead a team or those required to work within one. The main subject areas which will be addressed in detail are organisational vision, culture, team building, team management, the individual's roles within the team, communication and problem solving methods and techniques will also be demonstrated with regard to practical applications within a team structure. Providing the opportunity to develop skills and practice techniques. A variety of training methods are used during the course, including presentation, discussion, exercises, class workshops and demonstrations.	Eng. B. Choto	30.00	1	8hrs
2	<b>Course:</b> Solar Photovoltaic Technology, Site Selection and Solar Energy Yield Prediction.  <b>Venue:</b> ZIE Headquarters-Conquerar House  <b>Time:</b> 0800-1600	23 March	The Course will give an outline of basics of Solar PV generation, the photovoltaic effect, types of PV module Technology and the Solar PV Development Process. The requirements and constraints of selecting a suitable site for PV installation and determining energy output for the Solar PV plant will be outlined.	Eng. Nhamo Dhlamini	30.00	1	8hrs

3	<b>Course: Urban Tolling</b> <b>Venue:</b> ZIE Headquarters-Conquenar House <b>Time:</b> 1700-2000hrs	31 March	In press	Eng. Musarurwa	Free	0.5	3 hrs
4	<b>Course:</b> Computer Applications with Microsoft Excel <b>Venue:</b> ZIE Headquarters-Conquenar House <b>Time:</b> 0800-1600	6 April	Computer Applications is a fundamental course for today's engineers and technologists. This course is designed to equip engineers and technologists with basic, intermediate and advanced computer skills in Microsoft Excel, in order to optimize manufacturing operations. With the rapid advancement in technology, many operations have become centered on the application of computers to achieve rapid generation and analysis of results in design, modeling & simulation, and design of experiments. This foundation will give a basis for further studies in Finite Element Modeling, Computational Fluid Dynamics, Numerical Control, Inventory management, Operations Research and Robotics. The course will include many supporting value addition activities such as problem analysis and troubleshooting.	Eng. D. Museka	30.00	1	8hrs
5	<b>Course:</b> Sustainable Energy <b>Venue:</b> ZIE Headquarters-Conquenar House <b>Time:</b> 1700-2000hrs	22 April	In press	Eng. Martin Manuhwa <b>ECZ Chairman</b>	Free	0.5	3hrs
6	<b>Course:</b> The First 100 Days <b>Venue:</b> ZIE Headquarters-Conquenar House <b>Time:</b> 1700-2000hrs	30 April	In press	Eng. Tendai N. Kapumha <b>ZIE President</b>	Free	0.5	3hrs

7	<p><b>Course:</b> Report &amp; Proposal Writing and Technical Presentation Techniques</p> <p><b>Venue:</b> ZIE Headquarters-Conquenar House</p> <p><b>Time:</b> 0800-1600</p>	6 May	<p>This course will cover the following areas:</p> <ol style="list-style-type: none"> <li>1. Organisation Vision, mission and culture</li> <li>2. Definition</li> <li>3. Executive summary</li> <li>4. Targeted audience</li> <li>5. Proposal objectives</li> <li>6. Report objectives</li> <li>7. Font style and size</li> <li>8. Layout</li> <li>9. Illustrations</li> <li>10. Choice of words</li> <li>11. Attachments</li> </ol>	Eng. Benard Choto	30.00	1	8hrs
8	<p><b>Course:</b> The role of related training to project management maturity and implementation success</p> <p><b>Venue:</b> ZIE Headquarters-Conquenar House</p> <p><b>Time:</b> 1700-2000hrs</p>	13 May	<p>Participants will get an overview of common project management training and certification. Participants will be informed of available tools for Project Management Maturity assessment. The contribution of related training and certification will be discussed with provision of empirical evidence. They will also get to appreciate the link between project management maturity and ultimate project success.</p>		Free	0.5	3 hrs
9	<p><b>Course:</b> Due Diligence and Feasibility Studies</p> <p><b>Venue:</b> ZIE Headquarters-Conquenar House</p> <p><b>Time:</b> 1700-2000hrs</p>	21 May	In press	Eng. Tendai N. Kapumha <b>ZIE President</b>	Free	0.5	3 hrs
10	<p><b>Course:</b> Environmental Impact Assessment</p> <p><b>Venue:</b> ZIE Headquarters-Conquenar House</p> <p><b>Time:</b> 0800-1600 hrs</p>	27 May	<p>Environmental Impact Assessment (EIA) forms an integral part of the planning process for most developmental projects. This course examines the principles of EIA and relates them to the current environmental best practice in Zimbabwe. It is a legal requirement in Zimbabwe to conduct an EIA for all prescribed developmental projects. The training course will equip the participants with a sound knowledge of what an EIA is and how an EIA is conducted.</p>	Eng. Betty Nhachi	30.00	1	8hrs

11	Course: Safety of Electrical/Electronic Systems & Equipment Venue: ZIE Headquarters-Conquenar House Time: 0800-1600 hrs	10 June	<p><b>Course Description and Learning Goals:</b></p> <ul style="list-style-type: none"> <li>• Protection Engineers and technicians who complete this course will have gained a theoretical and applied understanding of power system protection.</li> <li>• The performance of instrument transformers, transducers, protective relays, and circuit breakers is first addressed.</li> <li>• These devices are then integrated into coordinated protective systems for generators, transformers, transmission lines, reactors, capacitor banks, system buses, etc.</li> </ul>	Eng. Tendai N. Kapumha <b>ZIE President</b>	45	1	8hrs
12	Course: ICT Infrastructure Sharing Venue: ZIE Headquarters-Conquenar House Time: 1700-2000hrs	24 June	In press	Eng. M. D. Chenga	Free	0.5	3hrs
13	Course: Introduction to grade-separated intersections and interchanges Venue: ZIE Headquarters-Conquenar House Time: 1700-2000hrs	<b>14 July</b>	<p>General statements and definitions; -Advantages of grade-separated intersections and interchanges; -Constraints of environmental, engineering and investment nature for the application of grade-separated and interchange structures; -General categories; -Methodology of study and design – integrated approach to stages of study; -Analysis of traffic factors and of location and site factors; -Links and ramps and their major characteristics of grades, radii, horizontal and vertical dimensional recommendations; -Merging, diverging and weaving within a structure; -Classifications, typology and practical examples; -Capacities and capacity characteristics of major elements and parts of the structures.</p>	Prof. Vassileva	30.00	1	8hrs
<p><b>Saturday 23 July 2016 –ZIE NATIONAL BRIDGE BUILDING COMPETITION</b></p> <p><b>Venue: ZIE Headquarters- Conquenar House HARARE</b></p>							
14	Course: Water Stewardship Venue: ZIE Headquarters-Conquenar House Time: 1700-2000 hrs	29 July	In press	Eng. Herbert Nyakutsikwa	Free	0.5	3hrs

15	Course: Introduction to Airport Engineering Venue: ZIE Headquarters-Conquenaar House Time: 1700-2000 hrs	12 August	Global aviation growth is expected to grow at a very fast pace in the coming years. ICAO reported that in 2014 more than 3 billion passengers were carried around the world. Aviation provides a lot of career opportunities and several ways of specialization. Most engineers can break into aviation at any stage if they are properly on-boarded. This course can be such an opportunity. Airport engineering topics are not fully covered in faculties to the same extent as Power, Telecommunications, Highways, Water or Industrial. The next coming few years opportunities in aviation are not only wider, but exciting and accessible to many.	Mugere Tineyi	30.00	1	8hrs
<b>ZIE Annual Soccer Fiesta</b> <b>Venue: TBA Harare</b>							
16	Course: Appropriate Agricultural Engineering Technology in Enhancing Food Security Venue: ZIE Headquarters-Conquenaar House Time: 1700-2000 hrs	26 August	In press	Eng. Tiri Koza	Free	0.5	3hrs
<b>Friday, 26 August 2016 2016-SAICE INTERNATIONAL BRIDGE BUILDING COMPETITION</b> <b>Venue: St Alban's College, Pretoria-South Africa</b>							
17	Course: Mining and Mineral Beneficiation Venue: ZIE Headquarters-Conquenaar House Time: 1700-2000 hrs	9 September	In press	Prof. G. Dzinomwa	Free	0.5	3hrs
18	<b>Course:</b> Root Cause Analysis(RCA) <b>Venue:</b> NUST-Bulawayo <b>Time:</b> 0800-1600hrs daily	16 September	After this Root Cause Analysis training course, delegates will be able to: -Use a structured approach to identifying and defining the problem, determining the root cause through analysis and defining an appropriate solution -Understand the range of tools available for analysis of problem situations. -Identify, evaluate and develop solutions that address the root cause of the problem  -Promote the ability to provide problem-solving support in situations where one is not an expert in the process or technology involved.	Eng William Goriwondo	30	1	8hrs

19	<p><b>Course:</b> Housing Delivery for the 21<sup>st</sup> Century</p> <p><b>Venue:</b> ZIE Headquarters-Conquenar House</p> <p><b>Time:</b> 0800-1600hrs daily</p>	30 September	In press	Eng. Pfikwa	Free	0.5	3 hrs
20	<p><b>Course:</b> Road Construction &amp; Maintenance</p> <p><b>Venue:</b> ZIE Headquarters-Conquenar House</p> <p><b>Time:</b> 0800-1600 hrs</p>	6 October	<ul style="list-style-type: none"> <li>-Theory on Use of Soils as Road Materials</li> <li>- Construction Materials Specifications, Testing and Importance of Quality Control</li> <li>- Compaction, Stabilization Methods, Surfacing Types and Construction Methods</li> <li>- Hauling and Dumping of Gravel</li> <li>- Concrete Production and Construction</li> <li>- Road Maintenance of Paved &amp; Unpaved Roads</li> </ul>	Eng. Mufaro Eric Gumbie	30	1	8hrs
21	<p><b>Course:</b> Sustainable Energy (Bioenergy and Environmental Engineering)</p> <p><b>Venue:</b> ZIE Headquarters-Conquenar House</p> <p><b>Time:</b> 0800-1600 hrs</p>	14 October	In press	Dr. Mercy Manyuchi	Free	0.5	3 hrs
22	<p><b>Course:</b> Thermal Use of Solar Energy</p> <p><b>Venue:</b> CONQUENAR House</p> <p><b>Time:</b> 0800-1600hrs</p>	26 to 28 September	The three-day course focuses on the applications of solar-thermal technologies suitable for Zimbabwe. New developments on the solar market will be highlighted and several reasons will be brought out as to why Zimbabwe has no choice but to go SOLAR. Different types of components and the design of complete solar hot water systems will be explained and their potential benefit to various industrial sectors as well as to hospitals, homes, schools and households. Offering alternatives to conventional energy sources, attendants from agriculture, industry, commerce and tourism will be introduced to methods of solar process heating and to solar refrigeration and air conditioning. The theory classes will be complemented with a site visit to a successfully running solar hot water installation in Harare. Attendants will be provided with the course material and other relevant literature on a CD.	Dr Anton Schwarzmuller	90	3	24hrs

23	<p><b>Course:</b> Production/Operations Management</p> <p><b>Venue:</b> NUST Bulawayo</p> <p><b>Time:</b> 0800-1600hrs Management</p>	11 November	<p>After completing this course, participants will :</p> <ul style="list-style-type: none"> <li>-Appreciate the Operations/Production/Manufacturing transformation Process</li> <li>-Understand the role of Supervision of Operations and Workforce</li> <li>-Appreciate and use the Principles of Management</li> <li>-Be able to lead and motivate a team</li> <li>-Carryout performance management that is appropriate to organizational development</li> <li>-Communicate effectively with all levels within and without the organization</li> <li>-Appreciate and Initiate World Class Manufacturing principles</li> </ul>	Eng William Goriwondo	30	1	8hrs
24	<p><b>Course:</b> Project Management with Microsoft Project</p> <p><b>Venue:</b> Conquerar House</p> <p><b>Time:</b> 0800-1600hrs daily</p>	18 and 19 November	<p>This course uniquely integrates the core Project Management Principles with the world's most popular Project Management Software to equip participants with the following abilities: Comprehensively define all work necessary to complete the project; Develop project schedules, budgets and cash-flows that capture ALL necessary project tasks and visibly show the resources required to complete tasks; Report actual production, cost and easily calculate and track variances ; Rebase project plans to accommodate any changes that inevitably occur during the life of a project, etc</p>	<p>Eng. Tendai N. Kapumha</p> <p><b>ZIE President</b></p>	80.00	2	16hrs
25	<p><b>Course:</b> Marketing in Engineering</p> <p><b>Venue:</b> Conquerar House</p> <p><b>Time:</b> 0800-1600hrs</p>	24 November	<p>Everybody should know what would constitute success in their own situation, determine how far away they are from their goals and work out ways of achieving these goals. The level of personal motivation is critical for success because it affects one's determination and ability to achieve identified goals.</p> <p>As a person, motivation helps you to put any challenges that you may be facing into their proper perspective, meaning that you will be able to tackle them from a position of strength</p>	Mr. Patrick M. Paradza-B.Sc (Econ);B.Acc (Sp. Hons) ; MAcc Missouri State University (USA)	45	1	8hrs

**NB:**

a) Detailed individual course overview and content will soon be on the CPD handle on [www.zie.org.zw](http://www.zie.org.zw) . Alternatively, send a course content request to [wilson@zie.co.zw](mailto:wilson@zie.co.zw)

b) Please note that virtually all of the 2016 CPD courses outlined are on pro bono (voluntary basis) on the part of the facilitators with investment requested to

cover associated recurrent expenses.

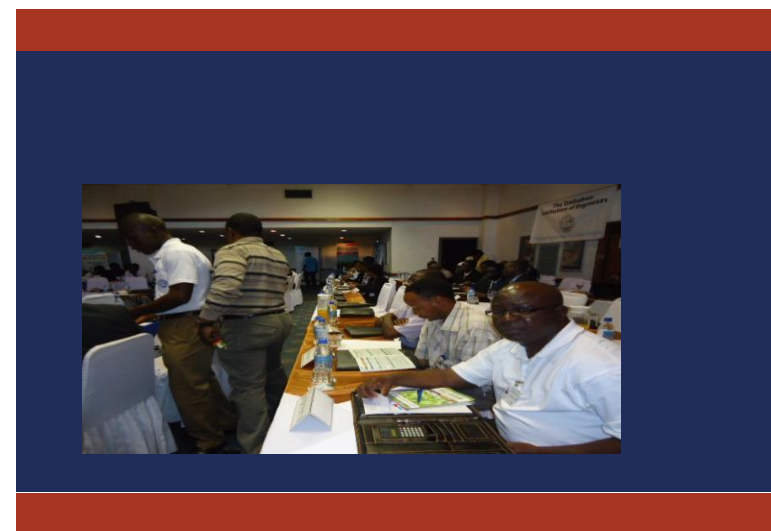
- c) Prospective participants are advised to register their interest on time by submitting a duly completed CPD registration form and make payment (where the CPD course is not for free) at least 14 days prior to the course to foster organisational logistics.
- d) Scheduled courses can be customized for organisations, companies or ZIE Areas provided the minimum number of participants (N20) and related investment are met.



# The Zimbabwe Institution of Engineers

CPD Credits are approved for all ZIE coordinated CPD activities

Course:.....  
 Date Due: .....  
 Venue: .....  
 Investment: \$..... Per Delegate



## A] Registration Details

Delegate's Full Names	Designation	Email	Cellphone Number
1.			
2.			
3.			

Company/Organisation: .....  
 Physical Address: .....  
 Contact Person:.....  
 Designation..... Email:.....  
 Cell Number:..... Signature: .....

## B] PAYMENT

**NB: Payment STRICTLY cash or bank transfer. ZIE FCA Bank account details are given below:**

### ZIE US DOLLAR ACCOUNT DETAILS

**Account Name:** Zimbabwe Institution of Engineers    **Bank:** Standard Chartered Bank  
**Branch:** Highlands    **Account Number:** 8700216764300 (US\$)    **Swift Code:** SCBLZWH

## C] Terms and Conditions

- a. **Course Fee entitles you to the following:** Morning + Afternoon refreshments, lunch, certification and course materials but excludes travel & accommodation.
- b. **Views of Speakers at any ZIE CPD Course:** are their own and do not necessarily reflect the views of ZIE, its employees, agents or stakeholders.
- c. **Delegate Substitution:** Provided the fee has been paid in full, within the time frame as per our terms and conditions, substitutions at no extra charge can be made up to 7 working days, before the start of the event. (Please send any notifications for such changes to [wilson@zie.co.zw](mailto:wilson@zie.co.zw))
- d. **Delegate Cancellations:** For any cancellations received in writing not less than 7 working days prior to the course, you will receive 90% credit to be used at another ZIE course which must occur within three months from the date of issuance. An administration fee of 10% of the contract fee will be retained for all permitted cancellations.
- e. **Except as specified above,** no credits will be issued for cancellations. There are no refunds given under any circumstances. ZIE is not responsible for any loss or damage as a result of a substitution, alteration or cancellation/postponement of an event. ZIE shall assume no liability whatsoever in the event this course is cancelled, rescheduled or postponed due to a fortuitous event, Act of God or unforeseen occurrence such as labor strike, extreme weather or other emergency.
- f. **Alteration of Facilitators:** Please note that while speakers and topics were confirmed at the time of publishing, circumstances beyond the control of the organizers may necessitate substitutions, alterations or cancellations of the speakers and/or topics, as such, ZIE reserves the right to alter or modify the advertised speakers and/or topic if necessary without any liability to you whatsoever. Any substitutions or alterations will be updated as soon as possible.
- g. **Course Cancellation by ZIE:** In the event that ZIE cancels /postpones an event for any reason, you will receive a credit for 100% of the course fee paid. You may use this credit for another ZIE event, which must occur within three months from the date of cancellation /postponement.