

Announcement of Integrated Sciences and Mathematics Program Adjunct Faculty Position for Fall 2022 Dhanani School of Science and Engineering – Habib University Teaching a Course on 'Engineering Mathematics'

The <u>Integrated Sciences and Mathematics</u> Program at <u>Habib University</u> invites applications for an adjunct faculty position to teach a course "Engineering Mathematics". This is a Mandatory Course for all engineering Students which covers topics such as Vector Calculus (vector functions, line and surface integrals). Elementary methods for solving first order ODEs (direct integration and substitution) with geometric interpretation and classification, separable ODEs, method of integrating factors. Vector algebra (including matrix algebra, eigenvalues and eigenvectors, quadric surfaces). Dynamical systems (linear systems of ODEs, stability and phase portraits of dynamical systems). Second, order ODEs - elementary methods including their classification, reduction of order techniques, linear second order ODEs with constant coefficients, and finding particular solutions. Orthogonal functions and Fourier series solutions (generalized and trigonometric methods), convergence in the mean and pointwise convergence, odd and even expansions, half-range expansions. Partial differential equations (PDEs) (wave, heat and Laplace equations), solutions using Fourier series and Laplace transforms, and Schr dinger equation.

Selected candidates will be offered a short-term one-semester contract to teach in Fall 2022. A typical Fall semester at Habib University starts in August and ends by December.

Habib University opened its award-winning modern campus in the fall of 2014 as Pakistan's first university of liberal arts and sciences devoted exclusively to undergraduate education. Classes are typically under 25 students - allowing close interaction between students and faculty. The University prides itself both on its need-blind admissions policy – assuring access to all qualified students - and the quality and dedication of its increasingly diverse international faculty - over 93% of whom hold advanced degrees from leading global institutions. The University also enjoys close connections with several prominent institutions of higher education in the U.S., including the Claremont Colleges, Stanford, UC Berkeley, the University of Michigan, and Texas A&M. An innovation in Pakistani higher education, Habib University is also among a handful of global institutions actively rethinking what defines the liberal arts and sciences in the 21st Century.

Interested applicants are invited to submit their applications to our <u>online application portal</u>. Recruitment-related queries may be directed to <u>academic@habib.edu.pk</u>.

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