

University Centre Colchester (UCC)

Staff Profile

Name:	Dr Dominic Onimowo.
Job title/role:	Lecturer in Engineering (Course Leader)
Subjects taught/administrative responsibilities:	<p>Course Leader BEng (Hons) Engineering Top Up</p> <p>Lecturer in Engineering</p> <p>Computer simulation and Modelling, Research Skills, Sustainability, Further thermodynamics, Virtual Engineering, Advanced Mechanical principles, Research Project, Engineering Science, Maths and Design, Fundamentals of thermodynamics, Computer Aided Design and Manufacture and Managing Professional Engineering Projects.</p>
Qualifications and Membership of Professional bodies:	<p>Chartered Engineer (CEng) MIMechE</p> <p>Fellow Higher Education Academy (FHEA)</p> <p>PhD – Engineering</p> <p>MSc. – Petroleum and Gas Engineering</p> <p>BEng (Hons) Mechanical Engineering</p>
Experience in Education:	<p>University Centre Colchester - Lecturer in Engineering (Course Leader)</p> <p>Anglia Ruskin University, Chelmsford – PhD</p> <p>University Of Salford, Manchester – MSc.</p> <p>Anglia Ruskin University, Chelmsford =- BEng (Hons)</p> <p>Independent Reviewer – Advance Assessments</p>
Biography and personal interests:	<p>I am an active researcher in the field of mechanical engineering, Sustainability, Renewable Energy and have experience in Computational Fluid Dynamics (CFD), Heat transfer Enhancement, Finite Element Analysis (FEA) and Computer Aided Design (CAD).</p> <p>My PhD involved the analysis of fluid flow geometries and the effects on the physics of flow using computational fluid dynamics. Design Rights are also held for the designs which were generated in the course of research done.</p> <p>I have worked as a research assistant carrying out computer-based fluid dynamics simulations on a 3D printer in order to create a digital twin and connect this to the Internet of Things (IoT).</p> <p>I have also co-authored publications one of which is the desktop printer with dual extruders to produce customized electronic circuitry.</p>

Professional practice / research interests:

Onimowo, D.A., 2018. The effects of fluid flow geometry on the physics of flow (PhD thesis, Anglia Ruskin University).

Butt, J., Onimowo, D.A., Gohrabian, M. et al. A desktop 3D printer with dual extruders to produce customised electronic circuitry. *Front. Mech. Eng.* 13, 528–534 (2018). <https://doi.org/10.1007/s11465-018-0502-1>

Onimowo, D.A., 2014. Analysis of Rheological properties of Invert Emulsion mud and its use for pressure control (MSc. thesis, University of Salford)

Onimowo, D.A., 2013. Design of a Solar powered Jatropha oil extractor (BEng (Hons) Dissertation, Anglia Ruskin University)

Patents and Intellectual Property

6021617; 6021618; 6021620; 6021621; 6021622; 6021623; 6021624; 6021625; 6021626.