## **PROGRAMME OUTCOMES**

PO1	Engineering knowledge - Apply knowledge of mathematics, science,	
	engineering fundamentals, and an engineering specialization to the solution	
	of developmental and complex engineering problems	
PO1.1	Demonstrate ability to identify and apply knowledge and technique in	
	mathematics, science, and engineering to solve engineering problems.	
PO2	Problem Analysis – Identify, formulate, research literature, and analyze	
	developmental and complex engineering problems reaching substantiated	
	conclusions using first principles of mathematics, natural sciences, and	
	engineering sciences.	
PO2.1	Demonstrate ability to solve problems by concepts through the integration of	
	mathematics, science, and engineering.	
PO2.2	Demonstrate skill in identifying vital information from resources in solving	
	problems.	
DODD	Demonstrate skill and appropriate technique and ingenuity in solving	
PO2.3	developmental or engineering problems.	
	Design/Development of Solutions - Proffer solutions for developmental or	
DOD	complex engineering problems and design systems, components, or processes	
PO3	that meet specified needs with appropriate consideration for public health	
	and safety, cultural, societal, and environmental considerations	
	Demonstrate understanding of the impact of engineering decisions and	
PO3.1	solutions to societal issues.	
PO3.2	Demonstrate understanding of solutions to cultural diversity based on our	
	local context in Nigeria.	
PO3.3	Demonstrate knowledge of the implications of engineering designs and	
	solutions to the public health and safety of all.	
	Investigation - Conduct investigation into developmental or complex	
	problems using research-based knowledge and research methods including	
104	design of experiments, analysis and interpretation of data, and synthesis of	
	information to provide valid conclusions.	
PO4 1	Demonstrate ability to appropriately set-up and conduct experiment to	
104.1	understand and extract underlining and fundamental principles.	
PO4 2	Demonstrate ability to apply statistical tools in designing and analyzing	
104.2	experiments.	
PO4.3	Demonstrate skill in applying the appropriate research method in solving	
	engineering problems.	

PO5.1 modelling and optimization to developmental and complex engined activities, with an understanding of the limitations.   PO5.1 Demonstrate an understanding of the inherent limitations of soft (application) tools, and analytical and numerical techniques.	tion,
<b>PO5.1</b> Demonstrate an understanding of the inherent limitations of soft (application) tools, and analytical and numerical techniques.	ering
	ware
<b>PO5.2</b> Demonstrate ability to identify and apply appropriate techniqu investigating and solving problems of engineering relevance.	e in
<b>PO5.3</b> Demonstrate capability and proficiency in using modern and ICT too solve engineering problems.	ls to
The Engineer and Society - Apply reasoning informed by contex	ctual
PO6 knowledge including Humanities and Social Sciences to assess soc	letal,
health, safety, legal and cultural issues and the consequent responsibi	ities
Demonstrate awareness of legal implications of professional engine	ring
PO6.1 practice.	ing
PO6.2 Demonstrate understanding of the required contribution of engineers to	o the
society.	
<b>Environment &amp; Sustainability</b> - Understand the impact of profess	onal
<b>PO7 Environment &amp; Sustainability</b> - Understand the impact of profession of the engineering solutions in societal and environmental contexts demonstrate knowledge of and need for sustainable development	onal and
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PO9.1	Demonstrate knowledge and understanding in completing set goals and plan tasks	
PO9.2	Demonstrate understanding in apply, using skills acquired to examine and adopt ideas as a member or team lead	
PO9.3	Demonstrate the ability to work with other engineering discipline or multi- disciplinary settings	
PO10	<b>Communication</b> - Communicate effectively on developmental or complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.	
PO10.1	Demonstrate the skills to communicate within the engineering society and outside engineering profession	
PO10.2	Demonstrate the ability to make presentations and be able to communicate the society at large	
PO10.3	Demonstrate the ability to use appropriate presentation medium for proper communication and receive clear instructions	
PO11	<b>Project Management &amp; Finance</b> - Demonstrate knowledge and understanding of engineering, management and financial principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multi-disciplinary environments	
PO11.1	Demonstrate the ability to conduct, manager and execute projects in multi-	
	disciplinary areas	
PO11.2	Demonstrate the ability to work within the budget when executing a project for proper management	
PO11.3	Demonstrate recognition or the skills needed for project management	
PO12	<b>Lifelong Learning</b> - Recognize the need for, and have the preparations and ability to engage in independent and lifelong learning in the broadest context of technological and social changes	
PO12.1	Demonstrate the ability to learn new technology or techniques that will be used for solving life problems and professional development activities	
PO12.2	Demonstrate the ability to apply the knowledge acquired from teaching, professional journals, and industry publications to improve processes and systems	