

SEMINAR ANNOUNCEMENT

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING
COLLEGE OF DESIGN AND ENGINEERING

Website: <https://cde.nus.edu.sg/ece>

Area: Control, Intelligent Systems & Robotics

Host: Associate Professor Xiang Cheng

Teaching seminar

TOPIC	:	Half-Wave & Full-Wave Rectifier
SPEAKER	:	Dr. Zhao Zhenyu Research Fellow, Nanyang Technological University, Singapore
DATE	:	Friday, 22 September 2023
TIME	:	1.00PM to 2.00PM
VENUE	:	E5-03-19 Block E5, College of Design and Engineering, NUS

ABSTRACT

This 45-minute teaching seminar targets second-year ECE undergraduates, focusing on the fundamental concepts of half-wave and full-wave rectifiers. Beginning with a concise overview of what rectifiers are and their importance in daily applications, the seminar will guide students through the basic principles of both half-wave and full-wave rectification methods. It is structured into five key sections:

- What is Rectifier
- Why Need Rectifier
- Half-Wave Rectifier
- Full-Wave Rectifier
- Exercise & Summary

By the end of the seminar, the students will know the significance of rectifiers in our daily applications and learn the fundamental concepts of half-wave and full-wave rectifiers.

BIOGRAPHY



Dr. Zhao Zhenyu (IEEE Senior Member) received the B.Eng. degree from Huazhong University of Science and Technology, China, in 2015, and the Ph.D. degree from Nanyang Technological University (NTU), Singapore, in 2021.

He is currently a Research Fellow at NTU and serves as the Director of Academic and Research for the Staff Association of the School of Electrical and Electronic Engineering, NTU. His research interests include electromagnetic compatibility (EMC), impedance measurement, and smart urban transportation. In these areas, he has authored more than 50 refereed papers, of which approximately 20 published in IEEE Transactions, and holds 4 patents.

Dr. Zhao has received multiple premium awards, including the Best Student Paper Award at the 2018 Joint IEEE International Symposium on EMC and Asia-Pacific Symposium on EMC (APEMC), the Best Paper Finalist at the 2021 IEEE APEMC, the Young Scientist Award and the Best Paper Award at the 2022 IEEE APEMC, and the Young Scientist Award at the 2023 International Union of Radio Science (URSI). He has served in various capacities at numerous international conferences, such as the Tutorial Instructor for 2023 IEEE I2MTC; Session Chair for 2023 IEEE IECON, 2022 IEEE I2MTC, 2021 & 2022 IEEE APEMC; Track Chair for 2022 IEEE SPIES; and TPC for 2023 IEEE ICSIMA, 2023 IEEE GEMCCon, etc. Additionally, he holds editorial roles in several SCI-indexed journals and currently serves as the Secretary and an Executive Committee Member of the IEEE Singapore EMC Chapter.

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