

Ewen Constant
Senior Lecturer
Faculty of Computing, Engineering and Science



Research interests

Research interests

Domestic energy storage and reuse.
Demand side management of energy - domestic applications

Qualifications

15 Feb 2022 → 15 Feb 2024 Welsh Language Standards Course, Welsh Language Standards Course
5 Mar 2020 → 5 Mar 2023 Risk Assessment, Risk Assessment
18 Oct 2017 → 18 Oct 2020 Risk Assessment, Risk Assessment
8 Sep 2017 → 8 Sep 2020 Health and Safety Awareness for Managers, Health and Safety Awareness for Managers
22 Jun 2018 → 22 Jun 2020 Data Protection Briefing: GDPR edition, Data Protection Briefing: GDPR edition
22 Jun 2018 → 22 Jun 2020 Information Security Essentials, Information Security Essentials
23 Dec 2020 → ... Criminal finances act 2017, Criminal finances act 2017
29 Jun 2020 → ... USW DEAL: Principles into Practice Short Course, USW DEAL: Principles into Practice Short Course
22 Jan 2020 → ... Module 1 - Quiz on Equality Diversity and Inclusion, Module 1 - Quiz on Equality Diversity and Inclusion
22 Jan 2020 → ... Module 2 - Quiz on Stereotypes Prejudice Assumptions and Unconscious Bias, Module 2 - Quiz on Stereotypes Prejudice Assumptions and Unconscious Bias
22 Jan 2020 → ... Module 3 - Quiz on Equality and the Law, Module 3 - Quiz on Equality and the Law
22 Jan 2020 → ... Module 3 - Quiz on Equality and the Law Types of Discrimination, Module 3 - Quiz on Equality and the Law Types of Discrimination
22 Jan 2020 → ... Module 4 - Quiz on Equality and USW, Module 4 - Quiz on Equality and USW
3 Apr 2019 → ... Introduction to Pure, Introduction to Pure
19 Jul 2018 → ... TSL@USW: Developing your claim for Senior Fellow, TSL@USW: Developing your claim for Senior Fellow
10 Jul 2018 → ... TSL@USW: Developing your claim for Senior Fellow, TSL@USW: Developing your claim for Senior Fellow
19 Jun 2018 → ... Inclusive Leadership Workshop, Inclusive Leadership Workshop
15 May 2018 → ... Management Leadership Programme - Leading Potential (Talent Management), Management Leadership Programme - Leading Potential (Talent Management)
14 May 2018 → ... Management Leadership Programme - Leading Potential (DPR), Management Leadership Programme - Leading Potential (DPR)
9 May 2018 → ... TSL@USW: Introduction to UKPSF for Claimants, TSL@USW: Introduction to UKPSF for Claimants
2 May 2018 → ... Health & Safety Training for Faculty Managers (ASM's), Health & Safety Training for Faculty Managers (ASM's)
2 May 2018 → ... Health and Safety Awareness for Managers, Health and Safety Awareness for Managers
12 Apr 2018 → ... Prevent Awareness Training, Prevent Awareness Training
28 Feb 2018 → ... SEP Seminar Series Raising Aspirations, SEP Seminar Series Raising Aspirations
29 Nov 2017 → ... LEEP FCES SESSION 2, LEEP FCES SESSION 2
13 Jul 2017 → ... Recruitment & Selection, Recruitment & Selection
6 Jul 2017 → ... DPR Training, DPR Training
8 May 2017 → ... How to become a Fellow and Associate Fellow of the Higher Education Academy, How to become a Fellow and Associate Fellow of the Higher Education Academy
23 Nov 2016 → ... Fieldtrip & site visit procedure, Fieldtrip & site visit procedure
22 Jan 2014 → ... Risk Assessment, Risk Assessment
6 Jun 2000 → ... Chartered Engineering of the IET, CEng

Employment

Senior Lecturer Mechanical and Aeronautical Engineering

Senior Lecturer

Faculty of Computing, Engineering and Science

University of South Wales

1 Sep 2022 → present

ASM - Mechanical and Aeronautical Engineering

Faculty of Computing, Engineering and Science

University of South Wales

5 Apr 2017 → 20 Sep 2022

ASM - Mechanical and Aeronautical Engineering

Faculty of Computing, Engineering and Science

University of South Wales

5 Apr 2017 → 13 Sep 2022

Research outputs

Overview of Energy Storage Technologies for Excess Renewable Energy Production

Thanapalan, K. & Constant, E., 16 Sep 2020, *WMSCI 2020 - 24th World Multi-Conference on Systemics, Cybernetics and Informatics, Proceedings*. Callaos, N. C., Hashimoto, S., Peoples, B. & Sanchez, B. (eds.). 24 ed. International Institute of Informatics and Systemics, Vol. 2. p. 91 - 95 5 p. (WMSCI 2020 - 24th World Multi-Conference on Systemics, Cybernetics and Informatics, Proceedings; vol. 2).

Development of an advanced solar tracking energy system

Davies, S., Sivanathan, S., Constant, E. & Thanapalan, K., 10 Sep 2020, *Energy and Sustainable Futures: Proceedings of 2nd ICESF 2020*. Mporas, I., Kourtessis, P., Al-Habaibeh, A., Asthana, A., Vukovic, V. & Senior, J. (eds.). Springer, p. 77-82 6 p. (Springer Proceedings in Energy).

Intelligent Controller Design for a Sustainable Energy System

Thanapalan, K. & Constant, E., 3 Sep 2020, In: *Renewable Energy and Power Quality Journal (REandPQJ)*. 18, p. 139-143 5 p., 250.

Failure detection of composite materials in sport applications

Davies-Frey, D., Bowkett, M., Constant, E. & Thanapalan, K., 29 Jun 2020, *7th International Conference on Control, Decision and Information Technologies, CoDIT 2020*. Institute of Electrical and Electronics Engineers Inc., p. 563-567 5 p. 9263966. (2020 7th International Conference on Control, Decision and Information Technologies (CoDIT)).

Robust Controller Design for a Solar Powered Sustainable Energy System

Thanapalan, K., Constant, E. & Bowkett, M., 9 Sep 2019, *Proceedings of The International Conference on Energy and Sustainable Futures (ICESF) 2019: Nottingham Trent University, Nottingham, 9 to 11 September 2019*. Al-Habaibeh, A., Asthana, A. & Vukovic, V. (eds.). Nottingham: Nottingham Trent University Publications, p. 183 - 189 7 p.

Advanced Failure Prevention Mechanisms for Unmanned Aerial Vehicles

Thanapalan, K., Bowkett, M. & Constant, E., 6 Sep 2019, *2019 25th International Conference on Automation & Computing: Improving Productivity through Automation and Computing - Lancaster University, UK 5-7 September 2019*. Yu, H. (ed.). International Institute of Informatics and Systemics, p. 371 - 375 5 p.

System Sizing for solar powered sustainable energy systems designed for domestic use

Constant, E. & Bowkett, M., 1 May 2019.

Fracture Toughness Prediction of Composite Materials

Jones, B., Thanapalan, K. & Constant, E., 14 Feb 2019, (Accepted/In press) *Proceedings of the 6th IEEE International Conference on Control, Decision and Information Technologies (CoDIT'19)*, Paris, France, 23 -26 April, 2019. Institute of Electrical and Electronics Engineers

System Sizing for Solar Powered Sustainable Energy System Designed for Domestic Users

Constant, E., Thanapalan, K. & Bowkett, M., 15 Jan 2019, (Accepted/In press) In: Renewable Energy and Power Quality Journal (REandPQJ). 17, p. 172-176 5 p.

Capture and Storage of PV-Energy for Domestic Consumption

Constant, E., Thanapalan, K. & Bowkett, M., 10 Apr 2018, *Proceedings of the 5th IEEE International Conference on Control, Decision and Information Technologies (CoDIT'18), Thessaloniki, Greece, April 10 -13, 2018.*

Failure Detection of Composites with Control System Corrective Response in Drone System Applications

Bowkett, M., Thanapalan, K. & Constant, E., 9 Apr 2018, In: International Symposium on Computer Science and Intelligent Control. 7, 2, 19 p., 23.

Development of a solar powered self-sustainable energy system

Constant, E., Thanapalan, K. & Bowkett, M., Apr 2018, *International Conference on Renewable Energies and Power Quality (ICREPEQ'18) Salamanca (Spain), 21th to 23th March, 2018.* p. 320-324 299. (Renewable Energy & Power Quality Journal; vol. 1, no. 16).

Optimal Energy Storage Evaluation of a Solar Powered Sustainable System

Constant, E., Thanapalan, K. & Bowkett, M., 8 Mar 2018, *Proceedings of 2018 SICE International Symposium on Control Systems (SICE ISCS 2018): Tokyo City University, Tokyo, Japan, March 9-11, 2018.* Tokyo, Japan: Institute of Electrical and Electronics Engineers, p. 193-198 6 p. 8330175

Operational safety analysis and controller design of a dual drones system

Bowkett, M., Thanapalan, K. & Constant, E., 20 Oct 2017, *In the Proceedings of the 2017 International Symposium on Computer Science and Intelligent Controls.* Budapest, Hungary

Awards

Enhancing Universities' Contribution to Lead Climate Change through, Research, Learning and Community Engagement

Constant, E., Tan, C. & MOHAMED, M.

British Council: £35,000.00

1/02/22 → 31/07/22