



TS. DR. MOHD FAIZAL BIN ALI AKHBAR
Vocational Training Officer
Tel: 019-9838846
Email: mfaizalaa@ump.edu.my



Academic Qualification

1. Doctor of Philosophy (Mechanical Engineering)
2. M.Eng. (Mechanical Engineering)
3. B.Eng. (Mechanical Engineering)

Brief Profile

Ts. Dr. Mohd Faizal Ali Akhbar obtained his B.Eng. and M.Eng. in Mechanical Engineering from University of Yamanashi (2010) and Universiti Teknologi Malaysia (2015), respectively. He completed his PhD in Mechanical Engineering (Bone Drilling) at Universiti Malaysia Pahang in 2020. He started as a vocational training officer at Universiti Malaysia Pahang in 2010. Dr. Faizal's research achievements have been recognized and he was awarded the Cendekia Bitara Award in 2017 and Sanjungan Award in 2019. In 2020, he was awarded the Anugerah Perkhidmatan Cemerlang Award by Universiti Malaysia Pahang. His main research interest is in osteonecrosis prevention in bone drilling surgery with specific interest in optimizing the drill bit design and machining parameters. To date, he has published in many high-impact journals in his field such as Applied Thermal Engineering (Q1, IF 4.725), Measurement (Q1, IF 3.364), International Communications in Heat and Mass Transfer (Q1, IF 3.971), Annals of Biomedical Engineering (Q1, IF 3.324), Part H: Journal of Engineering in Medicine (Q3, IF 1.317), Biomedical Physics & Engineering Express (Q2, IF 1.100) and Technology and Health Care (Q4, IF 0.806). He has contributed to the international scientific community as journal reviewer for reputable international journal such as Measurement (Q1, IF 3.364), Physica Scripta (Q2, IF 1.985), Medical and Biological Engineering and Computing (Q2, IF 2.022), Materials Research Express (Q2, IF 1.929), Part H: Journal of Engineering in Medicine (Q3, IF 1.317), Biomedical Physics & Engineering Express (Q2, IF 1.100), SN Applied Science (ESCI), Journal of Biomimetics, Biomaterials and Biomedical Engineering and (Q4) and Materials Today: Proceedings. He also participated in international conferences namely, 17th CIRP Conference on Modelling Machining Operations (CIRP MMO 2019, Sheffield, United Kingdom), Advanced Nanotechnology in Engineering and Medical Science (ANEMS 2017, Langkawi, Malaysia) and University Malaysia Pahang-University of Iwate Virtual Seminar, 2020. He actively involved in consultancy activities regarding the part-time study mode with Open University Malaysia (OUM), German-Malaysian Institute (GMI), and Institut Kemahiran Tinggi Belia dan Sukan (IKTBN).

Professional Qualification / Membership / Affiliation / Certification

1. Professional Technologist (Malaysia Board of Technologists)—PT18030298
2. Graduate Engineer (Board of Engineers Malaysia)—BEM 102180-A
3. Certified Professional NX CAD Designer (Siemens NX)—1028655-W

Area of Interests / Expert

1. Bone drilling
2. Mechanical Design
3. Engineering Simulation
4. Conventional and CNC Machining

Project Consultancy

1. GMI Material Research 2018
2. GMI BTM Advanced Manufacturing Process 2017
3. GMI BTM Advanced Manufacturing Process 2018
4. GMI BTM Advanced Manufacturing Process 2019
5. IKTBN BTM Computer-Aided Modelling 2018
6. IKTBN BTM Computer-Aided Modelling 2019
7. IKTBN BTM Manufacturing Component Design 2019
8. Design for Electric Wheelchair (UMP Grant under Dr. Hayyan Al-Sibai)
9. Open University Malaysia – Material Engineering (EBML 2103)
10. Open University Malaysia – Mechanical and Electrical System in Building (EBME2103)
11. Open University Malaysia – Introduction to Manufacturing Process (EBMM2103)
12. Open University Malaysia – Mechanical Engineering Study (HBLS4403)
13. Open University Malaysia – Engineering Mathematics (EDXM2103)
14. Open University Malaysia – Manufacturing Strategy (EBMP3203)
15. Open University Malaysia – Engineering Economy (EBMC3103)
16. Open University Malaysia – Cost Analysis and Estimating (EBQS3203)
17. Open University Malaysia – Quality Control (EBTQ3103)
18. Open University Malaysia – Operational Research (EBOR4203)
19. Open University Malaysia – Law and Technology Management (EBTL4103)

20. Open University Malaysia – Maintenance Management (EBTM4303)
21. Open University Malaysia – Facilities Planning and Design (EBME3103)
22. Open University Malaysia – Technology Management and Innovation (EBTT3103)
23. Open University Malaysia – Project Management (EBTM3103)