

Research Engineer and Ph.D. Candidacy (NUS-EDB IPP)	
Job Title	Research Engineer and Ph.D. Candidacy
Collaborating Company	GlobalFoundries-NUS Joint Research Programme
Project Details	Economic Development Board Industrial Postgraduate Programme (NUS-EDB IPP)
Job Posting Information	
Job Description:	<p>GlobalFoundries Inc, a multinational semiconductor contract manufacturing and design company with a base in Singapore, is partnering with the National University of Singapore (NUS) on new research programs that use relatively new integration concept called Heterogeneous Integration (HI) to accelerate the growth and development of Internet of Things (IoT). The aims are to perform R&D in areas of microelectronic device, materials, process and design technologies to integrate, on a semiconductor substrate, a device with heterogeneous semiconductor processes, and even non silicon-based devices using System-on-Chip (SoC) or System-in-Package (SiP) technologies. We are seeking talented and motivated candidates who are Singapore Citizens/Singapore Permanent Residents to enrol in a Ph.D. Industrial Postgraduate Programme to work and study at NUS and GlobalFoundries. Successful applicants will become full-time employee of GlobalFoundries Singapore and should qualify to enter into the Electrical and Computer Engineering Ph.D. or Engineering Doctorate Programmes at NUS.</p> <p>The selected candidate is expect to:</p> <ul style="list-style-type: none"> • Perform in-depth study on Integrated Passive Devices (IPD) such as resistors, inductors, capacitors, filters, radiators, etc., on-chip and in-package based on fundamental electromagnetic principles. It encompasses activities of design, simulation, materials and fabrication required to realise 5G and beyond wireless communication at both below 6 GHz and at mmWave. The project will also address current and future developments, and interdisciplinary challenges through the leverage of 2D, 2.5D and 3D advanced packaging techniques, and a multidisciplinary collaboration with chip system research scientists. • Candidates should have a good appreciate of semiconductor devices, circuits, and microelectronics, and strong in data analysis. <p>Interested applicants should send their motivation letter, curriculum vitae, and publication list via email to Prof Lim Yeow Kheng).</p>
Job Requirements:	<ul style="list-style-type: none"> • B.Eng/B.Sc./M.Eng/M.Sc in Electrical, Electronics, Mechanical, Chemical Engineering, Physics, Material Science or its equivalent from a reputable University/Institute is preferred. • Singapore Citizen or Singapore Permanent Resident • Demonstrate strong scholastic accomplishments and passionate about a career in R&D. <p>Candidates are subjected to selection processes by NUS ECE department as well as GlobalFoundries. Successful candidates will be offered a scholarship and an employment contract with GlobalFoundries and he/she will be expected to work at NUS as well as GlobalFoundries Singapore. The terms of employment contract is defined by GlobalFoundries.</p>
Contact Details	<p>Prof Lim Yeow Kheng eleykl@nus.edu.sg Dr Tan Juan Boon JuanBoon.TAN@globalfoundries.com</p> <p>(Interested applicants should send the motivation letter, curriculum vitae, and publication list via email to the above emails.)</p>
Validity of Job Advert	15 Oct 2022 – 31 May 2023