

ABRIDGED CURRICULUM VITAE

Professor Brandon Collier-Reed

July 2024

Professor and Head of Department, Mechanical Engineering, University of Cape Town, and previously EBE Deputy Dean for Undergraduate Studies. Past President of the South African Society for Engineering Education, a Fellow of the South African Institution of Mechanical Engineering, and past Director of the Centre for Research in Engineering Education.

A registered Professional Mechanical Engineer with the Engineering Council of South Africa (ECSA), having undertaken extensive work with ECSA developing national accreditation policy as well as leading teams undertaking the quality assurance of engineering programmes both locally and internationally.

Current research focusses on the importance of multilingualism and academic literacies in facilitating students' academic success. A specific interest in understanding how the student experience is impacted using technology in teaching and learning, and a long-standing interest in the nature of technology and technological literacy, particularly in relation to students entering higher education.

EMPLOYMENT HISTORY

Employer	Position	Period
University of Cape Town	Professor	2019-
University of Cape Town	Associate Professor	2010-2018
University of Cape Town	Senior Lecturer	2002-2009
University of Cape Town	Lecturer	1997-2001

ACADEMIC QUALIFICATIONS

Degree	Institution	Year received
PhD	University of Cape Town	2007
MSc (Engineering)	University of Cape Town	1997
BSc(Eng) Mechanical Engineering	University of Cape Town	1992

SELECTED PROFESSIONAL/LEARNED SOCIETIES

Body	Position	Period
Engineering Council of South Africa	Professional Engineer	2001-
South African Society for Engineering Education	President	2013-2017
South African Institution of Mechanical Engineering	Fellow	1999-

LEADERSHIP ROLES AT UCT

Area	Position	Period
Department of Mechanical Engineering	Head of Department	2020-
Faculty of Engineering and the Built Environment	Deputy Dean, UG	2013-2017
Centre for Research in Engineering Education	Director	2008-2011
Electro-Mechanical Engineering Programme	Programme Convenor	2004-2010

MEMBERSHIP OF COMMITTEES OF SENATE (SINCE 2010)

Committee name	Period
Senate	2010-2017, 2019-
Teaching and Learning Committee	2013-2017, 2020-24
Readmission Review Committee	2013-2017, 2024-

Language Policy Committee (Alt)	2024-
University Student Affairs Committee	2017-2022
University Information and Communication Technology Committee	1999-2019
Examinations and Assessment Committee	2010-2017
Admissions Committee	2013-2017

RECENT UNIVERSITY COMMITTEES AND WORKING GROUPS

Committee name	Period
Student Success and Academic Excellence Implementation Task Team	2024-
CHED Promotion and Remuneration Committee	2014-
Chair, Arise Building PIC	2023-
Web Governance Working Group	2019-
Promotion and Remuneration Appeal and Review Committee	2021-
Data Analytics for Student Success (DASS)	2020-
Online Education Sub-Committee	2017-2022
Learning Platforms Update Project PIC	2022-2023
Chair, dSchool Building PIC	2020-2022
RFP Adjudication Committee Upper Campus Data Centre Project	2022
CHED Faculty Board	2018-2023
Learning Platform Update Project Course Evaluations RFP	2023
Network Infrastructure Renewal PIC	2017-2021

SELECTED RECENT PUBLICATIONS

Collier-Reed, B. I., Nyembwe, K. D., Maphumulo, T. P., & Dienga, A. M. (2023). <i>The engineering skills pipeline</i> . Sixth Biennial Conference of the South African Society for Engineering Education, Muldersdrift, South Africa, 322-327.
Matsenjwa, B., Shaw, C., & Collier-Reed, B. (2023). <i>Interpretative Phenomenological Analysis (IPA) for Exploring the Human Experiences in the Manufacturing Industry 4.0</i> . Proceedings of International Conference on Academic Studies in Science Engineering and Technology 2023, Istanbul, Turkey, 1-26
Collier-Reed, B. I., Nyembwe, K. D., Maphumulo, T. P., Dienga, A. M., & Zvandasara, C. (2023). <i>An analysis of the literature on engineering student attrition in the South Africa higher education system</i> . Sixth Biennial Conference of the South African Society for Engineering Education, Muldersdrift, South Africa, 328-331.
Ganduri, L., Shaw, C., & Collier-Reed, B. (2023). <i>Investigating first-year engineering students' development of digital agency in a digitally mediated learning environment</i> . Sixth Biennial Conference of the South African Society for Engineering Education, Muldersdrift, South Africa, 54-64.
Boshoff, L., Simpson, Z., & Collier-Reed, B. (2023). <i>Engineering undergraduates' conceptions of critical thinking</i> . Sixth Biennial Conference of the South African Society for Engineering Education, Muldersdrift, South Africa, 8-17.
Ngoepe, M. N., le Roux, K., Shaw, C. B., & Collier-Reed, B. (2022). Conceptual Tools to Inform Course Design and Teaching for Ethical Engineering Engagement for Diverse Student Populations. <i>Science and Engineering Ethics</i> , 28(2), 20. https://doi.org/10.1007/s11948-022-00367-4
le Roux, K., Ngoepe, M., Shaw, C., & Collier-Reed, B. I. (2022). Language and disciplinary literacies for accessing, learning and communicating meaning: students' experiences of the transition from school to first-year undergraduate engineering. <i>European Journal of Engineering Education</i> , 47(6), 1144–1163. https://doi.org/10.1080/03043797.2022.2122406
Ganduri, L., Shaw, C., & Collier-Reed, B. (2021). <i>Digital agency among engineering students post emergency remote learning</i> . SEFI 49th Annual Conference: Blended Learning in Engineering Education: Challenging, Enlightening - and Lasting?, Berlin, Germany, 226-239.
Campbell, A., Craig, T., & Collier-Reed, B. (2019). A framework for using learning theories to inform 'growth mindset' activities. <i>International Journal of Mathematical Education in Science and Technology</i> , 1-18. doi:10.1080/0020739X.2018.1562118