

# CURRICULUM VITAE

## 1. Biodata

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- a. Name: Adetona, Zacchaeus Adesakin  
b. Date and place of Birth: January 15<sup>th</sup> 1976, Oyo Town  
c. Gender: Male  
d. State of Origin: Oyo  
e. Nationality: Nigerian  
f. Marital Status: Married  
g. Number and ages of Children: Three children: ages 9, 7 and 1.  
h. Religion: Christianity  
i. Contact Address: Adetona's Residence  
Ifelodun Challenge  
Oke Ola Area  
Ilaro  
j. Email: zacchaeus.adetona@federalpolyilaro.edu.ng  
k. Mobile Phone: 234 (0) 815 756 2049, 234 (0) 816 535 9746  
l. Present Position: Lecturer I

## 2. Institutions Attended With Dates

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The Federal Polytechnic, Ilaro, CISCO Academy.	Dec. 2015
Federal University of Agriculture, Abeokuta, Ogun State.	2010-2014
Obafemi Awolowo University, Ile-Ife, Osun State.	2001-2006
Federal Polytechnic, Ede, Osun State.	1997-1998
Alaafin High School, Agunpopo Area, Oyo, Oyo State.	1987-1993
St. Mary's Anglican Primary School Iyalamu, Oyo, Oyo State.	1982-1987

## 3. Academic Qualifications

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<b>M. Eng.</b> Electronic and Control Engineering (PhD Grade)	<b>2014</b>
<b>B.Sc.</b> (Hons.) Electronic and Electrical Engineering (Second Class Upper)	<b>2006</b>
<b>ND</b> Electrical Electronic Engineering (Distinction)	<b>1998</b>
<b>SSCE</b> Certificate	<b>1993</b>
<b>Primary School Leaving Certificate</b>	<b>1987</b>

## 4. Professional Qualifications

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<b>CISCO</b> Instructor Certificate in IT essentials	<b>2015</b>
Certification as Professional Energy Auditor (PEA)	2020

## 5. Membership of Learned Societies and Professional Bodies

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Nigerian Society of Engineers (Corporate Membership no.: 48669)	2018
Council for Regulation of Engineering (Reg. No. R49355)	2019

## 6. Work Experience

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### a. Academic Experience

#### i. Teaching Experience:

**October 2009 – Date** The Federal Polytechnic, Ilaro

**POST:** Senior Lecturer

#### **DUTIES:**

- 1 Teaching electrical electronic engineering courses (both theoretical and practical-oriented).
- 2 Developing students' practical manuals.
- 3 Handling practical sessions in the laboratories and workshops.
- 4 Supervising students' final year projects.
- 5 Marking and grading of student examinations.
- 6 Serving as departmental Research and Development Personnel.
- 7 Mentoring new members of staff in the departmental works.
- 8 Sourcing for needed equipment and collating same for acquisition.

#### **Courses Taught**

i.	Electronics Instrumentation	EEI 442
ii.	Electrical Instrumentation and Control III	EEI 311
iii.	Electrical Electronics Instruments II	EEC 236
iv.	Research Methodology	EEC 417
v.	Computer Hardware Maintenance	EEE 437
vi.	CISCO IT Essentials	ICT 107

**December 2007 – September 2009** Lagos City Polytechnic, Ikeja, Lagos State

**POST:** Assistant Lecturer

#### **DUTIES:**

1. Teaching Electrical Electronic Engineering both theoretical and practical-oriented courses. Handling practical sessions in the laboratories and workshops
2. Supervising students' final year project
3. Formulating practical manuals for practical-oriented courses
4. Marking and grading of student examinations
5. Member Examination Committee of the Polytechnic

#### ii. **Courses Taught**

- Electrical Engineering Science I, II
- Electrical Circuit Theory I, II, III
- Electrical Machines
- Telecommunication Engineering
- Electrical Electronics Maintenance and Repair
- Electrical Graphics.

### iii. Research Interests

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1. Power quality assessment.
2. Development of power distribution devices.
3. Renewable energy.
4. Energy audit and management.
5. Development of microcontroller-based devices.

### iv. Administrative Experience

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#### Membership of Committees

- Member, Polytechnic Committee on Development of Curriculum in Cement Engineering Technology.
- Member, Polytechnic Ceremonies Committee.
- Member, Polytechnic Committee on Turnitin and E-Learning Portal.
- Member, Stage Management Sub-committee of Polytechnic Ceremonies Committee.
- Member, Technical Sub-committee of Polytechnic Ceremonies Committee.
- Member, Committee on Technological Innovations and Research Development.
- Member, School of Engineering Ad-Hoc Committee on Solar-Powered Electricity Supply Committee.
- Member, School of Engineering Sixth National Conference Committee.
- Chairman, Departmental Committee for Equipment Sourcing, Collation and Utilization.
- Member, Departmental Committee for Accreditation.

### 7. Services outside the Federal Polytechnic, Ilaro.

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- i. Chairman, Abstract and Editorial Committee, First National Conference, Nigerian Society of Engineers, Ilaro Branch, November 2020.
- ii. Deputy Editor, International Journal of Engineering and Technology (InJET)
- iii. Technical Paper Reviewer for IEEE PES/IAS PowerAfrica 2020 Conference.
- iv. Reviewer for the international journal Sustainable Energy Technologies and Assessments
- v. Reviewer for Journal of Infrastructure, Policy and Development (International Journal).
- vi. Reviewer for FPI International Conference.
- vii. Engineering Career Talk Speaker at Itolu Grammar School, April 2019.
- viii. Engineering Career Talk Speaker at Itolu Grammar School, May 2021.

### 8. Academic Publications

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#### a. Journal Publications

- i. Olusegun Adeniji, **Adetona Z. A.**, Balogun A. B. (2023) Design and Construction of a Low-cost, Three-axis Computer Numerical Control (CNC) Machine. Iconic Research And Engineering Journals Volume 7 Issue 3, Page 348-353.
- ii. Ajibodu, F. A., **Adetona, Z. A.** & Oduntan. O. E. (2022). An Intranet-Based E-learning System for Curriculum Delivery in Rural Settings. American Journal of Education and Information Technology. Vol. 6, No. 2, pp. 85-95. doi: 10.11648/j.ajeit.20220602.14
- iii. **Adetona, Z. A.** & Ogunyemi, J. (2022). Electric Energy Impact on the Environment: Factors

- Influencing the Sustained Energy-Inefficient Lamps Utilisation in Nigeria Residential Sector. *Journal of Energy, Environmental & Chemical Engineering*. 7(3), 2022, pp. 71-79. doi: 10.11648/j.jeece.20220703.14
- iv. Ogunyemi, J., **Adetona, Z. A.** & Koledoye, T. O. (2022). Substation Load Management for Electric Power Distribution's Sustainability, *European Modern Studies Journal*, 2022, 6(1), 46-57.
  - v. Adetona, Z. A. & Ajibodu, F. A. (2021). Development of A Dynamic AC/DC (Hybrid) Electric Power Distribution Board, *International Journal of Electrical and Electronics Engineering*, 10(2), 27-34.
  - vi. Odunlami, S. A., Jesusina, B. M., Akintade, J. O., Chapi, S. P., Udoh, U.J., Balogun, A. B., Afolayan, A. O., Ogunyemi, J., **Adetona, Z. A.**, Oloyede, E. O., Fakeye, A. B., Okusanya, M. A., Olasina, J. R., Jayeoba, B. O., Ajetunmobi, D. T., and Oloyo, R. A. (2021). Design and Construction of a Prototype Mechanical Ventilator for Rural Communities in Poor Countries, *International Journal on Interactive Design and Manufacturing* xx(x) (in print).
  - vii. **Adetona, Z.A.**, Ogunyemi, J. & Bitrus, I. (2020). Maintenance Management Regime for Off-Grid Solar PV Renewable Energy System in Nigeria. *European Journal of Engineering Research and Science*. 5(11), 1376-1382. DOI:<https://doi.org/10.24018/ejers.2020.5.11.2233>.
  - viii. Ogunyemi, J. & **Adetona, Z. A.** (2019). Power Quality Survey of Voltage Stabilizers and Uninterruptible Power Supply with Nonlinear Loads. *European Journal of Electrical and Computer Engineering*, 3(6) 1-6. <http://dx.doi.org/10.24018/ejece.2019.3.6.141>
  - ix. **Adetona, Z. A.** & Ajibodu, F. A (2016): Performance Evaluation of Convolutional Coding for the Reduction of AWGN in a Communication Channel for Digital Video Broadcasting Terrestrial. *IOSR Journal of Electronics and Communication Engineering* 11(6), Ver. II (Nov.-Dec .2016): 12-19. DOI: 10.9790/2834-1106021219.
  - x. **Adetona, Z. A.** & Ajibodu, F. A (2016): Design and Implementation of A Stand-Alone Photovoltaic System As Alternative Power Source For Developing Countries. *Advances in Multidisciplinary Research Journal*. Vol. 2. No. 3, pp. 161-166.
  - xi. Ajibodu, F. A., **Adetona, Z. A.** & Ojo, B. A. (2016) Performance Analysis of Erbium Doped Fiber Amplifier's and FWM Characteristics in a Passive Optical Network. *International Journal of Optoelectronic Engineering* 2016, 6(1): 1-7 DOI: 10.5923/j.ijoe.20160601.01
  - xii. **Adetona Z. A.**, Koledoye T. O. & Alebiosu M. I. (2013) Television Broadcasting Transmission in Nigeria: Application of Technical Data for Re-Planning. *Electrical and Electronic Engineering*, Vol. 3, No. 6, pp. 173-177. <http://article.sapub.org/10.5923.j.eee.20130306.05.html> DOI:10.5923/j.eee.20130306.05
  - xiii. **Adetona, Z.A.** & Koledoye, T.O. (2011) 'The need for review of CCIR curves for tropical Africa for effective television broadcasting planning', *Int. J. Satellite Communications Policy and Management*, (Switzerland) Vol. 1, No. 1, pp.31-43.  
<http://inderscience.metapress.com/content/k7242111442h1616/> DOI:10.1504/IJSCPM.2011.039739
  - xiv. **Adetona, Z.A.** & Koledoye, T.O. (2011) "Assessment of Television Transmission Coverage in a Mega City: A Study of NTA Lagos and AIT Television Stations in Lagos State". *Journal of Engineering Science and Technology*, Vol. 6, No 1, pp. 49-53.
  - xv. **Adetona, Z. A.** (2010) "Design of a Computer Interface for Data Logging of Mains Voltage Supply". *International Journal of Science and Technological Research Volume 6, Number 1&2, 2010 edition*.
- b. **Book Chapters/Book Publication:**
  - c. **Adetona, Z. A.** (2024). *Industrial Measurement and Control*. Amazon Publishers. ISBN: 978-978-787-134-8. (Online)

- i. Adetona, Z. A. & Mathew, T. O. (2022). Electronics Engineering Fundamentals, vol. 1. ISBN: 978 978 37 4567 4
- ii. Ogunyemi, J., Adetona, Z. A., Abdulhamid, I. G. & Afunlehin, O. A. (2020). Fundamentals of Instrumentation and Control, Volume 1. Ilaro: Femlight Productions. ISBN: 978 978 979 406 5
- iii. Zacchaeus Adetona (2017) Microcontroller- Based Computer Interface for Mains Supply Data Logging. Published MEng Dissertation by LAP LAMBERT Academic Publishing, Saarbrücken, Germany. (Online)

d. **Conference Papers**

- i. **Adetona, Z. A., & Akinteye, F. O. (2023).** Energy Audit and Potential Energy Savings In An Office Building In Federal Polytechnic Ilaro, Nigeria. 6th National Conference of the School of Engineering, Federal Polytechnic, Ilaro. August 7-9, 2023.
- ii. Adetona, Z. A., & Olayiwola, J. O. (2022). Meeting the challenge of engineering asset maintenance in Nigeria through asset maintenance engineering education. 3rd International Conference, The Federal Polytechnic, Ilaro, August 16th – 17th, 2020.
- iii. Ogunyemi, J, Adetona, Z. A., Mbamaluikem, P. O. and Okufuye, O. A. (2021). A Viable Energy Mix Option for Nigeria Tertiary Institutions: Federal Polytechnic Ilaro as A Case Study. Nigerian Society of Engineers, 2021 International Conference on Expansion of the Energy Mix for National Economic Growth, Coal-City 2021 Conference, Abuja, December 6-10, 2021.
- iv. Adetona, Z. A. & Ajibodu, F. A. (2021). Ensuring Power Continuity through Dynamic Hybrid Distribution Fuse Board”. Paper presented at the 5th National Conference of the School of Engineering, Federal Polytechnic, Ilaro. November 2-3, 2021.
- v. Ogunyemi, J., Adejumobi, I. A. & Adetona, Z. A. (2020). Total Power Quality Concept in Electricity Distribution Network. The Nigerian Institution of Electrical and Electronics Engineers (NIEEE) International Conference and Exhibition on Power and Telecommunications ICEPT 2020. 9th – 13th October 2020.
- vi. Adetona Z. A. & Mbamaluikem, P. O. (2020). Factors Affecting Load Pattern in a Tropical Electric Power Distribution Area. 8th IEEE International Conference on Power and Energy, 7-8 December, 2020.
- vii. Ogunyemi, J., Oduntan E. O. & Adetona Z. A. (2020). Enhancing Technological Development through Dynamic, Innovative and Creative Academic Curricula. 2nd International Conference, The Federal Polytechnic, Ilaro, November 10th – 11th, 2020.
- viii. Adetona, Z. A., Ogunyemi, J. & Bitrus, I. (2020). Investigation into the maintenance management awareness on solar PV renewable energy system in Nigeria. NSE Ilaro Branch, 1st National Conference, Ilaro, 2-3 November, 2020.
- ix. Adetona Z. A. & Ogunyemi, J. (2020). An Investigation into the Utilisation of Energy Saving Lamps in Residential Buildings–A Case Study of Lagos Nigeria. IEEE PES/IAS PowerAfrica, (Virtual), 25-28 August, 2020.
- x. Adetona, Z.A. & Ogunyemi, J. (2019). Energy Efficiency Awareness and Preparedness in Nigeria: Federal Polytechnic Ilaro as Case Study. 4th School of Engineering National Conference, Federal Polytechnic Ilaro, November 25th -28th, 2019.
- xi. Ogunyemi, J. & Adetona, Z. A (2018) Distribution Network Power Quality Modelling Requirements: Problems and Solutions. Proceedings of the 2018 National Engineering Conference of the Nigeria Society of Engineers [NSE]. pp. 160 -169.
- xii. Ogunyemi, J., Adetona, Z. A., Fagbuaro, O. E., & Adedokun, A. G. (2018) Development of A Locally Fabricated Solid Food Processing Machine. Federal Polytechnic, Ilaro 1<sup>st</sup> International

- Conference, November 5-8, 2018.
- xiii. Ogunyemi, J. & Adetona, Z. A. (2017). Investigation into a Distribution Network Energy Utilization: Ilaro Community as Case Study. NIEEE 13<sup>th</sup> International Conference and Exhibition on Power and Telecommunications, National Engineering Center, CBD, Abuja, Nigeria, 9 - 13th October 2017.
  - xiv. Ajibodu, F. A., Adetona, Z. A. & Ayelabowo, O. P. (2016). Optimization of High Capacity Optical Transport Network Using Riverbed SP Guru Transport Planner for Metropolitan Network. Proceedings of 3<sup>rd</sup> National Engineering Conference, School of Engineering, The Federal Polytechnic Ilaro, Ogun State, March 7-10, 2016.
  - xv. Ajibodu, F. A., Adetona, Z. A. & Ogunyemi, J. (2016). Optimization of Maximum Achievable Bit Rate of A Next Generation Passive Optical Network. *Proceedings of 3<sup>rd</sup> National Engineering Conference*, School of Engineering, The Federal Polytechnic Ilaro, Ogun State, March 7-10, 2016.
  - xvi. Ajibodu, F. A., Adetona, Z. A. & Ojo, B. A. (2016). White Noise Reduction in Communication Channel Using Convolution Coding. *Proceedings of 3<sup>rd</sup> National Engineering Conference*, School of Engineering, The Federal Polytechnic Ilaro, Ogun State, March 7-10, 2016.
  - xvii. Adetona, Z. A. & Ajibodu, F. A (2016). Design and Implementation of A Stand-Alone Photovoltaic System As Alternative Power Source For Developing Countries. *Proceedings of Fourth International Conference on Engineering and Technology Research*, Faculty of Engineering and Technology, Ladoko Akintola University of Technology, Ogbomosho. February 23-25, 2016.
  - xviii. Ajibodu, F. A, Adetona, Z. A. & Ojo, B. A (2015). A study of Erbium Doped Fiber Amplifier (EDFA) Amplifier's Characteristic and FWM in an Optical Network using Optiwave Optisystem Simulator. Academic Staff Union of Polytechnics (ASUP) Zone C 2015 National Conference (Ilaro 2015), 11-14<sup>th</sup> May 2015.
  - xix. Adetona, Z. A. & Ogunyemi, J. (2014). Promoting Energy-saving Measures for Mitigating Electrical Power Crisis in Developing Countries. *2<sup>nd</sup> International Conference on Global Research Development and Challenges in the 21<sup>st</sup> Century*, Niger Delta University, Wilberforce Island, Amasoma, Bayelsa State, 18<sup>th</sup> –20<sup>th</sup> November, 2014.
  - xx. Adetona, Z. A., Adejumobi, I. A., Waheed, M. A. & Akinwale, A. T. (2013). A novel data-acquisition system for improving electric power distribution planning. Paper presented at *Proceedings of IEEE 2<sup>nd</sup> International Conference on Emerging and Sustainable Technologies for Power and ICT in A Developing Society*, Links Hotel, New Owerri Commercial Area, Imo state, Nigeria between 14<sup>th</sup> - 16<sup>th</sup> November 2013. DOI: 10.1109/NIGERCON.2013.6715656
  - xxi. Adetona, Z. A., Adejumobi, I. A., Jubril, A. M. & Akinwale, A. T. (2012). Multi-objective Optimal Power Dispatch for Power Network including Wind Energy Conversion System via Semi-definite Programming. *4<sup>th</sup> International Conference on Engineering Research & Development (ICERD2012)*, University of Benin, Benin City, Nigeria, 4<sup>th</sup> - 6<sup>th</sup> September 2012.
  - xxii. Adetona, Z. A. & Oloyede, E. O. (2012). Development of a Small Hydroelectric Power Plant: Ogun River as a Case Study". Paper presented at the Second National Conference of the School of Engineering, Federal Polytechnic, Ilaro. November 12-15, 2012.
  - xxiii. Fadare, S. A. & Adetona, Z. A. (2012). Safety First – The Splendiferous Cliché against Electrical Hazard: Discourse on the distaff side". Paper presented at the Second National Conference of the School of Engineering, Federal Polytechnic, Ilaro. November 12-15, 2012.
  - xxiv. Oloyede, E. O., Omolola, S. A., Adetona, Z. A., Aikulola, O. A. & Adetona, O. A. (2012). Harnessing Available Streams for Small Hydroelectric Plants" Paper presented at the *Second National Conference of the School of Engineering, Federal Polytechnic, Ilaro. November 12-15, 2012.*
  - xxv. Adetona, Z. A. & Ojo, B.A. (2012). Employing The Servo Trainer In Expanding The Frontiers Of Polytechnic Education In Control Engineering" *International Conference on Sustainable Development Strategies*, Cross River University of Technology, Calabar, Cross River State,

Nigeria, December 11-12, 2012.

- xxvi. Adetona, Z. A. (2011). Tackling the Challenges of Power Generation in Nigeria through Empirical Data Analysis. Faculty of Technology, Obafemi Awolowo University, Ile-Ife International Conference, 2011.
- xxvii. Adetona, Z. A. Okeke, B. & Igbabini, W. O. (2010). Necessary Framework for Implementation of ICT in Nigerian Tertiary Institutions for Curriculum Delivery. A paper presented at the First National Conference of the School of Engineering, Federal Polytechnic, Ilaro. November 2-5, 2010.

e. **Unpublished Project & Dissertation:** Nil.

- i. Technical Report on the Development of a Multi-outlet Electronic Letter Box with GSM Alert
- ii. Technical Report on the Development of Automatic Electronic Change-over Switch

f. **Major Research Undertaken**

- i. Member, FPI Research Team on COVID-19 for the development of Mechanical Ventilator and Disinfectant Booth.  
Development and fabrication of a farm produce drying machine. Funded with TetFUND Research Grant.  
The development of a farm produce drying machine  
Power Quality Assessment of voltage stabilizers and uninterruptible power supply with nonlinear loads in Ilaro.  
Development of a portable solar-powered multi-outlet portable mobile devices charging system. Funded with TetFUND Research Grant.  
Development of A Multi-outlet Electronic Letter Box with GSM Alert. Funded with TetFUND Research Grant.  
Development of Automatic Electronic Change-over Switch, Funded with TetFUND Research Grant.

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**9. Community Service**

- 1. Engineering Career Counsellor to the following schools:
  - i. Itolu Grammar School, Ilaro.
  - ii. Yewa College, Ilaro.
- 2. Chairman, Nigeria Society of Engineers 1<sup>st</sup> National Conference Abstract and Editorial Committee.

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**10. Extra-curricular Activities**

Leisure reading, listening to music and playing Ludo game.

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**11. Referees**

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1. Dr. Isaac A. Adejumobi

Head of Department

Dept. Electronic and Electrical Engineering

Federal University of Agriculture, Abeokuta

2. Dr. Abimbola Jubril

Dept. Electronic and Electrical Engineering

Obafemi Awolowo University Ile-Ife

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3. Surv. Theophilus Akinola  
Building Department  
Federal Polytechnic Ede  
Osun State  
Tel.: 234805 302 5214